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PRACTITIONER SUMMARY

How Does High Uncertainty in Accounting Estimates Impact Auditor Litigation Risk? Opposite Effects in Jury Trials and Attorneys' Out-of-Court Settlements

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SUMMARY: Research suggests that the amount of inherent uncertainty in contemporary accounting estimates has increased in recent years, potentially increasing audit litigation risk. We review a recent study that finds that high estimate uncertainty impacts auditor litigation risk in opposite directions, depending on whether the litigation is decided in a jury trial or settled by attorneys out of court. Mock jurors and attorneys specialized in corporate and securities law read the same case about an alleged undetected material misstatement, with jurors judging auditor negligence and attorneys planning proposed out-of-court settlement negotiations on behalf of auditors. Results show that, under common conditions, mock jurors found auditors *less* negligent when estimate uncertainty was high. However, attorneys predicted the mock jurors to find auditors *more* negligent when estimate uncertainty was high, leading them to concede *more* on behalf of auditors in their proposed settlements.

Keywords: audit litigation risk; high estimate uncertainty; juror judgments; attorneys' outof-court settlements.

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I. INTRODUCTION

R esearch suggests that contemporary accounting estimates require increasingly high levels of valuation uncertainty, which may make auditors more likely to experience negative outcomes in litigation (e.g., Christensen, Glover, and Wood 2013; Craig, Smieliauskas, and Amernic 2017). We review a recent study by Pickerd and Piercey (2021), which examines the way that high estimate uncertainty impacts auditor litigation risk and how it does so differently depending on whether an audit litigation case ends in a jury trial or is settled by attorneys out of court.

The vast majority of accounting research on audit litigation examines how aspects of an audit affect the judgments of jurors, even though audit litigation is most often settled by attorneys out of court (De Meyst, Lowe, Peecher, Pickerd, and Reffett 2021). Researchers have assumed that juror judgments provide a good representation of auditors' overall litigation risk, even for cases that attorneys settle out of court, since attorneys would presumably base their negotiations on how vulnerable auditors would be to jurors if the case were to go to trial (Donelson, Kadous, and McInnis 2014). Although it is reasonable to expect that attorneys would negotiate a settlement based on their predictions of how jurors would judge the case (Seabury 2013), prior research suggests that highly credentialed experts have difficulty accurately predicting novices' judgments, often underestimating the rationality of those judgments (e.g., Camerer and Johnson 1997; Pronin, Gilovich, and Ross 2004; Torngren and Montgomery 2004). As a result, attorneys' *beliefs* about how jurors would decide a case could differ from how jurors *actually* decide it.

Pickerd and Piercey (2021) conducted the first and only study of which we are aware that directly compares the judgments of mock jurors and attorneys evaluating the same case.¹ Their study finds that high estimate uncertainty, defined as susceptibility to an inherent lack of precision in measurement (American Institute of Certified Public Accountants (AICPA) 2011), impacts auditor liability in opposite directions, depending on how the case is resolved. The purpose of this article is to summarize the study of Pickerd and Piercey (2021) and report implications of the study's results for practice and academics.

II. STUDY BACKGROUND AND FINDINGS

To compare the judgments of jurors and attorneys, Pickerd and Piercey (2021) had mock jurors and attorneys read a hypothetical audit litigation case, adapted from prior research (Kadous 2000, 2001; Peecher and Piercey 2008). Pickerd and Piercey (2021) used 218 college students as mock jurors. Extensive prior research on juror judgments shows that college students behave extremely similarly to wider populations of jurors (e.g., Bornstein 1999). Additionally, Pickerd and Piercey (2021) recruited 87 attorneys with corporate, business, or securities law specializations. Table 1 provides demographic information for the mock jurors and attorneys.

Both groups of participants read a case of alleged auditor negligence following an alleged material misstatement. For the mock jurors, the case began with introductory materials providing them with an overview of basic auditing concepts, similar to what jurors would learn during an actual trial, followed by five questions verifying their understanding of these concepts. For the attorneys, the case began by informing them that college students acting as mock jurors had *also* completed this study, as well as a summary of the extensive research showing that college students tend to form



¹ A new stream of research is beginning to understand attorney judgments better in settings of auditor litigation through qualitative interviews of attorneys (De Meyst et al. 2021). However, Pickerd and Piercey (2021) provide a direct comparison of juror and attorney judgments, evaluating the same case using larger samples, statistical comparisons of their judgments, and a research design that provides more evidence of causation in terms of how factors influence auditor liability in out-of-court settlements.

TABLE 1

Pickerd and Piercey's (2021) Participant Demographics

Panel A: Mock Jurors' Demographics	
Percentage female	44%
Average years of post-high school education	2.5
Average accounting courses completed	1.7
Average management, accounting, economics college courses completed	4.1
Panel B: Attorneys' Demographics	
Percentage female	13.5%
Average years of legal experience	21.4
Percentage specialized in business, corporate, or securities law	95%
Percentage specialized in litigation	58%

judgments similarly to broader populations of jurors across a variety of cases and contexts.² In addition, since the attorneys would be negotiating proposed settlements on the basis of how they thought jurors would decide the case if it were to go to trial, and since the study would ultimately be comparing the attorney's *predictions* of the mock jurors' judgments to their *actual* judgments, Pickerd and Piercey (2021) provided the attorneys with information about the mock jurors. Specifically, the case materials provided the attorneys with the college students' demographics, the review of basic auditing concepts that the mock jurors had read, and the percentages of comprehension questions that they had answered correctly. Thus, the attorneys knew the mock jurors' demographics, that they had a basic understanding of relevant auditing concepts, and that they had paid attention.³

Next, in the case materials, mock jurors and attorneys read identical information about a hypothetical case of alleged auditor negligence in the audit of Big Time Gravel, a gravel and cement company. The case described the company's mining machinery, which is extremely customized and therefore lacks readily available market prices. As a result, Big Time Gravel relies on a mathematical model to estimate the fair value of the machinery and determine whether an impairment loss is required.

For the next portion of the case, the mock jurors and attorneys were randomly assigned to receive one of two different versions of information about the fair value estimate, which varied whether the amount of uncertainty inherent in this valuation estimate was high or low, holding everything else constant. In the high (low) estimate uncertainty conditions, the case told participants that the estimation is based on highly subjective (objective) and very complicated

² Pickerd and Piercey (2021) informed the attorneys of these research findings so that they would think about the mock jurors with the best available evidence from the research literature on mock jurors. Specifically, decades of juror research find that college students form judgments similarly to actual jurors (e.g., Bornstein 1999), a finding that has been replicated multiple times in audit litigation research (Kadous 2001; Cornell, Warne, and Eining 2009; Grenier, Pomeroy, and Stern 2015).

³ A primary purpose of Pickerd and Piercey (2021) was to illustrate that attorneys may not accurately predict how estimate uncertainty affects juror judgments, which could then affect their proposed settlement negotiations strategies (Donelson et al. 2014). Therefore, Pickerd and Piercey (2021) deliberately provided the attorneys with information about the mock jurors they would be predicting. Had the study not done so, it would leave open the alternative explanation that the attorneys would have predicted the mock jurors' reactions to estimate uncertainty better if only they had known the mock jurors' demographics or how well they understood the case facts. In contrast, the mock jurors did not need to predict how attorneys would settle the case, and, therefore, Pickerd and Piercey (2021) did not provide them with attorney demographic information.

(straightforward) assumptions about the cash that the machinery will generate, as well as other difficult (simple) projections about the rather unpredictable (predictable) costs of operating the machinery. The case described the range of estimate uncertainty as very imprecise and uncertain (precise and certain).

Next, all participants learned that, after the audited financial statements were issued (with an unqualified audit opinion), the company's machinery encountered problems causing significant costs and lost revenues. Investors sued the auditors, alleging that the poor condition of the machinery should have been apparent to the auditors during the audit and that a much larger impairment loss should have therefore been recognized. Failure to recognize the full impairment loss caused Big Time Gravel to just meet analysts' earnings forecasts.

Next, the case materials provided participants with the income statement containing the alleged misstatement, with columns containing the actual numbers as reported, the numbers that the plaintiffs allege should have been reported, and the alleged misstatement, stated in both absolute dollars and as a percentage of its income statement line-item.

Findings of the juror study showed that jurors' judgments of auditor negligence were highest for alleged misstatements of low estimate uncertainty appearing in disaggregated financial statements (Table 2). Jurors' judgments of auditor negligence were lower for alleged misstatements of high estimate uncertainty appearing in disaggregated or aggregated financial statements, as well as alleged misstatements of low estimate uncertainty appearing in aggregated financial statements (Table 2).⁴

After reading the case materials, the attorneys responded to a different set of questions from the mock juror participants, including how negligent they believed the mock jurors would find the auditors and how they would negotiate a proposed settlement to avoid trial as legal counsel for the auditors.

Pickerd and Piercey (2021) predicted that the attorneys would base their proposed negotiation strategies on how vulnerable they believed the auditors would be to mock juror judgments, but they also believed that the attorneys' predictions of how mock jurors would, in fact, decide the case would likely be incorrect. Prior psychology research indicates that highly credentialed experts are extremely good at what they do and know within their subject matter of expertise, but they are surprisingly poor predictors of other peoples' judgments, particularly novices' judgments (e.g., Camerer and Johnson 1997; Torngren and Montgomery 2004; Burgman et al. 2011). Experts tend to put too much confidence in their own judgments relative to novices' judgments, and they tend to give novices insufficient credit for being rational and reasonable (e.g., Pronin et al. 2004; Pronin 2007; Burgman et al. 2011). Legal research shows that attorneys tend to view themselves overconfidently, suggesting that they may similarly underestimate the rationality of novices like jurors (e.g., Birke and Fox 1999; Kiser, Asher, and McShane 2008).

If attorneys adopt a view of jurors as overly naïve, as prior research suggests, then Pickerd and Piercey (2021) predicted that attorneys might not accurately predict the mock jurors' reactions to high estimate uncertainty, which were actually quite rational. Attorneys may believe that mock jurors would instead see high estimate uncertainty as an indication that the misstatement is more likely and the stakes are higher, and therefore react to high uncertainty by blaming the auditor for





⁴ Participants in Pickerd and Piercey (2021) were randomly assigned to receive one of two presentation formats of the income statement. In one version, the allegedly misstated account appeared as its own line-item (the *disaggregated* condition). In the other, the allegedly misstated account was grouped with other clean accounts into a combined line-item (the *aggregated* condition). Pickerd and Piercey (2021) predicted and found that the effect of estimate uncertainty would be more impactful when the misstatement was disaggregated, causing the jurors to see a more conspicuously bad-appearing outcome. When jurors understood that estimate uncertainty was inherently high, they were more forgiving of the disaggregated misstatement.

TABLE 2 Mock Jurors' Judgments of Auditor Negligence

Panel A: Juror Study Findings for Auditor Negligence

	Income Statement Format			
Estimate Uncertainty	Disaggregated		Aggregated	
Low estimate uncertainty				
Average rating of auditor negligence	6.07		5.05	
Number of participants	56		55	
Version of case	А		В	
High estimate uncertainty				
Average rating of auditor negligence	5.57		5.46	
Number of participants	52		54	
Version of case	С		D	
Panel B: Statistical Tests				
Comparison		p-value	Test Result	
Jurors' judgments of auditor negligence highest for low estimate uncertainty in disaggregated financi compared to the other three version of the case. i.e., A > B, C, and D, Panel A).	misstatements of al statements,	0.011	Statistically significant	
Remaining differences among the other three version (i.e., B, C, and D, Panel A).	ons of the case	0.497	Statistically insignificant	

Mock jurors rated auditor negligence on a scale from 1 to 10. The four different versions of the case varied whether participants were told that the alleged misstatement involved low or high estimate uncertainty and whether it appeared on a more aggregated or disaggregated income statement (see Footnote 4).

not doing more to detect the misstatement. Attorneys may believe that mock jurors view the auditor as responsible to remove uncertainty and misstatements from the financial statements and therefore hold them negligent when they fail to do so.

Consistent with these predictions, the attorneys in Pickerd and Piercey (2021) incorrectly predicted that the mock jurors would find the auditors more negligent in the high estimate uncertainty conditions than in the low estimate uncertainty conditions, under all financial statement formats (see Table 3). Furthermore, results of Pickerd and Piercey (2021) show that the attorneys assessed the auditors as being in a weaker negotiation position relative to the opposition, became more willing to propose concessions on behalf of auditors in negotiations to settle out of court, proposed less ambitious negotiating goals for the minimum amount that auditors might be able to pay out to settle the case, set less ambitious maximum payout limits as the most that they would recommend to auditors to settle the case, and anticipated a larger final settlement amount on behalf of auditors when estimate uncertainty was high compared to when it was low. Statistical analyses within Pickerd and Piercey (2021) showed that these effects stemmed from the attorney participants' incorrect perceptions within the study about how the mock juror participants would react to high levels of estimate uncertainty.



TABLE 3

Attorneys' Predictions of Mock Jurors' Judgments of Auditor Negligence

Panel A: Attorney Study Findings for Predictions of Jurors' Negligence Judgments

_	Income Sta	Income Statement Format	
Estimate Uncertainty	Disaggregated	Aggregated	
Low estimate uncertainty			
Average predicted rating of auditor negligence	4.72	4.28	
Number of participants	18	18	
Version of case	А	В	
High estimate uncertainty			
Average predicted rating of auditor negligence	4.95	5.65	
Number of participants	20	20	
Version of case	С	D	
Panel B: Statistical Tests			
Comparison	p-value	Test Result	
Attorneys' predictions of jurors' auditor negligence judgments higher for misstatements of high estimate uncertainty than for estimate uncertainty (i.e., C and D > A and B, Panel A).	0.048 r low	Statistically significant	

Attorneys predicted the mock jurors' ratings of auditor negligence on a scale from 1 to 10. The four different versions of the case varied whether participants were told that the alleged misstatement involved low or high estimate uncertainty and whether it appeared on a more aggregated or disaggregated income statement (see Footnote 4).

III. CONCLUSION AND IMPLICATIONS FOR PRACTICE

The findings of Pickerd and Piercey (2021) have important implications. As the levels of estimate uncertainty in contemporary accounting estimates have increased in recent years, so have concerns that they may increase auditor litigation (Christensen et al. 2013; Craig et al. 2017). On one hand, the findings in Pickerd and Piercey (2021) provide some comfort in that the mock jurors held auditors less responsible when estimate uncertainty was high, recognizing that it lowered the likelihood that a properly conducted audit could detect an alleged misstatement. On the other hand, attorneys' beliefs about mock jurors were rather different. The attorneys assumed that mock jurors would hold auditors more responsible for failing to detect misstatements of high estimate uncertainty, as if the high level of estimate uncertainty meant that a properly conducted audit should have done more to detect the misstatement. The results highlight how high estimate uncertainty can, on one hand, increase auditor liability when the case is resolved by attorneys in pretrial settlement, and, on the other hand, decrease it when auditor negligence is assessed by a jury.

The results of Pickerd and Piercey (2021) also underscore that more research is needed on attorney judgments in auditor-negligence litigation. Since most audit litigation is settled out of court, research on juror judgments alone does not provide a complete picture about how various accounting factors affect auditor litigation risk. As Pickerd and Piercey (2021) demonstrate, it is not safe to assume that juror studies also provide an informative representation for attorney out-of-court settlement negotiations. Although their findings affirm that attorneys indeed negotiate based on their

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predictions of juror judgments, their findings also illustrate that those predictions can be wrong. That said, estimate uncertainty is only one possible aspect of financial statements. Future research should investigate other features of financial statements and audits that could increase or decrease the accuracy of attorneys' predictions of jurors and how that impacts auditor liability.

The results of Pickerd and Piercey (2021) also have important implications for practice. Auditors should take the findings regarding the impact of estimate uncertainty on auditor liability into consideration when assessing audit litigation risk. By more properly assessing risk, auditors can price audits and implement an audit program more appropriate for specific engagements. Auditors can also consider the findings in Pickerd and Piercey (2021) that attorneys sometimes misjudge juror judgments in audit litigation cases involving high estimate uncertainty and share these findings with their attorneys so that they can consider them as part of their settlement negotiations. They also might consider relying on advice from academics and trial consultants instead of attorneys on how jurors might perceive their case. The findings of Pickerd and Piercey (2021) suggest that attorneys practicing audit litigation may benefit from a better understanding of the overall audit research on juror decision making.

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