

Who's Behind the Curtain? Investors' Reactions to Group Audit Disclosures in the Form AP

John D. Keyser

Case Western Reserve University

Jason L. Smith

University of Nevada, Las Vegas

SYNOPSIS: Transparency concerns related to global group audits led the PCAOB to introduce the Form AP, requiring the lead audit firm to disclose the participation and relative contribution of component audit firms in a group audit. As prior research suggests that investors fail to seek out Form AP information, this study leverages experimental design to explore investors' reactions to group audit information directly provided to them, examining their likelihood to invest based on the percentage of audit work completed by a component audit firm and the lead audit firm's decision to assume or divide responsibility. Results indicate that investors are less likely to invest when a larger portion of the audit is conducted by a component audit firm, regardless of whether the lead audit firm assumes or divides responsibility for the component firm's work. These findings have significant implications for auditors, regulators, and investors concerning group audit transparency and disclosure practices.

Keywords: group audits; audit quality; investor judgment; lead auditor; component auditor.

I. SYNOPSIS AND CONTRIBUTION TO PRACTICE

In an increasingly global economy, companies frequently expand beyond national borders, establishing or acquiring subsidiaries outside their home countries.¹ Due to the geographic dispersion of these global entities, their consolidated financial statements are commonly audited as part of a “group audit,” involving multiple audit firms (Downey and Bedard 2019). According to a recent study, 37.6 percent of the audits of periods between April 2017 and April 2019 were group audits (Burke, R. Hoitash, and U. Hoitash 2020).²

Historically, the participation of multiple audit firms was not disclosed to users who relied on the audited financial statements. In an effort to increase transparency for financial statement users, the Public Company Accounting Oversight Board (PCAOB) proposed a requirement in 2011 that auditors disclose, in the auditor's report, the names of

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John D. Keyser, Case Western Reserve University, Weatherhead School of Management, Department of Accounting, Cleveland, OH, USA; Jason L. Smith, University of Nevada, Las Vegas, Lee Business School, Department of Accounting, Las Vegas, NV, USA.

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¹ Dunbar, Black, Duxbury, and Schultz (2017) identify 14,428 U.S. corporations that controlled one or more foreign corporations. In 2020, U.S. multinational corporations employed more than 42 million workers, with approximately 13.6 million located outside the United States (Bureau of Economic Analysis 2022).

² For example, the largest multinational corporation in the world—Walmart—reported global revenues of \$611 billion for the year ended January 31, 2023 (Walmart 2023). Because of its operations in the United States, Africa, Canada, Central America, Chile, China, India, and Mexico (Walmart 2023), the annual audit for Walmart's consolidated financial statements involved at least 12 audit firms located in various parts of the world (PCAOB 2023).

any participating component audit firms involved in the audit (PCAOB 2011). At that time, PCAOB Chairman Doty explained his rationale for proposing this requirement:

I am concerned about investor awareness. I have been surprised to encounter many savvy business people and senior policy makers who are unaware of the fact that an audit report that is signed by a large U.S. firm may be based, in large part, on the work of affiliated firms. Such firms are generally completely separate legal entities in other countries. Enhanced transparency into the composition of cross-border audits should help investors gain a better understanding of how an audit was conducted and make more informed decisions about how to use the audit report. (Doty 2011)

Public accounting firms initially objected to the PCAOB's proposal. For example, one firm's comment letter included the following:

We think that disclosing the identity of Audit Participants in the audit report is unlikely to provide meaningful information to investors and would muddy the clear accountability of the principal auditor for the audit. We believe that this proposal also raises additional litigation concerns. (PwC 2012)

In contrast to the accounting firms' opposing view, investors generally supported the proposal. For example, one institutional investor commented, "As indicated, we believe that investors need more information about certain other participants in the audit and...the Board should use the Amendments to satisfy those needs" (Mahoney 2014).

The PCAOB ultimately modified the proposal to require the lead audit firm to disclose this information in a new form—the Form AP—within 30 days of the auditor's report (PCAOB 2015). The Form AP requires the lead audit firm to disclose the individual firm names and specific percentages of work performed by each participating component audit firm that individually provided 5 percent or more of the total audit hours for the consolidated audit engagement.³ Thus, investors can now use information contained in the Form AP to better understand the identity and relative contributions of the lead audit firm and participating component audit firms.

The Form AP also requires the public disclosure of whether or not the lead audit firm assumes or divides responsibility for work performed by a component audit firm. Prior to the Form AP requirement, the involvement of a component audit firm was only evident to third parties in rare instances when the lead audit firm *declined* to assume responsibility for the component audit firm's work. In that situation, the lead audit firm's report describes the division of responsibility, including a disclaimer for the work performed by the component audit firm. A separate report, issued by the component audit firm, provides an opinion on the work they performed. In contrast, a decision by the lead audit firm to *assume* responsibility for the work of a component audit firm—both historically and under the new Form AP requirements—means there is no mention of the component audit firm in the auditor's report, and no separate report is issued by the component audit firm; the *only* disclosure that a component audit firm participated in the audit is in the Form AP filing.

Thus, the PCAOB's introduction of the Form AP allows investors to pull back the curtain and observe the nature and amount of participation by a component audit firm, regardless of the lead audit firm's decision to assume or divide responsibility. However, given the PCAOB's compromise to not include these disclosures in the auditor's report, investors must look beyond the 10-K to find this information. Importantly, research suggests that investors often fail to search for information about component audit firm participation (Hux 2021), suggesting that many investors remain unaware of the involvement of component audit firms. As such, it's not surprising that archival examinations of investors' reactions to Form AP data fail to find significant results (e.g., Doxey, Lawson, Lopez, and Swanquist 2021).

Given the somewhat surprising dissonance between investors' expressed support of enhanced group audit disclosures and research results suggesting that investors either (1) aren't searching for Form AP data (Hux 2021) or (2) are not responding to information disclosed in the form (Doxey et al. 2021), we leverage the strengths of experimental design to explore an alternative environment wherein investors are provided information about the group audit (i.e., the percentage of the audit completed by a component audit firm; the lead audit firm's decision to assume or divide responsibility) without the need to search beyond the auditor's report. Consistent with our expectations, we find that investors are less likely to invest in a company when a larger percentage of the overall audit is completed by a component audit firm. Importantly, we find that this relative reluctance to invest is not mitigated by the lead audit firm's decision to assume or divide responsibility for the component audit firm's work.

To further explore this latter result, we subsequently surveyed investors to explore their understanding of the lead audit firm's decision to assume or divide responsibility for the work of a component audit firm, finding that they are

³ In addition, the lead audit firm must disclose the quantity—without naming the firms—of other participating audit firms that individually provide less than 5 percent of the total audit hours, also disclosing an aggregate percentage of total audit hours completed by this set of component audit firms.

generally unaware of the differences in audit planning, performance, and reporting. This lack of contextual awareness helps explain the lack of interest in Form AP data found in prior research (e.g., [Hux 2021](#); [Doxey et al. 2021](#)), as well as our own findings that investors appear to be indifferent to the lead audit firm's assume/divide decision. In a follow-up experiment, we educated investor participants about the lead audit firm's varying roles and responsibilities in the work of a component audit firm, highlighting significant differences between the assume/divide decision scenarios.⁴ Even after educating them about these differences, investor participants remained indifferent to the assume/divide decision. This additional evidence is consistent with findings by [Doxey et al. \(2021\)](#) and [Mao, Ettredge, and Stone \(2020\)](#), who find no evidence that lead audit firms who assume responsibility provide higher audit quality than lead audit firms who divide responsibility.

This study contributes to group audit and Form AP literature by further examining the information content and investor preferences related to disclosures about participants in group audits. Because Form AP disclosure requirements fundamentally remove the historical opacity of component audit firm involvement in group audits, the potential benefits and incentives of a lead audit firm assuming responsibility have changed, possibly prompting lead audit firms to reconsider their historical preference for assuming responsibility. Thus, research examining the relative effects of this new information on financial statement users is important for regulators, auditors, public companies, and financial statement users.

II. THEORY AND HYPOTHESIS DEVELOPMENT

A principal motivation behind the PCAOB's Form AP requirement was to enhance the transparency of group audits for financial statement users, including the percentage of the audit completed by one or more component audit firms and the lead audit firm's decision to assume or divide responsibility for their work ([PCAOB 2015](#)).

Relative Contribution by a Component Audit Firm

In a group audit, more than one audit firm participates in the overall completion of the audit. When more than one person or entity is responsible for a task, it can be difficult to coordinate efforts and to determine the respective responsibilities of each party ([Mastop 2010](#); [Nollkaemper 2018](#); [Thompson 2014](#); [Van de Poel 2011](#)). Additionally, an aversion to diffused responsibility is evident in customers' preferences to hire a single vendor and "throat to choke," a colloquialism that "describes the advantage of purchasing goods or integrated services from a single vendor" ([Horii and Behlen 2021](#), 578), thus mitigating diffusion of responsibility and clarifying accountability in the event that something goes wrong ([Bostick 2007](#); [Kaplan 2007](#); [Wright 2014](#)).

Given these perceived benefits of a single service provider and an aversion to diffused responsibility and accountability, we expect investors to prefer more concentrated task ownership and responsibility by a lead audit firm. Thus, as the percentage of a financial statement audit performed by a component audit firm increases, we expect investors to be less willing to invest.

H1: Investors are less likely to invest when a component audit firm performs a larger percentage of the overall audit.

Assuming or Dividing Responsibility

In group audits, lead audit firms have two alternatives with respect to the work of a component audit firm: assume responsibility for the component audit firm's work or divide responsibility and exclude procedures performed by the component audit firm from the lead audit firm's opinion.

Assume Responsibility

When the lead audit firm assumes responsibility for the work of a component audit firm, they take a more active role in directing the work of the component audit firm, and they perform due diligence regarding the quality of work performed. For example, the lead audit firm provides instructions to the component audit firm with respect to various

⁴ The educational materials explained that when the lead audit firm *assumes* responsibility, they determine component materiality, participate in component-level risk assessment and selection of responses to significant risks of material misstatement, review portions of the component audit firm's work, and evaluate the materiality of misstatements arising at the component level. In contrast, when the lead audit firm *divides* responsibility, the component audit firm is solely responsible for determination of component materiality, identification of risks of material misstatement and responses to those risks, and the evaluation of identified misstatements. Also, the lead audit firm does not review the component audit firm's workpapers in a divided responsibility audit.

matters, including materiality and risks of material misstatement. The lead audit firm also reviews information provided by the component audit firm, including, for example, the results of procedures performed by the component audit firm to address significant risks, a schedule of uncorrected misstatements, and a list of internal control deficiencies known to the component audit firm.⁵ In addition, the lead audit firm may visit the component audit firm or request additional audit documentation for review. Finally, when a lead audit firm assumes responsibility for the work of a component audit firm, they issue a standard audit report with no reference to the work of the component audit firm, and no report by the component audit firm is included in the 10-K.

Divide Responsibility

When the lead audit firm chooses to divide responsibility for work performed by a component audit firm, the lead audit firm largely cedes control of the planning and performance of the component audit and performs only limited due diligence regarding the reputation, independence, and competence of the component audit firm. In these situations, the component audit firm determines materiality and assesses risk at the component level. When dividing responsibility, the lead audit firm makes reference to the work of the component audit firm in their audit report, indicating the dollar amount or percentage of assets and revenue audited by the component audit firm. Additionally, the component audit firm's opinion is separately included with the lead audit firm's report on the consolidated financial statements, allowing investors to access and view the opinion of the component audit firm.

Theoretical and practical expectations present cogent arguments for why investors may prefer either an assumed-responsibility or divided-responsibility approach to group audits. Several convincing arguments exist for why investors may prefer the assumed-responsibility approach. First, marketing and management research suggests that manufacturers and service providers use umbrella branding (i.e., apply their well-known brand to additional products or services) to extend perceptions of quality and related price premiums to new or unrelated offerings (e.g., [Kapferer 1997](#); [Aaker 2004](#)). Empirical research across various fields has shown that consumers and investors prefer high-profile brand names, leading to a sustainable price premium (e.g., [Aaker 1991](#); [Berry 1988](#)). Evidence of a Big 4 premium (e.g., [DeFond and Zhang 2014](#); [Hay and Knechel 2017](#); [Firth and Smith 1992](#)) suggests that the same umbrella strategy may extend to investors' preferences for audit services provided by high-profile public accounting firms.

In a representative public comment letter to the PCAOB, [Ramon \(2016\)](#) outlines three reasons why investors might prefer that the lead auditor assume responsibility. First, she posits that it is difficult to enforce and measure audit quality when more than one auditor is responsible for the audit. Second, dividing responsibility may create a perception that the lead auditor is blameless in the event of an error in the work performed by the component auditor. Third, divided responsibility with overseas audit firms may reduce investors' litigation remedy in jurisdictions outside the United States.

From a practical perspective, some potential advantages to a divided-responsibility approach exist. First, consistent with recent research describing how challenges in coordinating group audits may adversely affect audit quality ([Burke et al. 2020](#)), a divided-responsibility audit gives component auditors more autonomy, thereby reducing the amount of coordination and oversight required by the lead auditor. Second, when the lead auditor plans to divide responsibility, the component auditor's singular focus on the component likely leads to lower materiality thresholds, risk assessments, audit procedures, and evaluations of evidence at the component level, potentially increasing the precision and relevance of audit procedures.

Sociology and psychology research documents several adverse effects of the innate diffusion of responsibility that exists in group settings (e.g., [Detert, Treviño, and Sweitzer 2008](#); [Janis 1991](#); [Karau and Williams 1993](#)), including social loafing, groupthink, moral disengagement, and variation in the quality of task performance. In a group audit setting, diffused responsibility could cause investors to perceive reductions in audit quality and a resulting increase in the risk of material misstatements in the financial statements, leading to a lower likelihood of investing.

Finally, attribution of responsibility occurs when observers develop beliefs about the ultimate cause of an outcome and about the blame or praise merited by those involved. When outside observers are aware that multiple parties share responsibility in a jointly produced outcome, the accurate attribution of responsibility is made more difficult (e.g., [Arceneaux 2006](#)). As it pertains to a group audit setting, this would suggest that investors prefer that the lead auditor assume responsibility for the work of a component auditor, providing a single accountable party for the entire financial statement audit.

Although long-standing historical practices and regulators' expressed preferences appear to favor the lead audit firm assuming responsibility, the question of investor reactions or preferences to the decision remains empirically

⁵ The applicable requirements can be found in AU-C 600 ([AICPA 2023](#)) and Auditing Standard No. 1205 ([PCAOB 2024](#)).

unknown. As such, we present the following research question in a setting where investors are freely provided the underlying information:

RQ1: Are investors more likely to invest when the lead audit firm assumes responsibility (versus divides responsibility) for the work performed by a component audit firm?

III. METHOD

Experimental Design, Task, and Procedures

We conduct a 2×2 between-subjects experiment with 150 individual investors using a survey instrument administered online with Qualtrics.⁶ Participants were randomly assigned to experimental conditions and were asked to assume the role of an investor, answering questions about a fictional U.S. beverage manufacturing, bottling, and distribution company with a significant Brazilian subsidiary. Company background and summary financial information were provided, including revenue, net income, total assets, and long-term debt for the past three years, as well as stock price trends over that period.

Independent Variables

To manipulate the percentage of the audit work completed by a component audit firm, we vary the relative size of the Brazilian subsidiary (*Component Size*) between 5 percent (*Smaller*) and 40 percent (*Larger*) of the overall company's operations and of the consolidated financial statements.⁷ To explore the effects of the lead audit firm's decision to assume versus divide responsibility for work performed on the foreign subsidiary, we manipulate the *Assignment of Responsibility* by the lead audit firm (*Assume/Divide*).⁸ Participants assigned to the *Assume* condition read the unqualified audit report of the lead audit firm. Participants assigned to the *Divide* condition were provided two audit reports: the lead audit firm's unqualified report, making reference to the work of the component audit firm, and the component audit firm's unqualified report.^{9,10}

Dependent Variable

Our primary dependent variable is investors' expressed likelihood to invest in the company (*Likelihood to Invest*), which was measured on an 11-point Likert scale.¹¹

Participants

Following Rennekamp (2012) and others (e.g., Rapley, Robertson, and Smith 2021), we obtain data from 150 individual investor participants through Amazon's Mechanical Turk (AMT). Consistent with prior research (e.g., DeZoort, Holt, and Stanley 2019; Rennekamp 2012) and best practices identified by Hunt and Scheetz (2019), we use a variety of *a priori* screening questions to identify nonprofessional investors.¹² As shown in Table 1, participants in our study appear to be appropriate proxies for individual investors.

⁶ This study was approved by the Institutional Review Board (IRB) for Human Participants at the universities where this study was performed.

⁷ As the portion of the audit performed by the lead auditor decreases, the diffusion of responsibility increases. We manipulate the size of the component in order to examine the impact of diffusion of responsibility. We select these two component sizes to represent the smallest and largest relative contributions that a named component audit firm could make in a group audit. Five percent is the lowest contribution percentage where a component audit firm is required to be named in the Form AP. On the other hand, 40 percent approaches the maximum contribution allowed by component audit firms in a group audit setting.

⁸ Given the exploratory nature of RQ1 and the opposing practical and theoretical arguments regarding the potential for investors to respond more favorably to either an assume or divide scenario, it is reasonably possible that we will find no evidence of a systematic investor preference between the two approaches. To address this possibility with our experimental design, we include an additional experimental condition (*Qualify*) to create a highly predictable investor-preference scenario as a contrast case against both the assume and divide scenarios. In this contrast condition, the lead audit firm qualifies the audit opinion by scoping out the component and providing no assurance on the related financial information.

⁹ After viewing their respective audit reports, participants in both *Assume* and *Divide* conditions were subsequently informed that the company was subject to a group audit involving a lead audit firm and a component audit firm. This subsequent disclosure reflects the information available in the PCAOB's Form AP. Participants in the *Qualify* condition read the report of the lead audit firm, which was a qualified opinion based on a material scope limitation (i.e., the component was not subject to audit procedures).

¹⁰ We make no reference to the global network affiliation of either firm, instead referring simply to the auditors as the "U.S. accounting firm" and the "Brazilian accounting firm."

¹¹ "How likely would you be to invest in AC Beverage Company?" (0 = "highly unlikely" to 10 = "highly likely").

¹² Screening questions required participants to be U.S. citizens, at least 18 years old, experienced in trading individual stocks, knowledgeable of fundamental investing and auditing concepts, and not identifying as a professional investor or Certified Public Accountant.

TABLE 1
Descriptive Statistics

Panel A: Basic Information

	Small		Large		All
	Assume	Divide	Assume	Divide	
Sample size	35	39	37	39	150
Duration (in minutes)	15.2	14.8	15.2	14.4	14.9
Age	42.3	40.5	40.2	43.1	41.5

No significant differences were observed across treatment conditions for duration or age.

Panel B: Overall Statistics: Education

	n	%
Undergraduate degree	88	59%
Graduate degree	61	41%
No response	1	1%
	150	

Panel C: Overall Statistics: Courses Taken

Courses Taken	Accounting		Finance	
	n	%	n	%
0	39	26%	45	30%
1–3	79	53%	70	47%
4–6	22	15%	22	15%
7 or more	10	7%	13	9%
	150		150	

Panel D: Overall Statistics: Credentials

	n	%
Certified Financial Planner	8	5%
Certified Management Accountant	1	1%
Certified Internal Auditor	2	1%
Registered Investment Advisor	6	4%
Series 6	6	4%
Series 7	6	4%

Panel E: Overall Statistics: Gender

	n	%
Male	96	45%
Female	54	25%
	150	

(continued on next page)

TABLE 1 (continued)

Panel F: Investment Experience and Practices: Source of Financial Information

	n	%
Internet	114	76%
Annual reports	105	70%
Blogs	88	59%
Company website	86	57%
Advisor	53	35%
Newspapers	48	32%
Family/friends	51	34%
Magazines	34	23%
Television	30	20%
Other	6	4%

Panel G: Investment Experience and Practices: How Often Do You Refer to the Auditor's Opinion...

	n	%
Never	17	11%
Rarely	55	37%
Sometimes	45	30%
Frequently	26	17%
Always	7	5%
	150	

Panel H: Investment Experience and Practices: How Many Investment Decisions Have You Made in the Past 12 Months?

	n	%
None	3	2%
1–5	48	32%
6–10	35	23%
11–15	21	14%
16–20	13	9%
More than 20	30	20%
	150	

Panel I: Investment Experience and Practices: Where Do You Place Trades?

	n	%
Online	123	82%
Broker	28	19%
Advisor	26	17%
Other	2	1%

Panel J: Investment Experience and Practices: Income

	n	%
Less than \$20K	2	1%
\$20–50K	13	9%
\$50–100K	62	41%
More than 100K	73	49%
	150	

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TABLE 1 (continued)

Panel K: Investment Experience and Practices: Portfolio Value

	n	%
Less than \$50K	48	32%
More than \$50K	95	63%
Prefer not to respond	7	5%
	150	

Panel L: Investment Experience and Practices: Nature of Portfolio

	n	%
Stocks	132	88%
Mutual funds	113	75%
EFTs	98	65%
Cash	86	57%
Real estate	37	25%
Bonds	34	23%
Commodities	27	18%
Other	8	5%

IV. RESULTS

Manipulation Checks

To measure whether participants attended to the independent variable manipulations, they were presented with manipulation check questions as part of the post-experimental questionnaire. When asked to assess the relative size of the foreign subsidiary, participants in the *Smaller* condition (i.e., component is 5 percent of total operations) provided a mean response of 5.28 percent (Median = 5 percent) (t-statistic₇₅ = 1.880, $p = 0.064$), whereas those in the *Larger* condition (i.e., component is 40 percent of total operations) reported a mean response of 39.72 percent (Median = 40 percent) (t-statistic₇₃ = 0.588, $p = 0.558$).¹³ A total of 131 participants (87 percent) correctly reported whether the lead audit firm assumed (or divided) responsibility for the entire audit.¹⁴ These results suggest that participants were attentive to and understood the nature of the independent variable manipulations.

Results of Hypothesis Testing

The percentage of audit work completed by a component auditor was not historically observable to investors, but the PCAOB's Form AP disclosure requirements have made this information accessible. Table 2 reports descriptive statistics and ANOVA results of our hypothesis testing. Consistent with our first hypothesis, we find that investors who are provided with information on the contributions of a component audit firm are less willing to invest when the percentage of work performed by that component audit firm is larger (6.24) versus smaller (7.24; $p < 0.001$, one-tailed).

The long-standing practice of assuming responsibility, which presented the illusion of a one-firm approach to investors by cloaking the involvement of a component audit firm, was rendered moot with the Form AP disclosures. In response to our exploratory research question to understand if the lead audit firm's decision to assume or divide responsibility would mitigate investors' reluctance, we find no difference in investors' willingness to invest based on whether the lead audit firm chooses to assume (6.60) versus divide (6.86; $p = 0.377$, two-tailed) responsibility for the work of the component audit firm.¹⁵

¹³ t-statistics test the difference between participants' responses and the relative size of the subsidiary, as disclosed in the case materials.

¹⁴ We performed the data analysis both with the full sample and excluding the 19 participants who failed this manipulation check. The statistical inferences are unchanged across these groupings, so we report results using the full sample.

¹⁵ As ours is the first study we know of to explore investors' preferences for the lead audit firm to assume or divide responsibility, we included the *Qualify* condition as a straw-man test of internal validity to provide evidence of participants' attention to the variable manipulations and of their understanding of and preference for assurance from the auditor. As expected, investors demonstrated a strong aversion to the *Qualify* condition, relative to either the *Assume* or *Divide* conditions. A Helmert planned contrast analysis reveals that investors' likelihood to invest is lowest when the auditor provides *no* assurance regarding the component (Mean = 5.14; $p < 0.01$), but there is no observed difference when the auditor assumes responsibility (6.60) versus divides responsibility (6.86; $p = 0.469$) for the work of the component audit firm. Additionally, investors are especially averse to the *Qualify* condition when the component size is larger (Mean = 4.47) versus smaller (5.87). Thus, we believe investors understood and appropriately attended to this manipulation, providing additional confidence regarding our no-difference finding.

TABLE 2
Likelihood to Invest

Panel A: Likelihood That Participants Would Invest, Mean (Std. Dev.)

<i>Nature of Assurance</i>	<i>Small</i>	<i>Large</i>	<i>Row Totals</i>
<i>Assume</i> (i.e., lead auditor assumes responsibility for work of component auditor)	7.26 (1.74) n = 35	5.97 (2.05) n = 37	6.6 (2.00) n = 72
<i>Divide</i> (i.e., lead auditor divides responsibility with component auditor)	7.23 (1.69) n = 39	6.49 (1.45) n = 39	6.86 (1.61) n = 78
	7.24 (1.70) n = 74	6.24 (1.77) n = 76	6.73 (1.81) n = 150

Panel B: ANOVA Model

	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p-value</i>
<i>Nature of Assurance</i>	1	2.227	0.735	0.393
<i>Component Size</i>	1	38.471	12.698	<0.001
<i>Assurance * Size</i>	2	2.734	0.902	0.344
Error	146	3.030		

To summarize, we find that investors have a strong preference for the lead audit firm to perform a greater percentage of work in a group audit engagement, and their preferences appear unaffected by the lead audit firm's decision to assume or divide responsibility for the work of the component audit firm.

Supplemental Analysis

The results of our main experiment suggest that investors are indifferent to the lead audit firm's decision to assume or divide responsibility for the work of a component audit firm. However, it is unclear whether these results are driven by investors' ignorance regarding the differences between the two scenarios or by an informed indifference. In order to further investigate the matter, we surveyed an additional 89 individual investors regarding their understanding of the differences and implications of the assume/divide decision in a group audit setting. In untabulated survey results, we find that investors are generally unaware of (1) the information about group audits found in Form AP¹⁶ and (2) the differences inherent in the lead audit firm's decision to assume or divide responsibility.¹⁷

Based on the results of that survey, we conducted a second experiment in which we educated investor participants about group audits and the significance of the lead audit firm's assume/divide decision. This experiment employed 47 individual investors in a 1 × 2 between-subjects design where we manipulated the lead audit firm's decision of whether to assume or divide responsibility for the work of the component audit firm. The size of the component was held constant.

Participants first viewed contextual information explaining the lead audit firm's decision of whether to assume or divide responsibility and the differences in audit planning, performance, and reporting that result from that decision. Participants viewed a table that compared and contrasted responsibility for various decisions (e.g., materiality, significant risks, evaluation of the materiality of misstatements) under the two scenarios. After reviewing the educational materials, participants completed the same experiment as the initial investor participants, except that component size was held constant at the *Large* condition.

¹⁶ On a five-point Likert-type scale, where 1 is "I was not at all aware of this" and 5 is "I was fully aware of this," the mean (median) response to a statement describing the Form AP and its information disclosures related to group audits was 2.00 (2.00), with 40.4 percent of respondents selecting "not at all aware."

¹⁷ On an 11-point Likert-type scale where 0 is "Strongly Disagree" and 10 is "Strongly Agree," mean responses to a statement suggesting that the respondent has "a good understanding of the extent of the lead audit firm's involvement in the audit of a foreign subsidiary when that lead audit firm assumes (divides) responsibility for audit work performed by a component auditor," mean responses were 3.67 (3.60) with p-values < 0.001 (two-tailed tests of a difference from the scale midpoint of 5).

The results of the follow-up experiment are consistent with those of the initial experiment: although investors were directionally more likely to invest when the lead audit firm assumes responsibility (mean = 6.40) compared to when responsibility is divided (mean = 5.73), the difference is not significant ($F = 2.13$; $p = 0.15$, two-tailed). Thus, even when investors are directly educated about differences in audit planning, performance, and reporting under an assume versus divide setting, they appear to be indifferent to the approach.¹⁸

V. CONCLUSIONS

Given that public-company audits are increasingly being performed by a team of a lead audit firm and one or more component audit firms, research examining investors' responses to various dynamics of these group audits is timely and important. In light of the PCAOB's concerted efforts to enhance the transparency of group audits, our study contributes to a budding stream of research examining the information content and effect of Form AP disclosures, which has generally found that investors do not search for Form AP disclosures or use that information to inform their investment decisions.

We find that investors are less likely to invest in a company when a component audit firm completes a relatively large percentage of the group audit work. Even when educated about the various audit planning, performance, and reporting differences that exist, investors' preferences are not significantly affected by the lead audit firm's decision to assume versus divide responsibility for the work of a component audit firm. These results provide valuable feedback to regulators regarding the accessibility and information content of Form AP disclosures, particularly as group audits remain a regulatory priority. Specifically, these results support the value of clearly disclosing the relative contributions of participating auditors in group audit settings, regardless of the lead audit firm's decision to assume or divide responsibility. Given these results, regulators may wish to consider whether investors would benefit from having this information disclosed in the auditor's report versus in the separate Form AP.

In addition, lead audit firms and their clients should be interested in investors' apparent concerns about a component audit firm performing significant portions of the group audit, particularly if investors are indifferent to the lead audit firm's decision to assume or divide responsibility. Additional research may be needed to inform regulators and practitioners on potential mechanisms to provide assurance to investors regarding the quality of work performed by component audit firms, particularly when a component audit firm performs a relatively large percentage of the overall audit.

Finally, as group audits become increasingly prevalent, we encourage additional research that further enhances our understanding of investors' and other stakeholders' perceptions and judgments related to group audits. For example, whereas our study examines the effect of group audit disclosures on investors' preferences, future research might examine these effects in other relevant settings (e.g., auditor litigation, regulatory inspection and enforcement, decisions of other financial statement users).

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¹⁸ In addition to the supplemental analyses discussed here, we also performed additional analyses to explore the potential mediating effects of two process measures—*Perceived Audit Quality* and *Perceived Risk of Material Misstatement*—on our observed results. As described in the [Online Appendix](#), we find that the effect of *Responsibility* on *Likelihood to Invest* is serially mediated by *Perceived Audit Quality* and *Perceived Risk of Material Misstatement*.

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