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The effect of key audit matters and management disclosures on auditors' judgements and decisions: An exploratory study

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ABSTRACT

We investigate how disclosure of key audit matters (KAMs) and related management footnote disclosures on a subjective accounting estimate relating to fair value in the financial statement footnotes affect auditors' perceptions of their accountability and their subsequent adjustment decisions. In relation to accountability, a substitution effect is found between KAMs disclosures and footnotes. That is, auditors believe that they are less accountable either when they can report on the fair value estimates in KAMs disclosures, or when management has provided expanded fair value related footnotes. However, we find that when the fair value disclosure is considered by *both* KAMs and expanded footnotes it results in the auditor recommending a more conservative fair value adjustment decision. Overall, our results show that the requirement to disclose KAMs does make a real difference and interacts with management's disclosures to affect auditors' perceptions of accountability and their adjustment decisions.

1. Introduction

Key Audit Matters (KAMs under the IAASB) or Critical Audit Matters (CAMs under the PCAOB) are now required in audit reports to improve audit transparency. Additional audit disclosures have generally been welcomed by financial statement users (CAQ, 2013; PCAOB, 2017) and evidence already demonstrates that KAMs inform users' decisions (Christensen, Glover, & Wolfe, 2014; Commerford, Hatfield, & Houston, 2018; Kelton & Montague, 2018; Sirois, Bédard, & Bera, 2018). There was an expectation from some commentators that KAMs would result in an increase in auditors' liability (Katz, 2014) but research has found mixed results on this. Some have found it increases perceptions of auditor responsibility (Backof, Bowlin, & Goodson, 2022; Gimbar, Hansen, & Ozlanski, 2016), while others find it results in a decrease (Brasel, Doxey, Grenier, & Reffett, 2016; Kachelmeier, Rimkus, Schmidt, & Valentine, 2020). Our paper is different in that it evaluates auditors' behaviour in response to KAM requirements. Auditors make the decision on whether a KAM is included in the audit report and what should be included in the KAM, therefore they are an important group to consider in evaluating the effect of these disclosures.

This paper is exploratory as it explores the limited stream of research concerning the implications of the requirement to disclose KAMs on auditor responses and behaviour. There have been some studies looking at market and investor reactions, auditor liability, and client management responses (Bédard, Coram, Espahbodi, & Mock, 2016; Burke, Hoitash, Hoitash, & Xiao, 2023; Gold & Heilmann, 2019). However, we are aware of only one study that has evaluated how KAMs affect audit judgements and decisions (Asbahr & Ruhnke, 2019). Therefore, our understanding of the effect on auditors of this important new disclosure is still quite limited. This

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present study, by examining a very senior group of auditors provides a further contribution to our knowledge in this area. It is important for users, auditors, standard setters and regulators to understand if these changes have real consequences on the auditing process beyond the act of just disclosing the KAMs *per se*. Further, an understanding of the impact of KAMs on auditors' judgement and decisions can provide insights into practice and policymaking to evaluate the effectiveness of this type of auditor-investor communication, thereby facilitating future regulation and standards implementation and improvement processes.

Associated with the disclosure of KAMs by auditors are related management disclosures on these issues. KAMs are not a substitute for disclosures required by management (ISA 701, para. 4); therefore, where there is a KAM there will normally be a management disclosure, most likely in a footnote. This provides a new setting where the same issue is disclosed by both the auditor and management in the financial report. While footnote disclosures are different to KAMs, the two types of disclosures may provide information to financial statement users concerning the same underlying risk areas, which is in fact encouraged by ISA 701 (IAASB, 2015, para. A36). This present exploratory study explores the effect of *both* of these related disclosures on auditors' judgements and decisions.

In the current financial statement auditing context, auditors are held accountable to "apply professional judgement to assess the reasonableness of many complex accounting estimates that are future oriented" (Peecher, Solomon, & Trotman, 2013, p. 597). As the focal point of the KAM requirements is to supply information from auditors regarding the audit of significant matters, it is a reasonable expectation that this increased transparency of these issues raised during the audit process may affect auditors' accountability. We explore this issue in this paper. We also explore the impact of more management disclosure on the issue raised in the KAM, as we expect this may influence auditors' perceptions of accountability (Peecher, et al., 2013).

We also examine how the expanded disclosure of KAMs and the related disclosure of management affect auditors' adjustment decisions. Based on the requirements of the auditing standard on materiality (ISA 320), our expectation is that expanded disclosure on an accounting issue increases its salience and should affect the auditors' materiality assessment, and therefore result in a more conservative accounting adjustment. This differs with prior research, which suggests that expanded disclosures result in a moral licensing effect, whereby the auditors are more likely to acquiesce to management on a potential accounting adjustment (Asbahr & Ruhnke, 2019; Griffin, 2014).

While there are many types of accounting issues that auditors might disclose in KAMs, early research on the types of matters disclosed in KAMs shows that a discussion of fair value is one of the most common (KPMG, 2019). As it is one of the most common and involves uncertainty in judgement, that is the type of KAM we have chosen for this experimental study.

Using 50 experienced auditors (70 percent are partners or directors) in Australia, we conduct a 2×2 between-subjects experiment. The design first includes manipulation of KAMs at two levels: one that requires the inclusion of KAMs (as per ISA 701) and one where KAMs are not part of the reporting environment and therefore not an applicable disclosure option (similar to Asbahr & Ruhnke, 2019).[1] The second manipulation is of two levels of footnote disclosures by management, a standard footnote and an expanded footnote that provided more information on the fair value disclosure issue. We then ask participants about their perceptions of accountability towards the reasonableness of financial statements and their possible audit adjustment decisions.

We find that auditors perceive less accountability towards the reasonableness of financial statements under conditions when they can disclose KAMs, or when an expanded management footnote is provided in the financial statements. The finding suggests that when information regarding significant areas of risk is provided to users, either in the KAM disclosure in the audit report or in the management disclosure in the footnotes to the financial statements, auditors feel less accountable for ensuring reasonableness of financial statements.

However, despite the perceived lower accountability, we find that when management provide expanded footnote disclosures *and* auditors are also meeting the requirements of reporting KAMs (ISA 701), it increases the salience of the fair value accounting issue and influences auditors' decisions such that auditors require greater fair value adjustments.

This study contributes to the extant literature in several ways. It is one of the first studies to examine how the requirement to disclose KAMs affects auditors, and we find it does affect their judgements and decisions in a number of ways. The objective of implementing KAMs was primarily to improve the information from auditors to users of financial statements (IAASB, 2012). However, our study shows that there are some unintended consequences in terms of real effects on auditors, which responds to the call for research on the unintended consequences of ISA 701 (Bédard, et al., 2016). These findings could inform regulators' and standard setters' understanding and confirm expectations in relation to the effects of the new audit standard (i.e., ISA 701), by demonstrating that the application of the standard has real and important effects on auditors' responses, including their judgements and decisions.

The remainder of this paper is organised as follows. Section 2 reviews prior related research concerning KAMs, management disclosures, accountability, and adjustment decisions in audit. Section 3 describes the research method, design, and data collection. Section 4 reports and explains the results, while section 5 concludes the paper.

2. Background and literature review

2.1. Key audit matters and management disclosures

In recent years there has been a major change in audit reports to require disclosure of client-specific risks, called KAMs (IAASB,

[1] We generally refer to the international auditing standards. However, the study was conducted in Australia where the relevant standard is ASA 701, which is an Australian Auditing Standard. This standard corresponds to and is highly consistent with ISA 701.

2015)[2] or CAMs (PCAOB, 2017).[3] KAMs are defined in ISA 701 as "matters that, in the auditor's professional judgement, were of most significance in the audit of the financial statements of the current period" (IAASB, 2015, para.8). They are communicated in a dedicated section of the audit report and are intended to provide information that is specific to the client and audit engagement and enhance the informativeness, transparency, and overall usefulness of the audit report for financial statement users.

There has been significant and growing research on the effects of the disclosure of KAMs (for a review see, Gold & Heilmann, 2019). The vast majority of this research has been on investor behaviour and the market reaction to KAMs information (Gold & Heilmann, 2019). There is limited research on the effect on auditors due to these additional disclosure requirements. Some recent archival studies have hypothesised that audit quality and fees would increase as a result of KAMs disclosures.[4] This is based on the premise that KAM requirements are expected to heighten auditor accountability (see e.g., Reid, Carcello, Li, Neal, & Francis, 2019), leading auditors to respond with associated audit work around the risk areas disclosed in KAMs. The research on this has found mixed results. Two studies undertaken in the UK did not find an impact on audit quality or fees based on these changes (Gutierrez, Minutti-Meza, Tatum, & Vulcheva, 2018; Reid et al., 2019). Consistent with these findings, a study in France which has had expanded audit reporting for a longer period of time (although not specifically KAMs), also did not find a market impact, audit quality or audit fee impact from these disclosures (Bédard, Gonthier-Besacier, & Schatt, 2019).[5]

In terms of looking at actual auditor behaviour, Asbahr and Ruhnke (2019) find in an experiment that auditors exhibit lower skeptical action through a lower probability of recommending a potential fair value adjustment when there is a KAM reporting requirement and the fair value accounting estimate is included as a KAM. This could be interpreted as suggesting that KAM disclosures diminish auditor accountability.[6] Contrary to the expectations of standard setters (see e.g., IAASB, 2015), Asbahr and Ruhnke (2019)'s findings are indicative of possible unintended, adverse effects arising from the requirement to disclose KAMs.[7 and 8]

The other disclosure that relates to a matter identified in a KAM is the disclosure provided by management. ISA 701 notes that the auditor should avoid providing original information about the entity in the KAM. Despite the importance and value of KAMs, it is management who are primarily responsible to provide firm-specific information to improve the information environment of financial statement users, and inform their decisions (Dennis, Griffin, & Zehms, 2019). Although auditors evaluate reasonableness of disclosures, it is management's responsibility to prepare the financial statements in accordance with accounting standards (IAASB, 2016). As noted, KAMs are disclosures of the matters most significant to the auditors in conducting the audit and are not generally intended to provide new information beyond what has been disclosed by management (IAASB, 2016).

Recent research shows that KAM disclosures can affect management disclosure behaviours, such that more informative KAM disclosures may motivate management to provide more extensive disclosures on the KAM reporting area under certain conditions (Fuller, Joe, & Luippold, 2021). Another study demonstrates that KAM disclosures can influence management operating decisions by reducing risk-decreasing behaviour but not risk increasing behaviour, thereby showing a potential unintended risk-increasing effect of KAM disclosures (Bentley, Lambert, & Wang, 2021). While it is reasonable to evaluate the effect of potential KAMs on management disclosures, in practice the timing would be such that the final KAM would be produced after the management disclosures are finalised and the KAM has been discussed with those charged with governance (IAASB, 2015; PCAOB, 2017).

Our study examines whether and how auditors' judgement and decisions are affected by management disclosure on the same matter as is included in the audit KAM. We are not aware of this issue being explored in the literature on KAMs to date (Gold & Heilmann, 2019).[9]

The next section considers literature on how these disclosures might affect auditors' accountability perceptions and the following section examines how these disclosures might affect potential adjustment decisions.

[2] ISA 701 became effective for financial statement audits of listed firms for the period ending on or after December 15th, 2016 (IAASB, 2015).

[3] Other key jurisdictions include the European Union (EU, 2014), and the UK (FRC, 2013).

[4] Moroney, Phang, and Xiao (2021) demonstrate that KAM disclosures can improve investor perceptions of value and quality of audit for non-Big 4 audit firms, but do not change for those of audits conducted by Big-4 auditors.

[5] In contrast to these studies in the UK, in New Zealand, Li, Hay, and Lau (2019) find improvement in audit quality and significant increases in audit fees due to new audit reporting requirements.

[6] Asbahr and Ruhnke (2019) argue that moral licensing effects operate when auditors justify matters that are significant to the audit as KAMs, and therefore perceive that corresponding adjustments in the financial statements are less necessary.

[7] In an archival study, Sierra-García, Gambetta, García-Benau, and Orta-Pérez (2019) find that types and numbers of reported KAMs are associated with auditor and client specific characteristics.

[8] Our research is different from Asbahr and Ruhnke (2019) in the following major aspects. First, we examine the effect of KAMs on auditors' perceived accountability judgements. Second, we explore the effect of both a KAM disclosure requirement and management disclosure on the same issue of fair value estimates and examine how that affects auditors' adjustment decisions. Lastly, our experimental design for KAM conditions is largely different from Asbahr and Ruhnke (2019), such that it creates the environment under which KAM disclosure requirements are in effect instead of providing a fair value KAM issue and disclosure. Therefore, our setting can capture auditors' fair value judgement decisions under the KAM reporting environment before making the final KAM decisions. This is consistent with the audit process in practice, as KAM decisions are made in the final stage of an audit after significant auditing matters have been identified and necessary adjustments have been proposed and discussed with those charged with governance, rather than before those adjustment decisions are made.

[9] A few studies investigate the disclosures of managers and auditors on the same material measurement uncertainty from an investors' perspective (Christensen, et al., 2014; Dennis et al., 2019).

2.2. Accountability

Accountability has been defined as "a relationship, driven by social, contractual, hierarchical or other interpersonal factors, between the source (e.g., the principal) and the accountable person (e.g., the agent) in which the latter has incentives to behave as the former wishes" (Gibbins & Newton, 1994, p. 166). In relation to auditing, the auditing standards stipulate that the objective of the audit is to enhance the confidence of the intended users of the financial report (ISA 200, IAASB, 2007). Further, the audit report is usually addressed to those the report is prepared for, usually shareholders or possibly those charged with governance of the entity (ISA 700, IAASB, 2016). For the purposes of financial statement audits, auditors are accountable for evaluating the reasonableness of financial information (Peecher, et al., 2013), as well as taking due care to ensure sufficient disclosures are available for users of financial statements (IASB, 2009).

KAM disclosures particularly reinforce auditors' accountability toward the users of financial statements, as KAMs are intended to increase the transparency of the information environment for users by supplying firm specific information from the auditors. As noted by the Chairman of the IAASB in the proposal to expand the auditor's report, "users of auditing financial statements are calling for more pertinent information for their decision-making" (IAASB, 2012).

Peecher, et al. (2013) develop a framework for re-thinking accountability for financial statement auditors, where they distinguish between process accountability (i.e., requirement to justify process used to reach audit decision) and outcome accountability (i.e., requirement to justify final audit decision). Peecher et al. (2013) note that auditors have been held accountable when there were adverse financial outcomes after the completion of the audit, and they define this as outcome accountability. It is therefore a similar concept to responsibility, and they note that outcome accountability provides "retrospective assessments of auditors' judgement processes" (Peecher, et al., 2013, p. 602). Outcome accountability has been found to result in outcome bias when jurors have evaluated auditors more harshly due to negative outcomes (e.g., audit failures) regardless of high quality audits having been performed by the auditors (e.g., Kadous, 2001).

Early discussions of KAMs highlight the potential increased exposure to litigation expressed by interests groups from this type of disclosures (PCAOB, 2017). This suggests that KAMs disclosures can invoke outcome accountability due to the requirement for auditors to justify or explain the final audit judgement decision (Peecher, et al., 2013). However, disclosing KAMs may also reduce the risk that auditors are a target for penalties such as fines, punitive damages or revocation of license, which also relates to outcome accountability (Peecher, et al., 2013) – a study of jurors confirmed this expectation (Brasel, et al., 2016).

While this literature suggests that KAMs will increase accountability and audit quality, studies on users' perceptions on the related concept of auditors' responsibility find mixed results (Backof, et al., 2022; Brasel et al., 2016; Gimbar et al., 2016; Kachelmeier et al., 2020).

Therefore, we explore this issue as a research question as follows.

RQ 1. What is the effect of a KAM disclosure requirement on auditors' perceived accountability?

We also explore whether the extent of related management disclosure in footnotes will also affect auditor's accountability. Although Griffin (2014) examined the effect of management disclosures on auditor adjustment decisions, we are unaware of research that has examined the possible effect of expanded management disclosures on auditors' accountability perceptions. The moral licensing theory discussed by Griffin (2014) would suggest that enhanced disclosure by management may reduce auditors' perceived accountability. However, expanded disclosure by management may also put the onus on auditors to justify or explain the final audit judgement decision, therefore increasing accountability (Peecher, et al., 2013). We therefore pose the second research question.

RQ 2. What is the effect of an expanded management footnote disclosure on auditors' perceived accountability?

2.3. Adjustment decisions

The other aspect of how the requirement for KAMs and the extent of management footnote disclosure might affect auditors is in their adjustment decisions. Auditors are required to assess the reasonableness of financial estimates made by management and, if they deem the amounts to be materially misstated, they should recommend adjustments before signing off the accounts. The most important aspect of this decision is the auditors' assessment of materiality, which affects the decision on whether to recommend an adjustment and if so, its size. The auditing standard on materiality provides some guidance on this and states that a material misstatement is one that "could reasonably be expected to influence the economic decisions of users taken on the basis of the financial report" (ISA 320, para. 2). This is an area which requires professional judgements and therefore also variation in auditors' decisions on whether to require clients to record adjustments. However, the audit standard also highlights that in determining materiality, the auditor should consider disclosures, including qualitative disclosures (ISA 320, para. A2). These requirements of the standards would suggest that the increased salience and risk of an accounting matter through expanded management footnote disclosure or disclosure as a KAM may potentially affect the auditors' materiality decision and hence they would be more likely to recommend a more conservative audit adjustment.

Griffin (2014) notes that the auditing literature makes no clear prediction about how supplemental disclosure will affect auditors' adjustment decisions. His study did find that, consistent with moral licensing, supplemental management disclosure resulted in auditors' tolerating greater potential misstatements in the financial statements. Asbahr and Ruhnke (2019) examined the effect on these adjustment decisions when auditors are required to disclose KAMs. Their results were also consistent with moral licensing as they found that the requirement to disclose KAMs reduced the recommended adjustment amount proposed by the auditor.

In our study, while we acknowledge the findings of both Griffin (2014) and Asbahr and Ruhnke (2019), we note that these findings are contrary to what the auditing standards would expect of auditors when there is expanded disclosure of an important accounting issue. Griffin (2014) makes this point by describing his findings as a "perverse" effect of more disclosure and highlights that a push by regulators for more supplemental disclosures may have "unintended consequences". There have been very few studies in this area that have examined these types of decisions by auditors.

Based on the above discussion, we pose two research questions to explore auditors' decisions in this area as follows.

RQ 3. What is the effect of a KAM disclosure requirement on auditors' adjustment decisions?

RQ 4. What is the effect of an expanded management footnote disclosure on auditors' adjustment decisions?

In summary, in this exploratory study, we investigate how additional disclosures by both management and/or auditors affects auditors' judgements and decisions on a subjective accounting estimate relating to fair value.

3. Method

3.1. Experimental design

A 2 × 2 between – subjects experiment (KAMs versus no KAMs and a standard footnote versus an expanded footnote) was conducted to explore the research questions.[10] Audit partners and other senior auditors from public accounting firms in Australia participated in an online experiment hosted on Qualtrics.[11] The participants were provided with a hypothetical task in which they assessed an impaired asset (shown in the Appendices).

In determination of a subjective accounting estimate, we chose accounting for fair value of assets as an appropriate setting for this study. This is because it is widely acknowledged as an audit risk area.[12] Early KAMs research also shows that the inclusion of a discussion on fair value is one of the most common matters reported by auditors in KAMs disclosures (KPMG, 2019). Additionally, regulators encourage financial statement preparers to provide supplemental footnote disclosures regarding fair value estimates to explain the underlying rationale to users of financial statements (FASB, 2010; IASB, 2009; Reilly & Scannell, 2008; SEC, 2008a, 2008b).[13] Auditors play an important role in assessing uncertainty disclosures, including those made in footnotes to the financial statements (IAASB, 2008a), by evaluating the reasonableness of fair value estimates provided by management during an audit (AUASB, 2015; IAASB, 2008a).[14]

In the case material, the audit client's reported figure was different from the calculation of the specialists.[15] Auditors' perceived accountability judgement was measured by following the measure used in Kang, Trotman, and Trotman (2015), and the auditors' fair value decision measures were adopted from Griffin (2014).

After reading through the case materials presented, the auditors first rated the extent to which they felt accountable to ensure the reasonableness of the reported fair value estimate, given the audit environment presented to them. Auditors then made the following fair value decisions adopted from Griffin (2014): they indicated the likelihood that they would require management to adjust the fair value estimates, and the amount of adjustments. The task took approximately 15 min to complete.

3.2. Participants

Participants from the audit firms were provided with the Qualtrics link to the experimental materials. Our objective was to target senior auditors involved in KAM decisions and they were obtained by using three different approaches: i) direct contact with firms; ii) a notice in the CA ANZ electronic newsletter targeting two Australian states; and iii), some direct emails. [16]

The participants were all current Australian practicing auditors, with at least 3 years of audit experience.[17] In total, there were 51 participants who completed the survey; however, one participant was a staff auditor who we removed because of a lack of experience,

[10] This experiment received ethics approval at the university where it was conducted.

[11] Qualtrics is an online survey platform that distributes survey tasks and records responses. It is widely used in behavioural accounting research (e.g., Brandon, Long, Loraas, Mueller-Phillips, & Vansant, 2014; Lambert, Luippold, & Stefaniak, 2018).

[12] Fair value estimation decisions have been an important concern of regulators and researchers before the introduction of KAMs (Cannon & Bédard, 2017; Glover, Taylor, Wu, & Trotman, 2019; Griffin, 2014; Griffith, Hammersley, & Kadous, 2015; Martin, Rich, & Wilks, 2006). For example, auditing standard ISA 545 *Auditing Fair Value Measurements and Disclosures* stipulates that auditors are responsible for evaluating the reasonableness of fair value estimates reported in financial statements (IAASB, 2008a).

[13] To illustrate, preparers are encouraged to include qualitative characteristics of fair value measures in management disclosures, such as the level of subjectivity of inputs and a range estimate in order to signal the degree of uncertainty to the financial statement users (Griffin, 2014; Kelton & Montague, 2018).

[14] Under the auditing standards of disclosing KAMs, auditors have the responsibility of making additional disclosures regarding audit matters that most likely accompany management disclosures, such as fair value estimates.

[15] Specialists refer to valuation specialists engaged by the audit team rather than the specialists engaged by firm being audited.

[16] CA ANZ refers to Chartered Accountants Australia and New Zealand, which is the main professional membership body for auditors in Australia and New Zealand.

[17] In Australia, the corresponding auditing standard ASA 701 was effective in December 2016. The financial year end for the majority of Australian companies is on 30 June, so the first KAM reporting for most was on June 30, 2017. Our data collection period was from late 2018 to early 2019; therefore, the participants would have experienced two reporting seasons for KAMs.

leaving us with 50 participants in the final sample.[18] Thirty-nine (78 percent) had audit experience of 10 years or more. Among the participants, 35 (70 percent) were partners and/or directors, nine were senior managers or managers, and six were senior auditors. Ultimately, the top tier management of the audit team, such as audit partners and directors, makes the final decisions about fair value adjustments and KAMs. Given the overall experience levels of the participant group, we are confident that we engaged with the appropriate participants for this task. We also asked the participants whether they were familiar with auditing fair value estimates, on a ten-point scale.[19] Finally, participants were asked in what industries they had audit experience in. They reported a range of industries with the three most common being: consumer products/retail, manufacturing, and technology.

3.3. Task materials

Task materials were developed by following Griffin (2014), using only the high subjectivity and high imprecision condition.[20] Griffin (2014) was an experimental study that manipulated the level of subjectivity, imprecision, and supplemental footnote disclosure on a fair value measurement issue, and which examined how these variables affected auditors' adjustment decisions. The case describes a client, ABC Integrated Products, Ltd, which is a hypothetical publicly traded manufacturing company in Melbourne, Australia. The case controls for firm specifics and other audit concerns, including internal controls. The Appendices provide full case materials.

3.4. Independent variables

In this exploratory study, we manipulate two factors for the experiment. One factor is the audit environment (KAM *versus* no KAM), and the other is management footnote disclosures (an expanded footnote *versus* a standard footnote). Under the KAM conditions, participants were informed that the current audit reporting model should follow the standard of disclosing KAMs; while, in the no KAM conditions, auditors were told that reporting KAMs was not an audit disclosing option (i.e., the audit environment is 'pre-KAMs'). The second factor related to a footnote just stating that management follows the accounting standard on fair value measurement, compared to an expanded footnote that outlined details about how the fair value was measured. Specifically, we follow the footnote disclosures manipulation from Griffin (2014) by providing an additional paragraph discussing a range estimate of the reported fair value or not providing such a paragraph. The range is $1 million embracing the reported fair value of the client. The midpoint of the client's range is higher than the midpoint of the audit specialist's range. The management disclosure is a standard footnote provided in all four conditions as a paragraph about the fair value accounting standard AASB 13 Fair Value Measurement (AASB, 2015).[21] In the expanded footnote conditions, it also incorporated an additional paragraph with management's range estimate and a brief description about the assumptions (e.g., discounted cash flow model) for the Level 3 inputs used to calculate the fair value estimates.[22] Both the assumptions and range in the footnotes signify uncertainty of the recognised fair value estimate.

3.5. Dependent variables

We measure three dependent variables. First, the auditors' perceived accountability to users of financial statements, measures the extent to which auditors feel accountable to ensure the reasonableness of the financial statements. This measure is a 10-point Likert scale, ranging from low to high, with 1 being "significantly not accountable", and 10 being "significantly accountable". The measure follows the perceived accountability measure in Kang et al. (2015). We also measure two dependent variables for auditors' decisions, both adopted from Griffin (2014), namely (1) the likelihood of requiring management to adjust the fair value estimates, measured on a 10-point Likert scale from low to high, with 1 being the lowest and 10 being the highest likelihood, and (2) the required dollar amount of fair value adjustment. The question on accountability judgement was asked first, as that is what we expected would be the logical thought process of an auditor in evaluating this type of information and making a decision.

[18] The results were reanalysed with the 51 participants and results were the same as the reported analyses with the 50.

[19] The average responses for self-reported familiarity with fair value auditing does not vary by condition, ranging from 7.62 (no KAM/Footnote) to 8.27 (KAM/Footnote and KAM/Expanded Footnote). In untabulated analyses, we rerun all the tests for each dependent variable with additional covariates for measures of self-reported familiarity with fair value auditing, audit experience, rank, and self-reported confidence of fair value assessments, reaching the same conclusions.

[20] We only adopt the high subjectivity (level 3) and high imprecision (a wide range suggested by valuation specialists) condition from Griffin (2014). These conditions match the situation recommended by regulators (AUASB, 2015; IAASB, 2015) for auditors to address in KAMs, including areas with high management subjectivity and greater uncertainty calling for auditors' discretion.

[21] Equivalent to IFRS 13, Fair Value Measurement.

[22] Griffin (2014) argues that companies often include a discussion about the adoption of corresponding fair value accounting standards in the footnotes.

4. Results

4.1. Manipulation checks

The post-task questionnaire results show that all of the 23 participants in the KAM disclosure condition and 20 out of 27 participants (74 per cent) in the no KAM disclosure condition passed the manipulation check, by correctly answering the question of whether ASA 701 was applicable to the case.[23] In addition, out of the 23 participants under KAM disclosure conditions, 20 participants responded a score of 7 or higher (3 participants responded with a score of 5 or lower) on the likelihood of disclosing a KAM, with 1 being "very low likelihood of disclosing it as a KAM" and 10 being "very high likelihood of disclosing it as a KAM". This result shows that participants in the KAM disclosure condition are sensitive to this manipulation. We also check the footnote manipulation on the perceived usefulness of the footnote measure.[24] The results show that auditors perceive the expanded footnote to be more useful than the regular footnote ($F = 3.33$, $p = 0.037$), suggesting that the participants are also sensitive to the footnote manipulation.

4.2. Main analysis

We test the data to understand the effects of KAMs and uncertainty disclosures on auditors' accountability perceptions and fair value decisions.[25] We first conduct a two-way ANOVA on rank-transformed accountability measures, as shown in Table 1. The rank-transform converts the ordinal data into a relatively normally distributed data set for ANOVA analysis.[26] We present descriptive statistics and results of KAM and footnote effects on auditors' accountability in Panel A of Table 1. Results are also illustrated in Fig. 1.

ANOVA results for the 2 × 2 design shown in Panel B of Table 1 indicate that the main effects of KAM and footnotes are both significant at $p < 0.05$ (KAM main effect, $F = 5.57$; footnotes main effect, $F = 16.36$). We also present the results of simple main effect tests (Panel C, Table 1) to examine the two effects individually.

The first research question of the study explores the effect of auditors' perceptions of accountability under a KAMs reporting regime compared to under a No-KAMs regime. Panel B of Table 1 shows that KAMs have a significant negative effect on auditors' accountability perceptions with an accountability rank mean of 21.1 (KAM) compared to 29.3 (No KAM) ($F = 5.57$, $p = 0.023$). Simple effect results reported in Panel C of Table 1 show that the KAM effect is mainly driven by when an expanded footnote is *not* provided ($F = 5.63$, $p = 0.022$), and when an expanded footnote *is* provided the KAM effect is not significant ($F = 0.92$, $p = 0.341$).

The second research question examines whether the level of management footnote disclosures affect auditors' accountability perceptions. Panel B of Table 1 shows a significant effect on auditors' accountability perceptions with an accountability rank mean of 18.7 (expanded disclosure) compared to 32.3 (less disclosure) ($F = 16.36$, $p < 0.001$). Simple main effect results reported in Panel C of Table 1 show that the effect of the level of management footnote disclosure is significant under the no KAM condition ($F = 13.87$, $p < 0.001$) and the KAM condition ($F = 4.27$, $p = 0.044$), showing that irrespective of the requirement to disclose KAMs, auditors' perceived accountability is significantly lower when an expanded management footnote is present.

As shown in Fig. 1 and Panel C of Table 1, these findings illustrate a substitution effect between footnotes and KAMs on auditors' accountability perceptions. That is, either of these disclosures reduce accountability compared to when there are no KAMs and limited management disclosures. As can be seen, when there is an expanded footnote, there is very little reduction in accountability due to provision of a KAM. However, when the expanded footnote disclosure is not provided, the provision of a KAM significantly reduces auditors' perceived accountability. Overall, our findings suggest that either expanded management disclosures or the auditors' ability to disclose KAMs on the fair value could relieve auditors' perceived accountability on the reasonableness of financial statements.

Our next two research questions explore how these disclosures affect fair value decisions. As can be seen in Appendix E, we asked two questions: first, the likelihood of requiring a fair value decision; and second, the amount of the decision. In exploring these research questions, we construct a dependent measure–auditors' expected adjustment amount decision, by multiplying the likelihood of requiring an adjustment with the proposed adjustment amount. Since fair values are considered as being the most unlikely measures for audit adjustments (Cannon & Bédard, 2017), it is likely that auditors make tradeoffs in these fair value decisions. The combined measure allows us to estimate the likely required fair value adjustments to account for the potential offsetting effect of these two audit decisions.[27]

The third research question explores the effect on the auditors' adjustment decision under a KAMs reporting regime compared to under a no KAMs regime. As shown in Table 2, the expected adjustment decision when there are KAMs is $407,783 compared to

[23] Equivalent to ISA 701.

[24] For this manipulation check, we ask the participants to rate the usefulness of the footnote on a 10-point scale, between "1-not useful" and "10-extremely useful".

[25] Main testing is conducted on full sample including responses of participants (7 out of 27) who failed the manipulation check. Results are statistically similar when these responses are excluded.

[26] The original data were ordinal values in nature (ranging from 1 to 10 for the accountability and the likelihood of adjustment measures), which violate normality that is required for common parametric tests. Parametric tests using rank-transformed data are considered equivalent to the common nonparametric tests of Kruskal-Wallis and Wilcoxon for one factor tests using signed-rank tests to adjust for the normality issue with ordinal data (e.g., Messier Jr, Kachelmeier, & Jensen, 2001). We also replicated the analyses using the original data and the significant effects are the same as using the ranked values.

[27] According to Griffin (2014), auditors may trade-off of these fair value decisions to not to displease the clients.

Table 1
Two-way 2 × 2 ANOVA of KAM and footnotes effect on accountability perception.

Panel A: Descriptive Statistics - Accountability rank value mean (Actual Mean) [standard deviation]					
KAM Conditions	Footnotes Conditions				
	n	Footnote	N	Expanded Footnote	Total
No KAM	14	37.14 (9.86) [5.99] [0.36]	13	20.77 (8.45) [14.03] [1.61]	29.26 (9.19) [13.35] [1.33]
KAM	11	26.23 (8.55) [14.29] [2.62]	12	16.38 (8.08) [10.11] [1.73]	21.09 (8.30) [13.01] [2.16]
Total	25	32.34 (9.28) [11.63] [1.84]	25	18.66 (8.28) [12.26] [1.65]	25.50 (8.78) [13.69] [1.80]
Panel B: Two-way ANOVA model of Accountability Measure					
Source of Variation	SS	df	MS	F	p[a]
KAM (RQ 1)	726.58	1	726.58	5.57	0.023
Footnotes (RQ 2)	2132.08	1	2132.08	16.36	0.000
KAM * Footnotes	131.83	1	131.83	1.01	0.320
Error	5995.77	46	130.34		
R Squared = .348 (Adjusted R Squared = .305)					
Panel C: Simple effect tests for Accountability					
Source of Variation				F	p[a]
Effect of KAM given a regular footnote				5.63	0.022
Effect of KAM given an expanded footnote				0.92	0.341
Effect of expanded footnote under No KAM				13.87	0.000
Effect of expanded footnote under KAM				4.27	0.044

Table 1 presents analysis of rank - transformed values of auditors' perceived accountability. The dependent variable is perceived accountability, for which participants were asked to respond to the following question on a 10-point Likert scale: "To what extent did you feel accountable to ensure the reasonableness of the financial statements?", where 1 = "significantly not accountable" and 10 = "significantly accountable".
KAM conditions were manipulated at two levels, between-subjects, by explicitly informing whether reporting KAMs is required or not. Footnotes conditions were manipulated at two levels, between-subjects, by including or excluding an additional paragraph discussing the uncertainty about the fair value estimate in the management footnote.

[a] All reported p-values are two-tailed.

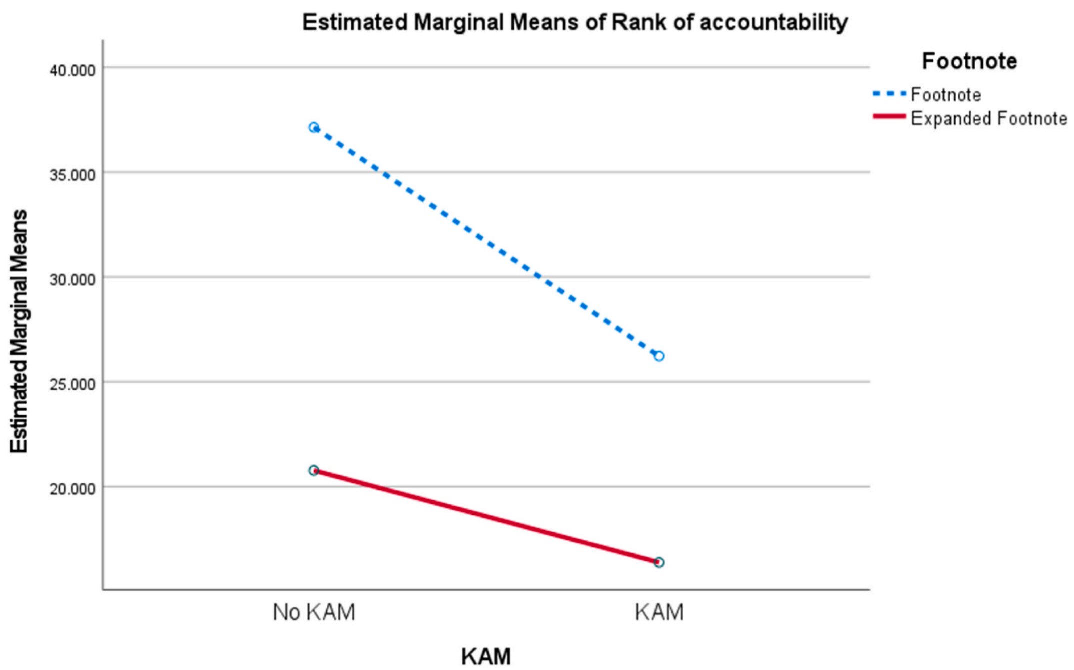

Fig. 1. Ranked Perceived Accountability. Note: Fig. 1 plots observed means for ranked values of auditors' perceived accountability. Auditors indicate their perceived accountability on a 10-point Likert scale to the question "To what extent did you feel accountable to ensure the reasonableness of the financial statements?", where 1 = "significantly not accountable" and 10 = "significantly accountable". KAM conditions were manipulated at two levels, between-subjects, by explicitly informing whether reporting KAMs is required or not. Footnotes conditions were manipulated at two levels, between-subjects, by including or excluding an additional paragraph discussing the uncertainty about the fair value estimate in the management footnote.

\$192,593 when there are no KAMs – that difference is significant ($F = 5.37$, $p = 0.025$). This shows that auditors are more likely to recommend conservative accounting adjustments when KAMs are reported. Simple effect results reported in Panel C of Table 2 show that the KAM effect is mainly driven by when an expanded footnote *is* provided ($F = 7.25$, $p = 0.010$), rather than when an expanded footnote *is not* provided ($F = 0.35$, $p = 0.556$).

The fourth research question examines whether the level of management footnote disclosures affect auditors' adjustment decisions. Table 2 shows a significant effect on auditors' adjustment decisions with an adjustment of \$422,000 (expanded disclosure) compared to \$161,160 (less disclosure) ($F = 8.92$, $p = 0.005$). Simple main effect results reported in Panel C of Table 2 show that the effect of the expanded management footnote disclosure is significant under the KAM condition ($F = 9.22$, $p = 0.004$), but not in the no KAM condition ($F = 1.24$, $p = 0.272$).[28]

Overall, the results suggest that when an accounting issue has been flagged as important by both a KAM disclosure as well as an expanded management footnote disclosure, it does affect auditor decisions and they make more conservative accounting adjustment decisions. [29] This is consistent with auditors' reconsidering materiality due to the significantly increased salience of the accounting issue because of the increased disclosures. We further explore this issue in our summary of auditors' comments on their decisions in the next section of the paper Fig. 2.

4.3. Auditor comments on their decisions

To better understand why auditors who participated in our study made their decisions, we asked them to provide comments on the reasons for the fair value decisions they made, and 34 participants provided comments.[30] Under no KAM conditions, 20 out of 27 participants responded. Of the 20 comments, 15 auditors indicate either the difference (\$200,000) is not material or is only borderline material. Under no KAM/Expanded footnote condition, auditors often refer to the estimation uncertainty (i.e., the range and/or Level 3 input) discussed in the footnote and consider the fair value difference is within materiality. For example, one auditor commented:

> Given the large number of inputs and assumptions used …, it is difficult to state that a model is 'wrong' and should be corrected by \$X … As the internal expert has arrived at … \$3.25m compared to the \$3.45m, no adjustment would be proposed … (on the grounds of materiality of \$1m).

For most of the conditions where there was no KAM, comments were made that suggested the auditor did not consider the amount material.

Under KAM conditions, 14 out of 23 participants provided comments. When the uncertainty footnote was not provided (6 commented), some auditors indicate that the fair value adjustment was not material and at most they would suggest a minimum adjustment or the midpoint. However, when the uncertainty footnote was provided (8 commented), six auditors required the highest write down or the midpoint. For example, an auditor commented:

> Go for the highest audit write down and give client our reasons for the additional write-down and hopefully this may make client revisit their assumptions and estimates.

The comments by the auditors requiring these adjustments focused on questions about management's assumptions and estimates and mostly they *did not* refer to materiality. This suggests that including both management and auditor disclosures in relation to an accounting matter increases its salience and makes it more difficult for auditors to pay less attention to it, which is consistent with it being "material". The other aspect that could be inferred is that this level of disclosure increases the risk of the matter to the auditor and potentially increases the chances of litigation. Consistent with these implications, the "materiality" reason to not require an adjustment

[28] In our setting, the results do not replicate the findings in Griffin (2014) for the management footnote effect on adjustment decisions. A possible reason for not replicating Griffin (2014) is due to the fact that since 2015 there has been a major change of the management disclosure requirements of uncertain fair value estimates using Level 3 inputs under the Australian accounting standard AASB 13 (equivalent to IFRS 13 of the International Accounting Standards), where management are required to disclose additional information that helps users evaluate those estimates. Compared to the overwritten AASB 13 that was in effect before 2015, the current standard is framed to "*require*" rather than "*encourage*" management to supplement valuation related information. A setting where provision of disclosures by management is dictated by requirements in the standard presents challenges to isolate the cause underpinning the observed management behaviour, that is, whether management provide the disclosures to fulfil compliance requirements or whether they do so from the desire to disclose relevant information to financial statement users, or both. Consequently, we do not expect to replicate results in Griffin (2014), as it is more difficult to capture the moral licensing effect of management expanded disclosures in our setting than in Griffin (2014).

[29] Untabulated analyses of individual dependent variables show that the two disclosures significantly influence audit adjustment amount decision but not the likelihood of adjustment decision. Specifically, the likelihood of requiring adjustment decision is not affected by KAMs ($F = 1.10$, $p = 0.300$) or uncertainty disclosures ($F = 0.95$, $p = 0.334$). However, the dollar amount adjustment decision is significantly affected by both KAMs ($F = 6.91$, $p = 0.012$) and footnote disclosures ($F = 7.43$, $p = 0.009$). Particularly, auditor proposed adjustment (\$766,667, with \$700,000 being midpoint of valuer's range) is significantly higher when both disclosures are available compared to (\$355,455, just above lower bound of \$200,000) when only KAM is provided ($F = 7.69$, $p = 0.008$) or (\$365,385) when only uncertainty footnote is presented ($F = 7.96$, $p = 0.007$). Together, these results are consistent with results for the combined measure and indicate that these two audit decisions are separately considered and may be trade-off by auditors.

[30] The question asking auditor participants to comment on their fair value decisions made was optional. The fact that 34 of the 50 auditors gave comments provides further evidence of the quality of the participant group. Please see Appendix F for the full set of comments.

Table 2
Two – way 2 × 2 ANOVA of KAM and Footnotes Effect on the Expected Adjustment Amount Decisions.

Panel A: Descriptive Statistics – actual mean [standard deviation]					
KAM Conditions	Footnotes Conditions				
	n	Footnote	N	Expanded Footnote	Total
No KAM	14	($128,571) [$161,667]	13	($261,538) [$356,671]	($192,593) [$276,344]
KAM	11	($202,636) [$209,811]	12	($595,833) [$438,934]	($407,783) [$395,818]
Total	25	($161,160) [$184,138]	25	($422,000) [$425,402]	($291,580) [$350,144]
Panel B: Two – way ANOVA model for Expected Adjustment Amount Decisions					
Source of Variation	SS[a]	df	MS	*F*	*p*[b]
KAM (RQ 3)	516.93	1	516.93	5.37	0.025
Footnotes (RQ 4)	858.19	1	858.19	8.92	0.005
KAM * Footnotes	209.92	1	209.92	2.18	0.146
Error	4425.84	46	96.21		
R Squared = .263 (Adjusted R Squared = .215)					
Panel C: Simple effect tests of KAM for Expected Adjustment Amount Decisions					
Source of Variation				*F*	*p*[b]
Effect of KAM given a regular footnote				0.35	0.556
Effect of KAM given an expanded footnote				7.25	0.010
Effect of expanded footnote under No KAM				1.24	0.272
Effect of expanded footnote under KAM				9.22	0.004

Table 2 reports analysis of the expected fair value adjustment amounts. The dependent variable Expected Adjustment Amount Decision is constructed by multiplying the likelihood of requiring an adjustment measure by the proposed fair value adjustment amount.
KAM conditions were manipulated at two levels, between-subjects, by explicitly informing whether reporting KAMs is required or not. Footnotes conditions were manipulated at two levels, between-subjects, by including or excluding an additional paragraph discussing the uncertainty about the fair value estimate in the management footnote.
[a] All sums of squares and mean square values are in'000,000,000.
[b] All reported *p*-values are two-tailed.

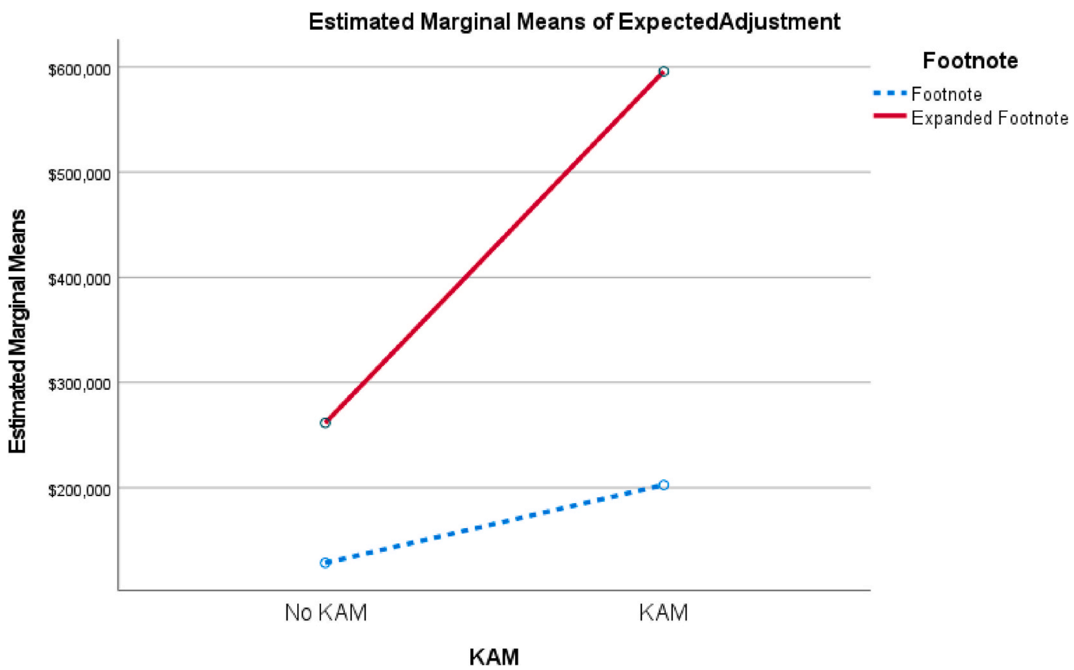

Fig. 2. Expected Adjustment Amount. Note: Fig. 2 illustrates the means of the expected adjustment amount decision by auditors. This measure is computed by using the likelihood of requiring adjustment measure multiplied by the proposed dollar amount adjustment. KAM conditions were manipulated at two levels, between-subjects, by explicitly informing whether reporting KAMs is required or not. Footnote conditions were manipulated at two levels, between-subjects, by including or excluding an additional paragraph discussing the uncertainty about the fair value estimate in the management footnote.

or not require a large adjustment seems to mostly not be present when both disclosures are made. This supports our empirical results which find that the largest recommended adjustments are when both disclosures are made.

5. Conclusions

Despite the fact that KAMs have been operational for a few years, there is little research evidence on how they impact on auditors' judgements and decisions. Further, the introduction of KAMs also provides a situation where there often is both an auditor as well as a management disclosure on the same accounting topic, which has historically been uncommon. This exploratory study reports the results of an experiment where we examine how these disclosures affect auditors' perceptions on their accountability as well as their expected adjustment decisions.

We find that there is a substitution effect between management disclosures and KAM disclosures on auditors' accountability perceptions, such that auditors' perceived accountability reduces when either an expanded footnote or a KAM is provided, consistent with moral licensing (Griffin, 2014). However, this would suggest an unintended consequence of these extra disclosures, as the original motivation of requiring KAMs was not to reduce accountability (IAASB, 2012).

Further, our findings indicate that when both of these disclosures are available it has a different effect on auditors' expected adjustment decisions. We find that the size of the expected adjustment recommended by auditors increases when fair value disclosures are provided in KAMs and/or in expanded management footnotes. However, we find that our results are being driven by the condition where *both* KAMs and expanded management footnotes are provided. Of the previous research on auditors' adjustment decisions, Griffin (2014) explored expanded management disclosure and Asbahr and Ruhnke (2019) looked at KAMs. Both studies found these disclosures reduced auditors' recommended adjustment decisions for reasons they report are consistent with "moral licensing", although Griffin (2014) did suggest the direction of these results were "perverse". In our study, we have a different scenario where the extra disclosures are by *both* management and the auditor and we argue that the increased salience of these disclosures affects auditors differently. Specifically, the accounting standards suggest that auditors need to consider "disclosures" in their determination of materiality (ISA 320) and we argue that this extra level of disclosure does make a difference. We also find support for this in our review of comments provided by auditors who made these decisions, as there was much more questioning about management assumptions and estimates and where both disclosures were made there was very little consideration of the accounting issues being "not material".

A possible explanation of our findings is that the increased salience of the disclosure may elevate concerns pertaining to the issue reported in the disclosure, strengthening the idea that there might be a need to act in response to the issue. Auditors may feel compelled to act to address the issue by using common practices, such as requiring the client to make greater fair value adjustments if, in so doing, they believe they are discharging their fiduciary duty more effectively. However, theoretical mechanisms underpinning the difference between perceptions of accountability and observed auditor responses are beyond the scope of this paper. Accordingly, we call for further research in this area.

In summary, this study provides empirical evidence to inform regulators and standard setters about how auditors' judgement and decisions shift due to the recent substantial changes in audit reporting requirements. While the objective of KAMs was to improve the information disclosed to users (IAASB, 2012), expanding reported information disclosure always had the potential to affect the judgements and decisions of the auditors who provide KAMs, and we show that it does.

Our results are subject to several limitations. First, we only explore one disclosure issue and related KAMs decisions of auditors. In practice, this fair value issue is likely to be part of a list of audit issues that audit partners need to consider. It is unclear if and how the decisions concerning those issues influence each other. Future studies might explore whether judgements and decisions vary due to factors such as the number and magnitude of KAMs that are disclosed. Second, our measure of perceived accountability captures auditors' perceived accountability concerning the outcome of the audit rather than their accountability concerning the audit process. Further research could examine the implications of auditor accountability towards the process and how that might differ from outcome accountability.

These changes to the audit reporting model were primarily designed to affect users' decisions (IAASB, 2012). However, we show that there are effects on auditors' judgements and decisions as well. Although our findings are not consistent with Asbahr and Ruhnke (2019), we do have a management disclosure in our setting, which they do not. These different results would also suggest that more research is warranted on the effect of KAMs on auditors. Further, although there has been some research on audit committees (Kang, 2019) and managers (Gold, Heilmann, Pott, & Rematzki, 2020), future research could further evaluate how enhanced disclosure by auditors of this type might affect the perceptions and real actions of other participants in the financial reporting process.

Finally, we also find from the written responses of participants, that enhanced disclosure by management and auditors seems to have an effect on auditors' perceptions of materiality. We are not aware of this as an audit response from the enhanced disclosures associated with KAMs in prior research, so this also appears to be an issue that may warrant further research.

Data availability

Data will be made available on request.

Acknowledgment

We appreciate valuable comments and suggestions received from the associate editor and two anonymous reviewers. We would like to thank Christine Gimbar, Noel Harding, Robert Knechel, Gary Monroe, Robyn Moroney, Ken Trotman, Karla Zehms, and seminar participants at The University of Adelaide, The University of Melbourne as well as conference participants at the 2020 Auditing Section Midyear Meeting for insightful comments on earlier version of this paper. We also thank Jeremy Griffin for sharing experimental materials. Finally, we thank the auditors who participated in this study.

Appendix A

Company Background

Company Background – For all conditions

ABC Integrated Products, Ltd.

Your client, ABC Integrated Products, Ltd. is a publicly traded manufacturing company headquartered in Melbourne, Australia. ABC Integrated is a profitable company with stable financial growth for the past five years. Financial indicators of the company, such as liquidity and leverage are at industry average. Prior audit engagements show that there is no identifiable material weaknesses in the company's internal control.

The company uses a materiality level of $1,000,000 based on Net Income for the financial statements overall, according to company guidelines. During the audit, the materiality level is agreed to be appropriate. During the current audit, all standard tests have been completed by competent staff of your audit team and the results have been reviewed to your satisfaction. Other than the unresolved matter described on the following page, there are no further adjustments being considered for the financial statements. In addition, there are no significant qualitative materiality factors identified in the audit during this year.

The client believes that the financial statements are presented fairly, and insists on receiving an unqualified opinion as soon as possible. The client is firmly opposing any proposed audit adjustments and is pressuring you to waive all the adjustments.

Appendix B

No KAM vs. KAM Manipulation

Asset Impairment Workpaper - No KAM

In the audit environment for this case study, Key Audit Matters (KAMs) are not a reporting option in auditors' reports. An independent auditor's report ONLY contains the auditor's opinion and basis for the opinion.

Due to product innovation and revision, the client identified a piece of manufacturing equipment that may be impaired at the end of the reporting period. According to AASB 136 *Impairment of Assets*, the client measured the recoverable amount of the equipment and determined that the carrying value of this equipment exceeded its recoverable amount. The client applied AASB 13 *Fair Value Measurement* to determine the fair value of the equipment. Due to an absence of relevant observable inputs, such as quoted price in an active market for this type of equipment or its similar kind, the client used unobservable inputs to determine the fair value. Unobservable inputs are categorised as level 3 inputs under AASB 13 fair value hierarchy. The client developed unobservable inputs and valued this equipment based on estimated future cash flows. The recorded value of this equipment was at **$ 3,450,000**.

The audit team involved the firm's valuation specialists to evaluate the client's estimate. The firm's specialists provided the following advice:

"We measure these assets based on discounted future cash flows, as there is no active market for these assets. Our estimated range for these assets is approximately between **$ 2,250,000** and **$ 3,250,000**. This range was developed using level 3 inputs under AASB 13. Our estimate is lower than the client's, because we take a different view of the industry prospects from the audit client."

Asset impairment Workpaper – KAM

Currently, Auditing Standard ASA 701 *Communicating Key Audit Matters in the Independent Auditor's Report,* has been effective since December 15, 2016. ASA 701 requires auditors to disclose Key Audit Matters that in the auditor's professional judgement, were of most significance in the audit of the financial report of the current period.

Due to product innovation and revision, the client identified a piece of manufacturing equipment that may be impaired at the end of the reporting period. According to AASB 136 *Impairment of Assets*, the client measured the recoverable amount of the equipment and determined that the carrying value of this equipment exceeded its recoverable amount. The client applied AASB 13 *Fair Value Measurement* to determine the fair value of the equipment. Due to an absence of relevant observable inputs, such as quoted price in an active market for this type of equipment or its similar kind, the client used unobservable inputs to determine the fair value. Unobservable inputs are categorised as level 3 inputs under AASB 13 fair value hierarchy. The client developed unobservable inputs and valued this equipment based on estimated future cash flows. The recorded value of this equipment was at **$ 3,450,000**.

The audit team involved the firm's valuation specialists to evaluate the client's estimate. The firm's specialists provided the following advice:

"We measure these assets based on discounted future cash flows, as there is no active market for these assets. Our estimated range for these assets is approximately between **$ 2,250,000** and **$ 3,250,000**. This range was developed using level 3 inputs under AASB 13. Our estimate is lower than the client's, because we take a different view of the industry prospects from the audit client."

Appendix C

A Footnote vs. an Expanded Footnote Manipulation

Client's Draft footnote – A Footnote

The Company applies AASB 13 *Fair Value Measurement* (AASB 13), where warranted for both financial and nonfinancial assets. AASB 13 defines fair value, establishes a framework for measuring fair value that is required or permitted by other Australian Accounting Standards, and expands disclosures about fair value measurements.

Client's Draft footnote – An Expanded Footnote

The Company applies AASB 13 *Fair Value Measurement* (AASB 13), where warranted for both financial and nonfinancial assets. AASB 13 defines fair value, establishes a framework for measuring fair value that is required or permitted by other Australian Accounting Standards, and expands disclosures about fair value measurements.

Due to an unobservable market, the recoverable amount of the equipment is estimated to be between $3 and $4 million, by using a discounted cash flow model prepared under a value – in – use based approach. In addition, a sensitivity analysis has been undertaken to examine the effect of any changes in the key variables, which would result in a change in the assessed value in use. The recognised amount represents the company's best estimate from within that range.

Appendix D

Field Senior's Conclusion

Field Senior's Conclusion - For All conditions

The client's fair value measurement is different from our firm specialists'. Our specialists' range estimate suggests that the client's recorded asset impairment loss should increase by approximately **$ 200,000** to **$ 1,200,000**. The client believes that its own estimate is more appropriate based on present facts and circumstances. Thus, the different estimates result in our proposal of the following adjustment amount to the client's financial statements:

Dr Impairment Loss $ xx.

Cr Accumulated Depreciation and Impairment Losses $ xx.

(Impairment loss on asset)

Appendix E

Survey Questions

Survey Questions:

1.Perceived Accountability

Given the audit environment presented to you in the case material, to what extent did you feel accountable to ensure the reasonableness of the financial statements? Please indicate your choice by using the scale:

2.Fair Value Adjustment Decisions

1.Likelihood of Requiring Fair Value Adjustment Decision.

Based on the case information provided about the client and the firm's partial workpaper, how likely is it that you would require management to make an adjustment to the recorded value of any dollar amount? Please indicate your choice by using the scale:

2.Fair Value Adjustment Amount Decision.

Please indicate the most likely dollar amount of your required adjustment:
$________________.

3. If you would like to comment on the reasons for your decisions, please do so in the space provided below (optional):
3) KAM Questions:

1.Likelihood of Disclosing KAMs (Only for under KAM conditions)

How likely would you disclose this matter as a Key Audit Matter in the audit report? Please indicate your answer by using the following scale:

2. If you would like to comment on the reasons for your KAM decisions, please do so in the space provided below (optional):

Appendix F

Comments on Fair Value Adjustment Decisions (Participant Quotes)

KAM and Expanded Footnotes Condition

1. Other factors that need to be considered are other assumptions and how these have been sensitised, relevant discount rates etc. Also, what the engagement team currently has on their under and overs spreadsheet. I have selected a mid-point between the range similar to the position taken by management. The variance within the range of materiality.
2. Based on the independent valuer's result, the worst case is that an impairment of 1.2 m need to be provided. I would take this as a starting point and hold further discussion with management, even if is unlikely that the management is reluctant for any adjustments at this stage.
3. Go for the highest audit write down and give client our reasons for the additional write-down and hopefully this may make client revisit their assumptions and estimates.
4. Your facts suggest the client has made a point estimate and not a range. Accordingly, the point estimate is outside the auditor's range and so an adjustment would be required. $1.2 m brings it to the top of the auditor's range. In practice I would seek more information from the firm's valuation expert to determine what assumptions underpin the ends of the range to be able to conclude on where in the range is the most appropriate point to anchor the adjustment. In the absence of this, I have selected the top of the range assuming that the high point is still acceptable.
5. The client is responsible for judgements made in the financial statements. Whilst our internal valuation was lower, a $200 k adjustment would being that within range of the internal estimation.
6. The low likelihood of adjustment is because the variance is below the materiality threshold so this could be maintained as an unadjusted audit variance.
7. Disclosure is factually incorrect and specialist advice would be relied upon.
8. I would need more information around the assumptions used. I would work within the materiality guidelines and based on this no adjustment may be necessary given the ranges provided by our qualified valuation experts. More concerned with the disclosure in the accounts stating the value is somewhere in the range of $3 m-$4 m as this is materially inconsistent with what our view is. If they could come down to a more reasonable and justifiable position on this, I would feel more comfortable (in addition to clearly disclosing key unobservable inputs and assumptions used).

KAM and Standard Footnotes Condition

1. Management estimates vs independent estimates are very difficult to practically quantify. This is not a precise science and there is always a reasonable range. More likely the nature of the estimates applied by management would be commented on in the KAM including the basis for management's approach. Also, with regard to the estimate as adjustment is not individually material (except at the low end of the valuation range) it would be difficult 'require' an adjustment. Alternative method of assessing the management calculation inputs would be likely to determine the input which is subject to most judgement.
2. *Prior to raising an adjustment would discuss with client to get and understanding in differences of valuation.*
3. With materiality set at $1 m it is arguable that no adjustment would be required. At most, I would suggest $200,000 and if this was rejected by the client I would include the amount in our unadjusted errors list. Our own firm's valuation range is very wide. In these circumstances I am more inclined to accept the client's position this year (record an immaterial unadjusted error in our file) and seek to gain more insight into the position during next year's audit. The need for any impairment is likely to become clear during the next financial year.
4. Difficult to determine without further information the exact adjustment to book.
5. Take to midpoint of specialist valuation.
6. It is difficult to say without the full fact set and being able to sit down with the client and talk through the relevant factors. To determine the amount of impairment would require an assessment and comparison of the 2 valuations to determine the most appropriate value of the asset. It would seem unlikely given the quantum of the impairment in the independent valuation that there would be no impairment in the asset value at balance date. $700 k used above as a midpoint.

NO KAM and Expanded Footnotes Condition

1. Adjustment based on the highest range of the recoverable value based on specialist's work. The high likelihood is based on that difference, though there should be additional consideration as to whether this is required to be adjusted before an unqualified opinion is issued given overall materiality is $1 m.

2. Given the large number of inputs and assumptions used in a discounted cash flow model (which is an estimate), it is difficult to state that a model is 'wrong' and should be corrected by $X. In this circumstance, it appears that there are some different assumptions/inputs being used by the internal expert/client to arrive at a differential of $200 k - $1.2 m, which should to be investigated. The auditor must assess management's assumptions as reasonable to be able to comfortably conclude that it is materially correct. As the internal expert has arrived at a top figure of $3.25 m compared to the $3.45 m, no adjustment would be proposed providing that the assumptions/inputs used are reasonable (on the grounds of materiality of $1 m).
3. A discussion with management would need to be held to understand their model and how they arrived at their conclusion. I have used $50 k as an indicator that there is potentially a ""middle ground"" that could be reached with management to find appropriate value. As the auditor's valuation is also level 3 inputs, I believe a hard and fast adjustment to our valuation would also not be reasonable.
4. I wonder what input has caused the variance and how judgemental that input is. We would recommend they aim to adjust towards the middle of our range but would accept generally anywhere, given the midpoint is half of our materiality, and this is the only error, I don't consider this judgemental difference in itself to be material to financials.
5. Depending on conversations with the client, suggest there would be an additional adjustment in terms of the range of the valuation and a disclosure adjustment.
6. In answering the above, I took "adjustment" as meaning an unrecorded audit difference being raised. I would not consider the difference to be material (on the low end of a range) but would insist it is raised as a judgemental difference.
7. The mid-point of the audit valuation and the client valuation was $700 k. With materiality of $1 m, in the absence of any other unadjusted differences, if the client decided not to make an adjustment, this would not have a material impact on the financial statements as a whole and hence we would not require an adjustment. However, we would suggest an adjustment of $700 k.
8. There are two possibilities: (1) Nil adjustment as the client provides evidence to support that the impairment is less than $1 m and therefore not material to the fairly stated accounts or (2) As auditor you have sufficient appropriate evidence to confirm an adjustment is warranted, and give the materiality, if the impairment was $1 m that would cover any impairment necessary to issue fairly stated accounts.
9. The client's estimate is not in the range of acceptable estimates determined by the auditor expert. A minimum judgmental audit adjustment of $200,000 would be proposed and communicated to the directors and management for consideration. If management did not record the adjustment as recommended, given the materiality level of $1 m, this would not lead to a modified audit opinion. In this context the auditor would not "require" the adjustment to be recorded.
10. To be conservative as possible.

NO KAM and Standard Footnotes Condition

1. *Would first need to try an reconcile the differences in the input assumptions between the client and the firm's specialists to determine if any differences can be resolved (e.g. the client or the firm specialists overlooked something). However, the difference as it stands is borderline material so not certain if would require an adjustment based on the fact pattern to date.*
2. Auditor's experts range is within the client's materiality threshold, therefore no adjustment required.
3. 1. make sure unadjusted amount is lower than materiality 2. best estimation is middle of the range for this case.
4. As the mid-point of our valuation experts impairment range does not result in a material impairment, I would not consider the absence of an impairment in this scenario material (on the assumption of no other unidentified audit differences). On this basis, I would not qualify the accounts should the client opt not to adjust the asset value down to our mid-point of the range. That said, I would strongly suggest the impairment be taken, and report the unadjusted difference to the Board.
5. I would record an adjustment as the difference between the highest range of our internal specialists view compared to the current carrying value. This is consistent with our firms guidance on audit differences when dealing with areas of judgements and ranges. I also note that $200,000 is not material so would not require this to be recorded unless there were other qualitative factors to be considered.
6. Given that a range of views exist in relation to the industry prospects I would communicate our specialists full range to the Audit Committee/Board however recognise a judgemental audit difference for the top of the range. If there was further information available this assessment might change.
7. The difference would likely be included on the audit difference schedule based on the mid-point of the difference. It might not be required to be adjusted by the client dependant on the total amount of the unadjusted differences and impact on individual line items. Given it is judgemental difference it would be more difficult to force the client to make the adjustment to the valuation.
8. Based on the case facts, I would assume that the client has already processed the impairment as per their calculation of $1,000,000, leaving a difference of $200,000 to be considered for additional impairment. This additional $200 k is based on our specialists best estimate, and we therefore rely on this amount. In practice we would request the amount to be adjusted, client will refuse, and it will be parked on the error schedule and reported as a remaining unadjusted item with no impact on the audit opinion since materiality is $1 million (and therefore the amount of uncorrected misstatements will not exceed materiality).
9. ASA 540 requires that where the auditors range estimate is outside the point estimate of the client, an unadjusted error for the difference between the clients point estimate and the closest end of the auditors range should be included in the summary of unadjusted errors and assessed for whether the financial statements are materially misstated. According the $200,000

difference between the clients point estimate of FV and the top of the auditors range of FV should be assessed for material misstatement.

10. The maximum difference is $1.2 m - using the auditor's most conservative estimate. Materiality is $1 m therefore maximum material misstatement is $201 k. Given that it is a high judgement matter and their estimate is largely within the materiality boundaries of ours, I would insist on full disclosure of the estimates and judgements used, but not a $ adjustment.

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