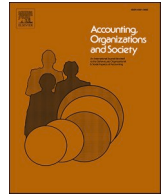




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Can open audit committee chairs cure the chilling effect of management's presence on auditors' information sharing during audit committee meetings?

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ABSTRACT

This study experimentally examines how the leadership style of the audit committee (AC) chair (controlling or open) influences the amount of discretionary information that auditors intend to share with the AC, in the context of common meeting formats (i.e., AC meetings with versus without management present, or private meetings between the auditor and AC chair). Participants are highly experienced auditors, including partners and (senior) managers, from Big 4 accounting firms. We predict and find that an open AC chair mitigates the chilling effect of management's presence on the number of discretionary issues shared with the AC. Compared to those who attend AC meetings only, auditors who engage in private meetings with the AC chair before AC meetings plan to disclose fewer discretionary issues to the AC in subsequent AC meetings, but disclose more discretionary issues in total across meetings. AC chair leadership style has no impact on their discretionary information sharing in these private meetings. These results suggest that open AC chairs can mitigate the adverse effect of management's presence on auditors' discretionary information disclosure and have implications for regulators aiming to enhance corporate governance.

1. Introduction

The Audit Committee (hereafter, AC) is the key institutional actor overseeing companies' financial reporting and audit processes. Effective auditor-AC communication can help the AC discharge its duties by taking the conversation beyond what is mandated by regulations and enabling the AC to gain deeper insights into the company (Compernelle & Richard, 2018; PwC, 2022). Governance best practices also encourage ACs, particularly the AC chair, to maintain an ongoing dialogue (outside AC meetings) with key individuals, including the external audit lead partner (Deloitte, 2018; KPMG Global, 2017). The AC chair plays a prominent role in the AC-auditor communication process, but the effect of the AC chair's leadership style remains largely unknown.

Management exerts influence on audit firm and audit partner appointments and terminations, thus potentially making the auditor reluctant to disclose non-mandated items to the AC (Cohen et al., 2010;

Dodgson et al., 2020; Fiolleau et al., 2013). Recognizing management's influence and power as an impediment to auditor independence, regulators have mandated meetings between audit committees and auditors, with and without management present (U.S. Congress, 2002; SOX 303; SOX 303A [7][d]). Conventional wisdom and theory (Kahn, 1990; Tetlock & Lerner, 1999) suggest that the presence of management likely curbs open discussions between the auditor and the AC in formal meetings, and that the absence of management improves the effectiveness of AC-auditor communication. However, AC chairs are always present in such meetings and their influential role in such meetings has hitherto been ignored. Theory suggests that the AC chair's leadership style can alter the effectiveness of these meeting formats. In this study, we investigate whether the leadership style of the AC chair can moderate the efficacy of these different meeting formats in enhancing auditor-AC communication and, in particular, enhance information sharing in light of management presence.

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Our investigation of the joint effects of these two variables on auditor-AC communication is novel and important. Mandating AC-auditor meetings with and without management present incurs substantial costs for those involved in terms of time and fees. If, as theory suggests, AC chair's leadership style moderates the effect of these meeting formats, it may require a revisit of the assumption regarding the efficacy of the management-absent meeting format or indeed, if a management-absent format is necessary if the AC chair's leadership style can induce improved AC-auditor communication.

The AC chair is vital to the functioning of the whole AC, and audit firms and AC members often cite the leadership style of the chair as having a significant impact on AC culture, information sharing, and effectiveness (Free et al., 2021; KPMG Global, 2019). According to a recent version of the Audit Committee Guide, "the audit committee chair's leadership [...] is vital to the committee's effectiveness and accountability, and cannot be overstated (p. 7, KPMG Global, 2021)."

Although there are a variety of leadership styles, we focus on two types that have been identified in prior studies and that are expected to be particularly relevant in the information sharing context – whether the AC chair is controlling/dominant or open/tolerant (Peterson, 1997).¹ A controlling chair uses a tightly scripted agenda, which leaves little time for discussions of other issues, does not encourage disagreements with their view, and restricts the flow of information that does not originate from them. In contrast, an open AC chair allows for a more flexible meeting agenda, and is consultative and collaborative, creating a psychologically safe and inclusive environment where all meeting members are encouraged to participate and ask questions. According to a survey by McKinsey (2021), open and consultative leadership behaviors help promote psychological safety, while controlling and authoritative leadership styles can be detrimental to psychological safety.

Our theory is grounded in the concept of psychological safety, which is a "sense of being able to show and employ self without fear of negative consequences to self-image, status, or career (Kahn, 1990, p. 705)." Perceptions of psychological safety influence individuals' willingness to communicate information, such that information may not be shared for fear of negative consequences (Gissel & Johnstone, 2017; Van Dyne et al., 2003). In the auditor-AC communication setting, auditors need to work together with both the senior management team and the AC to address the heightened expectations from shareholders, regulators, and other stakeholders on maintaining the integrity of financial reporting (PwC, 2022). In this context, auditors face social pressures from both the management and the AC and need to maintain their relationship with both sides.

We predict that in AC meetings, when management is present, auditors are likely to experience lower psychological safety due to the prospect of potential conflict with management, causing them to convey less discretionary information to the AC (Tetlock, 1983; Tetlock & Lerner, 1999). In such situations, a controlling AC chair will intensify psychological unsafety, making auditors even less willing to share private information, while an open AC chair will enhance the perceived psychological safety through supportive behaviors such as showing appreciation and/or rewarding auditor candor thereby encouraging the auditors to provide more information in their communication with the AC. In contrast, we expect that the effect of an open AC chair on promoting auditors' discretionary information sharing when management is absent in the AC meeting is smaller since their psychological safety is not threatened in this context. Overall, we predict that the difference in information sharing between the conditions with and without management present is smaller when the AC

¹ As *controlling* and *dominant*, as well as *open* and *tolerant*, are closely related in meaning, we use *controlling* and *open* hereafter to refer to the two leadership styles for clarity.

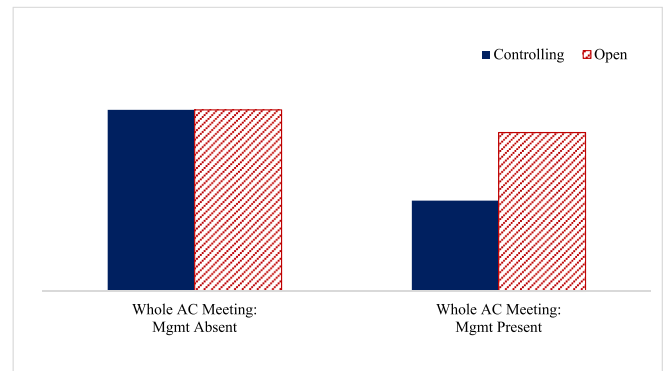


Fig. 1. Hypothesis 1 - Auditors' information sharing with the AC.

chair is open, compared to controlling (see Fig. 1 for a graphical representation).²

The AC chair ordinarily meets with the audit partner in a format outside of AC meetings (hereafter, private meetings) to gather information and identify key issues. Free et al. (2021) interviewed two dozen AC chairs and report that virtually all of them regularly meet with the external auditor prior to AC meetings. These meetings have now also been mandated in the UK, while other jurisdictions such as the US and Canada encourage them as good practice. However, the efficacy of these meeting formats in promoting more comprehensive information sharing from auditors with the AC during AC meetings is unknown and difficult to examine archivally due to a lack of data availability.

To test our predictions, we conduct a 3 (auditor meeting with the AC with management present; auditor meeting with the AC without management present; or a private meeting between the audit partner and the AC chair prior to the AC meeting) x 2 (controlling; or open AC chair) between-participants experiment. The participants in our experiment are audit partners and senior managers from two Big 4 public accounting firms in Canada who have first-hand experience interacting with ACs. The experiment involves a setting in which the mandated report to the AC is complete and the auditor has four additional discretionary issues that they can choose to add to the report for the AC.

Our results show that, in AC meetings with management present, while a controlling AC chair inhibits auditors' information sharing with the AC, an open AC chair helps mitigate such inhibiting effect due to management presence. When management is absent, this inhibition-mitigation effect naturally wanes, as auditors are more willing to share information, so there is no opportunity for AC chair leadership style to have a mitigating effect.

We further investigate whether engaging in a private meeting with the AC chair prior to the AC meeting alters auditors' information sharing with the whole AC. We find that auditors in the private-meeting-present conditions plan to disclose fewer discretionary issues to the AC during AC meetings than those who attend AC meetings only. Additionally,

² These predictions have some tension. If an open AC chair promotes open AC-auditor communication (Free et al., 2021), the management-present meeting format alone may encourage sufficiently open AC-auditor communication, notwithstanding the presence of management. Alternatively, with a controlling AC chair, the management-absent format or the private meeting formats may not be incrementally helpful in inducing more open AC-auditor communication. The current structure of requiring AC meetings with management present and AC meetings without management present provides us with a setting to investigate the effectiveness of each individual meeting format. In practice, the frequency of these meetings also leads to questions about what is discussed in these meetings, and why so many meetings (types) are required, since these interactions are currently insufficiently understood. To address this, we empirically examine the information sharing of auditors in these different meeting formats and how the leadership style of the AC chair influences this communication.

there is no effect of AC chair leadership style in the private-meeting-present conditions. We also examine auditors' total information sharing either with the AC chair during the private meeting or with the whole AC. The results show that auditors share significantly more of their discretionary information 'in total' if they are given the opportunity to meet with the AC chair privately in addition to the AC meeting. This finding supports the UK approach of mandating a meeting between the audit partner and the AC chair. However, it also highlights the 'gatekeeper role' and centrality of the AC chair in determining AC effectiveness.

Our results have important implications for regulators, audit committee members, and investors. We provide the first systematic evidence that a controlling AC chair can further deter open communication, while an open AC chair acts as a counterforce that fosters greater psychological safety when management is present during the AC meeting and improves auditors' information sharing by improving their psychological safety in the AC meeting context. These findings extend existing research on the role of psychological safety for auditor information sharing (Gissel & Johnstone, 2017; Nelson et al., 2016) by showing that this effect also applies to very senior auditors. Our findings underscore the importance of psychological safety in promoting information sharing within audit teams (e.g., audit juniors reporting questionable acts of their superiors (Boo et al., 2021); auditors raising concerns to the attention of audit engagement leadership (Kadous et al., 2019); effective consultation within audit firms (Knechel & Leiby, 2016)). The results further suggest that management's presence in AC meetings does not necessarily dampen the auditors' discretionary issue disclosure to the whole AC as long as the AC chair is an open one. This finding is important because management may prefer to be present during these meetings. Information disclosure during these meetings is essential, given that management is ultimately responsible for resolving the reported issues.

Our study also takes a valuable first step toward evaluating the efficacy of various AC meeting formats by directly comparing AC meeting formats to each other. Our results support SOX regulation to promote auditor-AC communication by mandating an executive session where the auditor communicates with the AC without the presence of management. Our evidence suggests that this meeting format is an effective way to promote auditor-AC communication. Despite their effectiveness, executive sessions cannot address all concerns regarding auditor-AC communication and should not be seen as a substitute for an open AC chair. Auditor-AC communication is a dynamic, ongoing process. Auditors' various meetings with the whole AC (with and without management) along with their various private meetings with the AC chair are not necessarily all based on the same set of information. Even after the formal conclusion of fieldwork, new information relevant to the risk of material misstatement could still emerge - whether from additional fieldwork findings, industry developments, or newly issued regulations. The auditor may possess different sets of discretionary information to disclose at various points in time. It is possible that the regulatory minimum one-time meeting with the AC in the absence of management has already taken place (fulfilling the regulatory requirement) when the auditor becomes aware of new discretionary information. In this case, it is beneficial to have an open AC chair to limit the "chilling effect" of management's presence on the auditor's subsequent information sharing with the AC.

Furthermore, our findings suggest that audit partner meetings with the AC chair lead to less information sharing by the auditor during subsequent meetings with the whole AC, which can reinforce the importance and centrality of the AC chair as an information intermediary (Compernelle & Richard, 2018).³ Open (compared to controlling)

³ Reports from the Bankruptcy Examiner and the media following the high-profile Lehman Brothers bankruptcy suggest that a lack of information sharing about the details of whistleblower allegations between auditors and the AC, as well as between the AC chair and other AC members, contributed to the crisis (Reuters, 2010; Valukas, 2011; Wiggins et al., 2019).

AC chairs are more likely to actively share their discretionary information with other AC members via various communication channels, such as holding private meetings with the other AC members (Free et al., 2021). According to the guidance on audit committees (2016) issued by FRC, "[i]t is expected that the audit committee chairman, and to a lesser extent the other members, will wish to keep in touch on a continuing basis with the key people involved in the company's governance, including the board chairman, the chief executive, the finance director, the external audit lead partner and the head of internal audit (p.4)." Therefore, in addition to "hard" financial and technical skills, it is also important for companies to consider "soft" skills such as communication when selecting AC chairs. Our results have implications for promoting auditor-company communication as well. The leadership style of other high-ranking firm executives also potentially influences the effectiveness of their communication with the auditor.

The rest of the paper is organized as follows. Section 2 reviews prior literature to develop our hypothesis and research questions. Section 3 describes the research design and experimental procedures. Section 4 presents the results and Section 5 concludes.

2. Literature review and hypothesis development

SOX requires ACs who are independent from management to appoint, compensate, and oversee the work of the external auditor, and there is currently some doubt about how effective SOX has been in making the external auditor candidly convey their observations and views to the AC (Beasley et al., 2009; Dhaliwal et al., 2015; Fiolleau et al., 2013, 2019). In addition, there are many social impediments to the free flow of communication between the external auditor and the AC, especially when management is present.

A model of corporate governance by Aghion and Tirole (1997) proposes that the real authority over decision-making in organizations depends on the amount of information asymmetry between the principal (AC acting on behalf of investors) and the agent (management). To retain real authority, the principal must be well-informed. If the AC lacks sufficient information, the principal cedes real authority to management, and rubber stamps the decision proposed by management (see Fiolleau et al., 2013, for an example). Thus, the level of information acquisition by the AC is a key determinant of the principal's real authority (Tirole, 2001). An independent external auditor can assist the AC to become a better-informed monitor, making it vital to maintain a strong relationship between the AC and the external auditor. We propose that the extent to which auditors report discretionary information to the AC, beyond that mandated by disclosure regulation, is a measure of auditor independence and AC effectiveness.

2.1. The AC chair leadership style

A high-performing AC starts with an effective chair who can bring out the best in other committee members, management, and external auditors (PwC, 2025). In consultation with management, the AC chair sets the agenda for all AC meetings, determines what issues get on the agenda, and when to put them on the agenda (Beasley et al., 2009; Cohen et al., 2010). Outside of AC meetings, the AC chair interacts with management (especially the CFO), the external audit partner, the head of internal audit, and other senior financial officers of the company (required by NYSE Listed Company Manual (NYSE, 2019)). As a result, the AC chair often has substantial discretionary information that is otherwise not available to the rest of the AC members (Compernelle & Richard, 2018; Turley & Zaman, 2004).

AC chairs differ in their leadership styles, and their interactions with the audit partners set the tone for the interaction between the AC and the external auditor. Practitioners, including auditors, recognize that the leadership of the AC chair is vital for the accountability and effectiveness of the committee (KPMG Global, 2021). Prior studies of leadership and AC meetings (Free et al., 2021; Peterson, 1997) have identified two

styles of leadership that are particularly relevant to our study. One type is a controlling (or domineering) chair who controls the flow of information, does not solicit meaningful inputs, and does not share information fully with the rest of the AC. Meetings controlled by such chairs are usually highly structured and constrained by the formal agenda, making it difficult to identify new issues or probe issues in depth. A second type is an open AC chair who is consultative during meetings, and collaborative in working with others.⁴ This AC chair shares his/her discretionary information more fully with other AC members, and all AC members are encouraged to participate and ask questions. This type of AC chair encourages discussions and the AC members collectively, rather than just the chair, determine the effectiveness of the AC.

Psychological safety is a “sense of being able to show and employ self without fear of negative consequences to self-image, status, or career (Kahn, 1990, p. 705).” Individuals’ perception of psychological safety influences their willingness to communicate information, and they will choose to withhold information when fearing negative consequences from speaking up (Gissel & Johnstone, 2017; Van Dyne et al., 2003). Leader openness (Detert & Burris, 2007) and consultative leadership behaviors such as feedback seeking and information sharing (Edmondson, 1999; Walumbwa & Schaubroeck, 2009) are important drivers of psychological safety. A leadership style that encourages information sharing without fear of negative consequences enhances people’s perceived psychological safety and, thus, their willingness to share discretionary information (Gissel & Johnstone, 2017; Kahn, 1990; Newman et al., 2017; Walumbwa & Schaubroeck, 2009). On the flip side, a controlling leadership style limits (unsolicited) information sharing.

In our context, it is critical for auditors to know that they have the AC’s support, given their concerns over potential management resistance or retaliation. To get the most value from auditors, the AC chair needs to signal their commitment to establishing and maintaining a good relationship that facilitates open and candid dialogues with the auditor (PwC, 2025). In this case, an open AC chair helps to create a psychologically safe AC-auditor relationship, where auditors are encouraged to fully share relevant information with the AC. An alternative expectation, however, is also plausible. According to Cohen et al. (2010), in the post-SOX environment, the AC has substantively claimed the power that had previously been seized by management, such that they have the requisite power to render effective oversight over the financial reporting process. Free et al. (2021) interviewed AC chairs and find that most of the interviewees are aware of a “norm of deference” to management. Thus, they are proactive in ensuring adequate information elaboration and sharing. Truly independent AC chairs would be expected to side with the auditor in the context of AC meetings so that a controlling (relative to an open) AC chair may be perceived as a more powerful counterweight to management by auditors, particularly when management is present.

2.2. The structure of auditor–AC interactions

The interactions between the external auditor and the AC can occur in various formats, and we are interested in three major ones, which are mandated by law in the US or the UK. Prior to SOX, AC meetings, where the external auditor formally reports to the AC, involved the presence of

⁴ The terminology is adapted from the leadership literature, more specifically, leader directiveness in psychology. Prior research on leadership style (e.g., Peterson, 1997) suggests that leader directiveness is closely associated with truncated group discussion, suppression of dissent, and a less extensive search for information. Open or democratic leaders encourage discussion of alternative ideas, whereas closed or authoritarian leaders are the opposite, strongly advocating their own solution over all others. The distribution of these leadership styles in practice is best explored through archival, survey, and/or interview methods, which provides a fruitful avenue for future research.

management. This is commonly referred to as the main AC meeting and is required by law (U.S. Congress, 2002). All financial reporting-related key matters (hard verifiable outputs of the audit) that the external auditor is required to report must be provided to the AC during this meeting (IAASB, 2016). Professional AC guides consider it essential that several members of management (CFO, Chief Accounting Officer, and Controller) be present at AC meetings since management has ultimate responsibility for the financial reporting process and can address issues raised immediately during the AC meeting (PwC, 2011). As a practical matter, the AC often has one such meeting at the end of each quarter with the most consequential meeting occurring after year-end. It is often beneficial for the auditor to go beyond the mandatory reporting requirements and provide more robust disclosure at this meeting about information obtained throughout the audit. However, given concerns about time pressure and implications for the working relationship with management, we expect that discretionary disclosures are likely to be muted in the main AC meeting.

SOX newly mandates so-called executive sessions, which are held in addition to the traditional format, usually after the AC meeting with management present.⁵ Executive sessions differ from the traditional AC meeting format in two key respects. First, management is not present in these meetings, so the auditor and AC can be more candid in their communication. Second, both regulators and the AC best practice guidance represent this form of meeting as an independent and distinct information channel enabling more open AC-auditor communication related to soft issues with management (Bertomeu & Marinovic, 2015; KPMG Global, 2017). However, management frequently retains control and/or significant influence over auditor appointment and replacement decisions, even post-SOX (Beasley et al., 2009; Cohen et al., 2010; Dodgson et al., 2020; Fiolleau et al., 2013). To the extent that issues from these executive sessions are eventually divulged to management, auditors may be reluctant to convey to the AC issues related to management that might reflect badly on management. Surveys show that AC members do not think that auditors are providing these broader views extensively and there is room for communication improvement (KPMG Global, 2015; Center for Audit Quality, 2025). This study investigates how auditors’ information sharing differs under these circumstances.⁶

A third format consists of private meetings between the AC chair and the audit partner. Although current codes of best practice suggest there should be a series of interactions outside of AC meetings or outside the boardroom, these meetings are not currently mandated in most countries except in the UK (Deloitte, 2018; KPMG Global, 2017). These “off-site” meetings can take a variety of forms (e.g., private meetings or interactions over a meal) and act as a more private communication channel. AC members’ responses in Free et al. (2021) indicate that AC chairs perceive this as a more timely way to acquire information, so there are no surprises at the AC meeting. We are interested in the efficacy of these private meetings in facilitating auditor-AC communication.

While prior studies have examined communication between the auditor and the AC (such as Fiolleau et al., 2019), our research focuses

⁵ SOX mandates that companies have one AC meeting with management present and one AC meeting with management absent. While more meetings and communications between the two parties are encouraged, companies have discretion over the number of the rest of the meetings as long as there is one meeting a year with and without management. Drawing on proxy statements from S&P 500 companies, the U.S. Spencer Stuart Board Index (2024) reports that audit committees met 8.1 times on average. The number of audit committee meetings ranged from three to 28, with a median of eight meetings. There is no rigid requirement on the sequence of these two types of AC meetings, but in practice, the executive sessions usually occur at the end of the main AC meeting. As a result, both the total number of meetings and their order differ across companies.

⁶ While it would be unusual for the auditor not to say anything during the executive session, the safest option is to elaborate on issues previously discussed in the main AC meeting.

on theorizing and documenting the information-sharing impact of individual meeting formats, holding constant other meeting dynamics such as AC knowledge. We also compare the incremental benefit of the presence of private meetings between the AC chair and audit partner by using AC meetings (with and without management present) as benchmarks. Note that AC chairs consistently participate in all meetings, but the influence of their leadership style has largely been neglected in the literature. Consequently, a thorough examination of the effect of meeting format must incorporate the AC leadership style.

2.3. The joint effect of AC chair leadership style and meeting format

The discussion above indicates that the presence of management imposes pressure on auditors and can cause hesitation about disclosing discretionary information to the AC. According to SOX and governance codes of best practice, the most important interaction between the auditor and the AC should occur in the main AC meeting with management present (U.S. Congress, 2002). However, auditors' perceived psychological safety vis-à-vis the AC is likely lower when management is present since management often prefers less than full information sharing (Tetlock, 1983; Tetlock & Lerner, 1999), and the effect of AC chair leadership style increases in importance. Thus, removing management from the meeting should make auditors feel more psychologically safe when interacting with the AC and increase their tendency to share more discretionary information.

The power of an open AC chair can induce a sense of psychological safety for the auditor in his/her relationship with the AC, reducing any reticence the audit partner feels due to management's presence. By showing appreciation and rewarding auditor candor, the AC chair can foster a high level of psychological safety, so auditors feel safe to disclose discretionary information. In contrast, a controlling leadership style can hinder auditor information sharing in settings where conflict may be expected due to management's presence. While controlling AC chairs may be perceived as a more proactive and powerful supporting force by auditors, relative to open ones, they are also likely to strictly follow the meeting agenda and limit discussions of items not on the agenda. In sum, we expect auditors' willingness to share discretionary information to be lower (higher) in the presence of management when the AC chair is controlling (open).

In the other two meeting formats discussed earlier, management is not present, so auditors feel psychologically safe with the AC, though the general openness of the AC chair may elicit a more comprehensive discussion of issues. This suggests that an open AC chair will encourage an open discussion in AC meetings with management present, which in turn reduces the adverse effect of management presence on the auditor's information sharing with the AC.

Our formal hypothesis is stated as follows (and graphically depicted in Fig. 1).

Hypothesis 1. When the AC chair is open, auditors' planned discretionary information shared during the AC meeting will be the same, regardless of management's presence. When the AC chair is controlling, auditors' planned discretionary information shared during the AC meeting will be higher in the management-absent format compared to the management-present format.

Our prediction is not without tension. It is possible that the effect of meeting format is so strong that it influences auditor candor independently, regardless of AC chair's leadership style. The auditor may also be concerned about information leakage, even when management is not physically present, which could upset and harm the working relationship between the auditor and management.

2.4. Private meetings with the AC chair

Interactions outside of AC meetings also remove management from the setting and create an information environment in which auditors

experience high psychological safety when communicating with the AC chair, so that candid and robust discussions are facilitated. Private meetings take place, without management's presence, between the AC chair and the lead audit partner (Free et al., 2021). These meetings improve the social relations between the two, though that is not their main purpose. It is not clear how the auditor's reporting of issues to the AC chair during private meetings affects what the auditor reports to the AC in mandated meetings. Since the meeting is one-on-one (with high visibility), it is plausible that the auditor has reputation concerns and wants to avoid being perceived as "backstabbing" management by bringing up new issues, especially contentious ones. As contentious issues require more effortful and thoughtful discussions, the auditor's proclivity to discuss them in such a setting may not be high.⁷

On the other hand, this private setting will likely make the auditor feel more at ease to raise contentious issues with the AC chair because the discussion is not documented and not in a formal setting, lessening any concerns that the auditor is lodging formal complaints against management. Further, because this private setting involves two parties, the auditor and the AC chair, there is an opportunity for the AC chair's leadership style to influence the auditor's willingness to raise issues. However, the effect private meetings, if any, have on the auditors' information sharing during subsequent AC meetings is unclear. The auditor may feel more comfortable raising issues in the AC meeting that have previously been discussed privately with the AC chair. The reverse could also be true since the auditor may assume that the AC chair is already informed about these issues from the private meeting, which could decrease subsequent information sharing during the AC meetings, relying on the AC chair to exercise judgment about what issues should be brought to the attention of the full AC (and enhance the AC chair's role as the gatekeeper of information to the committee).

As an initial approach to learning more about meetings between the auditor and the AC chair, we interviewed four audit partners (one from each of the four Big 4 public accounting firms, who had provided advice and promised to help recruit participants) regarding these private meetings. All four partners agreed that meetings with the AC chair helped build social relations and provided a channel to communicate the contents of required auditor communication to the AC, so there would be no surprises. All four, however, felt uncomfortable raising new (discretionary) issues in such settings, especially if the issues reflected poorly on management. One of the four partners we interviewed was the head office quality control partner of a Big 4 accounting firm. S/he expressed concerns that these meetings are a challenge for the audit firm's quality control, given that these meetings have no records about what the audit partner and client have or have not discussed. This may lead to documentation deficiencies during a PCAOB inspection and liability exposure, which could be problematic, especially given the PCAOB's complaints about the lack of adequate documentation in audits conducted by Big 4 firms. The interviews indicate mixed views among the interviewed audit partners about such meetings. Interestingly, one-on-one meetings are considered best practice in the US and Canada and are generally encouraged (Deloitte, 2018; KPMG Global, 2017). We report experimental evidence on the following research questions.

Research Question 1. How do meetings between the audit partner and the AC chair prior to AC meetings affect auditors' planned information sharing with the AC in subsequent meetings and total information sharing across meetings?

Research Question 2. How does the AC chair's leadership style affect the amount of information auditors plan to share with the AC in subsequent meetings after the audit partner meets the AC chair privately (without management present)?

⁷ The routinization of private meetings between the auditor and the AC chair may attenuate concerns that such interactions implicitly convey serious or untoward issues regarding management.

3. Research method

3.1. Participants

Participants are 86 highly experienced auditors from two Big 4 accounting firms in Canada.⁸ The participants received no monetary compensation for completing the study but were given the option to request a report of the results. Our sample consists of 49 audit partners and 37 audit managers. On average, participants have 18.70 years of audit experience, and they have held their current rank for 9.02 years. We ask participants whether they have attended meetings with the AC (AC chair) in the past, and if yes, how many sessions. 100 percent (88.37 percent) report having attended meetings with the AC (AC chair), and 87.21 percent (52.33 percent) have attended more than ten sessions, indicating that our participants have experience directly interacting with the AC and/or AC chair.

3.2. Experimental design and manipulations

Our experiment employs a 3 x 2 between-participants design, with *Meeting Format* (meeting with the whole AC with management present; meeting with the whole AC without management present; or presence of a private meeting between the audit partner and the AC chair prior to the AC meeting), and *AC Chair Leadership Style* (controlling versus open) as manipulated independent variables. Participants in all conditions are told to assume that they are the auditor in charge of the annual financial statement audit at Northern Petroleum Inc. (hereafter, NPI), a firm in the oil and gas industry. We manipulate *Meeting Format* by varying the circumstances in which the auditor is meeting the client firm's AC. Depending on the specific condition, participants are told that they are meeting the whole AC with management present, meeting the whole AC without management present, or meeting the AC chair prior to the meeting with the whole AC.⁹

We also manipulate *AC Chair Leadership Style* by varying the description of the AC chair's leadership style. Participants in the controlling condition are informed that the chair is known to be "a controlling/dominant person who dominates discussions and marginalizes dissenting voices." On the other hand, participants in the open condition are informed that the chair is known to be "an open/tolerant person who is consultative during meetings, and collaborative in working with others." Across all conditions, we tell participants that the AC chair holds a CPA so that the perceived competence of the chair is held constant.

3.3. Experimental procedures

We use Qualtrics, a web-based software tool, to administer our experiment. A contact partner in each of the four Big 4 firms was approached and asked for assistance in obtaining participants for the study. We forwarded a brief participant solicitation email with a link to the experiment to each contact partner and asked them to distribute it to audit partners and managers who have experience interacting with ACs. We kept this invitation quite generic to minimize concerns around self-selection. Our contact partner(s) then handled the internal distribution of the solicitation and endorsed the study to their colleagues. We provided each Big 4 firm with a separate link, allowing us to observe that we received participants from two Big 4 firms and none from the other two.

Participants do not physically meet the researchers or interact with them in any direct manner. Participants begin the experiment by

accessing the link sent to them, and they are randomly assigned to one of the six experimental conditions when they click on the link. At the beginning of the experiment, we provide participants with general instructions. After reading the instructions, participants provided their consent before proceeding to the background information about NPI, a publicly listed oil and gas company facing challenges reaching its capacity consolidation target due to weak oil prices and unfavorable market conditions. The background information contains our manipulations of *Meeting Format* and *AC Chair Leadership Style*. We chose a setting in the oil and gas industry because this is the dominant industry in the geographic region where the data was collected. This ensures that all participants are familiar with and have significant expertise in the issues that are presented.

Participants are asked to assume the role of the auditor preparing for the upcoming AC meeting. All required issues and disclosures have already been added in the firm's template for communicating with the AC. However, four discretionary issues remain unreported to the AC.¹⁰ The first issue relates to a \$50 million goodwill impairment charge for certain natural gas properties, which is assessed at the lower end of the range of reasonable values by NPI's own valuation expert. As such, this issue raises concerns about aggressive reporting. The second issue concerns a special assignment authorized by the audit committee, which finds that the safety budget of the firm's oil assets has been repeatedly cut in recent years, leading to delayed facility inspections and possible safety concerns. The third issue pertains to insufficient expertise and high turnover of NPI's finance group, which, in light of the company's complex accounting issues, may raise doubts about the quality of the financial records as a whole and be perceived as confrontational by management. The final issue is the recent repricing of executives' stock options to compensate for adverse market conditions, which could potentially invite unfavorable scrutiny from shareholders, the financial press, and others.

Issues 1 and 3 are the types of issues that directors are advised to raise with the auditor in AC meetings as they are clearly accounting-related and have a direct impact on the audit. Issues 2 and 4 are broader risk management issues. Following current audit guidance, all four issues can be justified as being relevant to the AC (KPMG Global, 2017; PwC, 2022). However, since we inform all participants that all required issues and disclosures have already been included in the firm's template for communicating with the AC, the auditor can also justify not formally disclosing any of these issues, allowing AC members an opportunity to elicit additional information by asking questions during the meeting.¹¹

After reading the details of each issue, participants indicate whether they would like to put the issue on the agenda to discuss with the whole AC in the coming AC meeting. They also indicate the strength of their preference and provide a brief explanation for their decision. Participants in the private-meeting-present conditions also respond to questions asking whether they will discuss each of the four issues during the private meeting with the AC chair and the strength of preference for this option. Only participants in the private-meeting-present conditions respond to this set of questions since participants in the AC meeting conditions do not attend one-on-one meetings with the AC chair.¹²

¹⁰ The audit regulators have mandated the external disclosure of key audit matters (KAMs), which are a subset of items reported by the auditor to the AC. In the current study, we are interested in the total information set conveyed by the auditor to the AC.

¹¹ We piloted the instrument with one Big 4 firm partner to ensure that our issues and their classification were appropriate.

¹² When deciding whether to put an issue on the agenda for the AC meeting, we remind participants in the private-meeting-present conditions that they would have had the opportunity to discuss issues with the AC chair before this meeting. We acknowledge that this reminder may impact our participants' information sharing choices by making the prior sharing opportunity more salient and we analyze multiple variations of the dependent measure in response.

⁸ The study was approved by the Internal Review Board (IRB) of the institution where the experiment was conducted.

⁹ In the first two conditions, the materials do not mention any private meeting with the AC chair. In the condition that includes a private meeting with the AC chair, the materials do not mention whether or not management will be present during the subsequent meeting with the whole AC.

Participants then respond to debriefing questions, manipulation checks, and demographic questions. At the end of the study, participants can indicate whether they would like to receive a copy of the results by providing their contact information.

4. Results

4.1. Manipulation checks

To check on our *AC Chair Leadership Style* manipulation, we ask participants whether the AC chair has been described to be: (1) a controlling and dominant person who dominates discussions, and marginalizes dissenting voices, or (2) an open and tolerant person who is consultative during meetings, and collaborative in working with others. All our participants (100 percent) correctly answer this question. Based on questions from our post-experimental questionnaire and using Exploratory Factor Analysis (EFA), we construct a factor to capture the participants' assessments of the AC and the AC chair's quality. An ANOVA shows a significant effect of the manipulation ($F(1, 84) = 38.86, p < 0.01$) such that the perceived quality is significantly higher when the AC chair is described as open than when they are described as controlling.

To verify our *Meeting Format* manipulation, we ask participants in AC meeting conditions whether the auditor is going to meet the whole AC (1) with management present or (2) without management present. Fifty-five out of 59 participants (93.20 percent) answer the question correctly. Specifically, participants in the management present condition are more likely to choose option (1), while participants in the management absent conditions are more likely to choose option (2) ($\chi^2 = 44.27, p < 0.01$).^{13, 14}

We also ask participants across all conditions whether the case mentions that the auditor would have the opportunity to meet the AC chair before the AC meeting by indicating: (1) yes or (2) no. Eighty-four out of 86 participants (97.70 percent) answer the question correctly. Participants in the private-meeting-present conditions are more likely to choose option (1), while participants in the private-meeting-absent (i.e., meetings with management present or management absent) conditions are more likely to choose option (2) ($\chi^2 = 77.36, p < 0.01$).¹⁵

4.2. Hypothesis testing

Hypothesis 1 predicts a two-way interaction of *Meeting Format* and *AC Chair Leadership Style* on auditors' planned information sharing during meetings with the whole AC. For each issue, we ask participants whether they would recommend putting the issue on the agenda to discuss with the AC by choosing yes (+1) or no (-1). We also ask them to indicate the strength of their preference for the option they have chosen on an 11-point scale ranging from "0" to "10". We then create a continuous measure of participants' planned information sharing with the AC by multiplying participants' answers to these two questions. We add participants' information sharing responses to these four issues and form a combined information sharing measure, which conceptually ranges from "-40" (all 'no' responses with maximum preference strength) to "+40" (all 'yes' responses with maximum preference strength). Panel A of **Table 1** presents descriptive statistics, and **Fig. 2** presents our results graphically.

We start by performing a "baseline" analysis of variance (hereafter, ANOVA) with all six cells, including the two private meeting conditions

¹³ We exclude participants in the private-meeting-present condition from this manipulation check question because, by definition, management is always absent from private meetings between the auditor and the AC chair.

¹⁴ All p-values are two-tailed unless specified otherwise.

¹⁵ The likelihood of participants passing the manipulation checks regarding meeting format does not differ significantly across AC Chair leadership conditions (smallest $p = 0.15$).

with *Meeting Format* and *AC Chair Leadership Style* as independent variables, and planned information sharing with the AC as the dependent variable (see panel B of **Table 1** for details). We find a marginally significant *Meeting Format* by *AC Chair Leadership Style* interaction ($F = 2.27, p = 0.06$, one-tailed equivalent). To test **Hypothesis 1** more directly, we focus our analysis on the two AC meeting conditions and conduct the same ANOVA with *Meeting Format* and *AC Chair Leadership Style* as independent variables, and planned information sharing with the AC as the dependent variable (see panel C of **Table 1** for ANOVA results). We find a significant two-way interaction of *Meeting Format* and *AC Chair Leadership Style* ($F = 3.04, p = 0.04$, one-tailed equivalent).^{16, 17, 18, 19} Consistent with our prediction, the difference between *Meeting Format* conditions is smaller when the AC chair is described as open rather than controlling. As shown in panel E of **Table 1**, when the AC chair is open, management presence does not affect participants' planned information sharing with the AC (23.36 versus 22.40, $F = 0.07, p = 0.80$); given a controlling AC chair, participants in the management present conditions plan to share significantly less information with the whole AC than those in the management absent condition (12.93 versus 23.19, $F = 7.18, p < 0.01$, one-tailed equivalent). Collectively, these simple effects provide direct support for our hypothesis.

Management presence has a "chilling" effect on auditors' planned information sharing when the AC chair is controlling, but not when the AC chair is described as open. Put differently, an open leadership style can help AC chairs mitigate the adverse effect of management presence on auditors' information sharing.²⁰

4.3. Tests of the research questions

We address **Research Question 1** by investigating the effect of *Private Meeting Presence* on the amount of discretionary information auditors plan to share with the whole AC in subsequent AC meetings after auditors meet only with the AC chair. Notably, our private meeting conditions' case materials are silent on whether the subsequent meeting with the entire AC committee will include or exclude management. As such, we focus on auditors' planned communications only and note that these plans may well change upon learning whether management will be present.

We form the private-meeting-absent condition by collapsing the management present and management absent conditions used in our hypothesis tests. The private-meeting-present condition is the condition in which the auditor meets the AC chair in private prior to the meeting with the whole AC, and the instrument does not specify if management is present or absent during the subsequent AC meeting. The latter is a design choice intended to maintain comparability across the two AC meeting conditions. Adding additional cells to account for management presence was not expected to be feasible given the recruiting constraints

¹⁶ Our inferences remain unchanged if we exclude the four participants who answered the manipulation check question regarding management presence incorrectly. The results become statistically weaker due to the lower sample size, but the interaction term remains significant ($F(1, 51) = 2.29, p = 0.07$, one-tailed equivalent, untabulated).

¹⁷ Our findings remain unchanged if we use the total number of issues participants intend to share with the AC as the dependent variable (untabulated).

¹⁸ We confirm that key demographic variables such as rank ($F(3, 55) = 0.21, p = 0.89$), audit experience in years ($F(3, 55) = 1.60, p = 0.20$), and number of sessions attended with the AC ($F(3, 55) = 1.53, p = 0.22$) do not differ significantly between conditions. Our inferences remain unchanged if we control for these demographic variables in our tests by including them as covariates.

¹⁹ Contrast tests using the necessary subsets of our "Baseline" ANOVA to test **Hypothesis 1** yield consistent results ($F(5, 80) = 3.62, p < 0.01$).

²⁰ The effect of management presence on auditor candor is consistent with accountability theory (Tetlock, 1983; Tetlock & Lerner, 1999). However, accountability theory by itself cannot fully explain the effect of the AC chair leadership style, nor can it account for the interaction effect observed.

Table 1
Information sharing with AC.

Panel A: Descriptive statistics – Mean (Standard Deviation) [Sample Size]													
AC Chair Leadership Style		Meeting Format											
		Whole AC Meeting: Mgmt Absent			Whole AC Meeting: Mgmt Present			Private Meeting with AC Chair			Overall		
Controlling	Continuous Measure	23.19	(8.65)	[16]	12.93	(12.23)	[14]	14.00	(15.03)	[14]	17.00	(12.74)	[44]
	# of Issues Shared	3.25	(0.68)	[16]	2.64	(0.84)	[14]	2.71	(1.07)	[14]	2.89	(0.90)	[44]
Open	Continuous Measure	23.36	(10.87)	[14]	22.40	(9.08)	[15]	11.31	(10.84)	[13]	19.29	(11.38)	[42]
	# of Issues Shared	3.29	(0.73)	[14]	3.40	(0.63)	[15]	2.46	(0.78)	[13]	3.07	(0.81)	[42]
Overall	Continuous Measure	23.27	(9.58)	[30]	17.83	(11.57)	[29]	12.70	(13.00)	[27]	18.12	(12.07)	[86]
	# of Issues Shared	3.27	(0.69)	[30]	3.03	(0.82)	[29]	2.59	(0.93)	[27]	2.98	(0.85)	[86]

Panel B: Baseline two-way ANOVA tests of between-participants effects – continuous measure						
Source	Sum of Squares	df	Mean Square	F-statistic	p-value	
Meeting Format	1589.20	2	794.60	6.29	<0.01*	
AC Chair Leadership Style	124.60	1	124.60	0.99	0.32	
Meeting Format x AC Chair Leadership Style	574.00	2	287.00	2.27	0.06*	
Error	10104.00	80	126.30			

Panel C: Whole AC meeting conditions only – two-way ANOVA tests of between-participants effects – continuous measure						
Source	Sum of Squares	df	Mean Square	F-statistic	p-value	
Meeting Format	436.23	1	436.23	4.17	0.05	
AC Chair Leadership Style	331.75	1	331.75	3.17	0.08	
Meeting Format x AC Chair Leadership Style	318.07	1	318.07	3.04	0.04*	
Error	5756.18	55	104.66			

Panel D: Whole AC meeting conditions only – simple effects tests of AC Chair Leadership Style – continuous measure						
Source	Sum of Squares	df	Mean Square	F-statistic	p-value	
Effect of AC Chair Leadership Style given mgmt absent	0.21	1	0.21	<0.01	0.96	
Effect of AC Chair Leadership Style given mgmt present	649.61	1	649.61	5.66	0.01*	

Panel E: Whole AC meeting conditions only – simple effects tests of Meeting Format – continuous measure						
Source	Sum of Squares	df	Mean Square	F-statistic	p-value	
Mgmt absent vs. mgmt present given controlling	785.83	1	785.83	7.18	<0.01*	
Mgmt absent vs. mgmt present given open	6.63	1	6.63	0.07	0.80	

Notes: *Meeting Format* and *AC Chair Leadership Style* are independently manipulated between-subjects. We report two information sharing measures (1) a continuous measure based on participants' binary choice to share or not share information as well as their preference strengths, and (2) the number of issues participants choose to share based on their binary choice. See the Experimental Procedures section for details.

* One-tailed p-value, all other tests are two-tailed.

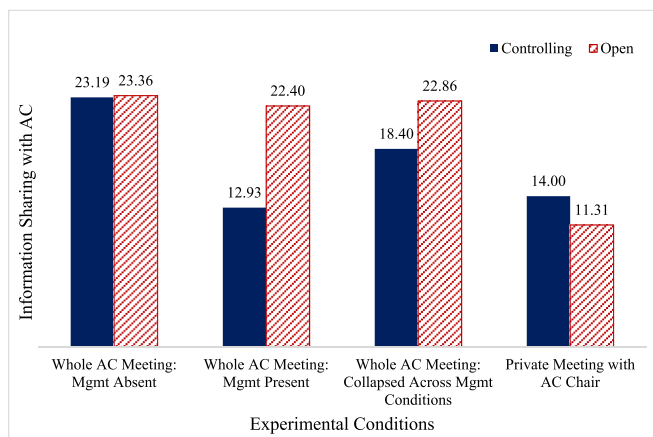


Fig. 2. Auditors' information sharing with the AC

Notes: This figure graphically illustrates the joint effect of the experimental conditions, *Meeting Format* (whole AC mgmt absent versus whole AC mgmt present versus private meeting with AC chair present), and *AC Chair Leadership Style* (controlling versus open) on participants' information sharing with the AC. *Meeting Format* and *AC Chair Leadership Style* are independently manipulated between-subjects. Information Sharing with the AC is a continuous measure based on participants' binary choice to share or not share information, weighted by their preference strengths.

when studying such an experienced and specialized participant group. The results comparing the private-meeting-present condition with individual AC meeting conditions should be interpreted with caution in this context.

We conduct an ANOVA with *Private Meeting Presence* (i.e., whether there is a meeting between the audit partner and the AC chair prior to the AC meeting) and *AC Chair Leadership Style* as independent variables, and we continue to use the same dependent variable, which measures planned information sharing with the whole AC. Panel A of Table 2 presents the descriptive statistics, and Fig. 2 depicts our results graphically. ANOVA results (panel B of Table 2) show a significant difference in planned information sharing with the AC between private-meeting-present and private-meeting-absent conditions (20.59 versus 12.70, $F = 8.68, p < 0.01$), suggesting that auditors are planning to share less of their discretionary information with the whole AC in subsequent AC meetings if they engage in private meetings with the AC chair prior to the AC meeting.²¹

We create an alternative measure of planned 'total' information

²¹ The inferences are unchanged, though the results become slightly weaker due to the reduced sample size, when comparing AC meeting conditions separately. The effect remains significant in the AC meeting condition with management absent, ($F(1, 53) = 11.99, p < 0.01$, untabulated). When looking only at the AC meeting condition with management present as a comparison, this effect is marginally significant ($F(1, 52) = 2.57, p = 0.06$, one-tailed equivalent, untabulated).

Table 2
Information sharing with AC – All meeting conditions.

Panel A: Descriptive statistics – Mean (Standard Deviation) [Sample Size]										
AC Chair Leadership Style		Private Meeting Presence						Overall		
		Absent			Present					
Controlling	Continuous Measure	18.40	(11.52)	[30]	14.00	(15.03)	[14]	17.00	(12.74)	[44]
	# of Issues Shared	2.97	(0.81)	[30]	2.71	(1.07)	[14]	2.89	(0.90)	[44]
Open	Continuous Measure	22.86	(9.82)	[29]	11.31	(10.84)	[13]	19.29	(11.38)	[42]
	# of Issues Shared	3.35	(0.67)	[29]	2.46	(0.78)	[13]	3.07	(0.81)	[42]
Overall	Continuous Measure	20.59	(10.86)	[59]	12.70	(13.00)	[27]	18.12	(12.07)	[86]
	# of Issues Shared	3.15	(0.76)	[59]	2.59	(0.93)	[27]	2.98	(0.85)	[86]

Panel B: Two-way ANOVA tests of between-participants effects					
Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Private Meeting Presence	1152.97	1	1152.97	8.68	<0.01
AC Chair Leadership Style	105.67	1	105.67	0.80	0.38
Private Meeting Presence x AC Chair Leadership Style	236.78	1	236.78	1.78	0.18
Residuals	10895.42	82	132.87		

Panel C: Simple effects tests of AC Chair Leadership Style					
Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Effect of AC Chair Leadership Style given private meeting absent	293.59	1	293.59	2.56	0.12
Effect of AC Chair Leadership Style given private meeting present	48.86	1	48.86	0.28	0.60

Panel D: Simple effects tests of Private Meeting Presence					
Source	Sum of Squares	df	Mean Square	F-statistic	p-value
Effect of Private Meeting Presence given controlling	184.80	1	184.80	1.14	0.29
Effect of Private Meeting Presence given open	1198.35	1	1198.35	11.67	<0.01

Notes: *Private Meeting Presence* is based on our manipulation of *Meeting Format*. We combine the management-present and management-absent conditions to create the private-meeting-absent conditions. *AC Chair Leadership Style* is independently manipulated between-subjects. We report two information sharing measures (1) a continuous measure based on participants' binary choice to share or not share information as well as their preference strengths, and (2) the number of issues participants choose to share based on their binary choice. See the Experimental Procedures section for details.

sharing for the private meeting conditions to account for communication channels between AC chairs and other AC members outside the AC meeting. We count an item as shared if the participant plans to share it either immediately with the AC chair during the private meeting or intends to share it later during the whole AC meeting. Panel A of Table 3 presents descriptive statistics, and Fig. 3 presents our results graphically.

We repeat the ANOVA with *Private Meeting Presence* and *AC Chair Leadership Style* as independent variables, and we use this measure of planned 'total' information sharing as the dependent variable. The ANOVA results (panel B of Table 3) show a significant difference in total information sharing between private-meeting-present and private-meeting-absent conditions (3.67 versus 3.15, $F = 9.77$, $p < 0.01$), suggesting that auditors are planning to share more of their discretionary information with the AC if they have the opportunity to meet with the AC chair privately in addition to the mandated AC meeting. While the main effect of AC Chair Leadership Style is insignificant ($F = 1.42$, $p = 0.24$), we find a significant interaction effect ($F = 3.61$, $p = 0.06$). Simple effects tests show significantly lower total information sharing when the AC chair exhibits a controlling style rather than an open leadership style ($F = 3.81$, $p = 0.06$) in settings without a private meeting. This difference disappears when a private meeting is present ($F = 1.07$, $p = 0.31$). Similarly, a private meeting leads to additional total information sharing only when the AC chair is controlling ($F = 11.53$, $p < 0.01$) but not when the AC chair is open ($F = 0.76$, $p = 0.39$). These findings are driven by the lower total information sharing in the private-meeting-absent condition when the AC chair is controlling.

The latter analysis assumes that all the information shared with the AC chair during the private meeting is passed on to the other AC members, while the former analysis only accounts for information sharing during the AC meeting, thus ignoring potential information sharing between the AC chair and other AC members outside the AC meeting. These two sets of analyses reflect information sharing under

two extreme assumptions: no communication vs. full transparency between the AC chair and other AC members. In this way, our results can speak to a wide variety of firms that are likely to be somewhere in between. Overall, we find that private meetings with the AC chair can reduce auditors' information sharing in subsequent AC meetings, while increasing total information sharing across meetings, regardless of AC chair leadership style.

To test Research Question 2, we investigate the simple effect of *AC Chair Leadership Style* in the private-meeting-present conditions. As shown in panel C of Table 2, we find no statistical difference between the open and the controlling conditions (14.00 versus 11.31, $F = 0.28$, $p = 0.60$). Auditors' information sharing with the whole AC is similar regardless of *AC Chair Leadership Style* when they engage in private meetings with the AC chair before AC meetings. In summary, our results suggest that, compared to those who attend AC meetings only, auditors who attend private meetings before AC meetings share less information with the whole AC during meetings, regardless of the AC chair's leadership style.

4.4. Additional analyses for AC meeting conditions

To provide evidence on the process driving Hypothesis 1, we focus the analysis on the two AC meeting conditions and use Structural Equations Modeling (SEM) to test for mediation. Recall that psychological safety describes an individual's ability "to show and employ self without fear of negative consequences to self-image, status, or career (Kahn, 1990, p. 705)" and that information may be withheld for fear of negative consequences from speaking up (Van Dyne et al., 2003). In the context of our study, an auditor feels psychologically safer in sharing information with the AC to the degree that he/she perceives that the information sharing is appreciated by the AC and improves the working

Table 3
 “Total information sharing” # of issues – All meeting conditions.

Panel A: Descriptive statistics – Mean (Standard Deviation) [Sample Size]									
AC Chair Leadership Style	Private Meeting Presence						Overall		
	Absent			Present					
Controlling	2.97	(0.81)	[30]	3.79	(0.58)	[14]	3.23	(0.83)	[44]
Open	3.35	(0.67)	[29]	3.54	(0.66)	[13]	3.41	(0.67)	[42]
Overall	3.15	(0.76)	[59]	3.67	(0.62)	[27]	3.31	(0.76)	[86]

Panel B: Two-way ANOVA tests of between-participants effects						
Source	Sum of Squares	df	Mean Square	F-statistic	p-value	
Private Meeting Presence	4.90	1	4.90	9.77	<0.01	
AC Chair Leadership Style	0.71	1	0.71	1.42	0.24	
Private Meeting Presence x AC Chair Leadership Style	1.81	1	1.81	3.61	0.06	
Residuals	41.11	82	0.50			

Panel C: Simple effects tests of AC Chair Leadership Style						
Source	Sum of Squares	df	Mean Square	F-statistic	p-value	
Effect of AC Chair Leadership Style given private meeting absent	2.11	1	2.11	3.81	0.06	
Effect of AC Chair Leadership Style given private meeting present	0.41	1	0.41	1.07	0.31	

Panel D: Simple effects tests of Private Meeting Presence						
Source	Sum of Squares	df	Mean Square	F-statistic	p-value	
Effect of Private Meeting Presence given controlling	6.40	1	6.40	11.53	<0.01	
Effect of Private Meeting Presence given open	0.34	1	0.34	0.76	0.39	

Notes: Private Meeting Presence is based on our manipulation of meeting format. We combine the management present and management absent conditions to create the private meeting absent conditions. *AC Chair Leadership Style* is independently manipulated between-subjects. Total information sharing measures the number of issues (out of four) based on participants’ binary choice to share or not share information. When a private meeting is present, participants have the option to share information with the AC chair during the private meeting, with the whole AC during the subsequent formal meeting, or both. For this measure of total information sharing, an item is counted as shared if the participant shares it either with the AC chair during the private meeting or with the whole AC during the formal meeting. Total information sharing equals the simple sum of issues that participants share in the conditions without a private meeting, since the participants lack the option to share information with the AC chair during a private meeting.

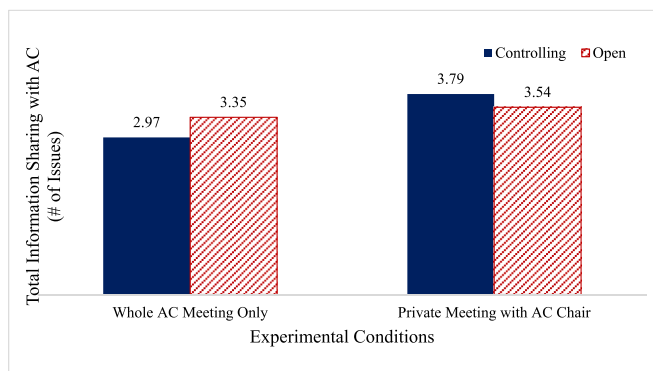


Fig. 3. Total information sharing with the AC across meetings
Notes: Private Meeting Presence is based on our manipulation of meeting format. We collapse the management present and management absent conditions to create the whole AC meeting only condition, as in Fig. 2. *AC Chair Leadership Style* is independently manipulated between-subjects. Total information sharing measures the number of issues (out of four) based on participants’ binary choice to share or not share information. In conditions with a private meeting, participants have the option to share information with the AC chair during the private meeting, with the whole AC during the subsequent formal meeting, or both. For this measure of total information sharing, an item is counted as shared if the participant shares it either with the AC chair during the private meeting or with the whole AC during the formal meeting. Total information sharing equals the simple sum of issues that participants share in the conditions without a private meeting, since the participants lack the option to share information with the AC chair during a private meeting.

relationship.²² The following quote from one of our participants illustrates this point: “[w]e would never put this on the agenda as management typically prepares and circulates the agenda to the board and would ruin our relationship with management.”

We perform an Exploratory Factor Analysis (EFA) using twenty questions from our post-experimental questionnaire. The whole dataset, including all six conditions, is used to estimate the factor scores to maximize the sample size (N = 86). We identify three principal factors using a cutoff of Eigenvalues >1. Factor 3 captures the participants’ concerns about sharing the uncovered information (“information sharing concerns”) which aligns well with the construct of interest: psychological safety. Item loadings and descriptive statistics are summarized in Table 4.

Based on our theory, we expect that the Meeting Format and the AC Chair Leadership Style influence auditors’ information sharing concerns, so that such concerns will be heightened when management is present during the meeting and when the AC chair is described as controlling. The descriptive statistics show that information sharing concerns are highest when auditors are asked to share information in an AC meeting with management present, presided over by a controlling AC chair, relative to the other three conditions (means of 0.74 vs. -0.08, -0.12, -0.05).

The SEM model tests if the information sharing concern score mediates the effect of our manipulated variables (*Meeting Format* and *AC Chair Leadership Style*) on auditors’ information sharing. Our results suggest full mediation, consistent with the idea that an open AC chair mitigates the pressure that auditors feel from management, which

²² We focus on psychological safety with AC because AC is the party that is common and constant in all AC meeting conditions, while management is absent in AC meeting without management conditions. In addition, the AC (chair) leads the AC meetings and has the strongest influence on the auditor’s perceived psychological safety by setting the tone for the meeting climate through their actions and behaviors.

Table 4
Exploratory factor analysis (EFA)

Panel A: EFA items & loadings						
Factor 1: meeting atmosphere						
Item	F1 Item Loadings					
“The format of the meeting with [the Chair of] the Audit Committee facilitates information sharing.”	0.95					
“The format of the meeting with [the Chair of] the Audit Committee stimulates a professional atmosphere.”	0.95					
“The format of the meeting with [the Chair of] the Audit Committee is appropriate.”	0.82					
“The Chair of the Audit Committee fosters cooperation.”	0.77					
“The format of the meeting with [the Chair of] the Audit Committee stimulates a friendly atmosphere.”	0.64					
“The format of the meeting with [the Chair of] the Audit Committee enables the auditor to fulfill his or her professional obligations.”	0.55					
Total variance explained = 21.20 %						
Cronbach’s Alpha = 0.92						
Factor 2: quality of the AC & the AC chair						
Item	F2 Item Loadings					
“I think [the Chair of] the Audit Committee will take appropriate action after learning of the information.”	0.75					
“The Audit Committee, as a whole, is effective.”	0.75					
“The Chair of the Audit Committee is effective.”	0.72					
“I like the Chair of the Audit Committee as a person.”	0.66					
“I think [the Chair of] the Audit Committee will appreciate my efforts.”	0.57					
“I think the Chair of the Audit Committee is competent.”	0.45					
Total variance explained = 15.60 %						
Cronbach’s Alpha = 0.85						
Factor 3: information sharing concerns						
Item	F3 Item Loadings					
“I was concerned that I may be challenged when I share information.”	0.62					
“I was concerned that sharing information with [the Chair of] the Audit Committee may harm our working relationship.”	0.59					
“I was concerned about audit risk when sharing information with [the Chair of] the Audit Committee.”	0.59					
“I was concerned about legal liability when sharing information with [the Chair of] the Audit Committee.”	0.58					
Total variance explained = 8.30 %						
Cronbach’s Alpha = 0.69						
Panel B: Descriptive statistics – Mean (Standard Deviation)						
Condition	Mgmt Absent & Controlling	Mgmt Absent & Open	Mgmt Present & Controlling	Mgmt Present & Open	Private Meeting Present & Controlling	Private Meeting Present & Open
	N = 16	N = 14	N = 14	N = 15	N = 14	N = 13
<i>Factor 1: meeting atmosphere</i>	-0.50 (0.99)	0.55 (0.78)	-0.73 (0.90)	0.26 (0.81)	-0.06 (1.02)	0.56 (0.69)
<i>Factor 2: quality of the AC & the AC chair</i>	-0.71 (0.78)	0.59 (0.62)	-0.62 (0.55)	0.45 (0.82)	-0.19 (0.87)	0.58 (0.97)
<i>Factor 3: information sharing concerns</i>	-0.12 (0.82)	-0.08 (0.97)	0.74 (0.67)	-0.05 (0.75)	-0.05 (0.76)	-0.45 (0.81)

Notes: We analyze the twenty questions (items) using Exploratory Factor Analysis (EFA) based on the data from all six experimental conditions (N = 86). Three principal factors are detected using a cutoff of Eigenvalues >1. Item loadings are reported based on a cutoff value of 0.4.

enhances discretionary information sharing. This effect is evident only when management is present in the meeting (see Fig. 4 for details). We also split the dataset based on the AC Chair Leadership Style to perform sub-sample analyses and find consistent results. Overall, the analyses suggest that our manipulations cause auditors to perceive higher information sharing concerns when management is present during the AC meeting and the AC chair is controlling. After controlling for auditors’ information sharing concerns, the effect of the experimental manipulations is no longer significant, suggesting full mediation in this subset.

4.5. Information sharing by issue

The instrument covers a range of different issues which vary in terms of perceived seriousness, whether they are directly related to the financial statement audit, the extent to which they reflect badly on management, and many other dimensions. While this is not the primary focus of this paper, we anticipate that the joint effect of meeting format and AC chair leadership style on auditors’ tendency to convey

discretionary information to the AC can be affected by the nature of the issue. We analyze information sharing by issue to provide some preliminary evidence. Table 5 presents the descriptive statistics and ANOVA results, while Table 6 shows detailed participant counts by issue and experimental condition.

Visually, the results indicate near-universal disclosure of Issue 1 (goodwill impairment) suggesting that auditors consider this matter as crucial information to be shared with the AC irrespective of the circumstances. Similarly, Issue 3 (expertise of the finance group) is disclosed by the majority of participants, although disclosure is overall lower than for Issue 1. This is particularly the case when management is present, and the AC chair is described as controlling.

Conversely, Issue 2 (safety budget cuts) and Issue 4 (repricing of executive stock options), which are broader risk management issues not directly related to the financial reporting process, exhibit lower levels of disclosure. Some participants choose not to disclose them at all, even when given the opportunity to talk to the AC chair privately. The impact of the manipulated variables (meeting format and AC chair leadership

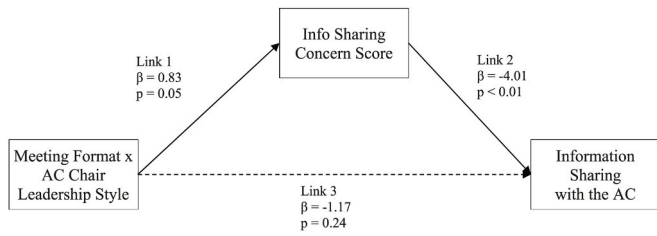


Fig. 4. Mediation analysis: Structural Equations Modeling – Auditors’ information sharing concerns

Notes: *Meeting Format* and *AC Chair Leadership Style* are independently manipulated between-subjects. Info Sharing Concern is a factor score based on an analysis of twenty questions from our post-experimental questionnaire using Exploratory Factor Analysis (EFA). We observe three principal factors using a cutoff of Eigenvalues >1. See the Additional Analyses section for details. All other variables are as previously defined, please see the Experimental Design section for details. P-values are based on bootstrapping-corrected standard errors with 5000 samples.

Fit indices for the fully-mediated model, i.e. without Link 3, are as follows: (a) $\chi^2 = 4.49$, $df = 3$, and $p = 0.21$, implying that the model fit is comparable to a fully saturated model; (b) Root Mean Squared Error of Approximation (RMSEA) value equals 0.09; (c) the model’s Comparative Fit Index (CFI) value equals 0.93; and, (d) the Standardized Root Mean Squared Residual value equals 0.08.

style) is more pronounced. Statistical analysis reveals significant differences between the *Meeting Format* and *AC Chair Leadership Style* conditions for Issues 2 (all $p < 0.06$) and 3 (all $p < 0.03$) but not Issues 1 and 4 (all $p > 0.25$).²³

Table 5

Information sharing with AC – Issue-by-issue overview.

Panel A: Descriptive statistics – Mean (Standard Deviation)												
Condition	Mgmt Absent & Controlling		Mgmt Absent & Open		Mgmt Present & Controlling		Mgmt Present & Open		Private Meeting Present & Controlling		Private Meeting Present & Open	
	N = 16		N = 14		N = 14		N = 15		N = 14		N = 13	
<i>Issue 1: Assessment of Goodwill Impairment</i>												
% Shared	100	(0)	92.86	(26.73)	100	(0)	100	(0)	92.86	(26.73)	92.31	(27.74)
Continuous	8.75	(1.24)	8	(4.46)	8.5	(1.65)	8.47	(1.6)	8.29	(4.75)	8.23	(4.38)
<i>Issue 2: Cuts to Safety Budgets</i>												
% Shared	43.75	(51.23)	78.57	(42.58)	35.71	(49.72)	60	(50.71)	50	(51.89)	15.38	(37.55)
Continuous	-0.06	(6.47)	3.93	(4.97)	-1.07	(6.55)	1.33	(7.17)	0.07	(6.8)	-3.77	(5.28)
<i>Issue 3: Expertise of the Finance Group</i>												
% Shared	100	(0)	100	(0)	71.43	(46.88)	100	(0)	78.57	(42.58)	76.92	(43.85)
Continuous	9.25	(0.93)	8.64	(1.82)	4.07	(7.56)	8.8	(1.57)	5.79	(7.17)	4.92	(7.57)
<i>Issue 4: Repricing of Executives’ Stock Options</i>												
% Shared	81.25	(40.31)	57.14	(51.36)	57.14	(51.36)	80	(41.40)	50	(51.89)	61.54	(50.64)
Continuous	5.25	(5.25)	2.79	(6.1)	1.43	(6.9)	3.8	(5.83)	-0.14	(7.23)	1.92	(6.47)
Panel B: ANOVA tests of between-participants effects across all six conditions												
Dependent Variable	N		F-statistic		p-value							
Issue 1 - % Shared	86		0.66		0.65							
Issue 1 - Continuous	86		0.09		0.99							
Issue 2 - % Shared	86		2.76		0.02							
Issue 2 - Continuous	86		2.24		0.06							
Issue 3 - % Shared	86		2.80		0.02							
Issue 3 - Continuous	86		2.66		0.03							
Issue 4 - % Shared	86		1.11		0.36							
Issue 4 - Continuous	86		1.34		0.26							

Notes: We report two information sharing measures (1) the percentage of participants who choose to share a given issue based on their binary choice, and (2) a continuous measure based on participants’ binary choice to share or not share information as well as their preference strengths. A single categorical variable is used as the independent variable to analyze between-participant effects across conditions. See the Experimental Procedures section for details.

²³ We acknowledge that our results are not in a strong position to provide evidence on issue-by-issue comparisons and which issue characteristics are most important due to potential ceiling effects and the relatively small number of issues we examine. Future research using a larger pool of carefully selected discretionary issues could provide more conclusive evidence on this aspect of auditors’ information sharing behavior.

To further examine the robustness of **Hypothesis 1**, we classify issues 1 and 3 as accounting-related issues, and issues 2 and 4 as non-accounting-related issues. We then test auditors’ information sharing of these two types of issues by conducting a Multivariate Analysis of Variance (MANOVA) test with *Meeting Format* and *AC chair leadership style* as independent variables. We add participants’ information sharing responses for the two accounting-related issues (1 and 3) and the non-accounting-related issues (2 and 4) separately to form the two information sharing measures.

The MANOVA results (untabulated) show insignificant effects of *Meeting Format* (approx. $F(1, 55) = 2.45$, $p = 0.10$) and *AC chair leadership style* (approx. $F(1, 55) = 1.62$, $p = 0.21$) with a significant interaction term (approx. $F(1, 55) = 2.96$, $p = 0.03$, one-tailed equivalent), based on Pillai-Bartlett Trace test statistics. Based on univariate tests, we find that the pattern of results for accounting-related issues is consistent with that of our main findings. The *Meeting Format* by *AC chair leadership style* interaction is significant ($F(1, 55) = 5.79$, $p = 0.01$, one-tailed equivalent). When we examine the sharing of non-accounting issues, the interaction is no longer significant ($F(1, 55) = 0.53$, $p = 0.47$), and all other effects are not significant.

4.6. Additional analyses of the post-experimental questionnaire

Our experiment includes an extensive questionnaire designed to better understand senior auditors’ decision-making processes in the context of auditor-AC communication. Based on the data from all six experimental conditions (N = 86), we analyze the twenty questions

Table 6
Number of participants by issue and condition.

Issue 1 Assessment of Goodwill Impairment	Not Shared at all	Shared with whole AC only	Shared with AC chair privately only	Shared with both	N
Private Meeting Present & Open	0	0	1	12	13
Private Meeting Present & Controlling	0	0	1	13	14
Mgmt Absent & Open	1	13			14
Mgmt Absent & Controlling	0	16			16
Mgmt Present & Open	0	15			15
Mgmt Present & Controlling	0	14			14
Issue 2 Cuts to Safety Budgets					
	Not Shared at all	Shared with whole AC only	Shared with AC chair privately only	Shared with both	N
Private Meeting Present & Open	4	0	7	2	13
Private Meeting Present & Controlling	2	1	5	6	14
Mgmt Absent & Open	3	11			14
Mgmt Absent & Controlling	9	7			16
Mgmt Present & Open	6	9			15
Mgmt Present & Controlling	9	5			14
Issue 3 Expertise of the Finance Group					
	Not Shared at all	Shared with whole AC only	Shared with AC chair privately only	Shared with both	N
Private Meeting Present & Open	0	0	3	10	13
Private Meeting Present & Controlling	0	1	3	10	14
Mgmt Absent & Open	0	14			14
Mgmt Absent & Controlling	0	16			16
Mgmt Present & Open	0	15			15
Mgmt Present & Controlling	4	10			14
Issue 4 Repricing of Executives' Stock Options					
	Not Shared at all	Shared with whole AC only	Shared with AC chair privately only	Shared with both	N
Private Meeting Present & Open	2	0	3	8	13
Private Meeting Present & Controlling	1	0	6	7	14
Mgmt Absent & Open	6	8			14
Mgmt Absent & Controlling	3	13			16
Mgmt Present & Open	3	12			15
Mgmt Present & Controlling	6	8			14

Notes: The experimental conditions are based on our manipulations of meeting format and AC chair leadership style. The tables count the number of participants, by issue, that fall into the indicated categories based on their binary choice for each issue. Note that participants in the conditions without a private meeting don't have the option to share information directly with the AC chair (greyed out cells above). See the Experimental Procedures section for details.

using exploratory factor analysis (EFA). Three principal factors are detected using a cutoff of Eigenvalues >1 (see Table 4 for details).

The first factor captures the participants' assessment of the meeting atmosphere with the AC (Chair) ("meeting atmosphere"). While the items specifically ask about the impact of the meeting format, we expect that both the format of the meeting as well as the AC chair's style of leadership during the meeting will have an impact on how the auditors

collectively assess the meeting atmosphere. We conduct an ANOVA and find that *AC Chair Leadership Style* ($F(1, 80) = 22.24, p < 0.01$) has a significant effect on meeting atmosphere. *Meeting Format* ($F(2, 80) = 1.93, p = 0.15$) and the interaction effect ($F(2, 80) = 0.49, p = 0.62$) are not significant. The descriptive statistics show that an open AC chair leads to a more positive assessment of meeting atmosphere than a controlling AC chair. These findings are broadly consistent with our

theory, though one could have predicted that the impact of *AC Chair Leadership Style* would be more impactful during private meetings than in meetings with the whole AC. While directionally consistent, the effect of *Meeting Format* is insignificant. Using SEM, we establish that there is no significant link between meeting atmosphere and auditors' information sharing (untabulated, $p > 0.70$) when *Meeting Format* and *AC Chair Leadership Style* are included in the model.

The second identified factor is consistent with participants' assessment of the AC and the AC chair's quality ("quality of the AC & the AC chair"). We expect that the *AC Chair Leadership Style* during the meeting will have an impact on how the auditors assess the Quality of the AC & the AC Chair. Using an ANOVA, we find a significant effect of *AC Chair Leadership Style* ($F(1, 80) = 38.99, p < 0.01$) such that the perceived quality is significantly higher when the AC chair is described as open than when they are described as controlling. *Meeting Format* ($F(2, 80) = 1.09, p = 0.34$) and the interaction term ($F(2, 80) = 0.82, p = 0.44$) are not significant, suggesting that the format of the meeting does not have an impact on how the auditors view the AC. This is sensible given that our participants have a strong understanding of the institutional context, so that their assessment of the committee and the chair is not affected by a factor that is not reflective of the committee's work. As before, we test for mediation using SEM but fail to find a significant link (untabulated, $p > 0.90$).

The third and final factor captures the participants' concerns about sharing the uncovered information ("information sharing concerns") and was previously discussed as part of our mediation analysis. When conducting the EFA, we find that four items do not meaningfully load on any of our three factors (all loadings < 0.4) and exhibit large uniqueness scores (all $u^2 > 0.80$).²⁴

We conduct a more detailed analysis of our participants' audit risk assessments to gain a better understanding of how, if at all, *Meeting Format* and *AC Chair Leadership Style* alter senior auditors' assessments of risk. The participants are asked to "assess the overall audit risk of the [client]" on a seven-point scale from "extremely low" to "extremely high." Across conditions, the average score is 5.21 out of seven, which corresponds to an assessment of "high" risk (as labelled). This is consistent with the idea that the four issues that the auditors learn about during the study raise some concerns about the engagement and the integrity of client management, at least at face value. We conduct an ANOVA, which shows an insignificant effect of *Meeting Format* ($F(2, 80) = 0.67, p = 0.51$) on audit risk. However, *AC Chair Leadership Style* ($F(1, 80) = 3.18, p = 0.08$) is marginally significant, and the interaction term ($F(2, 80) = 3.36, p = 0.04$) is significant. Using tests of simple effects, we observe that *AC Chair Leadership Style* has a significant impact on audit risk assessments when the auditors are scheduled to meet with the AC chair in private ($p = 0.01$) but not in the other two meeting conditions, regardless of management presence (both $p > 0.64$). When the auditors are meeting the AC chair privately before the meeting with the whole AC, they assess the audit risk to be lower (higher) when the AC chair is described as open (controlling). However, audit risk does not significantly affect the auditors' information sharing ($p > 0.38$).²⁵ It is possible that auditors respond to these changes in perceived audit risk not by sharing more information with the AC but by performing additional substantive tests or by adjusting other audit procedures not captured in our experiment.

²⁴ These four items are: "I was concerned that not sharing the information with [the Chair of] the Audit Committee could put the company at risk."; "How do you assess the overall audit risk of the NPI engagement?"; "It is my obligation as the external auditor to share the information with [the Chair of] the Audit Committee."; "Whether the information is shared with [the Chair of] the Audit Committee, or not, is irrelevant."

²⁵ In untabulated analyses, we check if auditors' planned information sharing mediates the effect between our manipulations and audit risk, but we fail to find significant results (all $p > 0.42$).

Lastly, our data suggest that more experienced auditors assess a higher audit risk across experimental conditions, relative to less experienced auditors, even in our very experienced sample. While the average audit risk assessment is 4.94 for Manager-level participants, it increases to 5.35 for Partner-level participants ($F(1, 79) = 3.65, p = 0.06$). Similarly, we find that the number of sessions the participants have attended with AC chairs has a positive impact on participants' audit risk assessments ($F(1, 84) = 5.77, p = 0.02$). This seems to suggest that auditors' personal experience with attending meetings with AC chairs, a very relevant experience given the focus of this study, impacts how auditors assess audit risk in these circumstances and leads them to assess higher audit risk than their less experienced colleagues.

5. Conclusion

In this study, we investigate how AC chair leadership style and AC meeting format jointly affect auditors' tendency to convey discretionary issues to the AC. In an experiment with experienced auditors as participants, we show that an open leadership style by the AC chair can curb the adverse effect of management's presence during the AC meeting on auditors' planned information sharing with the AC. In contrast, auditors share significantly less information with the AC when management is present during the AC meeting, relative to when management is absent, if the AC chair is controlling. To quote one of our participants (in the management present conditions): "[t]his is a sensitive issue since management is in the room. I would suggest doing an in-camera session or a pre-meeting with the AC chair." These findings are consistent with our expectations based on psychological safety theory and align with regulators' initiatives to use executive sessions as a means of facilitating auditor-AC interaction.

We further investigate whether engaging in a private meeting with the AC chair alters auditors' information sharing with the whole AC in subsequent AC meetings. We find that auditors disclose fewer discretionary issues to the whole AC in meetings after they engage in private meetings with the AC chair than when they attend AC meetings only. AC chair leadership style does not affect the number of discretionary issues disclosed by auditors to the whole AC during AC meetings if they previously attended a private meeting with the AC chair. When looking at the total amount of information sharing across meetings, however, the results show that information sharing is not reduced. Our results show that auditors share more of their discretionary information with the AC in total when given the opportunity to meet privately with the AC chair, in addition to the mandated meeting with the full AC.

Our study contributes to the literature on auditor-AC communication and has important implications for regulators, audit committee members, and investors. Prior studies show that active communication between auditors and the AC, which keeps the AC well informed, helps improve auditor judgment and financial reporting quality (Bhaskar et al., 2019; Fiolleau et al., 2013, 2019; Tirole, 2001). Concerned about insufficient auditor-AC communication, regulators have been mandating AC meetings with and without management present to encourage more complete auditor disclosure. Despite regulators' efforts toward improving auditor-AC communication, their effectiveness remains unknown. Furthermore, AC chairs are consistently present across diverse meeting types. To gain a comprehensive understanding of how meeting formats function, it is essential to jointly examine AC meeting format and AC chair leadership style.

Our findings provide support for the efficacy of executive sessions without management presence and suggest the importance of hiring open AC chairs. This type of AC chair can help reduce the pressure brought by management presence and improve auditors' psychological safety, thus increasing the number of discretionary issues reported to the AC. Our results speak to the detrimental effects of hiring controlling AC chairs, as their leadership style fosters psychological unsafety, leading auditors to withhold discretionary information. Our study also reveals that while private meetings can reduce the discretionary issue disclosure

to the entire AC in subsequent AC meetings, the total information shared with the AC chair and the whole AC actually increases. As such, private meetings reinforce the importance and centrality of the AC chair (Compernelle & Richard, 2018) as an information intermediary since it is within the AC chair's discretion whether and which discretionary items to share with the rest of the AC. Our analysis of total information sharing across meetings shows the importance of private meetings with the AC chair to achieve improved transparency between the auditor and the AC.

Our study provides the first evidence of the joint effect of meeting format and AC chair leadership style on the extent of auditor-AC communication. Our findings are also of interest to companies that seek to enhance board power and eliminate inhibitors of open and candid auditor-AC communications. Prior studies show that there are open and controlling AC chair types (Free et al., 2021; Peterson, 1997). Management often prefers to be "in the room" during meetings, and our results suggest that open AC chairs are crucial in encouraging auditors to share more discretionary issues with the AC in those settings. Further analysis also shows that auditors choose to share information directly with the AC chair – and, importantly, more information in total – when given a chance to meet with them in private. These findings support the regulatory efforts in some countries to mandate such meetings. Company directors likely should consider AC chair leadership style when selecting their AC chairs and/or support positive leadership behaviors to facilitate auditor-AC communication. This principle applies to selecting high-ranking firm executives as well. When these executives are receptive and willing to engage in open dialogue, it fosters trust and supports a more efficient and transparent auditor-client communication. Furthermore, auditors need to be made aware of the different AC chair leadership styles and respond by applying the most effective communication strategies to maximize the auditor-AC communication effectiveness. This is echoed by audit firms' increasingly high expectations for the social skills of auditors, especially experienced ones (Bol et al., 2018).

Our study is subject to some limitations which offer fruitful avenues for follow-up studies. First, although we show that auditors disclose fewer discretionary issues to the whole AC after they engage in private meetings with the AC chair than when they attend AC meetings only, it is unclear precisely why they do so. Do auditors not repeat issues shared with the AC chair to the whole AC again because they feel their responsibilities are discharged by notifying the AC chair? Or do the types of issues that auditors share differ depending on the circumstances of the meeting? A more extensive study with a larger pool of discretionary issues and a multi-stage research design in which auditors can choose if, when, how, and why they share discretionary information with the AC and/or the AC chair would provide more informative evidence. Interview studies with auditors can also offer valuable qualitative data to better understand their behaviors and considerations in this complex setting.

Second, the executive sessions are normally held after the AC meetings, with management present. It would be interesting to vary the order of these meetings to see whether the sequence matters. Testing the dynamics of sequential meetings and the interactions across all these meetings is beyond the scope of our study and would benefit from a field experiment. We recognize that this level of cooperation is difficult to obtain from audit firms. This study establishes the first-order effects of the stand-alone AC meeting formats, and the findings have implications for the efficacy of the current regime.

Finally, while we are interested in the moderating role of two specific types of AC chair leadership style, management also varies in its style. The impact of management's presence on auditors' information sharing likely depends on the specific leadership style and approach of management. While this study focuses on the construct of the AC chair leadership style and how it mitigates the chilling effect of management's presence in AC meetings, it opens up the impact of management's approach and other leadership styles for future research. It further

motivates research on how to best identify and nurture AC chairs with desirable leadership styles.

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Data availability

Data will be made available on request.

References

- Aghion, P., & Tirole, J. (1997). Formal and real authority in organizations. *Journal of Political Economy*, 105(1), 1–29.
- Beasley, M. S., Carcello, J. V., Hermanson, D. R., & Neal, T. L. (2009). The audit committee oversight process. *Contemporary Accounting Research*, 26(1), 65–122.
- Bertomeu, J., & Marinovic, I. (2015). A theory of hard and soft information. *The Accounting Review*, 91(1), 1–20.
- Bhaskar, L. S., Hopkins, P. E., & Schroeder, J. H. (2019). An investigation of auditors' judgments when companies release earnings before audit completion. *Journal of Accounting Research*, 57(2), 355–390.
- Bol, J., Estep, C., Moers, F., & Peecher, M. (2018). The role of tacit knowledge in auditor expertise and human capital development. *Journal of Accounting Research*, 56(4), 1205–1252.
- Boo, E. F., Ng, T., & Shankar, P. G. (2021). Effects of advice on auditor whistleblowing propensity: Do advice source and advisor reassurance matter? *Journal of Business Ethics*, 174(2), 387–402.
- Center for Audit Quality. (2025). *Audit committee practices report: Common threads across audit committees* (4th ed.) <https://thecaq.wpenginepowered.com/wp-content/uploads/2025/02/caq-deloitte-audit-committee-practices-report-2025-02.pdf>.
- Cohen, J., Krishnamoorthy, G., & Wright, A. (2010). Corporate governance in the post-sarbanes-oxley era: Auditors' experiences. *Contemporary Accounting Research*, 27(3), 751–786.
- Compernelle, T., & Richard, C. (2018). The audit committee as an interactive process: Insights on the AC chairperson's power. *European Accounting Review*, 27(4), 623–647.
- Deloitte. (2018). *Audit committee resource guide*. Centre for Board Effectiveness. *Deloitte United States*. Available at: <https://www2.deloitte.com/us/en/pages/center-for-board-effectiveness/articles/audit-committee-resource-guide.html>.
- Detert, J. R., & Burris, E. R. (2007). Leadership behavior and employee voice: Is the door really open? *Academy of Management Journal*, 50(4), 869–884.
- Dhaliwal, D. S., Lamoreaux, P. T., Lennox, C. S., & Mauler, L. M. (2015). Management influence on auditor selection and subsequent impairments of auditor independence during the post-SOX period. *Contemporary Accounting Research*, 32(2), 575–607.
- Dodgson, M. K., Agoglia, C. P., Bennett, G. B., & Cohen, J. R. (2020). Managing the auditor-client relationship through partner rotations: The experiences of audit firm partners. *The Accounting Review*, 95(2), 89–111.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383.
- Fiolleau, K., Hoang, K., Jamal, K., & Sunder, S. (2013). How do regulatory reforms to enhance auditor independence work in practice? *Contemporary Accounting Research*, 30(3), 864–890.
- Fiolleau, K., Hoang, K., & Pomeroy, B. (2019). Auditors' communications with audit committees: The influence of the audit committee's oversight approach. *Auditing: A Journal of Practice & Theory*, 38(2), 125–150.
- FRC. (2016). The guidance on audit committees. *Financial Reporting Council*, 1–15. Available at: https://media.frc.org.uk/documents/Guidance_on_Audit_Committees_April_2016.pdf.
- Free, C., Trotman, A. J., & Trotman, K. T. (2021). How audit committee chairs address information-processing barriers. *The Accounting Review*, 96(1), 147–169.
- Gissel, J. L., & Johnstone, K. M. (2017). Information sharing during auditors' fraud brainstorming: Effects of psychological safety and auditor knowledge. *Auditing: A Journal of Practice & Theory*, 36(2), 87–110.
- IAASB. (2016). *International standard on auditing (ISA) 260 (Revised), communication with those charged with governance*. New York, NY: IFAC.
- Kadous, K., Proell, C. A., Rich, J., & Zhou, Y. (2019). It goes without saying: The effects of intrinsic motivational orientation, leadership emphasis of intrinsic goals, and audit issue ambiguity on speaking up. *Contemporary Accounting Research*, 36(4), 2113–2141.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724.

- Knechel, W. R., & Leiby, J. (2016). If you want my advice: Status motives and audit consultations about accounting estimates. *Journal of Accounting Research*, 54(5), 1331–1364.
- KPMG Global. (2019). *The role of the audit committee chair*. Available at: <https://assets.kpmg/content/dam/kpmg/uk/pdf/2019/03/blc-role-of-the-audit-committee-chair.pdf>.
- KPMG Global. (2021). *Audit committee guide – 2021 edition*. Available at: <https://assets.kpmg/content/dam/kpmg/id/pdf/2021/11/kpmg-audit-committee-guide.pdf>.
- KPMG Global. (2017). *Audit committee handbook*. Available at: <https://assets.kpmg/content/dam/kpmg/no/pdf/2017/11/ie-aci-handbook-2017.pdf>.
- KPMG Global. (2015). *2015 global audit committee survey*. Available at: <https://assets.kpmg/content/dam/kpmg/pdf/2015/03/2015-global-audit-committee-survey.pdf>.
- McKinsey. (2021). *Psychological safety and the critical role of leadership development*. Available at: <https://www.mckinsey.com/business-functions/organization/our-insights/psychological-safety-and-the-critical-role-of-leadership-development>.
- Nelson, M. W., Proell, C. A., & Randel, A. E. (2016). Team-oriented leadership and auditors' willingness to raise audit issues. *The Accounting Review*, 91(6), 1781–1805.
- Newman, A., Donohue, R., & Eva, N. (2017). Psychological safety: A systematic review of the literature. *Human Resource Management Review*, 27(3), 521–535.
- NYSE. (2019). *NYSE listed company manual - Section 303A.07*. Available at: <https://www.nyse.com/listings/resources>.
- Peterson, R. S. (1997). A directive leadership style in group decision making can be both virtue and vice: Evidence from elite and experimental groups. *Journal of Personality and Social Psychology*, 72(5), 1107–1121.
- PwC. (2011). *Audit committee effectiveness what works best* (4th ed.) Available at: <https://www.pwc.com/jg/en/publications/audit-comm-effectiveness-what-works-best-2011.pdf>.
- PwC. (2022). *Overseeing the external auditors - How can the audit committee effectively oversee external auditors?*. Available at: <https://www.pwc.com/us/en/governance-insights-center/publications/assets/pwc-overseeing-the-external-auditors.pdf>.
- PwC. (2025). *Audit committee effectiveness: Practical tips for the chair*. Available at: <https://www.pwc.com/us/en/services/governance-insights-center/library/assets/audit-committee-effectiveness-pwc.pdf>.
- Reuters. (2010). *Auditor says it told Lehman board of whistleblower*. Available at: <https://www.reuters.com/article/world/us/auditor-says-it-told-lehman-board-of-whistleblower-idUSTRE62L62D/>.
- Spencer Stuart. (2024). *2024 U.S. spencer stuart board index*. Available at: https://www.spencerstuart.com/-/media/2024/09/ssbi2024/2024_us_spencer_stuart_board_index.pdf.
- Tetlock, P. E. (1983). Accountability and complexity of thought. *Journal of Personality and Social Psychology*, 45(1), 74–83.
- Tetlock, P. E., & Lerner, J. S. (1999). The social contingency model: Identifying empirical and normative boundary conditions on the error-and-bias portrait of human nature. In S. Chaiken, & Y. Trope (Eds.), *Dual-process theories in social psychology* (pp. 571–585). The Guilford Press.
- Tirole, J. (2001). Corporate governance. *Econometrica*, 69(1), 1–35.
- Turley, S., & Zaman, M. (2004). The corporate governance effects of audit committees. *Journal of Management & Governance*, 8(3), 305–332.
- U.S. Congress. (2002). *The Sarbanes-Oxley act of 2002*. Public Law 107-2004. H.R. 3763. Washington, D.C: Government Printing Office.
- Valukas, A. R. (2011). *Lehman brothers holdings inc (Chapter 11) Proceedings Examiner's Report*. Available at: <https://www.jenner.com/en/news-insights/news/lehman-brothers-holdings-inc-chapter-11-proceedings-examiner-s-report>.
- Van Dyne, L., Ang, S., & Botero, I.C. (2003). Conceptualizing employee silence and employee voice as multidimensional constructs. *Journal of Management Studies*, 40(6), 1359–1392.
- Walumbwa, F. O., & Schaubroeck, J. (2009). Leader personality traits and employee voice behavior: Mediating roles of ethical leadership and work group psychological safety. *Journal of Applied Psychology*, 94(5), 1275–1286.
- Wiggins, R. Z., Bennett, R. L., & Metrick, A. (2019). The lehman brothers Bankruptcy D: The role of Ernst & young. *Journal of Financial Crises*, 1(1), 100–123. Available at: <https://elischolar.library.yale.edu/journal-of-financial-crises/vol1/iss1/5>.