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Audit Partner Style in Key Audit Matter Reporting Decisions

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AUDIT PARTNER STYLE IN KEY AUDIT MATTER REPORTING DECISIONS

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ABSTRACT: We examine whether audit partners have unique styles for key audit matter (KAM) reporting, and whether such styles are associated with audit pricing and audit report delay. We develop a conceptual framework of audit partners' decision processes for KAM reporting as a function of partners' professional profiles, cognition, and firm and incentive environments to motivate our expectation that partners have idiosyncratic styles, by which we mean stable within-partner similarities and between-partner differences in KAM reporting across clients, industries, and reporting years. We use a sample of KAMs from the United Kingdom during the period 2013 to 2019 to examine whether, after controlling for audit firm-level fixed effects, partner-level fixed effects explain KAM reporting outcomes with respect to the volume, topical diversity, and communication of KAMs in the audit report. We find evidence of unique partner styles in KAM reporting volume, topical diversity, and communication after controlling for variation in client and audit firm characteristics. We find that audit partners with styles for reporting a greater volume, topical diversity, longer, and more complexly worded KAMs charge nine to 14 percent higher fees than their counterparts; this supports our theory that the underlying factors that drive partners' unique KAM reporting styles are not unique to KAMs, but affect other audit outcomes. We find no significant association between partners' KAM reporting styles and audit report delay, illustrating that a partner's style in producing more comprehensive audit reports does not inhibit their audit efficiency.

Keywords: audit partner identification, audit reporting model, critical audit matters, key audit matters, reporting style

Data availability: All data are available from publicly available sources.

AUDIT PARTNER STYLE IN KEY AUDIT MATTER REPORTING DECISIONS

I. INTRODUCTION

We examine whether audit partners have unique reporting styles for Key Audit Matters (KAMs) and whether those styles are associated with audit fees and audit delay.¹ Prior literature demonstrates that individual decision makers' unique styles predict many important outcomes, including CEO effects on company policies and performance (Bertrand and Schoar 2003), CFO accounting policy selection (Ge, Matsumoto, & Zhang 2011), audit partner quality effects (Gul, Wu, and Yang 2013), and audit partner pricing decisions (Taylor 2011); other research reports audit firm-level styles with respect to client financial reporting, audit quality, and audit firm reputation (Francis and Michas 2013; Francis, Pinnuck, and Watanabe 2014; Cook, Kowaleski, Minnis, Sutherland, and Zehms 2020). Against this backdrop, there exist strong stakeholder concerns that KAMs will become boilerplate disclosures based on audit firms' central guidance rather than the facts and circumstances of specific client engagements (Heffes 2013; Gunn 2016; PCAOB 2019; PwC 2014). It is therefore an open question as to whether individual partners will have idiosyncratic effects on KAM reporting outcomes.

To inform our analyses, we develop a conceptual framework explaining how audit partner KAM reporting styles may arise. We propose that partners' decision processes for KAM reporting vary in the partners' unique combinations of experience-knowledge-expertise, risk attitudes, professional skepticism, elements of the audit firm's reporting style, and competing

¹ KAMs are audit report disclosures describing matters that are especially important to the audit due to their challenging nature, subjectivity, use of the auditor's professional judgement, and/or use of specialists (IAASB ISA 701). PCAOB Critical Audit Matter (CAM) standards are similar to those governing KAMs, and their recent implementation as of June 2019 is motivating further interest in understanding how these disclosures arise and how they affect users. For simplicity and because our sample comprises European data, we use the acronym KAMs throughout this paper.

KAM reporting incentives. We conceive that these factors have a pervasive influence on each partner's judgements as they evaluate relevant features of the client engagement, develop a mental representation of the KAM reporting decision, and decide the volume and topical diversity of KAMs and the manner of communicating these matters in the audit report.

Our sample includes 2,826 company-year observations listed on the London Stock Exchange (LSE) from September 2013 (the KAM effective date) through March 2019. There are 279 unique audit partners for these client engagements across 11 audit firms. We adapt methodology from Bertrand and Schoar (2003) and Gul et al. (2013) to infer individual differences in partners' KAM reporting styles by examining whether partner-level fixed effects add significant explanatory power to regressions modelling KAM reporting outcomes.

We predict and find that auditors possess unique styles for their KAM reporting decisions, by which we mean within-partner similarities and between-partner differences across clients, industries, and reporting years after controlling for economic circumstances of the client, characteristics of the audit firm, and audit firm fixed-effects representing firm-level reporting style. We show that partners have individual reporting styles with respect to KAM volume, topical diversity of KAMs, average number of words per KAM, and the readability of the KAM section of the audit report. We find that these styles are associated with the partner's audit fees, but not the timeliness of auditor reporting. Partners whose styles are in the uppermost quintiles with respect to KAM volume and topical diversity charge between 8.8 and 10 percent higher fees than other partners in our sample, while partners in the lowest quintile for KAM readability (i.e., KAMs that are more difficult to comprehend) charge 14 percent higher fees.

Our conceptual framework and empirical results provide various contributions to research and practice. Prior research presents mixed results regarding whether KAMs are informative to

investors and whether the shift to a KAM reporting regime is associated with audit fees, quality, and auditors' liability outcomes.^{2, 3, 4} We contribute to this research by proposing a theory of audit partners' unique KAM reporting styles, challenging the assumption that the consequences of KAM reporting regimes are uniform across partners. We find that partners' idiosyncratic KAM reporting styles drive variation in KAM reporting outcomes. By answering the call to focus on individual decision makers in accounting research (Kachelmeier 2010; DeFond and Zhang 2014; Lennox and Wu 2018), we illustrate that incorporating the effects of individual audit partner KAM reporting styles can be a fruitful avenue for future research aiming to address the mixed evidence on the consequences of KAM reporting regimes. We also provide evidence relevant to regulators' concerns that KAM disclosures will become boilerplate at the audit firm level, showing instead that KAM reporting outcomes vary based on partner-level styles after controlling for audit firm-level styles.

Second, we extend the literature examining the effects of individual audit partners on audit outcomes (see Lennox and Wu 2018 for a review) to the KAM disclosure setting. This is a powerful setting in which to observe partner-level effects because KAMs are the direct and sole assertion of the auditor, contained in the audit report to which the partner signs his or her name. In contrast, the extant literature examining partner styles relating to audit quality⁵ relies on earnings management and misstatement measures as an indirect reflection of partner decision

² For literature examining whether the shift to a KAM reporting regime is informative to investors, see Bédard, Gonthier-Besacier, and Schatt (2018); Gutierrez, Minutti-Meza, Tatum, and Vulcheva (2018); Liao, Minutti-Meza, Zhang, and Zou (2019); Lennox, Schmidt, and Thompson (2019); and Altawalbeh and Alhajaya (2019).

³ For literature examining the association between KAM reporting and audit quality, see Bédard et al. (2018); Reid, Carcello, Li, and Neal (2019); and Li, Hay, and Lau (2019).

⁴ See Kachelmeier, Rimkus, Schmidt, and Valentine (2019); Vinson, Robertson, and Cockrell (2018); and Brasel, Doxey, Grenier, and Reffett (2016) for research on KAM reporting and auditor liability.

⁵ For literature examining partners' audit quality profiles, see Gul et al. (2013); Li, Qi, Gaoliang, and Zhang (2017); Ittonen, Johnstone, and Myllymäki (2014), and Knechel, Vanstraelen, and Zerni (2015).

making, when in fact financial statement balances are management assertions that the auditor serves to constrain rather than create (DeFond and Zhang 2014). Furthermore, examining KAMs enhances the generalizability of our inferences because we observe partner decision styles across a wide sample of companies; the vast majority of UK companies receive at least one KAM, with an average of three KAMs per audit report. In contrast, research investigating partner style with respect to going concern and modified opinion reporting⁶ encompasses only those companies experiencing unusual circumstances of financial distress or noncompliance with accounting standards, limiting the generalizability of the findings. Finally, ours is the first partner style study to examine not only the *extent* of the partner's reporting, but the *diversity* of audit issues the partner tends to consider and the language the partner chooses to *communicate* those issues. Expanding the conception of partner style to the breadth and content, not just the extent, of disclosure allows us to holistically capture relevant dimensions of partner decision making.

Third, we make an innovation in the audit partner style literature by extending the conceptualization of style to span multiple dimensions of the audit. Prior research conceptualizes style with respect to audit fees, audit quality, and auditor modified opinions in isolation, not contemplating that partner style for one audit outcome will affect a host of other partner decisions. For example, Taylor (2011) demonstrates that partners have individual effects on audit fees but does not consider how fee style relates to other partner outcomes such as audit quality, audit report timing, opinion reporting, or partner-client matching. Our conceptual framework motivates the idea that the elements of the partner's cognition, incentives, and environment that

⁶ See Chen, Sun, and Wu (2010); Chi, Douthett, and Lisic (2012); Firth, Rui, and Wu (2012); He, Pittman, Rui, and Wu (2017); Chi and Chin (2011); Carey and Simnett (2006); Ye, Carson, and Simnett (2011); Hardies, Breesch, and Branson (2014); Sundgren and Svanström (2014); Goodwin and Wu (2016).

drive partner KAM reporting style are not unique to KAM decisions. We predict and find that a partner's style for KAM reporting is significantly associated with their profile for setting audit fees. We show that partner demographics do not meaningfully explain these style effects, thereby motivating future research investigating the latent processes that we propose in our framework.

We proceed as follows. Section II contains our literature review and hypotheses. Section III articulates methods, Section IV discusses results, and Section V concludes.

II. LITERATURE REVIEW AND HYPOTHESES

Institutional Background

The International Auditing and Assurance Standards Board (IAASB) defines KAMs as “those matters that, in the auditor’s professional judgment, were of most significance in the audit of the financial statements of the current period. Key audit matters are selected from matters communicated with those charged with governance” (IAASB ISA 701-8). KAMs do not serve to disclaim or change the auditor’s opinion on the financial statements and are not a substitute for audit procedures necessary for achieving useful financial reporting (IAASB ISA 701-4). KAMs typically involve detailed descriptions of significant risks, transactions, events, and/or estimates (IAASB ISA 701-9) and provide decision-useful information about especially challenging audit areas by explaining the genesis of the KAM and how auditors addressed it (Gunn 2016; IAASB ISA 701-2).⁷ The Financial Reporting Council (FRC) is an independent regulator in the UK that sets corporate governance and stewardship codes of conduct. The FRC began requiring auditors to include KAM-like ‘risk of material misstatement’ disclosures in the audit report beginning in September of 2013. The FRC adopted more formal KAM requirements following IAASB KAM

⁷ Appendix A contains an example of KAMs issued by two different partners: KPMG partner Ruaidhri Gibbons’ 2017 report for Independent News & Media, and PwC partner Anna Loizou’s 2018 report for Globaltrans Investment; the Fog readability indices are 14.3 and 24.6, respectively.

standards effective June of 2017. In this study, we examine partner styles for reporting KAMs under FRC standards from 2013-2019 after controlling for the 2017 regulation change.

Do Partners Have Unique KAM Reporting Styles?

Over the past decade, audit researchers have expanded on extensive research showing the effects of *audit firms* and *audit offices* on various outcomes – especially audit quality – by turning toward understanding the effects of *observable* partner characteristics on a host of audit outcomes (see Lennox and Wu [2018] for a review). For example, this literature suggests that fee premia for industry expertise previously characterized as an audit office-level phenomenon may instead be driven by expert partners (Goodwin and Wu 2014), and that individual partners differ in their reactions to economic bond incentives as compared to office-level reactions (Chen et al. 2010). Research also shows that partners' past decisions affecting audit quality predict future outcomes. Knechel, Vanstraelen, and Zerni (2015) show that partners' preferences for aggressive versus conservative going concern reporting and earnings management persist over time. Li et al. (2017) show that partners with a history of signing off on subsequently restated financial statements are more likely to continue to sign off on misstated financial statements in the future. Further studies show that partner decisions vary with demographics such as age (Goodwin and Wu 2016), gender (Hardies et al. 2014), specialization (Chi and Chin 2011), tenure and busyness (Carey and Simnett 2006; Ye et al. 2011; Sundgren and Svanström 2014), along with client economic importance (Chi et al. 2012) and client social ties (Firth et al. 2012).

While these studies investigate associations between observable partner characteristics (demographics, past audit opinions, fees) and audit outcomes, a second line of literature explores individual audit partner 'style'. We make an important distinction between these two research approaches. Studies of observable characteristics examine whether partners' membership in

certain groups (e.g., gender, education, and willingness to allow client reporting aggressiveness) or position on a relative scale (e.g., fee premia or industry specialization) impacts audit outcomes. In contrast, the style literature allows for between-partner variation across partners who are otherwise identical on observable characteristics (Gul et al. 2013; Taylor 2011). As such, a partner's style encompasses both their observable and unobservable characteristics (e.g., cognition, skepticism, and task-specific expertise) important to predicting audit outcomes.

Existing style research finds that CEOs', CFOs', managers', and audit partners' individual styles predict outcomes in various settings after controlling for company characteristics. For example, Bertrand and Schoar (2003) show that individual CEO styles affect companies' investment, financial, and organizational policies, as well as performance. Dyring et al. (2010) demonstrate that managers possess identifiable tax avoidance styles, and Ge et al. (2011) reveal that CFOs have unique styles for selecting accounting policies. Bamber, Jiang, and Wang (2010) show that CFOs' distinct voluntary disclosure styles persist across multiple employers, and that CFO demographics explain between one and 13 percent of the variation in their disclosure style. Taylor (2011) illustrates that audit partners have unique profiles with respect to fee premia, and Gul et al. (2013) show that Chinese audit report signatories have individualized style effects on audit quality, and that individual demographics explain between just one and three percent of audit signatories' quality style.

Other research investigates audit firm-level style, conceiving that the institutional context of the audit firm drives homogeneity in the individual decision makers the firm employs (e.g., Covaleski, Dirsmith, Heian, and Samuel 1998; Cooper and Robson 2006; Suddaby, Gendron, and Lam 2009). Francis and Michas (2013) provide evidence of an audit office-level contagion effect of low-quality audits, whereby the presence of an audit client at a given auditor office that

reports a restatement is negatively associated with the subsequent quality of earnings of other office-level clients; the results also reveal that client misreporting for an audit office in a given year is positively associated with subsequent client restatements for that office in the ensuing five years. Francis et al. (2014, p. 605) characterize ‘style’ as “the unique set of internal working rules of each Big 4 audit firm for the implementation of auditing standards and the enforcement of GAAP within their clienteles.” The results reveal that two companies with the same audit firm, and therefore presumably the same audit firm style, are more likely to have comparable earnings structure than two companies whose audits are conducted by different audit firms.

A Conceptual Framework of Partner-level KAM Reporting Styles

Based on these studies and the large body of behavioral research investigating partner decision making on various complex audit tasks (Bonner, Davis, and Jackson 1992; Christ 1993; Griffith, Hammersley, and Kadous 2015), we propose a conceptual framework depicting our views on the genesis of audit partner KAM reporting styles and the application of those styles to KAM decisions in Figure 1. We posit that audit partners make KAM decisions by evaluating the facts and circumstances of individual client engagements, developing a mental representation, and making a decision about the number of KAMs to report, the topical areas the KAMs will address, and the language to use to describe the KAMs in the audit report. We theorize that a given partner’s unique KAM reporting style evolves as the following factors exert their pervasive influence on the partner’s decision process: (a) relevant experience-knowledge-expertise⁸, (b) risk attitudes,⁹ (c) professional skepticism, (d) elements of the audit firm

⁸ Knowledge develops through experience and is an important determinant of expertise (Bédard 1989; Bédard and Chi 1993; Libby and Luft 1993; Libby and Tan 1994; Ramsay 1994; Jamal and Tan 2001) and specialization (Solomon, Shields, and Whittington 1999; Balsam, Krishnan, and Yang 2003; Ferguson, Francis, and Stokes 2003; Francis, Reichelt, and Wang 2005; Chin and Chi 2009, 2011; Zerni 2012; Ittonen, Johnstone, and Myllymäki 2015).

⁹ Audit partners have stable individual differences in risk attitudes (Newton 1977; Lewis 1980), which affect a variety of audit decisions (Johnstone and Bedard 2004; Klersey and Roberts 2010; Amir et al. 2014).

environment (e.g., culture, training & resources, KAM guidance, and compensation policies), and (e) competing KAM reporting incentives (e.g., complying with audit standards, maximizing decision usefulness, etc.). While archival research cannot directly observe these underlying factors, our theory conceptualizes KAM reporting style as providing a visible signal of a partner's profile, environment, and cognition along these dimensions.

[INSERT FIGURE 1 ABOUT HERE]

The audit partner KAM reporting style that we depict in Figure 1 predicts partners will have stable individualized styles across clients and reporting years after controlling for variation in client and audit firm characteristics, as well as audit firms' idiosyncratic differences. In our setting, we observe partners' KAM reporting styles based on the number of KAMs the partner reports (volume), the topical diversity of those KAM disclosures, and how the partner communicates those KAMs in terms of average number of words per KAM and their readability.¹⁰ Based on this discussion, we propose that:

H1: Audit partners possess unique KAM reporting styles with respect to:

- a.** the volume of KAMs.
- b.** the diversity of KAM topics.
- c.** communication of KAMs in the audit report.

Despite these expectations, we note that certain features of the KAM reporting regime may work against finding support for H1. First, KAMs are not designed to disclose information that the client company has not already made public (FRC ISA 701). The client company's economic

¹⁰ To illustrate variation in audit partner style along these dimensions, consider two partners from our sample: Richard Porter and Ian Chambers are both partners in PwC's London office, each auditing three clients across three different industries during our sample period. Mr. Porter issues a total of 17 KAMs across five topical categories, while Mr. Chambers issues 39 KAMs across seven topical categories. Mr. Porter uses an average of 339 words to describe each KAM, with a readability index indicating 17 years of education is necessary to understand the report; Mr. Chambers uses an average of 319 words per KAM with a readability index of 19.

activities and disclosure choices are therefore closely tied to what will ultimately be reported as KAMs, which may leave little room for partners to develop unique reporting styles. Second, audit firms aim to provide a homogenous level of audit quality across audit partners, employing central trainings, guidance, and organizational behaviors to standardize the product the firm provides. From an incentive perspective, there is widespread concern among stakeholders that audit firms will prefer boilerplate KAMs that minimize litigation risk and decision effort, rather than encouraging individual partners to tailor their KAM judgments to the facts and circumstances of specific engagements.¹¹ Audit firm-level style and reporting preferences may therefore subsume the space for partners to develop and express an idiosyncratic decision style.

Implications of Partner-level KAM Reporting Styles for Audit Pricing and Report Timing

We next turn to investigating potential implications of KAM reporting styles on audit pricing and report timing. To begin, we review the emerging research on KAM reporting, which documents mixed findings as to whether and how the introduction of KAM reporting regimes affects audit effort, pricing, and audit quality. For example, Bédard et al. (2019) find that the shift to ‘Justification of Assessment’ reporting, a French requirement similar to KAMs, has no association with audit effort or fees. Similarly, Gutierrez et al. (2018) and Liao et al. (2019) find no association of KAM reporting with audit fees or quality in the UK or China, respectively. In contrast, Li et al. (2019) find that KAM reporting in New Zealand is associated with significant increases in both fees and quality. Reid et al. (2019) report no association between the KAM regime and audit fees or report delay in the UK, but find a significant increase in financial

¹¹ A PwC report on the implementation of KAM standards cautions that “forcing the pace of change might have adverse consequences – especially in litigious environments – and this could result in a retreat back to boilerplate ... If both companies and the profession do not see the benefits of the new reporting model, and approach the new reports as a necessary compliance exercise only, there is a very real risk of longer reports with simply more boilerplate language” (PwC 2014).

reporting quality. Taken together, these results suggest that KAM regimes have either no effect or a positive effect on audit pricing, and no effect on audit report delay.

We extend this literature by turning our focus from the effect of the KAM disclosures themselves to examining the role that individual audit partner KAM reporting styles play in audit pricing and report delay. Recall from the conceptual framework in Figure 1 that an audit partner's KAM reporting style results from the partner's profile, environment, and cognition; these factors are not unique to KAMs, but pervasive across complex audit decisions. We therefore expect that KAM styles are associated with audit fees and report delay not because of the effort involved in preparing the KAMs themselves, but because the same factors that shape a partner's approach to KAM decision making will influence their ability to command fee premia and conduct their audits efficiently.

Prior literature outside the KAMs setting reveals that partners' bids will often reflect anticipated incremental effort and risk premia (e.g., Bedard and Johnstone 2004; Johnstone, Bedard, and Ettredge 2004). We anticipate that if an audit partner's style reflects a relatively higher volume and diversity of KAMs, this signals a tendency for audit effort that likely necessitates additional audit procedures (e.g., see IAASB ISA 701 paragraphs 9-16; PCAOB AS 3101, paragraphs .11 and .12), client-auditor interactions (Brown and Johnstone 2009), and discussions with those charged with governance (Cohen, Krishnamoorthy, and Wright 2002). Therefore, we make the following prediction:

H2a: Audit partner KAM reporting styles with respect to volume and topical diversity are positively associated with audit fees.

The implications for partners' KAM communication styles for audit fees are less clear. FRC 701-A34 summarizes the objective of communicating KAMs as to provide "a succinct and balanced explanation to enable intended users to understand why the matter was one of the most

significance in the audit and how the matter was addressed.” Longer KAMs with greater word counts may therefore be characterized either as demonstrating a partner’s commitment to greater transparency, or as a shortcoming in expressing the KAM in the succinct manner prescribed in the relevant standard. Similarly, partners who report more readable KAMs may be construed as successful in “limiting the use of highly technical auditing terms” (FRC 701-A34), or as potentially oversimplifying the KAM such that the report user is not able to acquire a complete picture of the audit issue. We therefore propose the following non-directional prediction:

H2b: Audit partner KAM reporting styles with respect to communication are associated with audit fees.

With respect to the time it takes a partner to issue the audit report, we anticipate two competing possibilities. From one perspective, if an audit partner’s style reflects a relatively higher volume and diversity of KAMs and more complex communication style it may take longer to release the audit report since the incremental audit procedures and communications will necessitate more time to complete the audit (Krishnan and Yang 2009; Dao and Pham 2014; Habib 2015; Hussin, Nordin, Bamahros, and Shukeri 2018). Further, the partner’s tendency to expend that incremental effort with respect to KAMs may provide a signal that the partner exerts higher effort across other areas of the audit. From an opposing perspective, if an audit partner’s style reflects greater KAM volume, diversity, and communication complexity it may be that the audit partner has greater expertise in complex audit decisions, which may yield audit efficiencies. Based on this discussion, we make the following non-directional prediction:

H2c: Audit partner KAM reporting styles with respect to volume, topical diversity, and communication are associated with audit report delay.

III. METHODS

Sample Selection

We examine KAMs in audit reports of London Stock Exchange companies with fiscal years ending from the first month of KAM disclosures (September 2013) through the most recent month with available financial data (March 2019). We obtain data on KAM reporting outcomes, audit partner identities, and audit-related control variables from the Audit Analytics Europe database. We obtain corporate financial information from FactSet. We include partner fixed effects only for those partners signing at least five unique audit reports across at least two different clients during the sample period. The first criteria ensures a sufficient number of observations to observe the partner's unique KAM reporting style and reliably estimate a partner fixed effect, while the second allows us to disentangle the partner's style from the circumstances of each specific client. We require that an audit firm have at least three partners meeting this description to include an audit firm fixed effect to ensure that we can separate firm-level versus partner-level reporting styles.¹² Our main analysis includes 2,826 company-year observations from 279 partners across 11 audit firms. See Table 1 for a description of the sample.

[INSERT TABLE 1 ABOUT HERE]

Empirical Design

We follow the methodology in Bertrand and Schoar (2003) and Gul et al. (2013) to estimate individual audit partners' effects on KAM reporting after controlling for other potential explanatory factors. See Appendix A for detailed definitions of our dependent, independent, and

¹² We exclude audit firms and partners not meeting these criteria because including them and not estimating their fixed effects would mismeasure the incremental explanatory power of audit firms and partners on KAM reporting outcomes. Our results are robust to including all audit firms and partners and only estimating fixed effects for partners meeting these restrictions.

control variables. We estimate Model (1) using linear regression with high-dimensional fixed effects (Correia 2016):¹³

$$KAM_Outcome_{it} = \beta X_{it} + \sum \sigma_t Year_t + \sum \pi_{it} Industry_{it} + \sum \lambda_j AuditFirm_j + \sum \delta_k AuditPartner_k + \varepsilon_{it} \quad (1)$$

where i , t , j , and k index audit engagements (clients), fiscal years, audit firms, and audit partners, respectively. In our tests of KAM reporting volume, we operationalize the dependent variable *KAM_Outcome* with measures of the number of KAMs in the audit report de-meaned by the industry-year average (*Num_KAMs_dm*), i.e., the number of KAMs in the audit report minus the mean number of KAMs for that industry-year. We measure topical diversity KAM outcomes with an industry-year weighted measure:

$$wtd_Diversity = \sum_{c=1}^{c=9} I_c * (1 - \text{percent of firms in the industry year for which } I_c = 1)$$

where ‘c’ indexes the following KAM topical categories: complex estimates, revenue recognition, business combinations, taxes, inventory, internal control, financial statement presentation and disclosure, compensation, and complex instruments and ‘I’ is an indicator variable equal to one for firms receiving a KAM in category ‘c’.¹⁴ In our tests of KAM communication outcomes, we measure KAM length with industry-year de-meaned number of words per KAM (*wrdsperKAM_dm*) and complexity of the KAM language with an industry-year de-meaned Gunning Fog index (*Fog_dm*). The Fog index estimates the number of years of

¹³ High-dimensional fixed effects (HDFE) refers to situations in which the researcher is attempting to estimate a large number of fixed effects within other fixed effects (e.g., partners within audit firms, within client firm industries, within years). Correia’s (2016) HDFE estimation technique recovers fixed effect coefficients that are not dependent upon the order in which we estimate the fixed effects (i.e., whether we include audit firms or audit partners first in the regression specification), offering improvements over older, order-dependent statistical techniques (Abowd, Kramarz, and Margolis 1999).

¹⁴ We develop the categories by aggregating the 65 narrow KAM topic descriptions available in Audit Analytics into 15 broad KAM categories. Appendix C contains our categorization scheme, as well as a count of the frequency of each narrow topic and broad category of KAMs. We exclude six categories related to infrequently occurring client circumstances (going concern, fraud risks, accounting changes and error corrections, compliance, expense reporting, and other) because including them would artificially deflate the diversity measure for partners who never face client circumstances to which considering these types of KAMs are appropriate. The categories we include comprise 95% of the KAMs in our sample.

education that an individual would need in order to understand a written text (Loughran and McDonald 2016).¹⁵ We construct the *KAM_Outcome* variables to measure deviations from industry-year norms to identify the extent to which individual audit partner styles explain out of the ordinary KAM outcomes. We winsorize continuous variables at the 1st and 99th percentiles to avoid the potentially confounding effects of influential observations. We cluster on client firm to address the possibility of serial correlation.¹⁶

$\Sigma Year$, $\Sigma Industry$, $\Sigma Audit Firm$, and $\Sigma Audit Partner$ are sets of indicator variables we use to implement the fixed effects of interest.¹⁷ We add $\Sigma Audit Firm$ and $\Sigma Audit Partner$ to the base Model (2) sequentially to analyze the incremental effect of audit firms and partners on explaining KAM outcomes:

$$KAM_Outcome_{it} = \beta X_{it} + \sum \sigma_t Year_t + \sum \pi_{it} Industry_{it} + \varepsilon_{it} \quad (2)$$

X_{it} denotes a vector of control variables encompassing features of clients and auditors. Drawing on previous investigations of KAM determinants (Sierra-García, Gambetta, García-Benau, and Orta-Pérez 2019; Pinto and Morais 2019), we select controls for client complexity (*Size*, *Subs*), and performance (*ROA*, *Sales_Vol*, *Leverage*, *BTM*, *Loss*). We also control for economic activities of the client that are likely to give rise to KAM-reportable accounting items. These

¹⁵ We note Laughran and McDonald's (2016) criticisms of applying readability indices to financial documents. We believe that readability measures are appropriate to the KAM setting because standards encourage auditors to "provide a succinct and balanced explanation...limiting the use of highly technical auditing terms ... to enable intended users who do not have a reasonable knowledge of auditing to understand" (FRC 701-A34). Additionally, de-meaning by industry year removes the effect of common polysyllabic words on the readability measure. For example, consider the case of R&D intensive industries that use the words 'intellectual property' extensively. Readers will recognize and understand the term, but 'intellectual' has six syllables, which increases the Fog index. In this case, partners with portfolios containing R&D intensive clients would otherwise be inappropriately categorized as issuing very low readability KAMs, even though the meaning is clear to the audit report user.

¹⁶ Following Cameron and Miller (2015) we do not cluster on any of the variables for which we estimate fixed effects because the fixed-effect groups do not have balanced sample sizes.

¹⁷ We follow Fee et al. (2013) and include control variables for client economic circumstances rather than client fixed effects to better control for commonalities in companies that choose to hire the same auditor; the results are robust to including client fixed effects.

include indicators for acquisitions (*Acq*) and external financing (*Fin_Issue*), and continuous measures for the intensity of revenue (*Rev*), inventory and accounts receivable (*Inv_AR*), goodwill and intangibles (*GW_Intan*), pension liabilities (*Pension*), *PPE*, tax volatility (*Tax_Vol*), various impairments (*GW_Impair*, *Intan_Impair*, *PPE_Impair*), research and development (*RD_Exp*), investments (*Invest*), and legal liabilities (*Legal_Liability*). We include an industry fixed effect to capture complex accounting issues and significant activities common to specific industries. We include year fixed effects to control for macroeconomic conditions.

With respect to the auditor, X_{it} controls for fees (*Log_Aud_Fee*), which measure both auditor effort and the auditor-client economic bond (DeFond and Zhang 2014). We control for *Big4* firm membership in Model (2), and remove the control after adding the audit firm fixed effect to avoid perfect collinearity. We control for audit partner busyness (*Ptr_Busyness*) with a measure of the number of public clients the partner audits each year (Ittonen et al. 2014). We include an indicator variable equal to one if the client has a December year end (*DecYrEnd*) following Reid et al. (2019). We control for the economic ties between the auditor and client with the percent of total fees attributable to the client at the firm level (*AudFirm_Econ_Bond*), and the percent of total audit fees attributable to the client at the audit partner level (*AudPtr_Econ_Bond*). Similarly, we measure industry specialization (*Ind_Spec*) as the percent of total audit fees generated from the client industry at (1) the audit firm level, and (2) the audit partner level. We include year fixed effects to control for the effects of increasing partner experience with KAM reporting in later sample years. Finally, we employ *KAMreg*, an indicator variable equal to one for fiscal year-ends after June 15th 2017, to control for the effect of the change in the Financial Reporting Council's KAM reporting regulations to conform with IAASB KAM standards.

H1 anticipates that partners have unique KAM reporting styles with respect to KAM volume, diversity, and communication outcomes. We test H1 with a battery of tests examining whether the partner fixed effects in Models (1) and (3) meaningfully explain KAM outcomes as compared to a model with control variables and audit firm fixed effects only. First, we implement an exclusion restriction (*F*-test) examining whether all partners' fixed-effect indicator variables jointly increase explanatory power (Wooldridge 2012, pp.143-149). Second, we calculate the incremental change and percent change in the adjusted R² from adding partner fixed effects. Third, we calculate the Vuong (1989) likelihood statistic to test whether the change in R² from including partner fixed effects is statistically significant. Finally, we calculate the percent of individual partners whose fixed effects are significant at a $p \leq 0.05$ level and compare this to the five percent tolerable error rate; incidences of significant partner fixed effects in excess of five percent are unlikely to be driven by random error.¹⁸

We test H2a, that partner KAM reporting styles are positively associated with fees, using the following linear regression with a high-dimensional fixed-effects specification:

$$\text{Log_Aud_Fee}_{it} = \alpha_{it} + \beta \text{Style}_k + \beta \mathbf{V}_{it} + \varepsilon_{it} \quad (3)$$

where \mathbf{V}_{it} is a vector of control variables related to client complexity, financial risk, and auditor characteristics that are common audit fee determinants (Carcello and Li 2013; Gutierrez et al. 2018). Following Gul et al. (2013), we measure partners' *Style* as the δ_k coefficient on the partner

¹⁸ We recognize that Fee et al. (2013) criticize using a fixed-effect approach to detect idiosyncratic CEO styles because CEO turnover events are likely endogenous, occurring when the board of directors wishes to make broader changes to the company's direction. However, unlike the CEO style setting, a company does not have to switch auditors to be in our sample since we separate auditor effects from client-company effects using observations from the auditor's other clients. Mandatory audit partner rotation in the UK means that many partner changes are exogenous, and a minimum acceptable level of auditor independence means that a client cannot choose the number and topics of KAMs they receive in the audit report by changing audit firms or audit partners. We address Fee et al.'s econometric concerns about the reliability of *F*-tests for non-asymptotic variables by supplementing our analysis with the calculation of the Vuong χ^2 statistic, the change in R², and incidence of significant fixed effects.

fixed effect in Model (1) for each of the four operational measures of the *KAM_Outcome* dependent variable.¹⁹ δ_k captures a partner's propensity to report a higher volume (*Volume_Style*), greater topical diversity (*Diversity_Style*), longer (*CommStyle_Words*), or less readable KAMs (*CommStyle_Fog*) after controlling for client economics, features of the engagement, industry, year, and the idiosyncratic influence of the audit firm.

We test H2b, that partner style is associated with audit delay, using the following linear regression with a high-dimensional fixed-effects specification:

$$Audit_Delay_{it} = \alpha_{it} + \beta Style_k + \beta U_{it} + \varepsilon_{it} \quad (4)$$

where *Audit_Delay* is the number of days between the client's fiscal year end and the signature date of the audit report, U is a vector of control variables for client and auditor characteristics important to determining delay (Reid et al. 2019), and all other variables are as we define above.

IV. RESULTS

Descriptive Statistics

We present descriptive statistics in Table 2. Auditors in our sample report a mean of about three KAMs per audit opinion, comprising 289 words with a Fog Index of 18.5. The typical engagement has an audit fee of about one million US dollars and the partner issues the audit report 74 days after the company's fiscal year-end. Big 4 auditors comprise 78 percent of our sample, and the typical partner audits 1.3 publicly-traded clients a year. Audit firms typically obtain seven percent of their audit fees from any one industry and one percent of their total fees

¹⁹ We operationalize *Volume_Style* in Model (3) using partners' fixed-effect coefficients δ_k from a modified version of Model (1) that excludes the fee related control variables audit fees (*AudFee*), auditor industry specialization (*Ind_Spec*), and auditor-client economic bond (*Econ_Bond*) to avoid inducing a mechanical relation between *Style* and *Log_Aud_Fee*.

from any one client. At the partner level, audit fees are typically 34 percent concentrated in the audit partners' industry specialty and are 32 percent concentrated in any given client.

[INSERT TABLE 2 ABOUT HERE]

Mean client size equals \$5,682 million in total assets and mean ROA equals 3.5 percent. About 30 percent of sample companies report investments in unconsolidated subsidiaries, 30 percent report acquisition activity, 68 percent obtain external financing, and 23 percent report a loss. With respect to estimate and risk-intensive activities likely to give rise to KAMs, we find that revenues, inventory and accounts receivable, goodwill and intangibles, and pension benefit obligations comprise a mean of 70, 17, 15, and 15 percent of total assets, respectively.

Audit Partner Fixed Effects on KAM Reporting Outcomes

Partner Effects on KAM Volume

We present the results of estimating Models (1) and (2) in Table 3. In Panel A, we find that losses, acquisition activity, pension obligations, higher audit fees, and greater partner and firm industry specialization are positively associated with receiving a higher number of KAMs than is typical for that industry-year (*Num_KAMs_dm*). We find a negative association between the partner-client economic bond and *Num_KAMs_dm*. In Panel B, we show that clients with higher inventory and receivables intensity, greater goodwill and intangibles, higher audit fees, and greater audit partner industry specialization tend to receive more topically diverse KAMs (*wtd_Diversity*) than their industry-year peers. In Panel C, we find that the book-to-market ratio, goodwill impairments, higher audit fees, December year-ends, and audit firm industry specialization are associated with receiving longer than average KAMs (*wrdsperKAM_dm*). Conversely, tax volatility and the audit firm economic bond with the client are associated with shorter KAMs. Finally, Panel D shows that the readability of KAMs is increasing in revenue

intensity, audit partner industry specialization, Big 4 auditor, partner busyness, and audit firm economic bond, while readability decreases in investment activity, higher audit fees, and audit firm industry specialization.

[INSERT TABLE 3 ABOUT HERE]

We present the results of testing H1, that partners have unique KAM reporting profiles with respect to KAM volume, diversity, and communication in Table 4. We find that audit partner fixed-effect indicators are jointly important to explaining all of these KAM outcomes, with F-statistics ranging from 7.84 ($p = 0.000$) for *Num_KAMs_dm* to 10.35 ($p = 0.000$) for *wrdsperKAM_dm*. We find that adding partner fixed effects to a model with audit firm fixed effects increases the adjusted R² of the regressions by between 11 and 18 percent, yielding a 28 to 104 percent improvement in predictive power. We test whether these changes in explanatory power are statistically significant using the Vuong (1989) Chi-squared test, finding statistical significance at the $p \leq 0.01$ level for all of our KAM outcome measures. Finally, we count the number of partners whose fixed-effect coefficients are significant at the $p \leq 0.05$ level and divide that number by the total partners in the sample. We find that between 15 and 30 percent of partners in our tests have significant fixed-effects coefficients, well exceeding the five percent rate of significance we would expect due to random error. Collectively, these results show that idiosyncratic partner effects significantly explain KAM outcomes, thereby supporting H1.

[INSERT TABLE 4 ABOUT HERE]

Association Between Partner KAM Reporting Styles and both Audit Fees and Audit Delay

H2 predicts that partner KAM reporting styles are associated with audit fees and audit delay. Table 5, Panel A shows a positive association between fees and *Volume_Style* ($\beta = 0.0749, p \leq 0.01$), *Diversity_Style* ($\beta = 0.2076, p \leq 0.01$), *CommStyle_Words* ($\beta = 0.0006, p \leq 0.05$), and

CommStyle_Fog ($\beta = 0.0266, p \leq 0.01$). Collectively, this means that the underlying factors driving a partner to develop a style for reporting more KAMs, more topically diverse KAMs, longer KAMs, and more complexly written KAMs are associated with that partner's ability to command higher fees. In economic terms, we find that partners in the uppermost quintile of *Volume_Style* charge 10 percent higher fees ($\beta = 0.1021, p \leq 0.05$), partners in the uppermost quintile of *Diversity_Style* charge 8.8 percent higher fees ($\beta = 0.0884, p \leq 0.05$), and partners in the uppermost quintile of *CommStyle_Fog* charge 14 percent higher fees ($\beta = 0.1412, p \leq 0.01$) than their counterparts.

We present the results of testing the association between KAM reporting style and audit delay in Table 5, Panel B. We find no significant association between audit delay and any dimension of partner KAM reporting style.²⁰ We interpret this to mean that a partner's style in producing more comprehensive audit reports does not inhibit their audit efficiency. However, we caution that only 22 of the 2,754 audit delay sample observations have audit opinions that are issued later than the LSE filing deadline for the client firm, thereby limiting the variation in delay and the power of tests in our sample. Collectively, the results for H2 reveal a positive association between partner KAM reporting style and audit fees, but no relation between style and delay.

[INSERT TABLE 5 ABOUT HERE]

Sensitivity Test of Audit Partner Demographic Characteristics

Our conceptual framework proposes that partners' unique KAM reporting styles arise because partners' incentives, environment, skepticism, risk attitude, and knowledge drive heterogeneities in their decision processes for KAM reporting. We address the alternative explanation that

²⁰ If we de-mean report delay by the industry-year average, we also find no association between audit partner style and audit delay.

demographic, rather than cognitive, factors drive partners' KAM reporting styles using the following OLS regression:

$$Style_k = \alpha_k + \beta Z_k + \varepsilon_k \quad (8)$$

where Z is a vector of partners' demographics and ε_k is the error term. We hand-collect demographic data from partners' publicly available LinkedIn pages, audit firm profiles, and audit firm press releases. Of the 274 partners, 161 have available data. Our partners are predominantly male (85 percent) with a mean of 27.5 years' experience. About 24 percent hold advanced degrees, 84 percent have worked at a Big 4 audit firm, 33 percent have completed an international secondment, and 65 percent have occupied a practice leadership role.

We present regression results in Table 6. We find a significant positive association between *Volume_Style* and having an advanced degree ($\beta = 0.2871, p \leq 0.05$) and Big N experience ($\beta = 0.3469, p \leq 0.05$). We find a significant negative association between Big N experience and *CommStyle_Fog* ($\beta = -2.2762, p \leq 0.05$). We find that demographic characteristics explain between one and twenty percent of partners' KAM reporting style, implying that unobservable partner characteristics explain 99 and 80 percent of the partner style effects on KAM outcomes, respectively. The demographics most associated with reporting style (experience and education) are those most likely to affect KAM outcomes through their effect on partners' decision approaches. Collectively, we interpret this evidence to mean that heterogeneity in partners' KAM styles is primarily attributable to unobservable cognitive factors. We leave it to future behavioral research to further investigate whether and how partner cognitive processing for KAM decisions is the mechanism through which experience and education affects KAM outcomes.

[INSERT TABLE 6 ABOUT HERE]

V. CONCLUSION

We examine whether partners have unique KAM reporting styles and investigate how those styles affect audit fees and report delay. Our conceptual framework depicts how partner risk attitudes, professional skepticism, experience-knowledge-expertise, audit firm environments, and competing incentives drive between-partner differences in KAM decision processes. We predict and find that partners have individual styles for KAM reporting, showing that audit partner fixed effects significantly improve our ability to predict KAM outcomes with respect to volume, topical diversity, and communication. We find that audit partners with styles for reporting a higher volume, greater topical diversity, and more complexly worded KAMs charge 8.8 percent, 10 percent, and 14 percent higher fees than their counterparts. This finding is consistent with the idea that the underlying factors that drive heterogeneous KAM reporting styles are not necessarily unique to the KAM setting, but provide a signal of underlying partner professional profile, cognition, and environment, which likely affect a host of other complex audit decisions.

Our study provides several unique contributions. First, our finding that partners have unique KAM reporting styles contributes to the conflicting literature on whether KAMs impact audit outcomes and investor decision making. Our results suggest that these outcomes vary at the KAM decision maker level, i.e., based upon the unique styles of individual audit partners rather than varying based on whether or not KAMs are disclosed in the audit report at all. Second, we provide evidence relevant to regulators' concerns that KAMs might become boilerplate at the audit firm level by demonstrating that individual partners from the same firms exhibit stable heterogeneities with respect to KAM outcomes. Next, we extend the literature on partner reporting style to a setting that allows us to *directly* observe partner decisions (KAMs) across a wide variety of companies. In contrast, prior literature on partners' audit quality styles uses

indirect measures of earnings quality that confound audit and financial reporting quality, while extant research on partner reporting style focuses on clients with going concern or modified opinions, which are difficult to generalize to the average client company. Finally, we extend the extant literature's conceptualization of style by demonstrating that partner style on one audit outcome (KAMs) is tied to other outcomes (audit fees). Future research might consider whether partner KAM style is associated with outcomes such as client satisfaction and audit firm turnover/tenure.

We acknowledge several limitations to our research approach. First, we note that our archival sample does not allow us to directly observe whether the factors in the conceptual framework do, in fact, drive our findings that partners have heterogeneous KAM reporting styles. We address one alternative explanation with our demographic tests, but acknowledge that this does not rule out other possibilities. We leave it to future experimental and qualitative research to test the mechanisms that give rise to partners' idiosyncratic KAM reporting styles. Second, we recognize that our requirement that a partner be present in at least five observations from two clients and that an audit firm have at least three partners meeting this description may bias our sample towards larger audit firms and partners with larger client portfolios. Finally, we note that our measures of partner KAM reporting styles speak only to relative differences among partners. As auditing standards are not specific as to what constitutes a 'good' KAM report in terms of volume, diversity, or length, we make no claims as to the relative superiority of any given style.

There exist a host of additional opportunities for future research relating to heterogeneity in KAM reporting styles. One relates to recent Critical Audit Matters (CAM) reporting in the United States. CAM data will enable future research to examine audit office-level effects, which are impossible to detect in our study given limited audit office dispersion for companies listed on

the London Stock Exchange. Future research can also explore differences in audit procedures, reporting styles, and reporting outcomes based upon heterogenous litigation regimes and regulatory requirements of IAASB/FRC KAMs versus PCAOB CAMs. Another opportunity involves investigating long-window audit partner KAM reporting fixed effects to understand potential shifts in reporting strategies over time and across changing clients. Finally, future research can seek to understand audit partner and audit firm reactions to situations in which KAM reporting is subsequently revealed as inadequate or inaccurate.

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APPENDIX A

Panel A: Example of a select KAM from KPMG Partner Ruaidhri Gibbons 2017 Audit Report for Independent News & Media PLC. Fog Index: 14.3

Title: Carrying amount of goodwill (2017: €19.7 million; 2016: €19.7 million), intangible assets with indefinite lives (2017: €6.6 million; 2016: €19.9 million) and property, plant and equipment (2017: €40.1 million; 2016: €41.6 million)

Description:

- The Group has significant goodwill, intangible assets with indefinite lives and property, plant and equipment.
- There is a risk that these and other assets might be impaired. Recoverability is based on forecasting and discounting future cash flows and significant judgement is involved in relation to the assumptions used in the impairment models, in particular the discount rates and the cash flow forecasts.
- The Group recognised an impairment of €12.7 million (2016: €nil) in relation to intangible assets with indefinite lives during the period.

Response:

The procedures that we performed, among others, to assess the carrying value of goodwill, intangible assets with indefinite lives and property, plant and equipment, included:

- Examining the design and implementation of the controls over impairment testing.
- Assessing the Group's impairment testing models. We considered the appropriateness of the impairment methodology and considered the appropriateness of the cash-generating units ('CGUs') identified, taking into account the current management structure and reporting lines in place in the Group.
- Evaluating the key assumptions used by the Group, including forecasted cash flow based on budgeted EBITDA as adjusted for expenditure necessary to maintain the asset or CGU at its current standard of performance, discount rates and terminal value multiples. We compared the Group's assumptions, where possible, to externally-derived data and challenged the reasonableness of the underlying cash flow forecasts.
- Comparing the discount rates applied to the Group's CGUs to peer data as well as involving our own internal valuations expert to assist in assessing the key components of the discount rates calculation.
- Testing the mathematical accuracy of the Group's impairment calculations.
- Examining the sensitivity analyses prepared by management, taking into consideration the reasonableness and mathematical accuracy of their analysis. In addition, we performed further sensitivity testing of our own of the key assumptions and of the key drivers of the cash flow forecasts for the individual CGUs. Having identified the extent of change required in those assumptions to give rise to further impairments, we considered the likelihood of such a movement in those assumptions arising.
- Assessing whether the related disclosures in the financial statements are appropriate. As a result of our work, we determined that the quantum of the impairment recognised in intangible assets of €12.7 million was appropriate. For the CGUs where the Group determined that no impairment was required, we found that these judgements were supported by reasonable assumptions. We found the disclosures to be adequate.

APPENDIX A (continued)

Panel B: Example of a select KAM from PwC Partner Anna Loizou's 2018 Audit Report for TCS Group Holding PLC. Fog Index: 24.6.

Title: Credit loss allowance for loans and advances to customers, using the expected credit loss mode/ in line with the requirements of IFRS 9 "Financial Instruments" including impact of adoption on January 2018.

Description: We focused on this area because this is a new and complex accounting standard for which new models have been developed by the Group to calculate expected credit losses ("ECL") on adoption of IFRS as of January 2018 and for the year ended 31 December 2018 and significant judgement and estimates are involved in estimating expected credit losses on loan and advances to customers. The basis of credit loss allowance under IFRS 9 is significantly different from the impairment provision basis previously applied under LAS 39 and additional new enhanced disclosure requirements are also introduced together with the adoption of IFRS 9. Therefore we applied additional focus to the design and application of the new comprehensive "expected credit loss" models introduced by the Management for the purpose Of compliance with IFRS 9. detailed description of these models is disclosed in Note 3 "Significant accounting policies" and Note 34 "Financial risk management" to the consolidated financial statements. An assessment of the credit loss allowance for loans and advances to customers is performed on a portfolio basis, with the key assumptions being the probability Of an account falling Into arrears and subsequently defaulting (which is impacted by the definition of significant increase in credit risk and the definition of default), the estimated recoveries from defaulted loans and lifetime period for revolving credit facilities. Statistical models are used for the assessment Of the probability of default, recovery rate and lifetime period for revolving credit facilities. In addition, calculation of the expected credit loss allowance incorporates forward-looking information, taking into consideration different macro-economic scenarios and adjusting the probability of default. Note 3 "Significant Accounting Policies", Note 4 "Critical Accounting Estimates and Judgments in plying Accounting Policies", Note 5 "Adoption O New Or Revised Standards and Interpretations", Note 9 "loans and Advances to Customers" and Note 34 "Financial Risk Management" to the consolidated financial statements provide detailed information on the credit loss allowance for loans and advances to customers and the effect of adoption of new credit loss allowance models.

Response: In relation to implementation of the new ECL models for measuring credit loss allowance both on adoption of IFRS 9 on 1 January 2018 and as at 31 December 2018, we assessed the appropriateness of the key assumptions used in the methodologies and models of the Group and their compliance with the requirements of IFRS 9. We engaged our credit risk technical experts to assist us in undertaking this assessment. We tested on a sample basis the design and operating effectiveness of the key controls over the implementation Of the new credit loss allowance models in the systems. For a sample of loans we recalculated probabilities Of default on the basis Of the new methodologies and compared the results with the models' outputs. Additionally, we reviewed the Group's backtesting of probabilities of default estimated on the basis of the models by comparing them to the actual default rates evidenced in the loan portfolios. With regard to the controls relating to the credit loss allowance, we assessed and tested on a sample basis the design and operating effectiveness of the key controls over credit loss data and calculations. These key controls included those over loan classification by type of loan portfolio, allocation of cash received from customers to respective loans and advances to customers, identification Of the overdue loans and the data transfer from source systems to the credit loss allowance models. We determined that we could place reliance upon these key controls for the purposes of our audit. In addition, we tested on a sample basis the correctness Of loan classification by type Of loan portfolio and performed testing on a sample basis of the statistical models used to calculate credit loss allowance. This testing of the models varied by portfolio including testing of the coding used, re- performance of the calculation including calculation of the effect of forward looking information on credit loss allowance and testing the extraction Of data used in the models. We tested a sample of post model accounting adjustments where applicable, including considering the basis for the adjustment, the logic applied, the source data used and the key assumptions adopted. We assessed the disclosures made against the relevant accounting standards for their completeness and accuracy. Based on the evidence obtained we found the models used to be appropriate and the outputs from the models to be reasonable.

APPENDIX B

Variable Definitions

Dependent Variables for KAM Reporting Outcomes

Reporting Volume Outcomes

Num_KAMs Number of KAMs in the audit report.

Num_KAMs_dm Number of KAMs in the audit report minus mean number of KAMs for that industry-year.

Reporting Diversity Outcomes

Industry-year weighted topical diversity of KAMs, calculated as:

$$\sum_{c=1}^{c=9} I_c * (1 - \text{percent of firms in the industry year for which } I_c = 1)$$

wtd_Diversity where 'c' indexes the following KAM topical categories: complex estimates, revenue recognition, business combinations, taxes, inventory, internal control, financial statement presentation and disclosure, compensation, and complex instruments and 'I' is an indicator variable equal to one for firms receiving a KAM in category 'c'.

Communication Outcomes

Fog Gunning-Fog Index for the KAMs portion of the audit report measuring the number of years of education needed to comprehend the KAMs.

Fog_dm Gunning-Fog Index for the KAMs portion of the audit report minus the industry-year average Fog index.

wrdspersKAM Number of words in the KAMs portion of the audit report scaled by the number of KAMs.

wrdspersKAM_dm Number of words per KAM in the audit report minus industry-year average number of words per KAM.

Audit Partner Reporting Style

Volume_Style Audit partner's δ_k fixed-effect coefficient estimated in Model (1) with *Num_KAMs_dm* as the dependent variable.

Diversity_Style Audit partner's δ_k fixed-effect coefficient estimated in Model (1) with *wtd_Diversity* as the dependent variable.

CommStyle_Words Audit partner's δ_k fixed-effect coefficient estimated in Model (1) with *wrdspersKAM_dm* as the dependent variable.

CommStyle_Fog Audit partner's δ_k fixed-effect coefficient estimated in Model (1) with *Fog_dm* as the dependent variable.

Dependent Variables for Audit Fee and Audit Delay

Log_Aud_Fee Log of current year audit fees.

Audit_Delay Number of days between the client's fiscal year-end and the date of the audit report.

Control Variables for Client-Related Factors

Complexity

Size Log total assets.

Subs Indicator variable equal to one if the firm reports investments in unconsolidated subsidiaries.

Performance

ROA Income divided by average total assets.

OCF Cash from operations, scaled by total assets.

Sales_Vol Sales volatility, measured as the standard deviation of the past three years' sales.

Financial Risk

Loss Indicator variable equal to one if the company reports a loss in the current year.

Leverage Total debt divided by total equity.

BTM Book value of equity divided by market value of equity.

APPENDIX B

Variable Definitions (continued)

Control Variables for Client-Related Factors, Continued

Likelihood of Specific KAM Issues

<i>Industry</i>	Industry fixed effects.
<i>Acq</i>	Indicator variable equal to one if the company reports assets from acquisitions.
<i>Fin_Issue</i>	Indicator variable equal to one if the company obtained debt or equity financing in the current year.
<i>Rev</i>	Revenue scaled by total assets.
<i>Inv_AR</i>	Inventory plus receivables, scaled by total assets.
<i>GW_Intan</i>	Goodwill and intangibles scaled by total assets.
<i>GW_Impair</i>	Goodwill impairment scaled by total assets.
<i>Intan_Impair</i>	Other intangible asset impairment scaled by total assets
<i>PPE_Impair</i>	PPE impairment scaled by total assets.
<i>PPE</i>	Gross PPE scaled by total assets.
<i>RD_Exp</i>	Research and development expense scaled by total assets
<i>Pension</i>	Pension benefit obligation scaled by total assets.
<i>Tax_Vol</i>	Standard deviation of effective tax rate over the past three years.
<i>Invest</i>	Total investments scaled by total assets.
<i>Legal_Liability</i>	Absolute value of legal expense scaled by total assets.

Control Variables for Auditor-Related Factors

<i>Audit Firm Fixed Effect</i>	Set of indicator variables equal to one if the observation is associated with a specific audit firm.
<i>Log_Aud_Fee</i>	Log of audit fees.
<i>Big4</i>	Indicator variable equal to one if the audit was conducted by KPMG, EY, PwC or Deloitte.
<i>DecYrEnd</i>	Indicator variable equal to one if the client has a December year-end.
<i>Ptr_Busyness</i>	Log of the number of clients the audit partner signs the report for each year.
<i>Year</i>	Year fixed effects.
<i>Ind_Spec</i>	Industry specialization, measured as percentage of audit fees earned from the client's industry measured at the (1) audit firm level and (2) at the individual partner level.
<i>Econ_Bond</i>	Auditor's dependence on client fees. Measured at the firm level as the percent of total fees attributable to a specific client. Measured at the audit partner level as the percent of audit fees attributable to a specific client.
<i>KAMreg</i>	Indicator variable equal to one if the audit is for a fiscal year ended after June 15th, 2017.
<i>MainMkt</i>	Indicator variable equal to one if the client firm is traded on the LSE Main Market and has a four month filing deadline, zero if traded on the Alternate Investment Market with a six month filing deadline.

Partner Demographic Characteristics

<i>Female</i>	Indicator variable equal to one if the partner is female.
<i>Adv_Degree</i>	Indicator variable equal to one if the partner holds a Master's degree or higher.
<i>Acct_Major</i>	Indicator variable equal to one if the partner majored in accounting.
<i>BigN_Exp</i>	Indicator variable equal to one if the partner has experience at a Big N accounting firm.
<i>Int_Second</i>	Indicator variable equal to one if the partner has completed an international secondment.
<i>Client_Second</i>	Indicator variable equal to one if the partner has completed a client secondment.
<i>Prctc_Ldr</i>	Indicator variable equal to one if the partner has held a leadership role in their firm's audit practice.
<i>Exp_Yrs</i>	Years of experience in public accounting, measured as 2017 minus the year the partner started in public accounting plus one.

APPENDIX C
Categorization of KAM Topics

KAM Category and Related Audit Analytics KAM Topics	Frequency in all LSE Firms	Frequency in sample firms
Complex Estimates	6,819	3,084
Accounts/Loans Receivable	144	48
Allowance For Credit Losses	112	16
Asset Retirement And Environmental Obligations	63	35
Cash And Cash Equivalents	17	3
Contingent Liabilities (Including Litigation & Restructuring)	401	179
Contract Liabilities	2	2
Deferred And Capitalized Costs	404	170
Depreciation And Amortization	60	16
Impairment - Property, Plant, And Equipment	605	260
Impairment - Trade/Accounts Receivables	303	139
Industry-Specific Issue (Insurance)	88	28
Industry-Specific Issue (Mining)	83	30
Industry-Specific Issue (Oil And Gas)	120	41
Insurance Contract Liabilities	75	29
Investment Valuation - Property	497	259
Investment Valuation - Securities And Financial Instruments	1807	915
Land And Stores Under Construction	52	26
Leases	26	16
Long-Term Investments	325	148
Other Intangible Assets	536	208
Other Liabilities And Provisions	366	154
Other Or Unspecified Accounting Estimates	39	8
Pension And Other Post-Employment Benefits	623	337
Research And Development Expenses	17	5
Warranty Liabilities	54	12
Revenue Recognition	3,520	1,581
Revenue And Other Income	2945	1,345
Revenue From Customer Contracts	482	195
Revenue Recognition - Gift Card And Loyalty Programs, Including Break	17	8
Sales Return And Allowances	76	33
Business Combinations-Acquisitions, Divestures, and Goodwill	3,301	1,446
Business Combinations	758	332
Consolidation	45	12
Disposals, Discontinued Operations, And Accounting For Sales/Divestit	190	76
Equity Investments And Joint Ventures	260	110
Goodwill	754	337
Goodwill And Intangible Assets	850	417
Subsidiary/Affiliate	444	162

APPENDIX C
Categorization of KAM Topics (continued)

Taxes	861	495
Deferred Income Taxes	210	102
Other Income Taxes	452	280
Uncertain Tax Positions	199	113
Inventory	821	425
Inventory	663	347
Vendor/Supplier Rebates	158	78
Going Concern	579	187
Going Concern	579	187
Internal Control	529	198
Information Technology	93	33
Internal Controls	421	160
Transformation Initiatives	15	5
Financial Statement Presentation and Disclosure	390	203
Financial Statements And Disclosures	73	32
Presentation - Exceptional Items And Non-Gaap Measures	317	171
Other	318	110
Debt Covenants	26	15
First Year Audit	8	3
Listing/Delisting	18	1
Other Comprehensive Income	45	24
Segment Reporting	7	3
Significant One-Off Transactions	214	64
Deferred, Stock-Based, and/or Executive Compensation	265	119
Deferred And Stock-Based Compensation	265	119
Accounting for Complex Instruments	221	72
Debt, Quasi-Debt, Warrants & Equity (Bcf) Security	93	22
Derivatives And Hedging	84	35
Foreign Currency, Inflation, And Related Disclosures	44	15
Compliance with Laws and Regulations	148	65
Bribery And Corruption	11	-
Compliance With Laws And Regulations	137	65
Fraud Risks, Including Related Party Transactions	88	26
Fraud Risks	6	3
Related Party Transactions	82	23
Accounting Changes and Error Corrections	84	21
Error Corrections	10	4
Policy Changes	74	17
Expense Reporting	32	13
Other Expenses	25	11
Selling, General And Administrative Expenses	7	2
Grand Total	17,976	8,045

Notes: The total of 17,976 represents includes all the KAMs that Audit Analytics has recorded since KAM reporting started in the UK in 2013; the 8,045 represents the KAM topic frequency for our sample.

FIGURE 1
Conceptual Framework of Audit Partner KAM Reporting Style

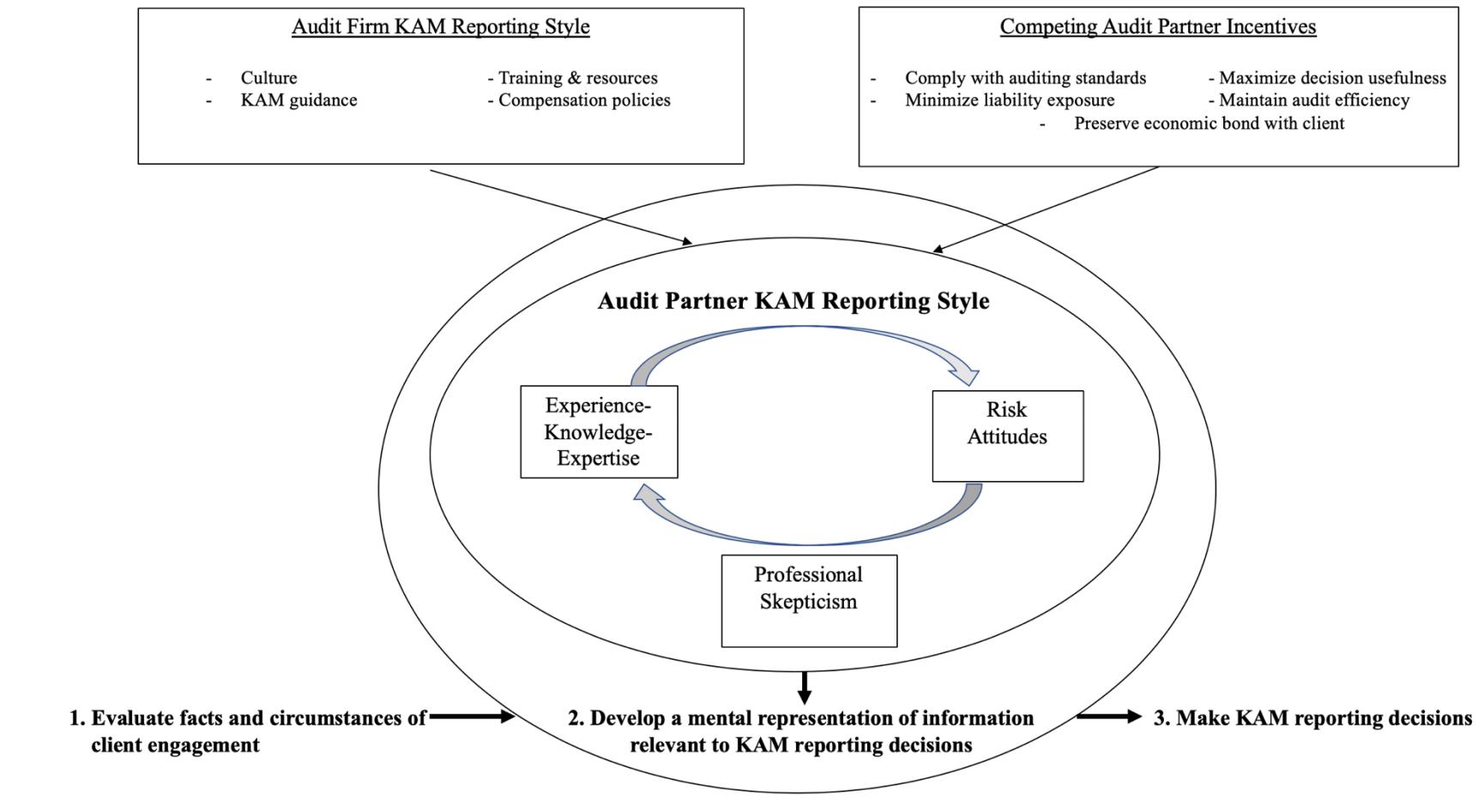


TABLE 1
Sample Composition

Panel A: Main Sample Composition

Number of London Stock Exchange companies with data in Audit Analytics Europe in the KAM regulation period (September 2013-March 2019)	6,063
Less: observations missing Audit Analytics data on auditor-related variables	(256)
Less: observations missing Factset International Fundamentals Annual data on financial control variables	(1,594)
Less: observations not meeting sample criteria (that audit partners have at least five observations from two unique clients and that audit firms have at least three partners meeting this description)	(1,386)
Number of observations	2,826
Number of partners	279
Number of audit firms	11

Panel B: Subsample Composition

Number of observations with estimable partner fixed-effect coefficients included in audit fee analysis	2,776	<div style="border: 1px solid black; padding: 5px; display: inline-block;"> 273 partners and 11 audit firms </div>
Number of observations from audit fee analysis with non-missing data on audit opinion date included in audit delay analysis	2,754	
Number of partners with demographic information publicly available on LinkedIn and audit firm profiles	161	

TABLE 2
Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
<u>KAM Reporting Volume</u>					
<i>Num_KAMs</i>	2,826	2.84	1.39	1	9
<i>wtd_Diversity</i>	2,826	0.78	0.63	0	2.82
<i>Fog</i>	2,826	18.45	2.00	14.08	26.14
<i>wrdspersKAM</i>	2,826	289.16	120.93	27.33	731.50
<u>Audit Fees and Delay</u>					
<i>Aud_Fee</i>	2,826	1,012,652	2,656,803	13,734	43,000,000
<i>Audit_Delay</i>	2,754	74	25	27	187
<u>Client-Related Control Variables</u>					
<i>Size</i>	2,826	5.682	2.065	0.548	12.290
<i>Subs</i>	2,826	0.294	0.455	0	1
<i>ROA</i>	2,826	0.035	0.149	-0.949	0.350
<i>OCF</i>	2,826	0.040	0.162	-1.964	4.698
<i>Sales_Vol</i>	2,826	157.019	571.828	0	6646.624
<i>Loss</i>	2,826	0.232	0.422	0	1
<i>Leverage</i>	2,826	0.468	1.094	-6.322	13.506
<i>BTM</i>	2,826	0.814	0.683	-0.361	11.415
<i>Acq</i>	2,826	0.293	0.455	0	1
<i>Fin_Issue</i>	2,826	0.681	0.466	0	1
<i>Rev</i>	2,826	0.596	0.704	-0.100	3.781
<i>Inv_AR</i>	2,826	0.128	0.173	0	0.784
<i>GW_Intan</i>	2,826	0.152	0.217	0	0.840
<i>GW_Impair</i>	2,826	0.002	0.013	0	0.136
<i>Intan_Impair</i>	2,826	0.001	0.006	0	0.090
<i>PPE_Impair</i>	2,826	0.003	0.020	-0.007	0.354
<i>PPE</i>	2,826	0.282	0.399	0	1.755
<i>RD_Exp</i>	2,826	0.011	0.047	0	0.642
<i>Pension</i>	2,826	0.151	0.371	0	3.532
<i>Tax_Vol</i>	2,826	0.281	1.311	0	24.144
<i>Invest</i>	2,826	0.335	0.434	0	0.997
<i>Legal_Liability</i>	2,826	0.000	0.003	0	0.102

TABLE 2
Descriptive Statistics (continued)

Variable	Obs	Mean	Std. Dev.	Min	Max
<i><u>Auditor-Related Control Variables</u></i>					
<i>Big4</i>	2,826	0.784	0.411	0	1
<i>DecYrEnd</i>	2,826	0.453	0.498	0	1
<i>Ptr_Busyness</i>	2,826	1.267	0.774	0	2.996
<i>Audptr_Ind_Spec</i>	2,826	0.580	0.343	0.025	1
<i>Audptr_Econ_Bond</i>	2,826	0.373	0.323	0.011	1
<i>Audfirm_Ind_Spec</i>	2,826	0.070	0.080	0.000	0.457
<i>Audfirm_Econ_Bond</i>	2,826	0.007	0.020	0.000	0.257
<i>KAMreg</i>	2,826	0.444	0.497	0	1
<i>MainMkt</i>	2,754	0.839	0.368	0	1
<i><u>Demographic Characteristics</u></i>					
<i>Female</i>	161	0.154	0.362	0	1
<i>Adv_Degree</i>	161	0.235	0.425	0	1
<i>Acct_Major</i>	161	0.259	0.440	0	1
<i>BigN_Exp</i>	161	0.840	0.368	0	1
<i>Int_Second</i>	161	0.327	0.471	0	1
<i>Client_Second</i>	161	0.130	0.337	0	1
<i>Prctc_Ldr</i>	161	0.648	0.479	0	1
<i>Exp_Yrs</i>	161	27.50	5.96	12	43

Note: We report all monetary figures in US dollars.

TABLE 3
Estimating Audit Partner Fixed Effects on KAM Reporting Outcomes

Panel A: Regression Results for KAM Volume

Variables	Dependent Variable: <i>Num_KAMs_dm</i>					
	Base Model		Audit Firm FE		Audit Partner FE	
	Coef	t-stat	Coef	t-stat	Coef	t-stat
<i>Size</i>	0.0361	(1.172)	0.0256	(0.878)	0.0096	(0.341)
<i>Subs</i>	0.0804	(1.020)	0.1120	(1.412)	0.1648**	(2.265)
<i>ROA</i>	-0.1603	(-0.751)	-0.0799	(-0.365)	-0.1456	(-0.773)
<i>Sales_Vol</i>	-0.0000	(-0.713)	-0.0000	(-0.419)	-0.0001	(-0.924)
<i>Loss</i>	0.1621**	(2.353)	0.1654**	(2.436)	0.1134*	(1.799)
<i>Leverage</i>	0.0311	(1.405)	0.0277	(1.217)	0.0070	(0.396)
<i>BTM</i>	0.0436	(0.872)	0.0503	(1.037)	0.0953**	(2.398)
<i>Acq</i>	0.2620***	(4.128)	0.2625***	(4.234)	0.2208***	(3.980)
<i>Fin_Issue</i>	0.0774	(1.551)	0.0685	(1.395)	0.0269	(0.597)
<i>Rev</i>	-0.0853	(-1.160)	-0.0886	(-1.206)	-0.0950	(-1.434)
<i>Inv_AR</i>	0.2761	(0.752)	0.3455	(0.950)	0.6243*	(1.900)
<i>GW_Intan</i>	0.2412	(1.158)	0.2721	(1.320)	0.1852	(0.946)
<i>GW_Impair</i>	0.9425	(0.510)	1.0056	(0.520)	1.4521	(0.750)
<i>Intan_Impair</i>	3.0832	(1.092)	2.6992	(0.921)	1.9770	(0.635)
<i>PPE_Impair</i>	-1.4869**	(-2.071)	-1.3418*	(-1.754)	-0.9347	(-1.309)
<i>PPE</i>	0.1657	(1.419)	0.2028*	(1.822)	0.1265	(1.069)
<i>RD_Exp</i>	0.0854	(0.153)	-0.0976	(-0.176)	-0.3444	(-0.608)
<i>Pension</i>	0.2922***	(2.744)	0.2861***	(2.798)	0.3866***	(3.531)
<i>Tax_Vol</i>	0.0180	(0.856)	0.0192	(0.940)	-0.0077	(-0.463)
<i>Invest</i>	-0.3093**	(-2.252)	-0.2456*	(-1.878)	-0.2114	(-1.645)
<i>Legal_Liability</i>	16.6823	(1.513)	19.6416*	(1.812)	14.7409	(1.009)
<i>Log_Aud_Fee</i>	0.3242***	(6.587)	0.3141***	(6.489)	0.4036***	(7.628)
<i>DecYrEnd</i>	-0.0682	(-1.062)	-0.0587	(-0.940)	0.0263	(0.467)
<i>Audptr_Ind_Spec</i>	0.4604***	(4.156)	0.4265***	(3.828)	0.4686***	(4.543)
<i>Audptr_Econ_Bond</i>	-0.4617***	(-2.794)	-0.4029**	(-2.413)	-0.4168***	(-3.474)
<i>Audfirm_Ind_Spec</i>	0.9634***	(2.763)	0.5000	(1.444)	0.5149	(1.455)
<i>Audfirm_Econ_Bond</i>	0.5772	(0.391)	0.3586	(0.184)	-0.7534	(-0.398)
<i>KAMreg</i>	-0.0154	(-0.183)	-0.0498	(-0.609)	-0.1364*	(-1.836)
<i>Ptr_Busyness</i>	0.0361	(0.640)	0.0347	(0.640)		
<i>Big4</i>	-0.0291	(-0.378)				
<i>Constant</i>	-4.6089***	(-9.059)	-4.2840***	(-8.464)	-5.3684***	(-6.009)
Observations	2,826		2,826		2,826	
Adjusted R-squared	0.233		0.263		0.416	
Year FE	Yes		Yes		Yes	
Industry FE	Yes		Yes		Yes	
Audit Firm FE	No		Yes		Yes	
Partner FE	No		No		Yes	

The symbols ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively (two-tailed for all t-statistics). See Appendix A for variable definitions. See Table 1 for sample composition. We use high-dimensional fixed-effect linear regression with heteroskedasticity robust standard errors clustered on client company.

TABLE 3
Estimating Audit Partner Fixed Effects on KAM Reporting Outcomes

Panel B: Regression Results for KAM Diversity

Variables	Dependent Variable: <i>wtd_Diversity</i>					
	Base Model		Audit Firm FE		Audit Partner FE	
	Coef	t-stat	Coef	t-stat	Coef	t-stat
<i>Size</i>	0.0059	(0.385)	-0.0024	(-0.167)	-0.0218	(-1.545)
<i>Subs</i>	0.0438	(1.010)	0.0665	(1.593)	0.0746*	(1.926)
<i>ROA</i>	0.1402	(1.328)	0.1648	(1.545)	0.1067	(1.065)
<i>Sales_Vol</i>	-0.0001*	(-1.736)	-0.0001	(-1.421)	-0.0001***	(-3.193)
<i>Loss</i>	0.0448	(1.264)	0.0402	(1.157)	0.0274	(0.798)
<i>Leverage</i>	0.0069	(0.608)	0.0048	(0.433)	-0.0043	(-0.453)
<i>BTM</i>	-0.0226	(-0.942)	-0.0167	(-0.726)	-0.0030	(-0.153)
<i>Acq</i>	0.0777**	(2.094)	0.0790**	(2.189)	0.0253	(0.768)
<i>Fin_Issue</i>	-0.0061	(-0.251)	-0.0116	(-0.493)	-0.0090	(-0.411)
<i>Rev</i>	-0.0333	(-1.007)	-0.0366	(-1.098)	-0.0388	(-1.225)
<i>Inv_AR</i>	0.5837***	(3.707)	0.6202***	(3.946)	0.5496***	(3.476)
<i>GW_Intan</i>	0.4399***	(4.082)	0.4570***	(4.312)	0.2844***	(2.814)
<i>GW_Impair</i>	0.2242	(0.250)	0.2733	(0.299)	-0.1101	(-0.114)
<i>Intan_Impair</i>	-1.9375	(-1.250)	-2.1346	(-1.365)	-1.9571	(-1.212)
<i>PPE_Impair</i>	0.2638	(0.573)	0.3436	(0.742)	0.7738*	(1.719)
<i>PPE</i>	0.1053*	(1.829)	0.1224**	(2.259)	0.0244	(0.419)
<i>RD_Exp</i>	0.1627	(0.636)	0.0276	(0.109)	-0.3392	(-1.187)
<i>Pension</i>	0.0340	(0.601)	0.0358	(0.651)	0.0110	(0.223)
<i>Tax_Vol</i>	0.0134	(1.035)	0.0134	(1.100)	0.0116	(1.231)
<i>Invest</i>	-0.0924	(-1.098)	-0.0737	(-0.917)	-0.1421*	(-1.701)
<i>Legal_Liability</i>	-0.1486	(-0.027)	1.4449	(0.271)	-2.6222	(-0.450)
<i>Log_Aud_Fee</i>	0.1641***	(6.351)	0.1570***	(6.139)	0.1819***	(5.615)
<i>DecYrEnd</i>	-0.0610*	(-1.854)	-0.0572*	(-1.784)	-0.0242	(-0.826)
<i>Audptr_Ind_Spec</i>	0.1569***	(2.747)	0.1070*	(1.939)	0.1706***	(2.864)
<i>Audptr_Econ_Bond</i>	-0.1405	(-1.592)	-0.0882	(-1.041)	-0.0165	(-0.241)
<i>Audfirm_Ind_Spec</i>	0.2713	(1.398)	-0.0583	(-0.299)	-0.0685	(-0.329)
<i>Audfirm_Econ_Bond</i>	0.1132	(0.164)	0.3983	(0.473)	0.5087	(0.567)
<i>KAMreg</i>	0.0018	(0.040)	-0.0205	(-0.454)	-0.0338	(-0.780)
<i>Ptr_Busyness</i>	-0.0100	(-0.319)	-0.0094	(-0.324)		
<i>Big4</i>	-0.0126	(-0.332)				
<i>Constant</i>	-1.4350***	(-5.313)	-1.2178***	(-4.528)	-1.5908***	(-3.278)
Observations	2,826		2,826		2,826	
Adjusted R-squared	0.355		0.387		0.495	
Year FE	Yes		Yes		Yes	
Industry FE	Yes		Yes		Yes	
Audit Firm FE	No		Yes		Yes	
Partner FE	No		No		Yes	

The symbols ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively (two-tailed for all t-statistics). See Appendix A for variable definitions. See Table 1 for sample composition. We use high-dimensional fixed-effect linear regression with heteroskedasticity robust standard errors clustered on client company.

TABLE 3
Estimating Audit Partner Fixed Effects on KAM Reporting Outcomes

Panel C: Regression Results for KAM Communication- Number of Words

Variables	Dependent Variable: wrdsperKAM_dm					
	Base Model		Audit Firm FE		Audit Partner FE	
	Coef	t-stat	Coef	t-stat	Coef	t-stat
<i>Size</i>	-0.1386	(-0.043)	-1.8690	(-0.609)	-0.9286	(-0.322)
<i>Subs</i>	9.7536	(1.211)	14.9489*	(1.942)	16.2425**	(2.227)
<i>ROA</i>	8.3189	(0.334)	-11.8326	(-0.552)	-17.2594	(-0.872)
<i>Sales_Vol</i>	-0.0083	(-1.359)	-0.0111**	(-1.980)	-0.0028	(-0.555)
<i>Loss</i>	3.0980	(0.462)	1.8248	(0.290)	0.7548	(0.133)
<i>Leverage</i>	-0.2011	(-0.112)	0.9595	(0.573)	1.7127	(1.087)
<i>BTM</i>	12.5974***	(2.921)	13.6272***	(3.241)	15.0894***	(3.852)
<i>Acq</i>	-13.5827**	(-2.169)	-12.3326**	(-2.063)	-7.4385	(-1.348)
<i>Fin_Issue</i>	-4.8285	(-0.919)	-2.9890	(-0.580)	-2.8914	(-0.599)
<i>Rev</i>	-10.3090	(-1.308)	-9.1696	(-1.166)	-4.3827	(-0.668)
<i>Inv_AR</i>	-8.9405	(-0.251)	-15.5643	(-0.443)	-31.7266	(-0.970)
<i>GW_Intan</i>	-12.6641	(-0.661)	-5.8648	(-0.321)	-25.1510	(-1.405)
<i>GW_Impair</i>	444.4725**	(2.459)	442.2453**	(2.534)	342.5230**	(2.179)
<i>Intan_Impair</i>	323.1210	(0.852)	238.8486	(0.700)	7.0550	(0.018)
<i>PPE_Impair</i>	155.5900	(1.178)	130.4773	(1.045)	82.3984	(0.652)
<i>PPE</i>	-3.4422	(-0.302)	-3.3990	(-0.320)	1.2769	(0.140)
<i>RD_Exp</i>	-37.3335	(-0.690)	-63.6022	(-1.251)	2.1702	(0.038)
<i>Pension</i>	-18.7813**	(-2.400)	-17.2470**	(-2.248)	-12.2614*	(-1.767)
<i>Tax_Vol</i>	-3.4368**	(-2.180)	-3.9602**	(-2.439)	-4.9318***	(-3.167)
<i>Invest</i>	27.7498*	(1.670)	21.2027	(1.357)	19.2020	(1.147)
<i>Legal_Liability</i>	534.1513	(0.634)	307.9766	(0.391)	147.1037	(0.226)
<i>Log_Aud_Fee</i>	27.0233***	(5.511)	22.5119***	(4.708)	27.6828***	(4.686)
<i>DecYrEnd</i>	23.6358***	(3.890)	26.3639***	(4.422)	25.5808***	(4.528)
<i>Audptr_Ind_Spec</i>	-16.7543	(-1.427)	-22.9677*	(-1.894)	-22.2763**	(-2.011)
<i>Audptr_Econ_Bond</i>	34.2047**	(2.108)	44.0233***	(2.741)	16.2239	(1.250)
<i>Audfirm_Ind_Spec</i>	109.2788***	(2.806)	122.9051***	(3.305)	99.0436***	(2.654)
<i>Audfirm_Econ_Bond</i>	-1,027.4975***	(-6.641)	-502.3714***	(-3.986)	-284.1549**	(-2.043)
<i>KAMreg</i>	1.6795	(0.196)	0.5866	(0.069)	1.9031	(0.267)
<i>Ptr_Busyness</i>	-2.6221	(-0.450)	1.8354	(0.327)		
<i>Big4</i>	-4.7526	(-0.545)				
<i>Constant</i>	-342.6421***	(-6.697)	-269.6634***	(-5.245)	-354.6221***	(-4.833)
Observations	2,826		2,826		2,826	
Adjusted R-squared	0.119		0.172		0.351	
Year FE	Yes		Yes		Yes	
Industry FE	Yes		Yes		Yes	
Audit Firm FE	No		Yes		Yes	
Partner FE	No		No		Yes	

The symbols ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively (two-tailed for all t-statistics). See Appendix A for variable definitions. See Table 1 for sample composition. We use high-dimensional fixed-effect linear regression with heteroskedasticity robust standard errors clustered on client company.

TABLE 3
Estimating Audit Partner Fixed Effects on KAM Reporting Outcomes

Panel D: Regression Results for KAM Communication- Fog Index

Variables	Dependent Variable: <i>Fog_dm</i>					
	Base Model		Audit Firm FE		Audit Partner FE	
	Coef	t-stat	Coef	t-stat	Coef	t-stat
<i>Size</i>	-0.0892	(-1.467)	-0.1014*	(-1.782)	-0.1266**	(-2.530)
<i>Subs</i>	-0.0360	(-0.282)	-0.0282	(-0.223)	-0.0188	(-0.158)
<i>ROA</i>	0.4262	(0.979)	0.1059	(0.252)	0.1208	(0.323)
<i>Sales_Vol</i>	0.0002**	(2.427)	0.0002*	(1.742)	0.0001	(0.843)
<i>Loss</i>	-0.0962	(-0.754)	-0.1087	(-0.886)	0.0380	(0.345)
<i>Leverage</i>	0.0387	(1.122)	0.0608*	(1.842)	0.0863***	(3.014)
<i>BTM</i>	0.0054	(0.080)	0.0306	(0.485)	0.0180	(0.296)
<i>Acq</i>	-0.1608	(-1.628)	-0.1564	(-1.604)	-0.0302	(-0.332)
<i>Fin_Issue</i>	0.0155	(0.164)	0.0810	(0.905)	-0.0005	(-0.006)
<i>Rev</i>	-0.3618***	(-3.227)	-0.3387***	(-3.142)	-0.2792***	(-2.584)
<i>Inv_AR</i>	0.2350	(0.448)	0.0731	(0.145)	0.1319	(0.280)
<i>GW_Intan</i>	0.0354	(0.109)	0.0747	(0.234)	-0.1211	(-0.397)
<i>GW_Impair</i>	-3.4099	(-1.358)	-3.3970	(-1.376)	-4.7847**	(-2.519)
<i>Intan_Impair</i>	7.7334	(1.276)	6.3581	(1.046)	7.8732	(1.428)
<i>PPE_Impair</i>	-0.9888	(-0.294)	-0.9426	(-0.286)	-0.2893	(-0.132)
<i>PPE</i>	-0.2078	(-1.062)	-0.2524	(-1.323)	-0.3185*	(-1.831)
<i>RD_Exp</i>	-0.5716	(-0.635)	-0.7263	(-0.801)	-0.4937	(-0.533)
<i>Pension</i>	0.1577	(1.171)	0.1668	(1.234)	0.2234*	(1.728)
<i>Tax_Vol</i>	-0.0284	(-1.175)	-0.0422*	(-1.725)	-0.0291	(-1.335)
<i>Invest</i>	1.1139***	(4.196)	1.0670***	(4.087)	1.1765***	(4.355)
<i>Legal_Liability</i>	-0.7999	(-0.104)	-9.1006	(-1.176)	-9.8112	(-1.385)
<i>Log_Aud_Fee</i>	0.3960***	(4.113)	0.3700***	(3.930)	0.2922***	(3.349)
<i>DecYrEnd</i>	0.0492	(0.460)	0.0802	(0.788)	0.1075	(1.048)
<i>Audptr_Ind_Spec</i>	-0.6453***	(-2.874)	-0.5247**	(-2.393)	-0.3540*	(-1.654)
<i>Audptr_Econ_Bond</i>	0.3606	(1.158)	0.3094	(1.031)	0.4458*	(1.837)
<i>Audfirm_Ind_Spec</i>	1.4703*	(1.921)	2.4027***	(3.305)	1.5976**	(2.229)
<i>Audfirm_Econ_Bond</i>	-15.4405***	(-5.452)	-10.0359***	(-4.051)	-2.8211	(-1.071)
<i>KAMreg</i>	-0.2285	(-1.456)	-0.1977	(-1.309)	-0.1615	(-1.247)
<i>Ptr_Busyness</i>	-0.2235**	(-2.186)	-0.1816*	(-1.873)		
<i>Big4</i>	-1.9684***	(-11.516)				
<i>Constant</i>	-2.3721**	(-2.543)	-4.0082***	(-4.164)	-2.5982**	(-2.033)
Observations	2,826		2,826		2,826	
Adjusted R-squared	0.132		0.178		0.359	
Year FE	Yes		Yes		Yes	
Industry FE	Yes		Yes		Yes	
Audit Firm FE	No		Yes		Yes	
Partner FE	No		No		Yes	

The symbols ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively (two-tailed for all t-statistics). See Appendix A for variable definitions. See Table 1 for sample composition. We use high-dimensional fixed-effect linear regression with heteroskedasticity robust standard errors clustered on client company.

TABLE 4
Testing the Explanatory Power of Audit Partner and Audit Firm Fixed Effects

Panel A: Testing the Significance of Audit Partner Fixed Effects

	<i>Num_KAMs_dm</i>	<i>wtd_Diversity</i>	<i>wrdsperKAM_dm</i>	<i>Fog_dm</i>
F-statistic	7.84	8.41	10.35	8.05
p-val on F-stat	0.000	0.000	0.000	0.000
Increase in adjusted R ² over audit firm fixed effect model	15%	11%	18%	18%
Percent increase in adjusted R ² over audit firm fixed effect model	58%	28%	104%	102%
Vuong Chi-Squared Statistic	14.04	13.77	12.99	14.39
p-val on Vuong stat	0.000	0.000	0.000	0.000
Percent of sample partners with significant fixed effect coefficients (compared to 5% tolerable error rate)	16%	15%	15%	30%

The symbols ***, **, and * denote significance at the 0.01, 0.05, and 0.10 levels, respectively. F-statistics report the results of exclusion restriction tests of whether the fixed-effect indicators for all partners are jointly significant to predicting KAM reporting outcomes. Increase in adjusted R² is calculated as the adjusted R² from the audit partner fixed-effects model minus the adjusted R² from the audit firm fixed-effects model. The percent increase in adjusted R² divides this difference by the adjusted R² from the audit firm fixed-effects model. Vuong Chi-Squared statistics are a likelihood ratio test of whether the change in the R² from the audit firm fixed-effects model to the audit partner fixed-effects model is statistically significant. The percentage of significant fixed- effect coefficients denotes the percent of sample partners whose fixed-effect indicator variables take on significant coefficients at a p ≤ 0.05 level.

Panel B: Testing the Significance of Audit Firm Fixed Effects

	<i>Num_KAMs_dm</i>	<i>wtd_Diversity</i>	<i>wrdsperKAM_dm</i>	<i>Fog_dm</i>
F-statistic	5.76	8.4	14.77	25.69
p-val on F-stat	0.000	0.000	0.000	0.000
Increase in adj R-squared over base Model (2)	3%	3%	5%	5%
Percent increase in R-Squared over base Model (2)	13%	9%	45%	35%
Vuong Chi-Squared Statistic	5.24	6.39	6.47	6.08
p-val on Vuong stat	0.000	0.000	0.000	0.000
Percent of sample partners with significant fixed effect coefficients (compared to 5% tolerable error rate)	20%	20%	70%	70%

The symbols ***, **, and * denote significance at the .01, .05, and .10 levels, respectively. F-statistics report the results of exclusion restriction tests of whether the fixed effect indicators for all audit firms are jointly significant to predicting KAM reporting outcomes. Increase in adjusted R² is calculated as the adjusted R² from the audit firm fixed effect model minus the adjusted R² from the base model with no audit firm or audit partner fixed effects. The percent increase in adjusted R² divides this difference by the adjusted R² from the base model. Vuong Chi-Squared statistics are a likelihood ratio test of whether the change in the adjusted R² from the base model to the audit firm fixed effects model is statistically significant. The percentage of significant fixed effect coefficients denotes the percent of audit firms whose fixed effect indicator variables take on significant coefficients at a p<=.05 level.

TABLE 5
Audit Partners' KAM Reporting Styles: Audit Fees and Audit Delay

Panel A: Audit Fees

Variables	Dependent Variable: <i>Log_Aud_Fees</i>									
	Coef	t-stat	Coef	t-stat	Coef	t-stat	Coef	t-stat	Coef	t-stat
<i>Volume_Style</i>	0.0749***	(2.617)							0.1109***	(2.810)
<i>Diversity_Style</i>			0.2076***	(3.390)					0.0975*	(1.282)
<i>CommStyle_Words</i>					0.0006**	(1.714)			0.0007**	(2.076)
<i>CommStyle_Fog</i>							0.0266**	(1.849)	0.0426***	(2.619)
<i>Size</i>	0.4553***	(23.478)	0.4549***	(23.393)	0.4582***	(23.532)	0.4588***	(23.513)	0.4530***	(23.501)
<i>Subs</i>	0.4583***	(7.365)	0.4535***	(7.284)	0.4575***	(7.411)	0.4518***	(7.290)	0.4552***	(7.366)
<i>ROA</i>	-0.5454***	(-3.345)	-0.5372***	(-3.326)	-0.5548***	(-3.408)	-0.5536***	(-3.398)	-0.5519***	(-3.435)
<i>Sales_Vol</i>	0.0001	(1.406)	0.0001	(1.309)	0.0001	(1.410)	0.0001	(1.333)	0.0001	(1.335)
<i>Loss</i>	-0.0372	(-0.849)	-0.0327	(-0.753)	-0.0386	(-0.879)	-0.0327	(-0.747)	-0.0336	(-0.786)
<i>Leverage</i>	0.0371**	(2.490)	0.0368**	(2.498)	0.0391***	(2.615)	0.0399***	(2.654)	0.0376***	(2.597)
<i>BTM</i>	-0.0536*	(-1.772)	-0.0593*	(-1.915)	-0.0575*	(-1.815)	-0.0612*	(-1.907)	-0.0604**	(-1.985)
<i>Acq</i>	0.2579***	(5.992)	0.2527***	(5.914)	0.2680***	(6.283)	0.2679***	(6.350)	0.2629***	(6.232)
<i>OCF</i>	-0.1001	(-0.861)	-0.1108	(-0.951)	-0.0985	(-0.824)	-0.0913	(-0.760)	-0.1055	(-0.881)
<i>Inv_AR</i>	0.6921***	(3.268)	0.6585***	(3.197)	0.6358***	(3.005)	0.6533***	(3.082)	0.6770***	(3.165)
<i>Fin_Issue</i>	-0.0218	(-0.641)	-0.0229	(-0.679)	-0.0197	(-0.579)	-0.0249	(-0.726)	-0.0344	(-1.017)
<i>Rev</i>	0.1356***	(2.903)	0.1363***	(2.982)	0.1387***	(2.906)	0.1370***	(2.856)	0.1398***	(3.010)
<i>GW_Intan</i>	0.7634***	(5.415)	0.7401***	(5.278)	0.7379***	(5.184)	0.7456***	(5.322)	0.7152***	(5.126)
<i>GW_Impair</i>	0.1685	(0.176)	0.0648	(0.068)	0.1572	(0.167)	0.1567	(0.168)	-0.0153	(-0.016)
<i>Intan_Impair</i>	3.5943**	(2.386)	3.8725***	(2.644)	3.7354***	(2.624)	3.9268***	(2.708)	3.8664***	(2.634)
<i>PPE_Impair</i>	-0.7709*	(-1.783)	-0.7918*	(-1.865)	-0.8720**	(-1.982)	-0.8850**	(-2.045)	-0.9144**	(-2.188)
<i>PPE</i>	0.0735	(1.018)	0.0643	(0.911)	0.0767	(1.051)	0.0720	(0.991)	0.0683	(0.977)
<i>RD_Exp</i>	0.8365**	(2.149)	0.7753**	(2.038)	0.8882**	(2.307)	0.9036**	(2.344)	0.7713**	(2.045)
<i>Pension</i>	0.1517**	(2.447)	0.1410**	(2.303)	0.1493**	(2.383)	0.1520**	(2.402)	0.1607**	(2.580)
<i>Tax_Vol</i>	0.0245***	(2.588)	0.0273***	(2.802)	0.0262***	(2.658)	0.0278***	(2.821)	0.0256***	(2.666)
<i>Invest</i>	-0.9550***	(-7.006)	-0.9674***	(-7.072)	-0.9750***	(-6.986)	-0.9724***	(-7.015)	-0.9583***	(-7.116)
<i>Legal_Liability</i>	12.1633**	(2.060)	11.9211**	(2.037)	12.0820**	(2.029)	12.2405**	(2.009)	11.8910**	(2.004)
<i>Big4</i>	0.0027	(0.051)	0.0328	(0.651)	0.0034	(0.065)	0.0609	(1.040)	0.0951*	(1.650)
<i>DecYrEnd</i>	0.1473***	(3.171)	0.1474***	(3.184)	0.1402***	(3.017)	0.1390***	(2.990)	0.1540***	(3.356)
<i>KAMreg</i>	0.0597	(1.186)	0.0616	(1.226)	0.0699	(1.398)	0.0695	(1.391)	0.0506	(1.022)
<i>MainMkt</i>	0.1590**	(2.374)	0.1374**	(2.073)	0.1482**	(2.230)	0.1311*	(1.942)	0.1267*	(1.932)
<i>Constant</i>	9.3349***	(79.462)	9.3142***	(80.112)	9.3248***	(79.315)	9.2962***	(78.007)	9.2747***	(79.919)
Observations	2,776		2,776		2,776		2,776		2,776	
Adjusted R-squared	0.882		0.883		0.882		0.882		0.884	
Year FE	Yes		Yes		Yes		Yes		Yes	
Industry FE	Yes		Yes		Yes		Yes		Yes	
Audit Firm FE	No		No		No		No		No	
Partner FE	No		No		No		No		No	

The symbols ***, **, and * denote significance at the .01, .05, and .10 levels, respectively (one tailed for style variables, which have directional predictions, two-tailed for all other t-statistics). See Appendix A for definitions of dependent, independent, and control variables. See Table 1 for a detailed description of the sample composition. We use high dimensional fixed effect linear regression with heteroskedasticity robust standard errors clustered on client company.

TABLE 5
Audit Partners' KAM Reporting Styles: Audit Fees and Audit Delay (continued)

Panel B: Audit Delay

Variables	Dependent Variable: <i>Audit_Delay</i>									
	Coef	t-stat	Coef	t-stat	Coef	t-stat	Coef	t-stat	Coef	t-stat
<i>Volume_Style</i>	-0.2123	(-0.264)							1.4838	(1.333)
<i>Diversity_Style</i>			-0.9486	(-0.564)					-2.3009	(-1.124)
<i>CommStyle_Words</i>					0.0124	(1.295)			0.0108	(1.090)
<i>CommStyle_Fog</i>							0.5743	(1.562)	0.8374*	(1.877)
<i>Size</i>	-6.4366***	(-8.976)	-6.4308***	(-8.922)	-6.4501***	(-8.958)	-6.4085***	(-8.943)	-6.4230***	(-9.015)
<i>Subs</i>	-1.8482	(-1.101)	-1.8470	(-1.108)	-1.7501	(-1.050)	-1.8642	(-1.115)	-1.7243	(-1.025)
<i>ROA</i>	-22.4322***	(-3.323)	-22.4726***	(-3.331)	-22.5638***	(-3.326)	-22.5464***	(-3.344)	-22.8009***	(-3.370)
<i>Sales_Vol</i>	0.0034***	(3.989)	0.0034***	(4.027)	0.0035***	(4.200)	0.0033***	(4.006)	0.0034***	(4.266)
<i>Loss</i>	-2.1631	(-1.459)	-2.1738	(-1.465)	-2.2440	(-1.513)	-2.1067	(-1.429)	-2.2036	(-1.496)
<i>Leverage</i>	0.1875	(0.533)	0.1904	(0.543)	0.1870	(0.533)	0.2079	(0.575)	0.2059	(0.565)
<i>BTM</i>	3.4867***	(3.122)	3.5084***	(3.166)	3.5178***	(3.170)	3.4098***	(3.043)	3.4966***	(3.133)
<i>Acq</i>	0.2414	(0.227)	0.2725	(0.257)	0.3200	(0.301)	0.3365	(0.318)	0.4734	(0.449)
<i>OCF</i>	-2.1364	(-0.340)	-2.0865	(-0.333)	-2.2559	(-0.356)	-2.0729	(-0.327)	-2.0869	(-0.327)
<i>Inv_AR</i>	-6.2230	(-0.878)	-6.1410	(-0.879)	-6.5079	(-0.921)	-6.1405	(-0.880)	-5.7934	(-0.820)
<i>Fin_Issue</i>	-1.2905	(-1.206)	-1.2725	(-1.187)	-1.2963	(-1.213)	-1.4322	(-1.330)	-1.4940	(-1.394)
<i>Rev</i>	-3.5836***	(-2.688)	-3.5804***	(-2.692)	-3.5316***	(-2.620)	-3.5677***	(-2.684)	-3.5217***	(-2.635)
<i>GW_Intan</i>	-13.1489***	(-3.124)	-13.0370***	(-3.098)	-13.5049***	(-3.222)	-13.3493***	(-3.179)	-13.4066***	(-3.194)
<i>GW_Impair</i>	27.9116	(0.847)	28.3036	(0.858)	27.3943	(0.828)	27.2895	(0.839)	27.5293	(0.846)
<i>Intan_Impair</i>	-65.1905	(-0.787)	-66.3369	(-0.801)	-66.8309	(-0.823)	-61.8978	(-0.748)	-66.0499	(-0.813)
<i>PPE_Impair</i>	52.0108**	(1.985)	52.0624**	(1.989)	51.4785**	(1.976)	50.7566*	(1.924)	50.4270*	(1.928)
<i>PPE</i>	-8.3976***	(-3.582)	-8.3549***	(-3.549)	-8.3521***	(-3.563)	-8.4397***	(-3.629)	-8.3433***	(-3.578)
<i>RD_Exp</i>	-51.3411***	(-3.278)	-51.0568***	(-3.249)	-51.2963***	(-3.273)	-50.8509***	(-3.255)	-50.3099***	(-3.239)
<i>Pension</i>	-1.1037	(-0.819)	-1.0699	(-0.802)	-1.0425	(-0.780)	-0.9765	(-0.726)	-0.7252	(-0.538)
<i>Tax_Vol</i>	-0.7191	(-1.645)	-0.7292*	(-1.668)	-0.7416*	(-1.714)	-0.6994	(-1.604)	-0.7574*	(-1.715)
<i>Invest</i>	-2.2909	(-0.693)	-2.2145	(-0.666)	-2.3426	(-0.705)	-2.3965	(-0.730)	-2.1775	(-0.659)
<i>Legal_Liability</i>	-161.4580	(-1.114)	-161.6570	(-1.108)	-165.9036	(-1.142)	-159.5430	(-1.124)	-163.0366	(-1.140)
<i>Big4</i>	-4.1549**	(-2.358)	-4.3339**	(-2.491)	-4.4406**	(-2.547)	-3.0783	(-1.598)	-3.3044*	(-1.711)
<i>DecYrEnd</i>	5.9379***	(4.348)	5.9245***	(4.369)	5.9557***	(4.394)	5.9344***	(4.379)	5.9759***	(4.396)
<i>KAMreg</i>	-0.2981	(-0.202)	-0.2840	(-0.192)	-0.3296	(-0.223)	-0.3442	(-0.233)	-0.4508	(-0.304)
<i>MainMkt</i>	-11.2014***	(-5.146)	-11.1104***	(-5.082)	-11.1954***	(-5.149)	-11.5613***	(-5.294)	-11.4218***	(-5.240)
<i>Log_Aud_Fee</i>	2.4365**	(2.363)	2.4327**	(2.343)	2.5285**	(2.446)	2.4278**	(2.356)	2.5370**	(2.486)
<i>Constant</i>	99.4662***	(10.084)	99.6274***	(10.055)	98.4927***	(9.989)	98.8198***	(10.011)	97.7020***	(10.019)
Observations	2,754		2,754		2,754		2,754		2,754	
Adjusted R-squared	0.471		0.471		0.472		0.472		0.473	
Year FE	Yes		Yes		Yes		Yes		Yes	
Industry FE	Yes		Yes		Yes		Yes		Yes	
Audit Firm FE	No		No		No		No		No	
Partner FE	No		No		No		No		No	

The symbols ***, **, and * denote significance at the .01, .05, and .10 levels, respectively (two-tailed for all t-statistics). See Appendix A for definitions of dependent, independent, and control variables. See Table I for a detailed description of the sample composition. We use high dimensional fixed effect linear regression with heteroskedasticity robust standard errors clustered on client company.

TABLE 6
The Association Between Partner KAM Reporting Style and Demographic Characteristics

Variables	<i>Volume_Style</i>		<i>Diversity_Style</i>		<i>CommStyle_Words</i>		<i>CommStyle_Fog</i>	
	Coef	t-stat	Coef	t-stat	Coef	t-stat	Coef	t-stat
<i>Female</i>	-0.0102	(-0.063)	0.0344	(0.438)	24.6981*	(1.762)	0.5785	(1.566)
<i>Adv_Degree</i>	0.2871**	(2.077)	0.0190	(0.282)	-22.5890*	(-1.881)	0.0612	(0.193)
<i>Acct_Major</i>	-0.1729	(-1.300)	0.1161*	(1.794)	-12.0205	(-1.040)	0.5055*	(1.659)
<i>BigN_Exp</i>	0.3469**	(2.149)	-0.1367*	(-1.741)	5.3308	(0.380)	-2.2762***	(-6.159)
<i>Int_Second</i>	-0.1611	(-1.308)	-0.0696	(-1.161)	11.8422	(1.107)	0.2969	(1.053)
<i>Client_Second</i>	-0.0044	(-0.025)	0.0395	(0.472)	-4.4731	(-0.299)	0.3983	(1.011)
<i>Prctc_Ldr</i>	0.0907	(0.741)	0.0246	(0.413)	-9.3977	(-0.884)	-0.1638	(-0.584)
<i>Exp_Yrs</i>	-0.0051	(-0.521)	0.0062	(1.288)	-0.3285	(-0.384)	-0.0191	(-0.846)
<i>Constant</i>	-0.2818	(-0.943)	0.0802	(0.551)	30.6736	(1.182)	2.6513***	(3.875)
Observations	161		161		161		161	
Adjusted R-squared	0.033		0.011		0.012		0.200	

*The symbols *** **, and * denote significance at the .01, .05, and .10 levels, respectively (two-tailed for all t-statistics). See Appendix A for definitions of dependent, independent, and control variables. See Table 1 for a description of the sample. We use ordinary least squares regression with heteroskedasticity and cluster robust standard errors.*