

WARREN MAROUN,
ALAN DUBOISÉE DE RICQUEBOURG, AND DUSAN ECIM

‘Standard KAMs’, ‘Canary KAMs’, and ‘Naughty KAMs’: A Typology of Key Audit Matters to Explain Their Value Relevance

This paper develops a framework for understanding how key audit matters (KAMs) can be factored into investors’ risk assessments. Detailed interviews with seasoned investors representing international and regional asset managers and owners confirm that the number and type of reported KAMs are not ‘priced’ directly. Nevertheless, KAMs can be a source of unbiased and complementary information for understanding the likelihood and impact of risks that affect an organization’s financial position and performance. The paper responds to calls for more interpretive work on financial statement audits with a specific focus on an overlooked but key user of audit reports. Unlike earlier work based on inferential testing of archival data and experiments using proxies for financial capital providers, this study is the first primary account of how KAMs are understood and applied by investors. Findings are based on a relatively small sample of informed investors. Other stakeholders are not engaged. Nevertheless, the proposed framework makes an important contribution by outlining an alternative risk classification schematic that can be used by investors and other users of financial statements. The study bridges the technical assurance and risk management literature while providing empirical evidence that will widen the risk analysis and classification field.

Key words: Risk classification; Key audit matters; Inherent risk; Control risk; Detection risk.

In response to calls for more relevant and informative audit reports, the International Auditing and Assurance Standards Board (IAASB) introduced ISA 701, which deals with key audit matters (KAMs). The inclusion of KAMs in the audit reports of listed companies is one of the most material changes to assurance

WARREN MAROUN and ALAN DUBOISÉE DE RICQUEBOURG are at Leeds University Business School and University of the Witwatersrand. DUSAN ECIM is at University of the Witwatersrand.

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practice in recent history (Minutti-Meza, 2021). Auditors are required to disclose the issues considered to be most significant for conducting their engagements and how these were addressed under a separate section of their audit reports (IAASB, 2016). This detail would not automatically have been included in a client's financial statements and, as a result, contributes to lowering information asymmetry while bolstering non-experts' confidence in the assurance processes (IAASB, 2017). Yet while the standard-setter maintains that there is growing support for the expanded auditors' reporting duties,¹ academic evidence on the impact that KAMs have on audit quality (e.g., Prasad and Chand, 2017; Gutierrez *et al.*, 2018; Asbahr and Ruhnke, 2019) and their decision-usefulness (e.g., Christensen *et al.*, 2014; Boolaky and Quick, 2016; Sirois *et al.*, 2018; Lennox *et al.*, 2023) is mixed.

To shed light on these varied findings, we offer one of the first *primary* accounts of how KAMs are being used by investors. To do so, we develop a framework for evaluating KAMs in terms of the risk-related insights they may provide to the primary users of audit reports. For this purpose, risks are classified as relating to the nature of an organization's operations ('inherent risk') and the robustness of its governance structures, monitoring processes, and internal controls ('control risk'). That the quality of audits (and associated reporting on KAMs) is not homogenous is an over-arching consideration. Data from 33 detailed interviews with seasoned investors on the information content of KAMs are organized according to how KAMs provide relevant details on inherent and control risks. Our aim is not to 'map' specific KAMs to a risk classification but to explicate how investors internalize KAMs and their basis either for disregarding or for capitalizing on additional information reported by auditors.

Developing a risk-classification framework to analyse KAMs makes, at least, three important contributions. Firstly, a connection is drawn between two separate subsets of research. Traditionally, accounting and finance scholars have concentrated on auditing as a means of lowering agency-related costs or legitimizing financial reporting (see Power, 2003). Management scholars are primarily concerned with the operational and strategic dimensions of risk. That auditing is part of a broader risk-management logic offering insights into the nature and extent of an organization's risk exposure, which is relevant for investors, has not been fully examined. By adapting the concept of inherent and control risks—which have been well-established by the technical auditing literature (IAASB, 2009a, 2019)—the current study illustrates how KAMs are not just a technical feature of audit reports but have the potential to contribute to risk assessments performed by non-auditors. Doing so iterates the link between the assurance and broader risk-management discourse.

Secondly, the current study complements prior archival work examining the usefulness of KAMs (e.g. Reid and Carcello, 2017; Gutierrez *et al.*, 2018; Burke

¹ For details on the IAASB's post-implementation review of KAMs, see <https://www.ifac.org/knowledge-gateway/supporting-international-standards/discussion/iaasb-undertakes-post-implementation-review-its-revised-auditor-reporting-standards>.

et al., 2023; Elsayed *et al.*, 2023; Klevak *et al.*, 2023; Lennox *et al.*, 2023). Much of this relies on inferential testing to reach conclusions on whether KAMs convey incremental information to financial statement users. This is done by examining market reactions to the introduction of KAMs (e.g., Bédard *et al.*, 2019; Lennox *et al.*, 2023). The presumption is that additional information included in audit reports results in changes to measures like the cost of capital or cumulative abnormal returns. *How* investors interpret KAMs is not expressly considered. Experimental studies offer an assessment of how reporting KAMs influence overall perceptions of the relevance and credibility of audit reports (e.g., Sirois *et al.*, 2018; Moroney *et al.*, 2021) but stop short of explicating decision-making processes involved when analysing KAMs. Many experimental studies are also limited by the fact that they rely on students or other proxies for financial capital providers. The current study draws on insights obtained from professional investors from different jurisdictions to understand how KAMs are being interpreted by this primary user group. Doing so responds directly to calls for detailed fieldwork in auditing research while shedding light on the seldom-studied interaction between assurance of financial statements and the way users process assurance reports (see Hay, 2015).

We show how KAMs are viewed by investors as either irrelevant, confirmatory, or incrementally informative to their decision-making. In cases where KAMs are repetitive or contain only generic information, they are disregarded. When this is not the case, they form part of a subjective process of understanding an investee's risk profile. KAMs covering previously known risks either 'comfort' investors when they affirm existing risk assessments or prompt follow-up with management when they provide further context. As a result, these KAMs are akin to 'canaries in a coal mine', which act as an important risk signal. Most useful are KAMs providing information on inherent or control risks about which the investors were unaware. These so-called 'naughty KAMs' were the most likely to alter the investors' decisions.

Finally, distinguishing KAMs according to how they can be used by investors offers a conceptual approach for understanding the impact of expanded audit reporting duties and contextualizing empirical work on the value relevance of KAMs. The findings also have important practical implications. The research will be useful for investors and other stakeholders looking to refine their risk appraisals by incorporating KAMs. Auditors should take note of how KAMs are being consumed by the market when developing policies for drafting their audit reports. The standard-setter is preparing to conduct a post-implementation review of wide-reaching audit reforms, including the introduction of ISA 701. The findings presented below provide primary evidence on how KAMs are understood and internalized by key stakeholders, something which will be relevant for the IAASB, national standard-setters, and regulators interested in enhancing the value of external audits.

PRIOR RESEARCH, THEORY, AND MODEL DEVELOPMENT

In jurisdictions applying International Auditing Standards, auditors are required to include KAMs in their audit reports for public interest entities (IAASB, 2016).

Doing so should contribute to more relevant reports (Moroney *et al.*, 2021) thanks to the provision of additional information and the possibility of more rigorous testing by auditors when issues are specifically flagged for public attention (Prasad and Chand, 2017; Kachelmeier *et al.*, 2020). The same logic applies to the critical audit matters (CAMs) regime in the US² under the PCAOB's equivalent to ISA 701(AS3101). According to the US regulator, CAMs provide 'audit-specific information that is *meaningful to investors*' (PCAOB, 2019, p. 1, emphasis added). Several experimental studies confirm this position.

For example, Christensen *et al.* (2014) and Rapley *et al.* (2021) find that non-professionals are more likely to alter their investment decisions when audit reports include KAMs. Likewise, Moroney *et al.* (2021) suggest that non-professional investors' perceptions of the credibility of non-Big 4 auditors and the value of their assurance services significantly improve as a result of the inclusion of KAMs in audit reports. The behaviour-altering potential of these additional disclosures is iterated by studies showing changes in managers' risk appetite (Bentley *et al.*, 2021), non-professional investors' perceptions of management credibility (Ozlanski, 2019), and how auditors understand their professional responsibility (Kachelmeier *et al.*, 2020) following the introduction of KAMs.

That KAMs can be a useful source of information is consistent with the fact that additional disclosure in audit reports is not symbolic. It is underpinned by an extensive risk-based approach to conduct each audit. Auditors are required to communicate extensively with a client's governing body on a range of issues related to the engagement. From these issues, matters that require 'significant auditor attention' and were most relevant for conducting the engagement are reported as KAMs (IAASB, 2016, paras 8–9). They are explained in a separate section of the audit report to 'enhance the communicative value' of the document (IAASB, 2016, para. 2). Doing so provides evidence-backed insights into the auditee's operations, management, and financial reporting processes, including those areas that involved the greatest judgement and associated risks (IAASB, 2017; Reid *et al.*, 2019; Segal, 2019; Gold *et al.*, 2020). Most notable is the susceptibility of transactions and balances to a material misstatement ('inherent risk') and the possibility of an organization's internal controls failing to prevent, detect, or correct material fraud or error in reported results ('control risk').

In summary, KAMs can be value-relevant because they lower information asymmetry by signalling uncertainty (Kachelmeier *et al.*, 2020; Rapley *et al.*, 2021). They highlight areas in financial reporting that are subject to a greater risk of material misstatement either because of the inherent nature of the respective transactions and balances or deficiencies in the organization's systems of internal control which safeguard financial resources and the integrity of reported results.

² There are technical differences between ISA 701 and the US equivalent but the broad aims of the respective standards are similar, as is the approach taken to flag the most substantial issues for the execution of financial statement audits for users' attention (Minutti-Meza, 2021). As a result, findings dealing with the relevance of CAMs may be equally applicable in settings where KAMs are being reported.

Inherent Risk

Inherent risk reflects how an auditee's underlying facts and circumstances influence the possibility of inappropriate accounting (IAASB, 2009a). Numerous qualitative and quantitative factors increase inherent risk because they lead to more opportunities for fraud or error. Examples include the complexity and subjectivity of accounting requirements; opportunities for management bias to influence the accounting for transactions and balances; and uncertainty arising from imperfect information and changes to accounting systems, policies, or processes (IAASB, 2009b, 2019).

To identify and assess inherent risks, the auditor considers the client's operating context. This includes ownership, management, and governance structures; the business model; internal and external measures of performance; and industry characteristics and regulatory requirements. The financial reporting standards to be applied, the type of accounting policies developed by management, and the reasons for any changes to accounting policies are additional considerations³ (IAASB, 2019). Each provides a 'frame of reference' for identifying inherent risk factors and evaluating the likelihood of their occurrence and resulting impact (IAASB, 2019, para. A50).

The link between KAMs and inherent risk is addressed to some extent by earlier work considering how clients' 'structural characteristics' are determinants of the number of reported KAMs and the topics being covered (Sierra-García *et al.*, 2019, p. 237). Common inherent risk indicators such as industry-specific complexities, extent of leverage, loss-making operations, and significant investments in intangible assets (see IAASB, 2019) are also associated with the disclosure of more KAMs in both developed (e.g. Burke *et al.*, 2023) and developing economies (e.g., Abdullatif and Al-Rahahleh, 2020). This is to be expected because the circumstances which increase the susceptibility of transactions and balances to misstatements are at the centre of risk-based audit models. They are consistently flagged by auditors as warranting additional attention and designated as KAMs as matter of good practice (Maroun and Duboisée de Riquebourg, 2024). How the integrity of the client's control infrastructure interacts with the number and type of reported KAMs is also relevant.

Control Risk

An organization's managers rely on internal controls to safeguard resources, ensure compliance with policies and best practices and reduce opportunities for fraud or error when compiling information for internal decision-making or external reporting (Caplan, 1999; Spira and Page, 2003). Controls are often

³ For example, in the banking sector, the accounting for complex financial products involves significant judgement and the use of estimates. Organizations with operations in multiple locations are challenged by accounting in different currencies and coordinating reporting by multiple offices. Entities operating in sectors with significant competition and scrutiny by investors will be under pressure to meet market expectations.

designed for and implemented to oversee the execution of tasks at the operational, application, or transaction level⁴ (van Assen *et al.*, 2000; Murray and Enang, 2022). Controls specific to financial reporting will also be implemented. These apply to how transactions are initiated and recorded in accounting records; how those records are used to compile financial statements; and the roles of the individuals operating the accounting system. The integrity of the technology infrastructure on which an organization's accounting is dependent and the associated risks arising from the use of technology are related considerations (see IAASB, 2019).

Management is responsible for monitoring internal controls, evaluating their ongoing effectiveness, resolving issues, and overseeing the implementation of remedial actions (Bento *et al.*, 2018). The organization's risk assessment activities, internal controls, and self-monitoring exercises decrease the possibility of material fraud or error occurring or going uncorrected. The same is true for the organization's control environment. The coordination, review, and monitoring functions carried out by governing bodies play an important role in safeguarding resources and ensuring the integrity of financial reporting (IAASB, 2019). Corporate governance research confirms how experienced boards of directors (Tricker, 1984), independent audit committees (Fairchild *et al.*, 2019; Tai *et al.*, 2020), and proactive risk and compliance committees (Malik *et al.*, 2020) counter opportunistic management and promote better decision-making when developing and applying a firm's policies. An organization's governance or control environment ensures that suitably qualified staff are appointed and retained; that a firm-wide culture of ethics is entrenched and that employees are held accountable for their performance (Rae and Subramaniam, 2008).

The possibility of human error, override of controls by dominant managers, and collusion mean that controls cannot reduce the probability of material fraud and error occurring to zero (IAASB, 2009a). That an organization's internal controls fail to prevent, identify, or correct material fraud or error is referred to as 'control risk'. The risk is a function of the design of internal control systems, the diligence with which those controls are implemented, and how well the controls are operated, maintained, and monitored by management and those charged with the organization's governance (IAASB, 2009a, para. A41). From an audit perspective, weaknesses in a client's control environment, information systems, and control activities increase the chances of financial statements being materially misstated. The result is more rigorous fieldwork (IAASB, 2009d), additional reporting to governing bodies (IAASB, 2009c), and further KAM disclosures (IAASB, 2016) as the significance of control-related issues for how the audit was conducted increases.

Like KAMs dealing with inherent risks, those covering a client's controls draw attention to areas of the financial reporting which are more susceptible to fraud or

⁴ For example, in manufacturing firms, controls are introduced over ordering raw materials, the allocation of inventory to jobs, and the adherence to standards to maintain quality and prevent waste.

error. KAMs highlighting control risks are not, however, the result of the nature or characteristics of underlying transactions or balances⁵ but an indicator of limitations in the accounting and management infrastructure. As a result, these types of KAMs may be especially relevant as an uncertainty or risk signal. Nevertheless, widely used classifications do not prioritize KAMs dealing with control risks. Audit Analytics, for example, has only a single KAM type that covers internal controls (see Appendix A). Sierra-García *et al.* (2019) consider client factors that lead to KAMs prioritizing entity-wide risk indicators rather than those specific to certain transactions and balances but do not deal explicitly with KAMs covering an entity's control environment and activities. Ecim *et al.* (2023) examine the number of KAMs by topic. They note that some KAMs cover governance and control-related matters but stop short of testing the determinants of these KAMs and the value relevance of the insights provided into a client's control risks.

In summary, KAMs are not a substitute for an investor's due diligence that addresses strategic, operational, environmental, market, and other risks. They are, however, a potentially useful source of information on inherent and control risks which contextualize the assessment of the auditee's financial position, performance, and cash flows. The implications for investment decision-making are unaffected by the fact that KAMs are not explicitly categorized as dealing with inherent or control risks in commonly used databases. This is because each KAM is the product of a codified audit approach which requires the assurance provider to identify and assess the combinations of inherent and control risk and design suitable tests in response. The outcome of this risk-based assurance model is the set of most significant issues affecting the audit which need to be communicated to the client's governing body and, from those, the matters which are flagged for users' attention as KAMs.

KAM/CAM Information Content: Predictive, Confirmatory, or Null Value

In support of the position that CAMs provide insights into an auditee's inherent and control risk is the fact that additional disclosure by the auditor enhances short-term market reactions (Klevak *et al.*, 2023) and long-term value relevance of reported earnings (Li and Luo, 2023). In contrast, Burke *et al.* (2023) report that short-term market reactions were no different between large accelerated filers reporting CAMs for the first time and a matched sample of non-large accelerated filers without additional disclosures. Most of the earlier empirical work outside of the US also finds little evidence of KAMs being value-relevant. In the UK (Gutierrez *et al.*, 2018, 2022; Lennox *et al.*, 2023), France (Bédard *et al.*, 2019), and China (Liao *et al.*, 2022), for example, there is little evidence of significant cumulative abnormal returns, buy-and-hold abnormal returns, or abnormal trading volumes following the disclosure of KAMs.

⁵ In addition, International Auditing Standards require inherent risk and control risk to be assessed separately (ISA 200 & ISA 315, para. 34).

One explanation is that KAMs have little information content. Even if they address inherent or control risks, the KAMs provide only generic information which market participants are unlikely to use (Segal, 2019; Abdelfattah *et al.*, 2020). The subjectivity involved in identifying and describing a KAM can result in inconsistency in how KAMs are presented among audit firms and their clients, undermining further their relevance for investors (Segal, 2019; Sierra-García *et al.*, 2019). There is, however, evidence of KAMs becoming more detailed and understandable, especially as audit firms have had additional time to develop systems and processes necessary for more context-specific reporting (Ecim *et al.*, 2023). Variations in the number of KAMs reported, topics covered, and presentation styles among audit firms, their specific offices and engagement leaders (see, e.g., Sierra-García *et al.*, 2019; Abdullatif and Al-Rahahleh, 2020; Rousseau and Zehms, 2020) are also at odds with the position that all KAMs are generic and, by inference, irrelevant for investors.

Consistent with this position, Elsayed *et al.* (2023) report a positive association between the number and proportion of risks reported by the auditors for their sample of UK firms and various proxies for investment risk. Rather than convey generic information, the additional disclosures provide useful inputs into investors' risk assessments. Further analysis by Lennox *et al.* (2023) and Czerney *et al.* (2019) show that, even if markets do not react directly to KAM disclosures they can be used to corroborate information obtained by investors from other channels before being reported officially by the respective company and its audit firm. KAMs may also provide new information on inherent and control risk, in which case an observed market reaction is expected. Deneuve *et al.* (2023), for example, finds a short-term market reaction to the textual properties of the KAMs for UK companies when KAMs are notably dissimilar to those disclosed in prior years and by other members of the same industry. Conversely, the absence of a market reaction does not automatically mean that the KAMs have no information content. Details about inherent and control risks that are used to corroborate alternative sources used by investors and re-affirm existing positions are still relevant.

Auditor Characteristics

Standard-setters presume that audit quality is homogenous among firms and their engagements but empirical evidence suggests otherwise⁶ (Francis, 2022). Consequently, while users should be able to operate on the good faith assumption that audits are conducted to the highest standard, there is no guarantee that an audit report is supported by a sufficiently rigorous risk assessment and response by the assurance provider. In turn, it cannot be guaranteed that all KAMs have

⁶ For example, the largest audit firms have long been associated with providing better-quality assurance services than their smaller counterparts. A firm's industry expertise, the capabilities of individual engagement leaders, and prevailing regulatory contexts are just some of the factors accounting for variations in audit quality as evidenced by inspection findings in different jurisdictions.

been reported accurately and with sufficient specificity, a limitation which is addressed to some extent by archival researchers.

For example, the number of reported KAMs and the topics covered vary by type of audit firm, even for clients of similar size and for assurance engagements conducted with comparable materiality thresholds (Sierra-García *et al.*, 2019). The nature and extent of KAM disclosures may also be driven by engagement leader idiosyncrasies (Rousseau and Zehms, 2020) and the informal practices of audit offices (Maroun and Duboisée de Ricquebourg, 2024) rather than the nature, timing, and extent of the core audit work being performed. If KAMs are not leading reflexively to changes in how audits are being executed (Gutierrez *et al.*, 2018) any benefits associated with more reporting on inherent and control risk could be perceived rather than substantive.

More broadly, KAM disclosures may increase the threat of auditor litigation and lead to audit fee recoverability issues with adverse implications for audit quality (see Brasel *et al.*, 2016; Gimbar *et al.*, 2016; Segal, 2019; Gambetta *et al.*, 2023). Paradoxically, auditors may be encouraged to report more generic or uninformative KAMs because of underlying threats to their independence, including fee dependencies. Variations in competency, commitment, and diligence of individual auditors that account for inspection findings are also relevant. Even when specific assurance practices are codified or backed up by statutory duties, it cannot be assumed that every auditor will comply with the letter *and* spirit of the applicable requirements. As a result, KAMs may widen, rather than narrow, the audit expectation gap (Segal, 2019) with their relevance for investors an ongoing matter of debate (Boolaky and Quick, 2016; Gutierrez *et al.*, 2018; Bédard *et al.*, 2019; Lennox *et al.*, 2023).

The model used by the remainder of this study adapts the concept of inherent and control risks, which have been well established by the technical auditing literature (IAASB, 2009a; IAASB, 2019), to inform an analysis of an organization's risk exposure by investors. The respective audit firm's standing or reputation is an overarching consideration when investors consider the potential relevance of KAMs.

METHOD

Given the exploratory nature of this research, a qualitative method inspired by comparable interpretive research is used.

Selection of Respondents

To understand how KAMs are used by investors as part of their risk/investment appraisal exercises, we conducted 33 interviews with asset managers and asset owners. Table 1 provides summary details. Additional respondent information is included in Appendix B.

The researchers took advantage of two international investor-focused conferences to identify potential participants. This resulted in interviews with

TABLE 1

RESPONDENT SUMMARY

Interviewees	Number of respondents	Average experience (years)	Average duration of interviews (min)
Asset managers	22	14	60
Asset owners	11	16	63
Total	33	15	61

This table shows the background of the 33 interviewees split between asset managers and asset owners, average years of experience, and average duration of interviews.

33 investors conducted in two tranches from August 2022 to April 2023 and March 2024 to June 2024.

Respondents were purposefully selected based on access. The researchers also relied on contacts provided by investors who agreed to be interviewed to secure additional respondents. This approach reflects participants' seniority and their significant time constraints. There is a risk of incorporating bias into findings, but the targeted selection of respondents ensured that each could provide detailed and informed responses to questions.

The possibility of selection or participation biases influencing results was mitigated by engaging with asset managers and owners from multiple firms operating in different jurisdictions and covering investees in different industries (see Appendix B). Running two sets of interviews approximately 12 months apart served as an additional control against selection biases and the possibility of describing a position as it existed at only a single point.

To address the risk of scripted or curtailed responses, the researchers used a broad agenda (see Appendix C) to guide interviews rather than a detailed list of questions or a survey. To ensure that respondents spoke freely, each participant was interviewed individually. Interviewees were informed that the research was being conducted for academic purposes only and that there were no 'correct' or 'incorrect' responses. Care was taken to avoid interrupting respondents. Follow-up questions were used to clarify comments as required. To ensure confidentiality, respondents were assigned a unique code. Work and personal details are withheld.

Data Collection

The interviews focused on establishing the interviewees' understanding of the auditors' expanded reporting duties, and discussing which sections of the audit reports were read as part of their risk/investment appraisal exercises. Interviewees were informed that the research was for academic purposes only; that they could withdraw from the study at any point and that the research was based on their opinions. The order in which questions were put to the interviewees varied but care was taken to ensure that all points on the research agenda were covered.

When each interview was complete, respondents were also requested to conclude whether or not they viewed KAMs as a useful source of information for their investment appraisals.

The transcripts were analysed by the lead researcher for consistency using an 'intuitive approach' comparable to the one followed by Georgiou (2018, p. 1304) and O'Dwyer (2011). After each interview was completed, the transcript was reviewed to gain a sense of the respondent's position on KAMs. Paragraphs were used as the unit of analysis to identify points on how KAMs were being understood, interpreted, and applied by investors. Statements on how KAMs provided insights into an auditee's exposure to risk were highlighted and recorded on a code register. To avoid restricting the analysis, interview agenda questions were used neither to identify nor to label codes. Instead, the codes were derived based on the time spent explaining different points; the emphasis placed on each and field notes taken while the interviews were being conducted.

The aim was not to identify and count consistent points or themes but to capture the full range of perceptions on KAMs. This was in keeping with the study's exploratory aims. Examples of codes included: (1) the types of KAMs being examined; (2) reasons for thinking a specific KAM was relevant or not; (3) the IAASB's rationale for introducing KAMs; and (4) different challenges encountered when trying to process KAMs. Data collection and analysis was an iterative process. The code register was updated as additional interviews were conducted and, where necessary, analysed transcripts were revisited to ensure that the analysis was accurate and consistent.

To structure the results, interview codes were aggregated according to the insights provided into inherent and control risks. Codes that did not 'map' to one or more risk category were flagged and reassessed to ensure that each of the risk types was 'populated' accurately and completely.

The final code register was reviewed by the support researchers as a validity and reliability check. Preliminary findings were piloted during two workshops hosted by the lead researcher. Quotations selected from transcripts to illustrate relevant themes/principles, reflect different perspectives, and ground the findings in the respondents' experiences, were also piloted with a group of academics and practitioners during two workshops hosted by the lead researcher.

RESULTS

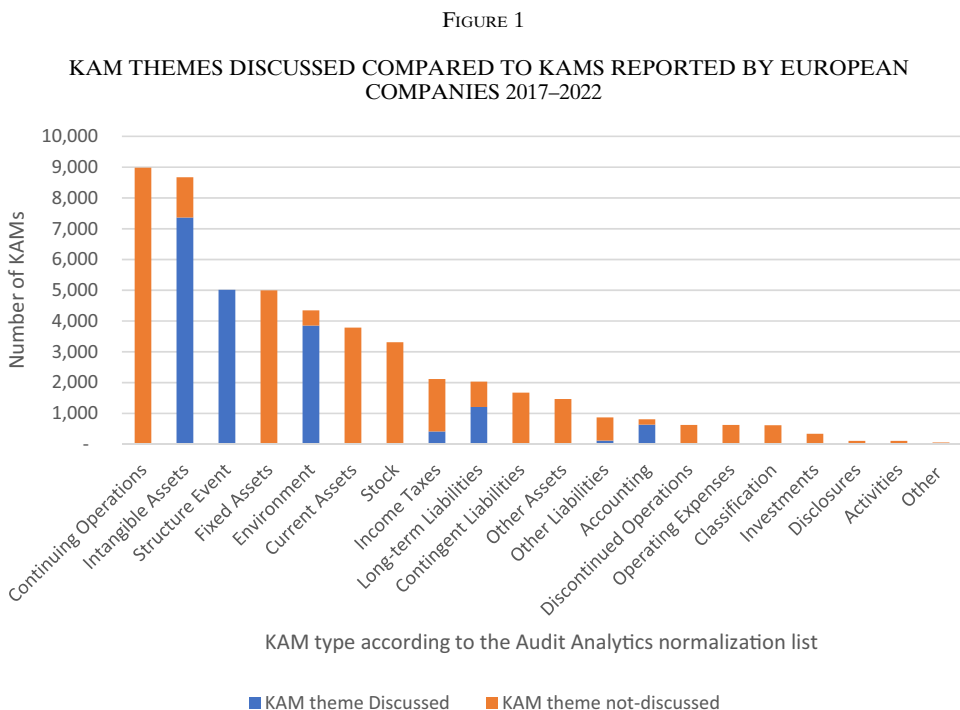
To contextualize the findings, we used Audit Analytics to identify commonly reported KAMs for companies primarily listed in the EU, the UK, and Switzerland from 2017 to 2022. This is consistent with the regions in which respondents operated as per Appendix B (Table B1).

KAM topics are per the database. KAMs dealing with continuing operations (18%) and intangibles (17%) are the most common. The former incorporates KAMs covering the accounting for revenue. Specific inherent and control risk

features are not detailed. The same applies to the second category of KAMs that are on goodwill, deferred/capitalized costs, and other intangibles. (Refer to Appendix A (Table A1) for additional information.)

Interviewees were asked about the importance of audit reports, the sections of the reports being used for informing decisions and, as part of this, the KAMs they encountered. KAM topics raised by respondents were cross-referenced to those per Audit Analytics. Figure 1 read with Appendix A shows that 40 of the 57 topics were not discussed by respondents. This does not, however, mean that KAMs are irrelevant or uninformative (see Table 2).

Table 2 shows that 33% of investors disregarded most KAMs when analysing financial statements or simply noted them as part of a verification exercise linked to whether an audit report was modified. A similar proportion confirmed using KAMs as part of their risk assessments to complement their analysis of financial statements and other sources (30%). For 37% of investors, the extent to which KAMs are factored into valuation models varies but the respondents concluded



This figure uses the Audit Analytics KAM typology to show which KAM topics were discussed by the interviewees in this study. To illustrate the relevance of topics discussed, we show the number of KAMs that would map onto these topics, compared to those that do not. Overall, the figure shows the distribution of 50,568 KAMs reported by 4,513 listed European companies between 1 January 2017 and 31 December 2022. See Appendix A for a more detailed breakdown of the KAM typology along with a brief description of the sample selection process used.

TABLE 2

SUMMARY OF INTERVIEWEES' VIEWS CONCERNING THE RELEVANCE OF KAMS WHEN CONDUCTING RISK ANALYSIS

	KAMs are relevant	Mixed views	KAMs are irrelevant
Asset managers	15%	27%	24%
Asset owners	15%	10%	9%
Total	30%	37%	33%

This table shows the proportion of the 33 interviewees who felt KAMs were helpful, those with mixed views, and those who felt KAMs did not provide them with useful information when conducting their risk analysis.

that KAMs have, at least, some potential to provide useful insights. Understanding the factors that increase this potential is the focal point for the remainder of this paper. When investors do not disregard KAMs, the starting point in their assessment is the credibility of the respective audit firm reporting the KAM.

Perceived Credibility of the Audit Firm Reporting the KAMs

All the investors explained how an audit firm's reputation serves as a type of guarantee that engagements are being conducted according to the highest standards. By inference, reported KAMs are complete and provide an accurate explanation of facts and circumstances. Of importance were 'credibility-enhancing factors' (IN-2) such as the auditors' industry-specific experience, involvement in think tanks, contributions to national and international codes of best practice, and overall market prominence.⁷ Concluding on the credibility of an audit report is based heavily on 'gut feel' (IN-11), 'accumulated experience' (IN-14), and 'word of mouth' (IN-15) but some generally accepted indicators are available. Firm-specific ones are the easiest to observe.

In my experience, you get the most out of the larger [audit] firms. There are probably exceptions. There are some very good audit teams at smaller firms but the big players command the most confidence because they are most likely to stand up to management and they have their reputations at stake. (IN-17)

This view is consistent with earlier research findings that larger audit firms are presumed to conduct their engagements to a higher standard than smaller ones (Knechel *et al.*, 2013; Francis, 2022). Over time, investors may come to identify specific firms, national, or regional offices as industry specialists (IN-4, IN-5, IN-27). Conversely, adverse coverage of an audit firm in the financial press and any regulatory findings against a firm call its credibility into question (IN-22, IN-23, IN-33).

⁷ A detailed examination of how auditors build and maintain their legitimacy is beyond the scope of this paper.

Engagement-specific factors contributing to auditor credibility include, for example, adherence to ethical standards, the extent of supervision and review of fieldwork, the assignment of suitably experienced staff, and the availability of subject experts (IAASB, 2009a, 2022). These are not directly observable, but some risk indicators are available. For example, adverse media attention and results of inspection findings are relevant.

The [latter] may not be public but they get discussed at audit committee and that feeds back to you. You learn to take some people with a pinch of salt and listen very carefully to others. Same applies to what auditors tell you in their [audit] reports. (IN-12)

A further indicator was a change in auditor. On the one hand, this can promote independence and the completion of audits with a fresh perspective. On the other, it can lead to a loss of client-specific knowledge. As a result, a decision to rotate audit firms 'will usually send a signal' (IN-8).

There may have been disagreements or not enough disagreement. The audit committee is on the line so it wants a bulldog not a poodle. Otherwise, management's bark is worse than the auditor's bite [laughs]. So if you remove your poodle and put in a bulldog and out come some changes, you have better financials, And if out comes some new KAMs that means that can tell you that the audit was more focused or that they are cleaning house depending on the context. (IN-9)

Respondents are not focused on the technical details of the KAMs following a change in audit firm, but on the fact that 'things are getting shaken up' (IN-10) leading to more credible reporting by the client and its auditor. In addition, interviewees confirmed that the number of reported KAMs, how this compared to industry averages, and the volume of KAMs by topic were not relevant. After establishing the credibility of the audit firm, interviewees described an interpretive process of factoring KAMs into investment appraisals. As outlined below, this is based on the relevance of KAMs for understanding inherent and control risks including the extent to which KAMs are confirmatory, incrementally informative, or a source of unexpected/new information.

Inherent Risks

More than half of the respondents felt that KAMs are useful when they signal inherent risks. The KAM topics which interviewees flagged as being most likely to do this included: (1) non-compliance with laws, regulations, or industry standards; (2) any form of material business restructurings; (3) compliance with major contracts, including debt covenants; (4) going-concern issues;⁸ and (5) changes to

⁸ Material uncertainty about an organization's ability to continue business would be covered in a separate section of an audit report rather than as part of the KAMs. This is, however, a technical requirement of ISA 705 and ISA 570 intended to ensure the prominence of any going concern issues.

accounting policies required by standard-setters/regulators or at management's election. Each provides a sense of the extent to which the organization's broader context adds to the complexity, uncertainty, and subjectivity of the underlying accounting culminating in a higher risk of misstatement.

Most of this information was confirmatory (IN-2, IN-3) but this did not mean that the KAMs were irrelevant. On the contrary, '... the KAM tells you that you and the auditor are on the same page about that transaction being risky' (IN-16). Being on the 'same page' as the auditor is helpful because not all the information available to investors before the audit report has been published is formally verified. Respondents explained how they incorporate details obtained directly from management, media outlets, various databases, and informal engagements as part of their investment appraisals. As such, KAMs that 'reconcile' with the *a priori* risks identified by investors or analysts have significant confirmatory value. Such KAMs do not result in additional action by investors or a change in their perception of the investee but reassure the investor that the major sources of risk have been identified and addressed appropriately.

Some KAMs highlighting inherent risks also provide an incremental, as opposed to a confirmatory, source of information. Examples included KAMs where the auditor 'tags' specific disclosures as being 'inherently riskier than others with the result that you exercise more caution when you use that information' (IN-1). These KAMs are a direct signal of inherent risk and are used to update risk assessments (IN-6), carry out 'sense checks' (IN-17), and 'polish the questions you want to put to management and the auditors' (IN-9). Citing a specific example dealing with KAMs on non-compliance with laws and regulations, IN-6 affirmed:

You will not have the details because the KAM may not go into all of it, but you do know that there were issues, and you may want to re-look at your own risk assessments because of that.

The KAMs do not alter investment decisions but can prompt an investor to re-assess facts and circumstances and collect additional information from management and other sources. KAMs related to specific transactions may serve a similar function. KAMs identifying the use of significant estimates and judgements in accounting policies are an example (IN-18, IN-21). These include KAMs on the valuation of financial instruments, the valuation of goodwill, and major financing transactions which include debt and equity features. In each case, KAMs flag areas where 'there was a greater risk and where—even if the auditor did the best job—there could still be issues so if you are using that number directly, take extra care' (IN-10).

KAMs covering inherent risks can also be incrementally informative when they provide insights into management's understanding of the underlying transactions, their expertise, and their risk appetite. This is because the KAMs serve as an indirect signal of an increase in inherent risk:

... Valuations are bread and butter for them [auditors]. So, if an auditor stands up and says that a valuation was a KAM and that item is a core one, that can make you

pay attention. Maybe there was something else going on with the mechanics you don't know about? Management may not be as on the ball as they make out or as you may have thought from what you heard at the last roadshow. Maybe there are some cowboys. There was some fudging and the number was okay in the end but only after the auditors put their foot down? ... Basically, the car drove off in the end but someone had to look under the hood first. (IN-1)

Interviewees reported that they seldom focused on the technical accounting and auditing considerations applicable to each KAM. More relevant than the KAM classification per existing databases and the number of each type of KAM disclosed is whether the KAM is a direct or indirect signal for increased inherent risk (IN-3, IN-7). A KAM dealing with uncertain tax positions and disputes with applicable authorities was given as an additional example:

If auditors are coming up with KAMs on taxes and non-compliance, that goes to whether or not there are adequate provisions, which the auditor tested for anyway. What's more worrying is the culture that may be taking hold at the place. You need to pay your fair share and you need to play by the rules. (IN-17)

Given that remuneration policies drive management behaviour and may incentivize inappropriate accounting treatments to secure performance-related bonuses (IAASB, 2009b), KAMs on employee benefits were a further indication of inherent risk. 'Pressure points for management' can be used to 'contextualize' the information being reported to investors and confirm conclusions based on other KAMs or a position informed by insights from other sources available to investors (IN-22). More generally, KAMs linked to executive performance can form part of an overall assessment of an organization's governance culture and the risk of being associated with or invested in the respective entity (IN-9). For example:

... we know that incentives drive earnings management and we know that remuneration attracts a lot of public scrutiny. You don't want to be invested and then there's a blow-up because they got the directors payslips wrong or did not disclose something they should have and now it looks like they've got something to hide. (IN-20)

To gain further insights into whether an organization has 'something to hide' (IN-20), the focus of analysis shifts from inherent risk signals to issues dealing with control risk.

Control Risks

Stringent listing rules, codes on corporate governance and regulatory measures designed to protect investors set a 'minimum standard which is very high for companies on the boards of major stock exchanges' (IN-23). As a result, there is a presumption that these entities have robust governance structures and control

environments (IN-1, IN-23, IN24). Except in cases where SOX applies, auditors do not express an opinion on the integrity of a client's internal controls. As a result, 'just because there aren't control KAMs doesn't mean that everything is hunky dory' (IN-8), but the absence of KAMs flagging material control-related concerns was seen as an 'indirect confirmation' that 'latent factors' which lower control risk and increase the reliability of reported results are probably at work (IN-2). Conversely, 'a KAM telling you that there has been a major control failure makes you sit up and take notice' (IN-30). This is because KAMs highlighting deficiencies in the design or implementation of controls over a specific application or business process are a source of incremental information pointing to higher risk (IN-8).

Interviewees noted that KAMs can provide insights into a change in control risks even when inherent risks are already known and constant. For example:

A restructuring is not a secret ... What the KAM does is it tells you that the restructuring may have been messier than management is letting on. If all goes to plan, it's complex accounting but it's also stuff the guys know how to do very well. So if it's a clean job, there should be nothing giving the auditor ball ache. If it's a shit show, then you get a KAM and that is what is important. (IN-7)

In other words, KAMs are useful when they signal that the accounting and management systems were 'strained' to the extent that additional attention by the organization's governing body and auditor was required. The respondent reiterated that the number of KAMs and the topic of each were not the primary consideration. As discussed above, this provides mainly confirmatory information on a known level of inherent risk (in this case, the complexity associated with a restructuring). Investors were aware of the terms of the applicable transaction that had been disclosed to the market before the financial statements were published but they did not have a complete understanding of the procedural or system-related issues. These were highlighted by the applicable KAM and prompted some 'additional questions and fact-checking' (IN-7). Ultimately, the incremental information provided by the KAM did not alter the investor's conclusion on the restructuring but was interpreted as evidence of a change in control risk and a signal that additional scepticism was required.

The same logic applies to KAMs dealing more broadly with governance issues. For example:

... We do have a check for [governance structures] and any flags being raised by auditors because that can give you context. You have a big picture at the back of your mind when you look at [specific transactions and balances] and you complement what the numbers tell you with a more qualitative analysis ... That includes the control environment ... The control environment matters and any KAMs which point to a problem would then also matter. (IN-1)

KAMs on changes to accounting policies, and variations in systems and processes, business combinations, and other restructurings can also be incrementally

informative (IN-7). This is especially the case when the KAMs relate to pervasive or systemic control issues:

For your big ticket items, you want the [governing body] to be on top of things. If the auditors are worried about the higher-level controls—stuff like monitoring by the board—that can point to structural issues and that goes to a higher level of overall risk. (IN-3)

KAMs on non-compliance with laws and governance standards, fraud-related concerns, and related-party transactions can provide the most direct indication of an increase in risk because of a weak control environment (IN-4, IN-5, IN-7, IN-10, IN-11). In most jurisdictions, codes on corporate governance, listing requirements, and statutes deal expressly with compliance issues, fraud prevention, and related-party transactions. Consequently, an auditor identifying these as a focal point during an engagement was seen as an indication of weaknesses in the applicable governance structures and transaction-level controls (IN-18, IN-21). For example:

... The related party transactions ... For me, they are like a *canary in a coal mine*. There's loads of rules about them in the listing requirements and [various legislation] and then IFRS requirements on top of all of that. So if an auditor is saying that these transactions were a special focus area, that can make me worried and I think, overall, your risk has gone up. (IN-10, emphasis added)

Investors understand that an organization's internal controls have limitations (IAASB, 2009a). 'Canary KAMS' are 'very useful for calibrating expectations about how well controls are working at [the organization] and either confirming your position or making it a bit clearer when you need to go back and ask some more questions' (IN-26).

The incremental informativeness of canary KAMs increases when transactions are at 'the centre of what the business does and gets flagged by auditors' (IN-15). This is because, even if the underlying accounting requires, for example, the use of complex valuation methodologies and estimates (increased inherent risk) there is a presumption that management has the expertise and resources to comply with the relevant accounting standards and report transparently (decreased control risk). As a result, a KAM on methods, systems and processes related to 'core transactions' is 'a clear red flag' (IN-11). The 'nitty gritty accounting details don't matter because [management] should know what they are doing and that's what the KAM is actually telling you is management did not have the bull by the horns' (IN-21).

While many KAMs dealing with related parties, fraud, uncertain tax positions, or disputes with regulatory authorities were given as examples of canary KAMs, some were labelled 'naughty KAMS' (IN-5). Like canary KAMs, these provide insights into the specific checks and balances that failed, and highlight problems with the organizational culture that may have encouraged, enabled, or overlooked management's 'cowboy' behaviour (IN-1). Naughty KAMs are, however, more

than just confirmatory or incrementally informative because the underlying controls are:

... at the inner workings of a firm. Only management and the auditor are privy to the details. That's very different to a major transaction which needs to be disclosed and which gets talked about long before you have a copy of the [audited financials]. So, if you have a KAM that's telling you that there is a material control problem, that's going to be news for you. I don't think you would have had that kind of information from another source in advance. (IN-30)

Respondents subscribing to the view that KAMs can be a source of useful information confirmed that canary and naughty KAMs were most likely to be those dealing with control activities or the broader control environment (IN-28, IN-30). Details on specific transactions and balances can often be obtained from a range of sources with the result that 'standard KAMs' signalling inherent risks are often only confirmatory. In contrast, control-related KAMs have the potential to provide 'context-specific detail' about the 'inner workings' of an organization to which only management and the auditee are privy (IN-28, IN30). That existing regulations do not universally mandate reporting on control-related issues (IN-33) increases the likelihood of these types of KAMs providing incremental or new information to investors compared to KAMs covering only inherent risks.

Limitations of KAMs

Limitations highlighted by investors inclined to disregard KAMs are summarized and ordered based on how often the points were raised. Firstly, was the view that some KAMs contained boilerplate information that 'significantly limited' (IN-9) their usefulness. Even if this is not the case, there is a difficult trade-off between providing insights into inherent and control risk and 'overloading' the reader with information.

KAMs probably do send a signal about the client's risks which would be helpful when you evaluate the business but that gets lost because you have pages and pages of KAMs. Some of it is generic and some of it is very technical and the message gets lost. You also have to do a trade-off. Are the additional details I get about the client worth the time it takes me to read fives pages in an audit report on some or other accounting standard? (IN-13)

Secondly, as discussed above, KAMs are not the equivalent of an expanded audit that covers an entity's governance and culminates in an opinion on the design, implementation, and operating effectiveness of internal controls. As a result,

I think the IAASB could have added more value if they followed the US idea and said, "you auditors need to test the controls and you need to give an opinion on those controls like you do for the financial statements and you need to list the control deficiencies you discussed with management". (IN-13)

A third limitation is the fact that KAMs are restricted to the financial statements. As more emphasis is placed on sustainability reporting and the social- and environmental-related risks that can impact economic performance or have adverse implications for stakeholders, KAMs may become less relevant. Conversely,

When developing the standards for auditing sustainability reports, we may need “key sustainability matters” before we can use KAMs as a comprehensive way for understanding risks better. (IN-19)

Supplementary Analysis

Responses were analysed further by grouping respondents according to different characteristics in Table 3. Panel A shows that overall views on KAMs for the first and second tranche of interviewees are consistent. In addition, neither the respondents’ experience nor the duration of their interviews varies substantially with their position on KAMs.

Panel B shows that each of the three positions on KAMs comprises investors from a range of jurisdictions. Untabulated details confirm that this is also the case when considering investor gender and the extent to which interviewees engaged with environmental, social, and governance information in addition to financial statements. Overall, the stratifications in Table 3 suggest that the legal or governance system, other jurisdiction-specific features, or investor idiosyncrasies are not affecting opinions on KAM usefulness. Some caution must, however, be exercised given the relatively small sample size and the fact that the current research is not focused specifically on testing the determinants of investors’ stance on KAMs quantitatively.

DISCUSSION AND CONCLUSION

KAMs have been framed as a technical regulatory development by the assurance literature (Gambetta et al., 2023; Mashayekhi et al., 2023) but they have the potential to highlight underlying risks which ought to be considered by investors and other stakeholders. This is especially the case given that KAMs are among the few organizational risk indicators which have, in substance, been externally verified. Unlike other information reported voluntarily by management, KAMs provide insights into facts and circumstances which affect how independent auditors assess the risks of clients’ financial statements being misstated. This paper makes an important contribution by offering primary evidence on how KAMs are interpreted by investors, the nature of the information being provided, and the implications for decision-making (see Figure 2).

Earlier value-relevance studies treat KAMs as direct inputs into valuations or determinants of financial performance and risk measured using, for example,

TABLE 3

SUMMARY OF INTERVIEWEES VIEWS OF KAM USEFULNESS

Panel A: Summary of interviewees by period and view of KAM usefulness

	Proportion of respondents	Average experience (years)	Average interview duration (min)
KAMs are relevant	30%	16	66
First tranche	32%	14	69
Second tranche	27%	21	60
Mixed views	36%	15	64
First tranche	36%	17	64
Second tranche	36%	12	64
KAMs are irrelevant	33%	14	53
First tranche	32%	16	54
Second tranche	27%	11	53

Panel B: Summary of interviewees by location and view of KAM usefulness

	KAMs are relevant	Mixed views	KAMs are irrelevant	Total
Austria	1			1
Belgium	1	1	1	3
France	1	1	1	3
Germany	1	1	1	3
Luxembourg		2		2
Netherlands	1		2	3
Portugal			1	1
South Africa–UK	2			2
South Africa–US		1	1	2
Spain	2	2	1	5
Switzerland			1	1
UK	3	3	1	7

Respondents included South African-based investors at firms with offices in the UK and US. These interviewees focused on companies with operations in South Africa but with primary or secondary listings in the EU.

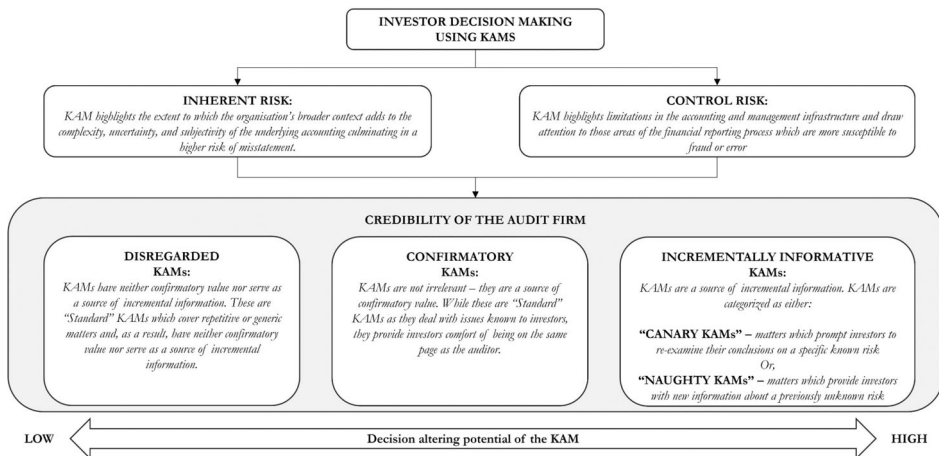
cumulative abnormal returns. This oversimplifies how KAMs are being understood and applied by investors.

In cases where KAMs are repetitive or contain only generic information, they are disregarded. When this is not the case, they form part of a subjective process of understanding an investee's risk profile. In the context of the credibility of the audit firm providing the additional disclosure, risk insights are either inherent or related to control.

Some KAMs provide confirmatory evidence about these risks. They do not have a direct impact on share price or other financial measures because the investor is already aware of the underlying matter. Not all the so-called 'standard KAMs' are, however, irrelevant. Some give investors comfort that they are on 'the same page' (IN-16) as the auditor, contextualize other details contained in financial statements or other sources, and serve as a type of completeness check for investment and risk appraisals.

FIGURE 2

FRAMEWORK ILLUSTRATING THE INTERPRETATION OF KAMS BY INVESTORS



This figure illustrates the risk classification framework used by investors when evaluating the value relevance of KAMs.

Canary KAMs are different. They provide *incremental* information about matters of which the investor was already aware but are used to refine risk assessments. Investors may not alter their decision about the investee, but the KAMs prompt them to ‘lift the hood’ (IN-1) on the financial statements. Doing so may either affirm the original investment decision or lead to further discussion and analysis, which may contribute to a change in position.

In rare cases, auditors report naughty KAMs. Like canary KAMs, these serve as a risk signal but are also a source of new information with the potential to prompt additional scrutiny by the investor and directly inform an investment decision. Naughty KAMs may arise because of inherent risk factors but the examples provided by interviewees suggest that these types of KAMs are most likely to address material issues with an entity’s internal control systems, governance structures, and organizational culture.

The above conclusions are tentative. The risk classification framework was derived using interviews with a relatively small group of experts complemented by findings from earlier KAM determinant and value-relevance research. Detailed case studies to test the model’s application were not performed and offer an opportunity for future research. It would also be useful to apply the framework using an organization’s audit report and ‘calibrate’ the findings by comparing them with independently generated risk assessments and perspectives obtained from that organization’s governing body. The framework also weights risk indicators equally. How these could be ranked according to an investee’s

circumstances and risk appetite of the investor would offer further insights into how financial risk is internalized in practical settings.

Despite its limitations, the model offers one of the first *primary* accounts of how KAMs are interpreted by investors and *how* they act on additional information reported by auditors. Doing so reveals how the number of KAMs and their categorization by existing databases and research are not the primary consideration. More important are inferences which can be drawn about inherent and control risks.

Even if an audit report is unmodified, investors appreciate that audits are subject to limitations and that errors do occur. KAMs can be used to complement the one-dimensional information in an audit opinion. The content of individual KAMs and how they are framed in the context of the investor's understanding of the auditee's business can reveal potential governance weaknesses; deficiencies in systems of internal control and limitations in management processes. The KAMs themselves are not being 'priced' by the market but they can be used to facilitate a more refined risk assessment by investors which, in turn, inform their decisions. The proposed inherent-control risk model iterates how valuations are not only dependent on sophisticated mathematical modelling but contain an inherently interpretive dimension, something which will need to be factored into future analyses of the determinants and consequences of KAM reporting. There are also important practical implications.

ISA 701 and the AS3101 explicate how KAMs or CAMs, respectively, should be identified but offer little guidance on how these are presented and explained in audit reports. To make KAMs/CAMs more informative for investors, auditors should consider dealing explicitly with how the matters of 'greatest significance' for conducting the audit impact the auditors' assessment of inherent and control risk. The steps taken by the auditee to mitigate these risks, and how the risks change over time, also have the potential to provide further value-relevant information to the primary users of the audit report.

Finally, the findings in this paper will be useful for standard-setters. Evidence is provided in support of the decision to expand auditors' reporting duties but also iterates the importance of providing context-specific disclosures. Care must be taken to avoid KAMs or CAMs becoming part of a compliance-driven routine that limits their relevance. Regulators will need to play a key role in encouraging auditors to avoid generic reporting while internal quality reviews should focus on maximizing original information content in addition to managing legal liability and ensuring compliance with the letter of auditing standards.

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APPENDIX A

TABLE A1

RELEVANCE OF KAM TOPICS DISCUSSED BASED ON AUDIT ANALYTICS TYPOLOGY

KAM topic	Discussed	Ref	No. KAMs reported for European companies 2017–2022
Accounting			813
Policy changes	Yes	a.	451
Related-party transactions	Yes	b.	181
Foreign currency, inflation, and related disclosures	No		135
Error corrections	No		46
Activities			107
Listing/delisting	No		62
First-year audit	No		45
Classification			615
Presentation—Exceptional items and non-GAAP measures	No		334
Other debt	No		274
Segment reporting	No		7
Contingent liabilities			1,672
Contingent liabilities (including litigation and restructuring)	No		1,508
Warranty liabilities	No		164
Continuing operations			8,979
Revenue and other income	No		5,956
Revenue from customer contracts	No		2,813
Sales return and allowances	No		210
Current assets			3,788
Inventory	No		2,054
Accounts/loans receivable	No		1,436
Vendor/supplier rebates	No		237
Cash and cash equivalents	No		61
Disclosures			107
Financial statements and disclosures	No		107
Discontinued operations			625
Disposals, discontinued operations, and accounting for sales/divestitures	No		625
Environment			4,348
Going concern	Yes	c.	3,137
Information technology	No		444
Internal controls	Yes	d.	453
Compliance with laws and regulations	Yes	e.	265
Transformation initiatives	No		35
Bribery and corruption	No		14
Fixed assets			4,998
Property, plant, and equipment	No		1,875
Real estate investments	No		1,616
Long-lived assets	No		1,243
Leases	No		264
Income taxes			2,117
Deferred income taxes	No		1,244

(Continues)

TABLE A1
CONTINUED

KAM topic	Discussed	Ref	No. KAMs reported for European companies 2017–2022
Other income taxes	No		455
Uncertain tax positions	Yes	f.	418
Intangible assets			8,669
Goodwill	Yes	g.	3,443
Goodwill and intangible assets	Yes	g.	2,566
Other intangible assets	Yes	g.	1,352
Deferred and capitalized costs	No		1,308
Investments			340
Long-term investments	No		340
Long-term liabilities			2,033
Pension and other post-employment benefits	Yes	h.	812
Insurance contract liabilities	No		558
Derivatives and hedging	Yes	g.	398
Asset retirement and environmental obligations	No		265
Operating expenses			625
Deferred and stock-based compensation	No		410
Depreciation and amortization	No		112
Other expenses	No		81
Selling, general, and administrative expenses	No		22
Other			60
Other or unspecified accounting estimates	No		60
Other assets			1,471
Allowance for credit losses	No		934
Proven and unproven reserves	No		537
Other liabilities			874
Other liabilities and provisions	No		753
Debt covenants	Yes	i.	121
Stock			3,313
Other investments	No		3,313
Structure event			5,014
Business combinations	Yes	j.	2,074
Subsidiary/affiliate	Yes	j.	1,870
Equity investments and joint ventures	Yes	j.	590
Significant one-off transactions	Yes	k.	378
Consolidation	Yes	j.	102

This table uses the Audit Analytics KAM typology to show which KAM topics were discussed by the interviewees in this study. To illustrate the relevance of these topics, we show how the 50,568 KAMs reported by 4,513 listed European companies are distributed according to this typology. The data were obtained from Audit Analytics Europe by selecting all companies with a primary listing on a European, UK, or Swiss stock exchange with audit opinions and KAMs for any of the fiscal years ending 1 January 2017 to 31 December 2022.

a. Changes in accounting policies; b. Related party transactions; c. Going concern issues; d. Deficiencies in design and/or implementation of control specific to an application or business process; e. Non-compliance with laws and governance standards; f. Uncertain/disputed tax positions; g. Use of judgements/estimates for a specific balance/transaction including valuations of intangibles, goodwill, and financial instruments; h. Employee benefits; i. Contractual compliance (including debt covenants); j. Complex group structures, business combinations, or other reorganizations; k. Major refinancing arrangements.

APPENDIX B

TABLE B1

FURTHER DEMOGRAPHIC INFORMATION OF RESPONDENTS

Key	Years in current role	Interview duration	Operating location	Focus	Role	ESG experience	Interview tranche	Usefulness of KAMs
IN-1	5	100	Portugal	MUL	M	E	First	PROP
IN-2	14	60	UK	MUL	M	E	First	FLEX
IN-3	6	45	UK	MUL	M	S	First	FLEX
IN-4	30	45	UK	MUL	M	S	First	OPP
IN-5	16	60	South Africa–UK	MUL	M	S	First	FLEX
IN-6	11	65	France	MUL	M	E	First	FLEX
IN-7	31	60	Spain	MUL	M	S	First	FLEX
IN-8	12	45	France	MUL	M	S	First	OPP
IN-9	22	45	Switzerland	MUL	M	N	First	PROP
IN-10	15	90	Germany	MUL	M	N	First	PROP
IN-11	19	90	UK	MUL	M	S	First	PROP
IN-12	6	60	Spain	MUL	M	S	First	OPP
IN-13	18	60	Spain	FOC	M	N	First	OPP
IN-14	8	30	UK	FOC	M	E	First	OPP
IN-15	33	100	Spain	MUL	O	S	First	FLEX
IN-16	12	90	Luxembourg	MUL	O	S	First	OPP
IN-17	11	60	Belgium	FOC	O	E	First	FLEX
IN-18	7	45	France	FOC	O	N	First	PROP
IN-19	23	45	Luxembourg	MUL	O	N	First	OPP
IN-20	9	50	Spain	MUL	O	S	First	PROP
IN-21	18	60	Belgium	MUL	O	S	First	PROP
IN-22	10	60	South Africa–UK	FOC	O	E	First	FLEX
IN-23	10	45	UK	FOC	M	S	Second	FLEX
IN-24	14	120	Netherlands	FOC	M	S	Second	FLEX
IN-25	12	45	Germany	MUL	M	S	Second	FLEX
IN-26	8	45	Belgium	MUL	M	E	Second	OPP
IN-27	7	45	Germany	MUL	M	E	Second	OPP
IN-28	13	45	Austria	MUL	M	S	Second	FLEX
IN-29	17	60	South Africa–US	MUL	M	S	Second	OPP
IN-30	18	60	South Africa–US	FOC	O	S	Second	PROP
IN-31	25	60	Netherlands	MUL	O	N	Second	PROP
IN-32	10	60	UK	MUL	O	N	Second	OPP
IN-33	19	60	Netherlands	MUL	M	N	Second	PROP

This table provides further demographic information for each of the respondents used in this study, along with their stance regarding the usefulness of KAMs when making investment decisions. Respondents' investment focus is classified as either on multiple classes of assets (MUL), or specific investment types (FOC); respondents are further shown as either asset managers (M) or owners (O). Work experience of respondents with ESG information is indicated as either: Extensive (E), To some extent (S), or Not at all (N). The extent to which respondents believed KAMs to be useful in informing their investment decision-making is shown as: Proponents of KAMs (PROP), Undecided (FLEX), Not used at all (OPP).

APPENDIX C INTERVIEW AGENDA

1. How important are audit reports for market participants? What is your basis for this position?
2. What sections of the audit report do you read?
3. Do you process all of the information contained in those sections and what do you do with the other parts of the audit report?
4. What is your view on the standard-setters introducing a requirement for auditors to report key or critical audit matters?
5. What is your opinion on the key or critical audit matters you have seen in audit reports?
6. Do you discuss the key or critical audit matters as part of your analysis of an investee's financial results? If not, why not?
7. Can you provide any examples of where key audit matters have provided useful insights into an investee's financial position, performance, or cash flows?
8. If not, can you suggest what should be done to make key audit matters more relevant?