



The Effects of Clawbacks on Auditors' Propensity to Propose Restatements and Risk Assessments

William D. Brink¹ · Jonathan H. Grenier¹ · Jonathan S. Pyzoha¹ · Andrew Reffett¹

Received: 7 December 2016 / Accepted: 13 March 2018
© Springer Science+Business Media B.V., part of Springer Nature 2018

Abstract

Both the Sarbanes–Oxley Act of 2002 and the Dodd-Frank Act of 2010 include clawback provisions that require executives to pay back incentive compensation earned on financial statements that are restated in a subsequent period. Such provisions intend to reduce unethical reporting behavior by executives who otherwise might be more inclined to misstate financial statements to boost incentive-based compensation. However, such provisions could promote rather than deter unethical behavior. In particular, Pyzoha (Account Rev 90(6):2515–2536, 2015) finds that, under certain conditions, executives are less willing to restate financial statements in the presence of a clawback policy. Similarly, auditors might also act unethically by being less likely to propose restatements in the presence of clawbacks to avoid upsetting management. To examine this possibility, this study reports the results of three experiments that examine the effect of clawback provisions on auditor judgment. Contrary to expectations, our three experiments, along with supplemental qualitative evidence (surveys and interviews of practicing auditors) consistently indicate that clawbacks do not affect auditors' propensity to propose restatements. These results suggest that a decrease in the number of restatements in a clawback environment will not be due to auditors acting unethically to appease management. The effects of clawbacks on auditors' risk assessments, however, are less conclusive. As such, we offer potential post hoc explanations to guide future research.

Keywords Clawback · SOX · Dodd-Frank · Auditing · Restatements · Independence

Introduction

The Sarbanes–Oxley Act of 2002 (SOX; U.S. House of Representatives 2002) was enacted as a direct response to the high-profile frauds and corresponding audit failures that occurred in the early 2000s (e.g., Enron, WorldCom). The intent of the legislation is to hold both company executives

and financial statement auditors more accountable for their actions and thereby improve the material accuracy of publicly traded companies' financial statements. Of particular interest to this study, SOX Section 304 includes a clawback provision that requires executives to pay back incentive compensation earned on financial reporting metrics that subsequently are restated. More recently, the Dodd-Frank Act of 2010 (Dodd-Frank) strengthened such clawback provisions. This study's objective is to provide theory and evidence (both experimental and qualitative) to indicate how clawbacks influence auditors' ethical judgment and decision-making.

Although the intent of clawbacks is to foster high-quality financial reporting by creating a culture of ethical behavior (SEC 2010), Pyzoha (2015) finds evidence that clawbacks can decrease ethical behavior by increasing management opposition to restatements when they are at risk of losing incentive-based compensation. Specifically, Pyzoha (2015) reports that managers are more likely to oppose a restatement when they have relatively high incentive-based compensation at risk and the auditor is of relatively low

Electronic supplementary material The online version of this article (<https://doi.org/10.1007/s10551-018-3846-x>) contains supplementary material, which is available to authorized users.

✉ Jonathan H. Grenier
greniejh@miamioh.edu

William D. Brink
brinkwd@miamioh.edu

Jonathan S. Pyzoha
pyzohajs@miamioh.edu

Andrew Reffett
reffeta@miamioh.edu

¹ Miami University, Oxford, USA

quality. Thus, while reductions in restatements in a clawback environment may be due to enhanced honesty, such reductions might also be due to unethical behavior by managers attempting to retain incentive-based compensation. Beyond the compromised ethics of management, the auditor independence literature suggests that auditors might be less likely to propose restatements to avoid upsetting management in the presence of a clawback policy. The effect of clawbacks on auditors' restatement recommendations is of particular interest due to these strong ethical implications and the fact that restatements often result in adverse economic consequences for investors, creditors and other financial statement users, company directors, management and other employees, and auditors (Palmrose et al. 2004).

Leveraging psychology theory on motivated reasoning (cf. Kunda 1990), and prior accounting research on auditor independence, we predict that auditors will be less likely to propose restatements in the presence of a clawback policy (i.e., they will exhibit less ethical behavior). Previous research demonstrates that auditors exploit ambiguity in financial reporting standards to make judgments consistent with managements' preferred conclusions (Hackenbrack and Nelson 1996; Kadous et al. 2003). Thus, when evaluating an ambiguous potential restatement, we expect that the presence of a clawback will amplify the effects of motivated reasoning, making auditors less likely to conclude a restatement is necessary to avoid upsetting management by triggering the clawback. Further, we examine whether these predicted effects are amplified when auditor independence is threatened (i.e., when client importance is relatively high) as auditor incentives to appease management are strengthened.

Although the effects of clawbacks on auditors' propensity to propose restatements are our primary interest due to the strong ethical implications and financial consequences, we also examine whether clawbacks affect auditors' assessments of the risk of material misstatement (RMM, i.e., pre-audit assessments of the likelihood that an audit client's unaudited financial statements are materially misstated). For several reasons, we expect auditors' RMM assessments to decrease in the presence versus absence of a clawback. First, auditors consider management's financial reporting incentives when assessing RMM and may view incentives to misstate as weaker in a clawback environment (Hirst 1994). Second, clawback policies are likely perceived as strengthening corporate governance and the overall control environment, leading to lower RMM assessments (cf. Hanno and Cohen 2000; Schmidt 2014). Finally, there is evidence that clawbacks lead to higher-quality financial reporting (Chan et al. 2012; deHaan et al. 2013; Chen et al. 2015), which may lead to lower RMM assessments if auditors are aware of this evidence and/or believe in this empirical relationship. Decreased RMM assessments would have efficiency benefits in cases where clawbacks foster higher-quality

financial reporting, but could hinder audit effectiveness in cases where clawbacks have no effect or reduce financial reporting quality (cf. Pyzoha 2015).

To test our predictions, we conducted three experiments using practicing auditors as participants along with an expert panel discussion and supplemental audit partner interviews. Experiment 1 manipulates clawback policy (no clawback, lower clawback, and higher clawback) and the importance of the client to the audit firm (lower importance and higher importance). Participants review background information about a fictitious client, the CFO's compensation contract containing the clawback manipulation, and then assess RMM for the client's financial statements. Next, participants review and evaluate a potential misstatement relating to an aggressive accounting method used in the prior year's financial statements and assess their likelihood of proposing a restatement. As the presence of a clawback did not significantly affect either of these assessments, results of the first experiment fail to support our predictions.

To further investigate and assess the robustness of the non-effect of clawbacks on either auditors' RMM assessments or their propensity to recommend restatements, we conducted a second experiment. Experiment 2 utilizes Experiment 1's no clawback and higher clawback conditions (no clawback, clawback) and a slightly modified (at a participating firm's request) client importance manipulation (higher, lower). We increased experimental power with more participants and control by using in-person versus online data collection. We also added new process measures to examine post hoc explanations. Results of Experiment 2 are consistent with Experiment 1 and support our post hoc explanation. Specifically, we find that clawbacks elevate auditors' perceived accountability for higher-quality financial reporting, which likely counteracts any deleterious effects of clawbacks on auditors' restatement recommendations.

Our third experiment further investigates the robustness of our results. Experiment 3 is a 1×2 between-participants design that manipulates clawback policy (no clawback, clawback). The clawback condition is consistent with the manipulation in Experiment 1 (higher clawback condition) and Experiment 2 (clawback condition), but we change the control condition from informing participants that there was not a clawback provision in place (Experiments 1 and 2) to not mentioning the presence/absence of a clawback provision (i.e., a pure control condition). We find consistent results that clawbacks do not influence auditors' propensity to recommend a restatement. However, unlike Experiments 1 and 2, we find evidence that auditors decrease RMM assessments in the presence of a clawback, consistent with our original expectation. A potential explanation for these seemingly inconsistent results is that clawbacks do in fact reduce risk assessments relative to the former ecology where

clawbacks were uncommon (i.e., Experiment 3), but not relative to clients who explicitly decide to not adopt a clawback policy (i.e., Experiments 1 and 2) because those companies presumably have adequate compensating controls to deem a clawback policy unnecessary. When discussing the results of Experiment 3, we provide some limited evidence supporting this post hoc explanation and discuss other potential explanations to guide future research. Further, as we do not find support across our three experiments for our hypothesis related to recommending a restatement and inconclusive evidence for our RMM hypothesis, we discuss in “**Conclusion**” section the potential role that experimental design choices may have played in our findings.

As an additional check of the robustness of our results, we conducted an expert panel discussion with members of the authors' institution's Accounting Advisory Group (AAG), which includes both corporate executives and audit professionals. We also conducted interviews with three audit partners from three different accounting firms (one from a Big 4 firm and two from non-Big 4 firms). Both the expert panel discussion and partner interviews were consistent with the general results of the three experiments. Participants did not believe that clawbacks would make auditors less likely to propose restatements, stressing that auditors generally have strong ethics, and more importantly that audit firms have strong quality control mechanisms such as mandatory consultation for potential restatements that would prevent ethical lapses. As for RMM, the participants consistently indicate that a clawback would be a risk factor, but some noted that any effects would be captured by other elements of the control environment, indicating dependency on the presence or absence of other control risk factors. One participant noted that there might not be an effect on RMM since unethical managers, who are going to misstate financial performance to earn a bonus, likely will do so regardless of a clawback due to their low integrity. That is, if they are willing to risk civil and criminal penalties, they will also be willing to risk having their compensation clawed back. Overall, our qualitative evidence regarding risk assessments was inconclusive, again highlighting the need for future research.

Examining the effects of clawbacks on auditor ethics is important and timely, in part, because of the increasing prevalence of clawback policies. In fact, approximately three out of four S&P 500 firms currently have a clawback policy (Equilar 2016). Thus, it is increasingly important for practitioners and regulators to understand how clawbacks influence auditor judgment in light of the unethical behavior exhibited by executives (Pyzoha 2015; Pyzoha et al. 2017). Despite the prevalence of clawback policies, this is the first study of which we are aware that investigates how clawbacks influence auditors' ethical judgments and decision-making. As such, our study makes several important contributions to extend the literature on auditor ethical decision-making

(e.g., Sweeney et al. 2010; Brown-Liburd et al. 2013; Samsonova-Taddei and Siddiqui 2016; Grenier 2017). Despite clawbacks likely leading to greater management opposition to restatements (Pyzoha 2015), such provisions might not ultimately lead to fewer auditor proposed restatements as, across three experiments, we consistently find that auditors are no less likely to propose restatements in the presence of a clawback. As such, we also contribute to the auditor independence literature by identifying a boundary condition on motivated reasoning theory's prediction that auditors will exploit ambiguity to justify client-preferred conclusions (cf. Hackenbrack and Nelson 1996). Although clawbacks likely strengthen the salience of management's preferred conclusions (cf. Pyzoha 2015) and/or decrease the salience of auditors' accuracy goals, we provide evidence they also simultaneously strengthen auditor accountability for high-quality financial reporting mitigating any deleterious effects on auditors' ethical judgment.

Background and Hypothesis Development

Background

Clawbacks

Clawback provisions were first introduced in Section 304 of SOX, “*Forfeiture of Certain Bonuses and Profits*,” so that the Securities and Exchange Commission (SEC) can recover, on a publicly traded company's behalf, any incentive-based compensation that CEOs and CFOs earned in the 12 months following the issuance of materially misstated financial statements. Luis Aguilar, SEC Commissioner, noted that Congress included clawbacks in SOX to enhance executives' responsibility for financial reporting and to create a more honest culture of reporting (SEC 2010). Thus, an important objective of the SOX clawback rule is to enhance the control environments at publicly traded companies by making the CEOs and CFOs mindful that, if financial statements are misstated, any incentive-based compensation earned on misreporting will be susceptible to a clawback by the SEC. Despite public pressure, the SEC did not actively employ the SOX clawback rules in the initial years following passage of SOX. As a result, clawback regulations were modified and enhanced in Section 954, “*Recovery of Erroneously Awarded Compensation*,” of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the Dodd-Frank Act). Since the passage of the Dodd-Frank Act, the SEC has increasingly utilized the SOX provision while the new Dodd-Frank Act rules are being finalized. Some recent examples include recouping incentives from executives at Beazer Homes, CSK Auto Corporation, and Computer Sciences Corporation (SEC 2011a, b, 2015a).

The SEC released its proposal in September 2015 for implementing the specific requirements in the Dodd-Frank Act with a request for public comment (SEC 2015b). Currently, the SEC is considering the comments and revising the rules for public release. Once implemented, the Dodd-Frank Act will require all publicly traded companies to adopt a clawback policy with the following characteristics: restatements due to error or fraud trigger the clawback, the policy covers current and former executive officers, and incentive compensation is recoverable for up to 3 years preceding the restatement. However, the SEC has yet to enact the rules from Dodd-Frank. Thus, SOX establishes the clawback law currently in effect.¹

In the following sections, we develop our expectations regarding the effect of clawbacks on auditor judgment. Although our primary interest is auditors' restatement recommendations due to the strong ethical implications and financial consequences, we start with the effects on risk assessments, as some of the theory developed for risk assessments will be extended in the theory development for restatement recommendations.

Clawbacks and Auditors' RMM Assessments

Leveraging prior experimental audit research, we expect auditors' RMM assessments to decrease in the presence of clawbacks. In particular, Hirst (1994) finds that auditors' RMM assessments are sensitive to management's financial reporting incentives. Thus, to the extent that auditors believe, consistent with the intention of SOX and Dodd-Frank, clawbacks reduce management incentives for inaccurate reporting, auditors' RMM assessments likely will decrease in the presence of clawbacks. Further, prior research indicates that auditors' RMM assessments decrease when companies have stronger governance structures and control environments (Hanno and Cohen 2000; Schmidt 2014). Thus, to the extent that auditors believe that clawbacks, again consistent with regulatory intentions, improve companies' governance structures and control environments, then auditors' RMM assessments should decrease in the presence of clawbacks.

This expectation is consistent with multiple archival findings indicating that misstatements are less frequent, and financial reporting quality is higher in the presence of clawbacks (see Pyzoha 2015 for a review). Specifically, firms that voluntarily adopt clawbacks experience lower

rates of restatements and have higher perceived financial reporting quality (Chan et al. 2012; deHaan et al. 2013; Chen et al. 2015). Further, firms that voluntarily adopt clawbacks experience more favorable stock price valuations, suggesting that market participants believe clawbacks improve financial reporting quality (Iskandar-Datta and Yonghong 2013). To the extent that auditors are aware of these findings of higher financial reporting quality, and/or share similar views as market participants, auditors' RMM assessments likely decrease in the presence of clawbacks. Thus, we present the following hypothesis:

H1 Auditors will assess a lower risk of material misstatement in the presence versus absence of clawback provisions.

Clawbacks and Restatement Recommendations

The judgment of whether prior financial statements are misstated, and a restatement is necessary, hinges on the auditors' assessment of the acceptability and consistency with GAAP of previously utilized accounting methods.² Such judgments are important because failing to restate previously misstated financial statements can lead to litigation, regulatory sanctions, and reputational damage for the auditors. To avoid these negative outcomes, auditors have incentives to be accurate and unbiased when assessing the acceptability of previously utilized accounting methods. However, to retain business, auditors also have incentives make judgments that are consistent with their clients' preferences (Hackenbrack and Nelson 1996; Bazerman et al. 1997; Libby and Kinney 2000; Kadous et al. 2003). Further, determining the acceptability of accounting methods often is very subjective, which makes it more likely that client preferences to not restate will influence auditors' recommendations (Kunda 1990; Hackenbrack and Nelson 1996; Libby and Kinney 2000; Kadous et al. 2003). Thus, situations in which restatements are arguable, but ambiguous, can create an ethical dilemma for auditors.

Leveraging motivated reasoning theory (Kunda 1990), we expect that auditors will be less likely to recommend restatements in the presence versus absence of clawbacks. Motivated reasoning theory predicts that individuals' directional goals (i.e., preferred outcomes) consciously and/

¹ In June 2017, The Financial Choice Act of 2017 was passed in the US House of Representatives to modify the Dodd-Frank Act. The only modification to the Dodd-Frank Act clawback provision is related to who will be susceptible to clawbacks. Specifically, the new bill proposes that clawbacks will only cover executive officers who had control over the financial reporting that resulted in the misstatement.

² Generally Accepted Accounting Principles (GAAP) require companies to formally restate prior period financial statements (i.e., refile financial statements with the SEC) when material misstatements are discovered subsequent to their issuance (FASB 2005). While a company's management ultimately makes the decision to restate, auditors also have significant input. Specifically, auditors who believe a client's financial statements should be restated can decline to issue an unmodified opinion on the company's financial statements unless the company agrees to restate the prior period financial statements in question.

or subconsciously influence their search for, analysis, and weighting of information/evidence in the direction of the preferred outcome, making individuals more likely to arrive at their preferred conclusions (Kunda 1990; Hackenbrack and Nelson 1996; Kadous et al. 2003; Kaplan et al. 2007).³ In our context, we expect the presence of a clawback provision to simultaneously decrease the salience of auditors' accuracy goals to make unbiased judgments regarding the need to restate prior financial statements and increase the salience of auditors' directional goals to make judgments that are consistent with the client's preference not to restate prior financial statements. Consequently, we expect auditors to be less likely to recommend restatements in the presence of clawbacks.

We expect the salience of auditors' accuracy goals to decrease in the presence of clawbacks due to perceptions of lower engagement risk (also commonly referred to as auditors' business risk). The risks of litigation, regulatory sanction, and reputational damage largely determine auditors' engagement risk (Brown and Johnstone 2009). Importantly, as the risk of fraud increases (decreases), auditors' engagement risk also increases (decreases) (Pratt and Stice 1994; Johnstone 2000; Hanno and Cohen 2000; Houston et al. 2005; Cohen et al. 2017). To illustrate, Cohen et al. (2017) states that "Material misstatements in the financial statements lead to other risks for auditors; for example, misstatements increase engagement risk (PCAOB 2010). That is, the risk of material misstatement increases the risk that the auditors will suffer damages." Conversely, and more relevant to our study, as auditors' perceptions of the risk of fraud decrease, auditors' perceptions of engagement risk also decrease. Thus, given that we expect auditors' to perceive a lower risk of fraud in the presence of clawbacks (see H1), we expect auditors to perceive decreased engagement risk in the presence of clawbacks.

Decreased auditor perceptions of engagement risk are important because, consistent with prior psychology research on motivated reasoning (Kunda 1990), prior accounting research finds that auditors' willingness to accept client-preferred aggressive accounting methods increases as engagement risk decreases (Hackenbrack and Nelson 1996). Specifically, as perceived engagement risk decreases, and thus the magnitude of the auditors' expected losses for

inaccurate judgments decreases, auditors' accuracy goals become less salient (Kadous et al. 2003). As accuracy goals become less salient, auditors likely place less weight on evidence that is inconsistent with the client-preferred conclusion and more weight on evidence that is consistent with the client-preferred conclusion (Kunda 1990). Thus, when auditors perceive low engagement risk, they likely will require even more persuasive evidence that is inconsistent with the client-preferred conclusion, in order to not to reach the client-preferred conclusion. Overall, as perceived engagement risk decreases, auditors' accuracy goals become less salient, auditors place less (more) weight on evidence that is inconsistent (consistent) with the client-preferred conclusion, and thus are more willing to accept client-preferred conclusions.

In addition to decreasing the salience of auditors' accuracy goals, we expect clawbacks to increase the relative salience of auditors' directional goals to reach conclusions that are consistent with client-preferred outcomes. Specifically, Pyzoha (2015) finds that management more strongly prefers not to restate prior year's financial statements in a clawback environment. We expect that auditors are aware of this stronger preference not to restate prior financial statements in the presence of a clawback. Consequently, auditors' directional goals to reach conclusions that are consistent with client preferences likely are more salient in the presence of clawbacks. Given our previously outlined expectations, this indicates that auditors will be less likely to recommend restatements in the presence of clawbacks.

Before formally stating our second hypothesis, it is important to note a few reasons why we might not find support for our hypothesis. In particular, while management almost certainly has a stronger preference not to restate their financial statements in the presence versus the absence of a clawback policy, management would still have a very strong preference not to restate their financial statements in the *absence* of a clawback (e.g., Desai et al. 2006). Thus, the effect of management's additional incentives not to restate their financial statements attributable to the presence of a clawback may be marginal and not significantly affect auditor judgment. Further, auditors may feel an increase in accountability for not identifying the misstatement during the prior year's audit (e.g., Messier and Quilliam 1992; Nelson and Tan 2005). Last, auditors may have their own incentives (e.g., to avoid being dismissed by the client) and risks to consider (e.g., litigation, regulatory, and reputation management) to not restate the financial statements, either in the presence or in the absence of a clawback (e.g., Hackenbrack and Nelson 1996; Hennes et al. 2014). Individually or collectively, these influences might overshadow our predicted effects of clawbacks. Nevertheless, for the reasons discussed in the prior paragraphs, we predict the following:

³ Consistent with prior psychology research, accounting researchers find that clients' reporting preferences consistently affect auditor judgment across varying contexts (Trompeter 1994; Hackenbrack and Nelson 1996; Salterio and Koonce 1997; Wilks 2002; Kadous et al. 2003; Ricchiute 2004). For example, prior research finds that clients' financial reporting preferences significantly affect auditors' disclosure requirements (Jenkins and Haynes 2003) and their judgments regarding the effectiveness of clients' internal controls (Earley et al. 2008; Wolfe et al. 2009; Reffett et al. 2017).

H2 Auditors will be less likely to propose restatements of prior financial statements in the presence versus the absence of a clawback policy.

Client Importance

The economic theory of auditor independence (DeAngelo 1981) suggests that the reluctance to restate an audit client's financial statements stemming from the presence of a clawback will be more pronounced for higher versus lower importance clients (Chung and Kallapur 2003). Consistent with this theory, several studies indicate that financial statement users and audit evaluators perceive that higher client importance is associated with decreased auditor independence (Krishnan et al. 2005; Brandon and Mueller 2006; Francis and Ke 2006; Khurana and Raman 2006). However, one could also argue that increased client importance would increase engagement risk, which, for reasons discussed above, would likely make auditors more inclined to recommend restatements. Further, the archival studies that examine actual audit outcomes (as opposed to perceived audit outcomes) generally find that client importance is not associated with reduced audit quality and/or reduced auditor independence. In particular, Chung and Kallapur (2003) do not find a statistically significant association between client importance and abnormal accruals. Similarly, Ashbaugh et al. (2003) do not find a significant association between audit fees and audit clients meeting analysts' forecasts. Next, DeFond et al. (2002) find no association between audit fees or non-audit fees and auditors' propensity to issue going concern modifications to their audit opinions. Similarly, Li (2009) finds no association between client importance and auditors' propensity to issue going concern opinions. Given the apparent inconsistency between theory and the currently reported archival results, we present the following research question:

RQ1 Do the effects of clawbacks on auditors' restatement recommendations vary across higher versus lower importance clients?

Experiment 1

Participants

To solicit responses for Experiment 1, we sent email invitations to over 150 professional contacts currently working as auditors (identified through each author's network on a professional networking website). We compensated participants who completed the online study with a \$20 Amazon gift card. Participants consisted of 100 auditors at the following experience level: staff (4%), senior (60%), manager

(28%), senior manager (4%), and partner (4%).^{4,5} They have an average of 5.74 years of audit experience and 33% work for a Big Four firm. We do not find significant differences for the demographic information across experimental conditions ($p > 0.05$), indicating successful random assignment.⁶

Method

The experimental instrument is a modified version of the instrument used in Pyzoha (2015). As Pyzoha (2015) finds that financial reporting executives with higher incentive-based compensation are less likely to agree with restating prior financial statements in a clawback environment, it is important to use the same instrument to examine whether clawbacks affect auditors' ethical judgments and decision-making.⁷

We use a 3×2 between-participants experimental design. One independent variable is the clawback provision in the CFO's compensation contract manipulated at three levels (no clawback, lower clawback, and higher clawback). In all conditions, the CFO's compensation contract for the prior year was \$2.5 million, of which \$1.5 million is incentive-based. In the higher (lower) clawback conditions, the participants read that, the CFO would have to repay \$1.5 million (\$750,000) of their previously awarded compensation if prior year financial statements are restated.⁸ In the no

⁴ We cannot calculate a response rate as the email invitation encouraged them to forward the invitation to other auditors in their firm at the senior level or above who may be willing to participate. Although we did not request staff auditors, their exclusion does not affect the inferences from the results.

⁵ Junior auditors (e.g., seniors) are generally responsible for performing the audit procedures and making the initial conclusions that become the basis for the audit opinion (Willet and Page 1996; Herrbach 2005; Lambert and Agoglia 2011). Griffith et al. (2015) also find that seniors and managers are the most common preparers of every major step in the process of auditing an estimate such as the one in this study. Thus, prior research finds that our participant pool of auditors is appropriate for the audit task in our instrument.

⁶ Managers' likelihood of agreeing with an auditor proposed restatement in a clawback environment varies based on auditor quality (Pyzoha 2015). Our results remain unchanged for auditors' judgments in a clawback environment when we include three different measures of auditor quality (audit firm size, experience auditing manufacturing clients, and experience auditing impairments of long-lived assets) in the models for all reported experiments.

⁷ Also, it is important to note that, as described in the results section, we do not find significant results in our main analyses. Therefore, a previously vetted instrument provides some assurance that the finding of no results was not due to instrument specification.

⁸ Although we do not make a formal prediction, we include multiple levels of compensation within the clawback condition for consistency with Pyzoha (2015) and to test the robustness of our results. Pyzoha (2015) finds that the extent of incentives being clawed back differentially influences financial reporting executives' likelihood of agreeing with the auditor's restatement recommendation.

clawback condition, participants read that the contract did not include a clawback policy to minimize the chances that participants assumed that a clawback policy was in effect. This permits the cleanest and strongest test of our predictions. The other manipulated variable is the importance of the client to the audit firm manipulated at two levels (lower versus higher) using an adaptation of the manipulation used by Grenier et al. (2012). More specifically, in the higher (lower) conditions, Medical Marvels' audit fees represent approximately 50% (2%) of the local office's total revenues and the audit firm's local office is the largest (a relatively small) office within the firm, with total revenues ranking it first (18th) out of the 21 offices.⁹

Experiment 1 proceeds in the following manner. After reading a welcome page, the instrument provides participants with background information about Medical Marvels. This information includes the clawback and client importance manipulations. Participants then respond to the first dependent measure: "Based on the information in the case, what is your assessment of risk of material misstatement for Medical Marvels' current year (2014) financial statements?" Participants respond to this question by completing an 11-point scale (0% = "Low RMM," 50% = "Moderate RMM," and 100% = "High RMM"). Measuring RMM using low, moderate, and high is consistent with how auditors assess risk in practice (Arens et al. 2017).

The experiment then provides the participants with information about an audit issue that has the potential to trigger a restatement of Medical Marvels' prior year financial statements. Specifically, in the prior year, Medical Marvels became concerned about a potential impairment loss. A manager at Medical Marvels concluded, in accordance with ASC 360-10, that the carrying value of the equipment is recoverable and therefore the subsidiary is not required to recognize an impairment loss. Participants read that the current year audit team's analysis, using a more conservative method of estimation, suggests that it might be necessary to record an impairment. This would necessitate a restatement of the prior year's financial statements.¹⁰ Participants then respond to the second dependent measure: "How likely is it that you would recommend that Medical Marvels' 2013 financial statements should be restated due to

the impairment?" using an 11-point scale. The experiment concludes with manipulation checks, debriefing questions, and demographic questions.

Results

For the clawback manipulation, 93% of participants correctly indicated whether the CFO described in the case faced a clawback policy and if so, the correct amount of incentive-pay subject to the clawback.¹¹ To measure their perceptions of client importance, the experiment asks participants: "How important of a client do you believe that Medical Marvels is to the Philadelphia office of your audit firm?" (0 = "Not An Important Client" and 10 = "A Very Important Client"). On average, participants in the lower importance condition perceived the client as significantly less important ($M = 4.57$) than in the higher importance condition ($M = 9.57$; $t_{98} = -11.864$, $p < 0.001$). Taken together, these results suggest participants attended and understood the experimental manipulations.

Table 1 provides descriptive statistics from Experiment 1. Panel A reports RMM assessments and Panel B reports results for the likelihood of recommending a restatement.¹² Hypothesis 1 predicts that auditors will assess a lower RMM in the presence versus the absence of a clawback policy. ANOVA testing presented in Table 2, Panel A, indicates that there is not a significant effect of clawback on the RMM assessment ($F = 0.047$; $p = 0.954$). Further, assessments for participants in the no clawback condition ($M = 40.00$; $SD = 21.134$) did not significantly differ from RMM assessments for participants in the lower clawback condition ($M = 41.21$; $SD = 20.273$) ($p > 0.10$), or from RMM assessments for participants in the higher clawback condition ($M = 41.39$; $SD = 21.798$) ($p > 0.10$). Finally, following Buckless and Ravenscroft (1990) and Guggenmos et al. (2018), we use contrast weighting (1, -0.5, -0.5) to test the overall pattern of hypothesized results ($t = 0.285$,

⁹ Consistent with prior audit research, the instrument included three true/false review questions to encourage participants' attention and therefore to strengthen the manipulations (e.g., Peecher and Piercey 2008; Grenier et al. 2015). As our hypotheses related to our manipulated factors are unsupported, demand effects are not a concern (Rosenthal 1976; White 1977).

¹⁰ Consistent with Pyzoha (2015), having a new audit team identify the issue ensures that the auditors would not be questioning their own work from the prior year. This approach allows the auditors to be objective as opposed to believing it was their own work and therefore potentially biased toward believing it was correct.

¹¹ Removing the participants who did not correctly answer the clawback manipulation check does not qualitatively alter the results.

¹² We exclude 55 participants who completed the study in less than 10 min. As none of the participants in Experiment 2 took less than 10 min, there is a strong possibility that these 55 participants took advantage of their relatively uncontrolled online experimental setting to not fully attend to the experiment and simply complete it to earn the \$20 gift card. Inferences remain unchanged when examining the full data set, when controlling for completion time, or when using a 5-min cutoff. However, it is important to eliminate noise in the data that may result from participants failing to provide adequate attention to the case scenario. This is particularly important when examining whether it is appropriate to fail to reject null hypotheses.

Table 1 Summary statistics—Experiment 1

Dependent variable: RMM assessment				
Clawback		Mean	SD	N
Panel A: Summary statistics for the auditor's assessment of risk of material misstatement				
No clawback	Lower importance	39.23	17.059	13
	Higher importance	40.56	24.125	18
	Total	40.00	21.134	31
Lower clawback	Lower importance	43.50	21.588	20
	Higher importance	37.69	18.328	13
	Total	41.21	20.273	33
Higher clawback	Lower importance	42.50	27.447	16
	Higher importance	40.50	16.694	20
	Total	41.39	21.798	36
Total	Lower importance	42.04	22.265	49
	Higher importance	39.80	16.646	51
	Total	40.90	20.894	100
Dependent variable: recommend restatement				
Clawback		Mean	SD	N
Panel B: Summary statistics for the auditor's propensity to recommend a restatement				
No clawback	Lower importance	46.15	27.549	13
	Higher importance	49.44	29.995	18
	Total	48.06	28.568	31
Lower clawback	Lower importance	52.00	26.675	20
	Higher importance	44.62	30.718	13
	Total	49.09	28.103	33
Higher clawback	Lower importance	54.37	27.318	16
	Higher importance	55.00	28.377	20
	Total	54.72	27.515	36
Total	Lower importance	51.22	26.742	49
	Higher importance	50.39	29.255	51
	Total	50.80	27.913	100

Variable definitions

Independent variables

Client importance

Lower importance client—"Medical Marvels is a relatively small client of the Philadelphia office of your audit firm, with audit fees representing approximately 2% of the Philadelphia office's total revenues. The Philadelphia office is a relatively small office in your audit firm, with total revenues ranking the Philadelphia 18th out of the 21 offices in the firm."

Higher importance client—"Medical Marvels is the largest client of the Philadelphia office of your audit firm, with audit fees representing approximately 50% of the Philadelphia office's total revenues. The Philadelphia office is the largest office in your audit firm, with total revenues ranking the Philadelphia office 1st out of the 21 offices in the firm."

Clawback

No clawback—Participants are informed that in the CFO's contract the client did not include a clawback policy

Lower clawback—Participants are informed that in the CFO's contract the client included a clawback policy stating that in the event of a prior year restatement, the CFO would need to pay back \$750,000, which is 50% of the CFO's prior year incentive-based compensation

Higher clawback—Participants are informed that in the CFO's contract the client included a clawback policy stating that in the event of a prior year restatement, the CFO would need to pay back \$1,500,000, which is 100% of the CFO's prior year incentive-based compensation

Dependent variables

Risk of material misstatement (RMM): "Based on the information in the case, what is your assessment of risk of material misstatement for Medical Marvels' current year (2014) financial statements?" 0% = Low RMM, 50% = Moderate RMM, 100% = High RMM. Scale utilizes 10-point increments. (Asked prior to the introduction of the audit issue)

Recommend restatement: "How likely is it that you would recommend that Medical Marvels' 2013 financial statements should be restated due to the impairment?" 0% = No Likelihood, 50% = Moderate Likelihood, 100% = Absolutely Certain. Scale utilizes 10-point increments

Table 2 Results—Experiment 1

Dependent variable: RMM assessment						
Source	SS	df	MS	F	p	β
Panel A: ANOVA for the auditor's assessment of risk of material misstatement						
Clawback	42.744	2	21.372	0.047	0.954	0.057
Importance	113.009	1	113.009	0.248	0.620	0.078
Clawback \times Importance	196.683	2	98.342	0.216	0.806	0.083
Error	42,867.521	94	456.037			
Dependent variable: recommend restatement						
Source	SS	df	MS	F	p	β
Panel B: ANOVA for the auditor's propensity to recommend a restatement						
Clawback	995.160	2	497.580	0.618	0.541	0.150
Importance	32.358	1	32.358	0.040	0.842	0.055
Clawback \times Importance	483.102	2	241.551	0.300	0.742	0.096
Error	75,738.964	94	805.734			

See Table 1 for variable definitions and measurement information

$p=0.776$). Taken together, these results uniformly suggest that Hypothesis 1 is not supported.¹³

Hypothesis 2 predicts that auditors will be less likely to propose restatements in the presence versus the absence of a clawback policy. Referring to Table 1, Panel B, auditors that were in the no clawback condition reported that their likelihood to recommend a restatement was 48.06% on average ($SD=28.568$). The auditors in the lower clawback condition reported 49.09% on average ($SD=28.103$). Last, the auditors in the higher clawback present condition reported 54.72% on average ($SD=27.515$). ANOVA testing presented in Table 2, Panel B, indicates that there is not a significant effect of clawback on the likelihood to recommend a restatement ($F=0.618$; $p=0.541$). Further, there is not a significant difference in the reporting recommendation between either of the treatment conditions and the control condition (all $p>0.10$). Finally, following Buckless and Ravenscroft (1990) and Guggenmos et al. (2018), we use contrast weighting (1, -0.5 , -0.5) to test the overall pattern of results hypothesized ($t=0.634$, $p=0.528$). Taken together, these results uniformly suggest that Hypothesis 2 is not supported.

RQ1 explores whether client importance moderates the influence of a clawback on the auditors' likelihood to recommend a restatement. ANOVA results presented in Table 2, Panel B, indicate that the interaction between client

importance and the presence of a clawback is not significant on the auditors' likelihood to recommend a restatement ($F=0.300$; $p=0.742$).

Supplemental Analysis and Discussion

In Experiment 1, we find no evidence supporting our predictions that clawbacks decrease auditors' RMM assessment (H1), propensity to propose restatements (H2), or that any such potential deleterious effects are more likely to be found for high importance clients (RQ1). As discussed in the hypothesis development for RMM, auditors may expect higher-quality financial statements when there is a clawback. We measure financial statement quality on a scale (0 = "Lower Quality" to 10 = "Higher Quality") with participants indicating the extent to which they believed the clawback policy influenced financial statement quality. We do not find differences across clawback treatment conditions ($p>0.10$). However, we do find evidence supporting our expectation that auditors perceive higher-quality financial statements with a higher clawback ($M=5.94$) compared to no clawback ($M=4.94$); $t_{65}=-2.021$; $p=0.047$) although this did not lead to lower risk assessments.¹⁴

Next, a reasonable post hoc explanation for the lack of findings for H2 is that clawbacks, by their very nature, make auditors feel more accountable for proposing restatements (i.e., for failing to detect the misstatement in the prior year). We measure auditor accountability in Experiment 1 on an

¹³ It is unlikely that the data analyzed is susceptible to a Type II error, the probability of failing to reject the null hypothesis when in fact it should be rejected. Although this manuscript reports multiple hypothesis tests in which we fail to reject the null hypothesis, power testing shows that there is only a minimal chance the null hypothesis should have been rejected. All β 's are reported in ANOVA tables.

¹⁴ Using a Bonferroni adjustment, we find directional, but insignificant, evidence that financial statement quality is higher at a significance level of $p=0.147$.

11-point scale (0 = “Not Responsible” to 10 = “Very Responsible”) with the following question: “Please indicate the previous audit team’s level of responsibility for the potential restatement.” We do not find differences across all clawback treatment conditions ($p > 0.10$). However, we do find directional, but insignificant, evidence that auditor accountability is greater in the higher clawback condition ($M = 5.75$) than the no clawback condition ($M = 4.90$) at a significance level of $p = 0.156$ ($t_{65} = -1.434$).

Discussion of No Results and Importance of Replication

Due to the unexpected nature of our results and the above process measure results for financial statement quality and auditor accountability, we conducted a second experiment. Most importantly, since Experiment 1 found no differences for RMM assessments or auditors’ propensity to propose a restatement in the presence versus absence of a clawback policy, replication is imperative to have confidence in the lack of support for our predictions. Replication provides additional evidence that reduces the possibility of relying on inappropriate conclusions (Lindsay and Ehrenberg 1993). To facilitate the replication and improve the chances of statistical significance, Experiment 2 has greater power (i.e., more participants per cell) and greater experimental control (i.e., in-person, as opposed to online data collection). Additionally, we added several process measures to examine our post hoc explanations as Experiment 1 exposed a limitation in our original theoretical development, i.e., not adequately considering the possibility that clawbacks could enhance auditor accountability thereby counteracting any deleterious effects on auditors’ propensity to recommend restatements.

Experiment 2

Method

Experiment 2 differs from Experiment 1 in some key regards. First, we administered Experiment 1 online, while we administered Experiment 2 in-person with paper and pencil instruments at firm training sessions of two international accounting firms. This modification establishes greater control of the participants during the study. Second, we reduced the number of treatment conditions from six to four by dropping the lower clawback condition to create a 2×2 between-participants design. We did not examine the lower clawback condition from Experiment 1, as this weaker condition is unnecessary to examine the robustness of the lack of significant results in Experiment 1. Reducing the number of conditions increases the sample size per treatment condition and thus increases the probability of observing significant results. Third, while the second manipulated

variable continued to be client importance (higher or lower), we slightly modified the higher importance condition, at the request of one of the participating firms, such that the local office is now the third largest office in the audit firm as opposed to the largest. Fourth, we worded the main dependent measures such that participants indicate what they believe the *audit team* will assess as the RMM assessment and the *audit team*’s likelihood of proposing a restatement, as opposed to their own personal beliefs. We made this decision to minimize social desirability bias (Chung and Monroe 2003), which finds that accountants exhibit high levels of social desirability bias when encountered with highly unethical decisions.¹⁵ Finally, we added additional process measures (see below) to further examine our post hoc explanations.

Participants

Ninety-eight auditors participated in Experiment 2 consisting of staff (2%), seniors (96%), and managers (2%). On average, participants indicated that they have 2.5 years of audit experience and 89.8% work for a Big Four firm. We do not find significant differences related to the demographic information collected between treatment conditions ($p > 0.10$) except for participants in the lower importance condition having lower experience with manufacturing clients than the higher importance condition (3.61 vs. 5.29, $t_{96} = 2.22$, $p = 0.029$). Results remain unchanged when we control for manufacturing experience.

Results

For the clawback manipulation, 96.9% of the participants correctly indicated whether the CFO described in the case faced a clawback policy.¹⁶ On average, participants in the lower importance condition ($M = 4.76$) rated importance significantly lower than participants in the higher importance condition ($M = 9.49$; $t_{96} = -11.668$, $p < 0.001$). Taken together, these results indicate that the participants clearly attended to and understood the manipulations.

Table 3, Panel A, provides descriptive statistics for the auditors’ assessment of RMM and Panel B for the auditors’

¹⁵ In Experiment 1 participants first made their recommendations and then were asked what a peer would recommend for proposing a restatement. Results are statistically consistent between the two potential dependent measures and they are highly correlated ($r = 0.674$, $p < 0.001$). For Experiment 2, we removed the self-recommend decision as to not allow it to bias the peer recommend decision.

¹⁶ Removing the participants who did not correctly answer the clawback manipulation check does not qualitatively alter the results.

Table 3 Summary statistics—Experiment 2

Dependent variable: RMM assessment				
Clawback		Mean	SD	N
Panel A: Summary statistics for the auditor's assessment of risk of material misstatement				
No clawback	Lower importance	35.83	21.042	24
	Higher importance	31.20	24.035	25
	Total	33.47	22.505	49
Clawback	Lower importance	27.20	17.205	25
	Higher importance	38.33	25.310	24
	Total	32.65	22.058	49
Total	Lower importance	31.43	19.472	49
	Higher importance	34.69	24.673	49
	Total	33.03	22.171	98
Dependent variable: recommend restatement				
Clawback		Mean	SD	N
Panel B: Summary statistics for the auditor's propensity to recommend a restatement				
No Clawback	Lower importance	51.04	24.405	24
	Higher importance	49.60	28.792	25
	Total	50.31	26.466	49
Clawback	Lower importance	54.52	28.938	25
	Higher importance	47.92	26.699	24
	Total	51.29	27.774	49
Total	Lower importance	52.82	26.593	49
	Higher importance	48.78	27.510	49
	Total	50.80	26.992	98

Variable definitions

Independent variables

Client importance

Lower importance client—"Medical Marvels is a relatively small client in the audit firm's local office, with audit fees representing approximately 2% of the local office's total revenues. The local office is a relatively small office in the audit firm, with total revenues ranking it 18th out of the 21 offices in the firm."

Higher importance client—"Medical Marvels is the largest client in the audit firm's local office, with audit fees representing approximately 50% of the local office's total revenues. The local office is the third largest office in the audit firm, with total revenues ranking it third out of the 21 offices in the firm."

Clawback

No clawback—Participants are informed that in the CFO's contract the client did not include a clawback policy

Clawback—Participants are informed that in the CFO's contract the client included a clawback policy stating that in the event of a prior year restatement, the CFO would need to pay back \$1,500,000, which is 100% of the CFO's prior year incentive-based compensation

Dependent variables

Risk of material misstatement (RMM): "Based on the information in the case, what do you believe the audit team will assess the risk of material misstatement (RMM) as for Medical Marvels' current year (2015) financial statements?" 0% = Low RMM, 50% = Moderate RMM, 100% = High RMM. Scale utilizes 10-point increments. (Asked prior to the introduction of the audit issue)

Recommend restatement: "Please indicate how likely you believe it is that the audit team will propose a restatement of the 2014 financial statements." 0% = No Likelihood, 50% = Moderate Likelihood, 100% = Absolutely certain. Scale utilizes 10-point increments

likelihood to recommend a restatement.¹⁷ Hypothesis 1 predicts that auditors will assess a lower RMM in the presence

versus the absence of a clawback policy. Auditors that were in the no clawback condition reported that their assessment of RMM was 33.47% on average (SD = 22.505) compared to auditors in the clawback condition who reported on average 32.65% (SD = 22.058). ANOVA testing presented in Table 4, Panel A, shows that there is not a significant effect of clawback on the RMM assessment ($F = 0.028$;

¹⁷ Unlike Experiment 1, we did not observe any participants who spent less than 10 min completing the study. Therefore, all participants are included in the results. This also provides evidence that our goal of enhancing experimental control by performing in-person data collection at firm trainings was successful.

Table 4 Results—Experiment 2

Dependent variable: RMM assessment						
Source	SS	df	MS	F	p	β
Panel A: ANOVA for the auditor's assessment of risk of material misstatement						
Clawback	13.776	1	13.776	0.028	0.867	0.053
Importance	258.673	1	258.673	0.530	0.468	0.111
Clawback \times Importance	1521.966	1	1521.966	3.118	0.081	0.416
Error	45,884.667	94	488.135			
Dependent variable: recommend restatement						
Source	SS	df	MS	F	p	β
Panel B: ANOVA for the auditor's propensity to recommend a restatement						
Clawback	19.737	1	19.727	0.026	0.871	0.053
Importance	396.257	1	396.257	0.531	0.468	0.111
Clawback \times Importance	163.119	1	163.119	0.219	0.641	0.075
Error	70,089.032	94	745.628			

See Table 3 for variable definitions and measurement information

$p=0.867$). Consistent with Experiment 1, Hypothesis 1 is not supported.

Hypothesis 2 predicts that auditors will be less likely to propose restatements in the presence versus the absence of a clawback policy. Auditors in the no clawback condition reported that their likelihood to recommend a restatement was 50.31% on average ($SD=26.466$) compared to 51.29% ($SD=27.774$) in the clawback present condition. ANOVA testing presented in Table 4, Panel B, shows that there is not a significant effect of clawback on the likelihood of recommending a restatement ($F=0.026$; $p=0.871$). Consistent with Experiment 1, Hypothesis 2 is not supported. RQ1 examines whether client importance moderates the relationship between the presence of a clawback and the auditors' likelihood to recommend a restatement. ANOVA results show that the interaction between client importance and the presence of a clawback is not significant ($p=0.641$).¹⁸

¹⁸ Referring to the ANOVA presented in Table 4 Panel A, there appears to be a marginally significant interaction between *Clawback* and *Importance* on *RMM*. Referring to the means reported in Table 3 Panel A, it appears that the RMM assessments were lower for participants in the higher importance condition in the absence of a clawback, but RMM assessments were higher for participants in the higher importance condition in the presence of a clawback. However, further analysis shows that there is not a significant difference between participants' RMM assessments when comparing responses between the low importance clawback present/absent conditions ($p=0.261$) or between the high importance clawback present/absent conditions ($p=0.175$). This is consistent with the lack of support for the hypothesis.

Supplemental Analysis

Auditors' Assessment of RMM

Recall that we hypothesize auditors' RMM assessments will differ in the presence of a clawback policy because auditors will expect higher-quality financial statements. Although we do not find that RMM assessments differ across conditions for either of our experiments, we perform a supplemental analysis for Experiment 2 to further investigate financial statement quality and the additional process measures. We measure quality on an 11-point scale (0 = "Lower Quality" to 10 = "Higher Quality") with participants indicating the extent to which they believed the clawback policy influenced financial statement quality. In Experiment 2, consistent with Experiment 1, we find that auditors assess quality as marginally higher with a clawback as compared to no clawback (5.67 vs. 4.94; $t_{96} = -1.692$; $p=0.094$). Thus, we perform a mediation analysis for Experiment 2 for the indirect effect of clawback on RMM via financial statement quality with 5000 bootstrap samples and a bias-corrected 95% confidence interval (Preacher and Hayes 2008). In untabulated results, we find that financial statement quality does not mediate the relationship between clawback and RMM.^{19,20}

¹⁹ We performed the same mediation analysis for Experiment 1 with clawback (higher clawback, no clawback), financial statement quality, and RMM. We find consistent results that financial statement quality does not mediate the relationship between clawback and RMM.

²⁰ To explore other possible factors that mediate the relationship between clawbacks and RMM, we performed mediation analyses with all the new process measures that were added for Experiment 2. Litigation risk is the only process measure that provides any explanation as to why the presence of a clawback did not lead to differences

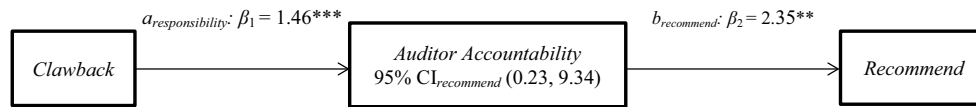


Fig. 1 Supplemental analysis—Propensity to recommend a restatement (Experiment 2). *Notes:* This figure presents the coefficients of the indirect effect of *Clawback* on *Recommend* with *Auditor Accountability* as the mediator. For the path labeled *a*, the coefficient was obtained from the following regression: $Auditor\ Accountability = \alpha + \beta_1 Clawback + \epsilon$. For the path labeled *b*, the coefficient was obtained from the following regression: $Recommend = \alpha + \beta_2 Auditor\ Accountability + \beta_3 Clawback + \epsilon$. β_1 and β_2 are reported in the model. The total indirect effect of *Clawback* on *Recommend* is $\beta_1 * \beta_2$ for the mediator, *Auditor Accountability*. β_3 is the direct effect of *Clawback*. The direct effect is not reported because it is not relevant to this analysis. *Clawback* is coded 1 if there was a clawback policy, 0 otherwise.

Auditors' Propensity to Recommend a Restatement

We predicted that auditors' propensity to recommend a restatement will differ in the presence of a clawback, yet we do not find differences in either of our first two experiments. Recall that our post hoc explanation for the lack of differences in Experiment 1 was potentially due to heightened auditor accountability for restatements in a clawback environment. As noted above, we measure auditor accountability on an 11-point scale (0 = "Not Responsible" to 10 = "Very Responsible") with the following question: "Please indicate the previous audit team's level of responsibility for the potential restatement." Due to low power in Experiment 1, we further examine auditor accountability in Experiment 2 with more participants.²¹ In Experiment 2, we find that auditors assess auditor accountability as significantly higher

wise. *Auditor Accountability* is measured by the extent of responsibility that the previous audit team has for the potential restatement (assessed on the following scale: "0 = Not Responsible, "5 = Somewhat Responsible," and "10 = Very Responsible"). *Recommend* is measured by the auditor's propensity to recommend a restatement (assessed on the following scale: "0% = No Likelihood, "50% = Moderate Likelihood," and "100% = Absolutely Certain"). *, **, *** Denote two-tailed significance at $p < 0.10$, $p < 0.05$, and $p < 0.01$ levels, respectively. Significance of the confidence interval (CI) is indicated if the interval excludes zero. The CI is a bias-corrected interval for the indirect effect. It was estimated with 5000 bootstrapping samples

with a clawback as compared to no clawback (6.92 vs. 5.47; $t_{96} = -3.094$; $p = 0.003$).

Thus, we next perform a mediation analysis to examine whether auditor accountability mediates the relationship between clawback and auditors' propensity to recommend a restatement. We perform the mediation analysis with 5000 bootstrap samples and a bias-corrected 95% confidence interval (Preacher and Hayes 2008). As shown in Fig. 1, we find auditor accountability significantly mediates the relationship between clawback and auditors' propensity to recommend a restatement (CI 0.23–9.34). This finding suggests that accountability is a significant motivator for auditors in this context and that it mediates the effects of clawbacks when an auditor is determining whether to propose a restatement. In other words, auditors perceive greater accountability for proposing restatements when such restatements could lead to the enforcement of a clawback. This increased accountability appears to offset any motivation from auditors to acquiesce to managers' increased preference not to restate prior financial statements in the presence of a clawback.

Experiment 3

Method

Due to the continued lack of results across our first two experiments and the potential for concerns related to design choices leading to no result findings, we perform Experiment 3 with some additional design modifications. Experiment 3 employs a 1 × 2 between-participants experimental design where we manipulate clawback (no clawback, clawback). For the clawback condition, we used the same manipulation used in Experiment 1 (higher clawback condition) and Experiment 2 (clawback condition). For the no clawback condition, participants do not receive any information on clawbacks (i.e., a pure control). This design choice addresses

Footnote 20 (continued)

in RMM assessments. We measure litigation risk on an 11-point scale with the following question: "Please indicate how likely it is that the audit team will consider potential litigation risk when deciding whether or not to propose a restatement?" We do not find differences between clawback conditions for the full sample ($p > 0.10$). However, we find within the higher importance condition that litigation risk is marginally higher with a clawback than without one (62.71 vs. 48.20; $t_{47} = -1.738$; $p = 0.088$), consistent with prior literature finding that litigation is a more important consideration for larger, more important clients (Stice 1991; Lys and Watts 1994; Kim and Park 2014). We find litigation risk significantly mediates the relationship between clawback and RMM using a Preacher and Hayes (2008) mediation analysis with a 95% confidence interval (not tabulated, CI 0.10–13.68), suggesting that litigation risk is a significant consideration for auditors when assessing RMM in a clawback environment.

²¹ We added additional process measures for auditor accountability in Experiment 2. However, this measure of auditor accountability continues to be the only one that provides support for our post hoc explanation that the lack of differences in auditors' judgments was due to auditor accountability for restatements in a clawback environment.

the following potential design concerns from Experiments 1 and 2: (1) participants in the no clawback condition assumed that the company would adopt a retroactive clawback policy in the future; or (2) salient non-adoption of a clawback affects auditors' judgments.²² Next, we did not include client importance information because we did not find results for importance in either of the two previous experiments, importance is unnecessary to test the robustness of our clawback findings, and most importantly, it allows us to isolate the effect of clawbacks on auditor judgments.²³

Participants

Thirty-seven auditors participated in Experiment 3 consisting of staff (29.7%), seniors (29.7%), managers (21.7%), senior managers (10.8%), and partners (8.1%). Participants were recruited at three non-Big four firms and from an author's network on a professional networking website. We compensated participants who completed the online study with a \$25 Amazon gift card. Participants have on average 5.3 years of audit experience and 32.4% work for a Big four firm. We do not find significant differences related to the demographic information collected between treatment conditions ($p > 0.10$) except for participants in the clawback condition

having lower experience with manufacturing clients than the no clawback condition (4.78 vs. 7.74, $t_{35} = 3.26$, $p = 0.003$). Results remain unchanged when we control for manufacturing experience.

Results

One hundred percent of the participants correctly indicated whether the CFO described in the case faced a clawback policy. This result suggests that they clearly attended to and understood the manipulation. Descriptive statistics are in Table 5, Panel A for the auditors' assessment of RMM and Panel B for the auditors' likelihood to recommend a restatement.²⁴ Hypothesis 1 predicts that auditors will assess a lower RMM in the presence versus the absence of a clawback policy. As shown in Table 6, we find auditors assessed significantly lower RMM in the presence versus the absence of a clawback (33.56 vs. 55.26, $t_{35} = 3.332$, $p = 0.001$). Unlike Experiments 1 and 2, these results support H1.

There are several potential post hoc explanations for these seemingly inconsistent findings. Although we cannot make statistical comparisons across experiments, the average RMM assessment in Experiment 3's control condition was descriptively higher than RMM assessments in all other control and clawback conditions across the three experiments by a wide margin (over 10 pts. on a 100 pt. scale). A potential explanation for these seemingly inconsistent results is that when the potential for adopting a clawback is not salient (e.g., in Experiment 3's setting), an audit client taking the proactive step to adopt clawbacks reduces auditors' risk assessments. However, when the potential for adopting a clawback is salient (e.g., in Experiments 1 and 2's settings), clients that adopt clawbacks are not viewed as less risky than clients that do not adopt clawbacks because the auditors might presume that those clients have adequate compensating controls to deem a clawback policy unnecessary. This explanation is consistent with our qualitative findings (discussed below) that auditors consider clawback policies as a factor in their RMM assessments, but any effects might be captured or contingent on other risk factors. For example, if we would have described a higher risk client that had a history of material weaknesses including poor tone at the top, the salient non-adoption of a clawback may not have been viewed as positively, leading to a significant effect of clawbacks in the first two experiments. Ultimately, however, we do not draw definitive conclusions as to why Experiments 1 and 2 do not support Hypothesis 1, whereas Experiment 3 does. Thus, future research should test the above post hoc

²² Participants also indicated their experience with CFOs having a clawback on an 11-point scale (0="Very Little Experience," to 10="Significant Experience"). We would expect participants to have *some* experience if they are aware that all public company CFOs are susceptible to the SOX clawback provision. Yet, participants in Experiments 1, 2, and 3 indicated they have very little experience with means of 1.13, 1.49, and 1.08, respectively.

²³ With any experimental study, an important consideration is whether participants received sufficient information to make their judgments. We test this concern in three ways. First, we coded participants' responses to the open-ended questions for any evidence of a perception of insufficient information such as claiming that they did not have enough information or requesting more information. This coding only revealed nine total participants (six from Experiment 1, two from Experiment 2, and one from Experiment 3) that felt the information was insufficient. Removing these participants did not affect the analysis and conclusions drawn. Further, there were not statistically significant differences across experimental conditions. Second, although the means for proposing a restatement are near the midpoint of the scale, potentially indicating pervasive uncertainty due to the lack of information, there is significant variance (i.e., standard deviations ranged from 24 to 28 on the 100-point scale across the three experiments). Third, we included a new question in Experiment 3 requiring participants to indicate the extent to which they believe the information in the case was sufficient to make their judgments on an 11-point scale (0="Not At All Sufficient" to 10="Very Sufficient"). We performed a median split at four where participants above (on or below) the median are considered to have received more (less) than sufficient information. We find results remain unchanged when we include only participants who perceived that they received more or less than sufficient information. These three analyses give us some comfort that a pervasive perception of insufficient information does not explain the lack of support for our hypotheses.

²⁴ Six participants spent less than 10 min completing the study. Results remain unchanged when these participants are included. Thus, we include all participants in the final sample.

Table 5 Summary statistics—Experiment 3

Dependent variable: RMM assessment			
Clawback	Mean	SD	<i>N</i>
Panel A: Summary statistics for the auditor's assessment of risk of material misstatement			
No clawback	55.26	18.369	19
Clawback	33.56	17.564	18
Total	45.68	20.350	37
Dependent variable: recommend restatement			
Clawback	Mean	SD	<i>N</i>
Panel B: Summary statistics for the auditor's propensity to recommend a restatement			
No clawback	43.16	25.831	19
Clawback	54.44	23.319	18
Total	48.65	24.962	37

Variable definitions

Independent variables

Clawback

No clawback—This is a control condition where participants are not provided any information about clawbacks

Clawback—Participants are informed that in the CFO's contract the client included a clawback policy stating that in the event of a prior year restatement, the CFO would need to pay back \$1,500,000, which is 100% of the CFO's prior year incentive-based compensation

Dependent variables

Risk of material misstatement (RMM): "Based on the information in the case, what is your assessment of risk of material misstatement (RMM) as for Medical Marvels' current year (2016) financial statements?" 0% = Low RMM, 50% = Moderate RMM, 100% = High RMM

Scale utilizes 10-point increments. (Asked prior to the introduction of the audit issue)

Recommend restatement: "How likely is it that you would recommend that Medical Marvels' 2015 financial statements should be restated due to the impairment?" 0% = No Likelihood, 50% = Moderate Likelihood, 100% = Absolutely Certain. Scale utilizes 10-point increments

Table 6 Results—Experiment 3

Dependent variable: RMM assessment	<i>df</i>	<i>T</i> statistic	<i>p</i> value	
Panel A: <i>T</i> test comparisons for the auditor's assessment of risk of material misstatement				
Clawback versus no clawback	35	3.332	0.001	
Dependent Variable: recommend restatement	<i>df</i>	<i>T</i> statistic	<i>p</i> value	β
Panel B: <i>T</i> test comparisons for the auditor's propensity to recommend a restatement				
Clawback versus no clawback	35	-1.392	0.173	0.273

See Table 5 for variable definitions and measurement information

explanations by manipulating the presence of other risk factors, most notably compensating controls and management integrity (see qualitative evidence below).²⁵

Hypothesis 2 predicts that auditors will be less likely to propose restatements in the presence versus the absence of a clawback. As shown in Table 6, we find there is not a significant effect of clawback on the likelihood of recommending a restatement between the clawback and no clawback conditions (54.44 vs. 43.16, $t_{35} = -1.392$; $p = 0.173$). Consistent with Experiments 1 and 2, Hypothesis 2 is not supported. Further, this finding is also directionally inconsistent with Hypothesis 2. One potential post hoc explanation is that some auditors, when auditing clients that have, versus have not, implemented clawback provisions, are more likely to revise their risk assessments upward after learning

²⁵ We chose not to run a fourth experiment to examine this possibility mainly because the effects of propensity to propose restatements, not RMM, is our primary research interest due to the strong ethical implications and financial consequences, but also because our three experiments and qualitative evidence show that the relationship between clawbacks and risk assessment is very complex and worthy of an entire subsequent paper.

of a potential restatement and are therefore somewhat more inclined to recommend a restatement.

Qualitative Evidence

Experiments 1 through 3 examine the effects of clawback provisions on auditors' judgments in a between-participants experimental setting. Thus, these experiments reveal how auditors respond to changes in clients' clawback provisions in their natural "between-participants" setting.²⁶ However, since participants in between-participants settings only see one level of a manipulated variable, such designs do not necessarily reveal participants' conscious beliefs as to how their judgments *should* vary with changes in the manipulated variable (Kahneman and Tversky 1996; Reffett 2010). Therefore, to explore whether the results for experiments one through three are consistent with auditors' conscious beliefs as to how clawback provisions should affect their judgments, we conducted an expert panel discussion (between Experiments 2 and 3) and interviews with audit professionals (concurrent timing with Experiment 3).

Expert Panel

We conducted an expert panel with members of the authors' institutions' Accounting Advisory Group (AAG). The AAG group consisted of 16 accounting professionals, 14 are current or former auditors with an average of 10.61 years of auditing experience. The panel members were not informed of this study's specific research questions, but were provided with a background paragraph describing a clawback. Panel members completed a short survey and participated in a full panel discussion led by one of the authors. Table 7 reports the results of the survey. The survey asked participants to indicate: "How you believe the presence (versus the absence) of a clawback provision likely would affect auditors' assessment of an audit client's (1) Engagement risk, (2) Control environment, (3) RMM, (4) Substantive tests, and (5) Restatements?" Participants indicated their responses to these five questions using scales with points labeled as follows: 0 = "Significantly decrease," 5 = "No effect," and 10 = "Significantly increase." As shown in Table 7, Panel A, the responses to these five questions were not significantly different from the midpoint (i.e., "No Effect") (all p 's > 0.10). This shows that when asked to think about the effect of clawbacks on an audit engagement, audit

professionals do not believe clawbacks affect their judgments in these five areas.

In addition, in an open-ended question, these same AAG panel members were given the opportunity to write down qualitative information about how they believe an executive's clawback policy could affect the audit engagement. Of the 16 AAG members, 13 provided qualitative responses, showing that they were actively engaged in the expert panel. The responses to this open-ended question are in Table 7, Panel B. The consensus of the expert panel is that clawbacks are an important part of improving a company's control environment (e.g., see quotes 2 and 12), but that any effects would probably be captured by or contingent on other risk factors (e.g., see quotes, 3, 8, 11, and 13). Panel members also uniformly believed that auditors would not compromise their ethics by being less likely to propose a restatement in the presence of a clawback (e.g., see quotes 1, 2, 7, and 12).

Auditor Interviews

In addition to the surveys, we interviewed three audit partners (one from a Big 4 firm and two from non-Big four firms) about the effects of clawbacks on auditors' risk assessments and restatement recommendations. Three co-authors were present for all of the interviews, one of which took notes. The interview started by asking about their knowledge of clawbacks, and all interviewees indicated familiarity and related experience. We then asked about the effects on risk assessments and restatement recommendations, respectively, with follow-up questions as necessary. The results for risk assessments were generally consistent with the expert panel. Specifically, any effects of a clawback provision would probably be captured by or contingent on other risk factors. One interviewee noted that clawbacks might reduce risk assessments more for higher risk clients, but also noted that might not be the case if management integrity is in doubt. He explained that unethical managers, who are going to misstate financial performance to earn a bonus, are going to do so regardless of a clawback provision due to their lack of integrity. In other words, if managers are willing to risk civil and criminal penalties, they will also be willing to risk having their compensation clawed back. All interviewees consistently indicated that clawbacks would have no effect on restatement recommendations. They stressed that auditors have strong ethics, and more importantly that there are quality control mechanisms in place to prevent auditors from behaving unethically. For example, one partner stressed that for all circumstances in which an audit engagement team is considering the need to restate prior years' financial statements, technical specialists in the firm's national office, who

²⁶ By natural between-participants setting, we are conveying that, for any given audit engagement, auditors will make judgments either in the presence or in the absence of a clawback agreement, but not both.

Table 7 Results—Expert panel survey

Panel A: panel members were asked to indicate, how you believe the presence (versus the absence) of a clawback provision likely would affect auditors' assessment of an audit client's (1) engagement risk, (2) control environment, (3) RMM, (4) substantive tests, and (5) restatements?" on the following scale: (0 = "significantly decrease," 5 = "no effect," 10 = "significantly increase")

Topic	<i>N</i>	Mean	SD	<i>T</i> statistic ^a	<i>df</i>	<i>p</i> value ^a
(1) Engagement risk	16	4.875	1.576	0.317	15	0.755
(2) Control environment	16	5.688	1.611	1.707	15	0.108
(3) RMM	16	4.781	1.549	0.565	15	0.580
(4) Substantive tests	16	5.188	0.834	0.899	15	0.383
(5) Restatements	16	5.344	2.166	0.635	15	0.535

Panel B: quotes from the expert panel

1. "I think the absence of the provision would increase scrutiny in all areas listed above. I think the clawback has to have impact on conscious of auditor; however believe the auditor would make the ethical call 9/10."
2. "It would appear that this provision would enhance the tone/ethics/control environment, however, ultimately, does not reduce the testing, protocols/materiality considerations of engagement risk. One would hope that this would drive greater scrutiny/commitment to accuracy inside the entity."
3. "For clients with performance based compensation, whether with clawback or not, this is already factored into our risk assessments and audit plan."
4. "Audit procedures could be enhanced to evaluate entity level controls associated with measuring "tone at the top."
5. "This provision should have minimal effect—if an actor will engage in risky behavior the clawback will have minimal impact/consideration."
6. "Understand and/or be aware of the personal implication of a restatement."
7. "From my past experience in auditing, I don't feel the clawback provision would impact planning or performance of the audit."
8. "I don't feel a clawback would have any more impact than the general impact of executive incentive compensation. The presence of which is always considered."
9. "The interaction between management and auditor. The role the audit committee plays."
10. "If the same individuals exposed to the clawback clause were key same individuals responsible for areas of judgment or control owners, this would impact audit. If were separate, would have less of an impact."
11. "Clawbacks are evaluated as a risk. In any amount, but for public companies, would still be considered when designing and executing tests of controls similar to any risk."
12. "While I believe it is great compensation governance to have a clawback in place, I do not believe it significantly impacts what external auditors do."
13. "The list of issues for risk is significantly more than that one risk. Clawback has some impact but definitely not impacting the whole risk environment."

^aComparisons of each mean were made versus the midpoint of the scale (5 = "No Effect")

have no contact with the client in question, are consulted and have significant input into the final restatement decision.²⁷

Conclusion

Results of our three experiments and qualitative methods indicate that there is not a negative relationship between the presence of clawback provisions and auditors' likelihood of recommending a restatement upon the discovery of a potential accounting misstatement (i.e., we find no effects

of clawback policies on auditors' ethical decision-making). Further, we find some, but far from conclusive, evidence that the presence of a clawback may decrease auditors' risk assessments. Therefore, future research is needed to more fully understand the effects of clawbacks on risk assessment.

We find the lack of results for auditors' propensity to restate is due to auditors perceiving greater accountability for proposing restatements when doing so could cause managers to forfeit previously received incentive-based compensation (i.e., in the presence of a clawback). However, another potential feature driving our lack of results is that the decision to propose a restatement may just be too important to be influenced by a clawback, as the risk to the audit firm is too great to avoid proposing a restatement. Although this is consistent with our qualitative evidence where interviewees stressed strong quality control mechanisms over the restatement process, additional research, particularly regarding the

²⁷ While experiments can capture non-conscious effects of clawbacks that expert panels and interviews likely would not capture, we believe it is important to have both the experimental data and our qualitative analysis to understand more fully whether the presence of clawbacks influences auditors' conscious and non-conscious judgments.

effects of clawbacks on auditor–client negotiations around restatements, is needed before reaching more definitive conclusions.

Our results have important policy implications for regulators. We investigate critical unanswered questions about the effectiveness of a key SOX provision that was implemented over 15 years ago. Specifically, we examine whether the clawback provision impairs auditors' ethical behavior. Our results suggest that a decrease in the number of restatements in a clawback environment will not be due to auditors acting unethically to appease management. These findings will be particularly comforting for regulators as Pyzoha (2015) finds evidence that clawbacks might actually decrease ethical behavior by increasing *executives'* opposition to restatements. Thus, our study suggests that, despite clawbacks likely leading to greater opposition to restatements from managers (Pyzoha 2015), such policies likely will not ultimately lead to fewer restatements due to auditors' judgment and decision-making. As regulators work to finalize the revised SOX clawback provision in the Dodd-Frank Act, results of our study suggest that regulators can have some comfort that the provision will not alter the ethical behavior of auditing professionals.

Our results also have important implications for auditors and practice. To our knowledge, we provide the first systematic evidence of how clawbacks influence auditors' judgments and decision-making. The effect of clawbacks on auditors' restatement recommendations is of particular interest due to its strong ethical implications and the fact that restatements often result in adverse economic consequences (Palmrose et al. 2004). We find clawbacks strengthen auditor accountability for higher-quality financial reporting mitigating any deleterious effects on auditors' ethical judgment. We also find some evidence that clawbacks can influence auditors' judgments during risk assessments. Collectively, our findings have important practical implications as clawbacks become more prevalent, particularly in light of the revised SOX clawback provision being finalized from the Dodd-Frank Act.

Our study is subject to limitations beyond those typically associated with experimental research, thereby creating opportunities for future research. Most importantly, we only examine the effect of clawbacks on two measures of auditor judgment. As such, clawbacks could have significant effects on other facets of auditor judgment and decision-making. For instance, it is possible auditors may be more willing to concede during the restatement negotiation phase, or perhaps be more likely to propose current year adjustments in the financial statements to avoid future negative publicity of a clawback and restatement. We also only examined one threat to auditor independence. Thus, although client importance did not interact with the presence or absence of a clawback policy, the effects of clawbacks could depend on

other independence threats (e.g., provision of non-audit service, long auditor tenure). Future research needs to examine these possibilities. Additionally, our Experiment 3 finding that clawbacks decrease RMM assessments is inconsistent with our qualitative evidence where auditors believe that there would not be an effect. As we believe that this pattern is due to non-conscious effects in our between-participants design that would not be captured in surveys/interviews (cf. Reffett 2010; Griffith et al. 2016; Pyzoha et al. 2017), future research on clawbacks (and behavioral research in general) should consider employing expert panels and/or interviews to further inform results from between-participants experimental settings designed to support theoretical predictions regarding the presence of non-conscious effects.

Our study is also subject to the limitations associated with studies that fail to support their hypotheses (e.g., the role of experimental design choices). Although we have tried to diligently address these concerns across three separate experiments and multiple forms of qualitative evidence, it is impossible to completely rule all of them out. Importantly, these concerns provide opportunities for future research. First, using a long-term, low-risk client could have inadvertently suppressed the prominence of a clawback policy as a potential risk factor to consider. Future research could explore the influence of clawbacks on a client with moderate or higher risk factors. Second, the manipulation may be strengthened if presented in change form where the company (1) adopted a clawback policy and did not have one in the previous year, (2) retained the same clawback policy from the prior year, and (3) did not adopt or already had a clawback policy. Despite having some comfort in the strength of the manipulation via the manipulation checks and the significant effect of the clawback policy on other measures (e.g., the accountability measure), future research should consider ways to strengthen the manipulation of clawback policies such as using a change format. In light of these limitations, we agree with Lindsay and Ehrenberg's (1993) view that no result papers can still make important contributions as long as they are "scientifically informative." Accordingly, we believe our study contributes to the literature by using an appropriate research design to address important unanswered questions about a key SOX provision.

Acknowledgements We thank the auditors who participated in the study and interviews, our expert panel, Regan Schmidt (discussant), three anonymous reviewers, and attendees at the University of Waterloo's 3rd Biennial Symposium on Accounting Ethics, for their constructive feedback, and Miami University for financial support.

Compliance with Ethical Standards

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Dec-

laration of Helsinki and its later amendments or comparable ethical standards.

Informed Consent Informed consent was obtained from all individual participants included in the study.

References

- Arens, A., Elder, R., Beasley, M., & Hogan, C. (2017). *Auditing and assurance services: An integrated approach* (16th ed.). London: Pearson.
- Ashbaugh, H., LaFond, R., & Mayhew, B. (2003). Do non-audit services compromise auditor independence? Further evidence. *The Accounting Review*, 78(3), 611–639.
- Bazerman, M., Morgan, K., & Loewenstein, G. (1997). *The impossibility of auditor independence* (pp. 89–94). Summer: Sloan Management Review.
- Brandon, D. M., & Mueller, J. M. (2006). The influence of client importance on juror evaluations of auditor liability. *Behavioral Research in Accounting*, 18, 1–18.
- Brown, H. L., & Johnstone, K. M. (2009). Resolving disputed financial reporting issues: Effects of auditor negotiation experience and engagement risk on negotiation process and outcome. *Auditing: A Journal of Practice and Theory*, 28(2), 65–92.
- Brown-Liburud, H., Cohen, J., & Trompeter, G. (2013). Effects of earnings forecasts and heightened professional skepticism on the outcomes of client-auditor negotiation. *Journal of Business Ethics*, 116(2), 311–325.
- Buckless, F. R., & Ravenscroft, S. P. (1990). Contrast coding: A refinement of ANOVA in behavioral analysis. *The Accounting Review*, 65, 933–945.
- Chan, L. H., Chen, K. C. W., Chen, T.-Y., & Yu, Y. (2012). The effects of firm-initiated clawback provisions on earnings quality and auditor behavior. *Journal of Accounting and Economics*, 54(2/3), 180–196.
- Chen, M. A., Greene, D., & Owers, J. (2015). The costs and benefits of clawback provisions in CEO compensation. *Review of Corporate Finance Studies*, 4(1), 108–154.
- Chung, H., & Kallapur, S. (2003). Client importance, non-audit services, and abnormal accruals. *The Accounting Review*, 78(4), 931–955.
- Chung, J., & Monroe, G. S. (2003). Exploring social desirability bias. *Journal of Business Ethics*, 44(4), 291–302.
- Cohen, J., Gaynor, L., Montague, M., & Wayne, J. (2017). The effect of framing on information search and information evaluation in auditors' fair value judgments. *Working paper*, Boston College, University of South Florida, and Wake Forest University.
- DeAngelo, L. (1981). Auditor independence, "Low Balling," and disclosure regulation. *Journal of Accounting and Economics*, 3, 113–127.
- DeFond, M., Raghunandan, K., & Subramanyam, K. R. (2002). Do non-audit service fees impair auditor independence? Evidence from going concern audit opinions. *Journal of Accounting Research*, 40, 1247–1274.
- deHaan, E., Hodge, F., & Shevlin, T. (2013). Does voluntary adoption of a clawback provision improve financial reporting quality? *Contemporary Accounting Research*, 30(3), 1027–1062.
- Desai, H., Hogan, C., & Wilkins, M. (2006). The reputational penalty for aggressive accounting: earnings restatements and management turnover. *The Accounting Review*, 81, 83–112.
- Earley, C., Hoffman, V., & Joe, J. (2008). Reducing management's influence on auditors' judgments: An experimental investigation of SOX 404 assessments. *The Accounting Review*, 83, 1461–1485.
- Equilar. (2016). *Compensation and Governance Outlook 2016: Shareholder Engagement drives changes to proxy disclosures*. Redwood City, CA: Equilar Inc.
- Financial Accounting Standards Board (FASB). (2005). *Accounting Changes and Error Corrections*. Statement of Financial Accounting Standards No. 154. Norwalk, CT: FASB.
- Francis, J. D., & Ke, B. (2006). Disclosure of fees paid to auditors and the market valuation of earnings surprises. *Review of Accounting Studies*, 11(4), 495–523.
- Grenier, J. H. (2017). Encouraging professional skepticism in the industry specialization era. *Journal of Business Ethics*, 142(2), 241–256.
- Grenier, J. H., Pomeroy, B., & Reffett, A. (2012). Speak up or shut up? The moderating role of credibility on auditor remedial defense tactics. *Auditing: A Journal of Practice and Theory*, 31(4), 65–83.
- Grenier, J. H., Pomeroy, B., & Stern, M. (2015). The effects of accounting standard precision, auditor task expertise, and judgment frameworks on audit firm litigation exposure. *Contemporary Accounting Research*, 32(1), 336–357.
- Griffith, E. E., Hammersley, J. S., & Kadous, K. (2015). Audits of complex estimates as verification of management numbers: How institutional pressures shape practice. *Contemporary Accounting Research*, 32(3), 833–863.
- Griffith, E. E., Kadous, K., & Young, D. (2016). How insights from the "new" JDM research can improve auditor judgment: Fundamental research questions and methodological advice. *Auditing: A Journal of Practice and Theory*, 35(2), 1–22.
- Guggenmos, R. D., Piercey, M. D., & Agoglia, C. P. (2018). Custom contrast testing: Current trends and a new approach. *Forthcoming—The Accounting Review*.
- Hackenbrack, K., & Nelson, M. (1996). Auditors' incentives and their application of financial accounting standards. *The Accounting Review*, 71(1), 43–59.
- Hanno, D., & Cohen, J. (2000). Auditors' consideration of corporate governance and management control philosophy in preplanning and planning judgments. *Auditing: A Journal of Practice and Theory*, 19(2), 133–146.
- Hennes, K. M., Leone, A. J., & Miller, B. P. (2014). Determinants and market consequences of auditor dismissals after accounting restatements. *The Accounting Review*, 89(3), 1051–1082.
- Herrbach, O. (2005). The Art of Compromise? The individual and organisational legitimacy of 'irregular auditing'. *Accounting, Auditing, and Accountability Journal*, 18, 390–409.
- Hirst, E. (1994). Auditor sensitivity to earnings management. *Contemporary Accounting Research*, 11(1), 405–422.
- Houston, R., Peters, M., & Pratt, J. (2005). Nonlitigation risk and pricing audit services. *Auditing: A Journal of Practice and Theory*, 24(1), 37–53.
- Iskandar-Datta, M., & Yonghong, J. (2013). Valuation consequences of clawback provisions. *The Accounting Review*, 88(1), 171–198.
- Jenkins, J., & Haynes, C. (2003). The persuasiveness of client preferences: An investigation of the impact of preference, timing, and client credibility. *Auditing: A Journal of Practice and Theory*, 22(1), 143–154.
- Johnstone, K. (2000). Client acceptance decisions: Simultaneous effects of client business risk and audit planning decisions. *Auditing: A Journal of Practice and Theory*, 19(1), 1–25.
- Kadous, K., Kennedy, S., & Peecher, M. (2003). The effect of quality assessment and directional goal commitment on auditors' acceptance of client-preferred accounting methods. *The Accounting Review*, 78(3), 759–778.
- Kahneman, D., & Tversky, A. (1996). On the reality of cognitive illusions. *Psychological Review*, 103(3), 582–591.
- Kaplan, S. E., Petersen, M. J., & Samuels, J. A. (2007). Effects of subordinate likeability and balanced scorecard format on performance-related judgments. *Advances in Accounting*, 23, 85–111.

- Khurana, I., & Raman, K. K. (2006). Do investors care about the auditor's economic dependence on the client? *Contemporary Accounting Research*, 4(23), 977–1016.
- Kim, Y., & Park, M. S. (2014). Real activities manipulation and auditors' client retention decisions. *The Accounting Review*, 89(1), 367–401.
- Krishnan, J., Sami, H., & Zhang, Y. (2005). Does the provision of non-audit services affect investor perceptions of auditor independence? *Auditing: A Journal of Practice and Theory*, 24(2), 111–135.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, 108(3), 480–498.
- Lambert, T. A., & Agoglia, C. (2011). Closing the loop: Review process factors affecting audit staff follow-through. *Journal of Accounting Research*, 49(5), 1275–1306.
- Li, C. (2009). Does client importance affect auditor independence at the office level? Empirical evidence from going-concern opinions. *Contemporary Accounting Research*, 26(1), 201–230.
- Libby, R., & Kinney, W. (2000). Does mandated audit communication reduce opportunistic corrections to manage earnings to forecasts? *The Accounting Review*, 75(4), 383–404.
- Lindsay, R. M., & Ehrenberg, A. S. C. (1993). The design of replicated studies. *The American Statistician*, 47(August), 217–228.
- Lys, T., & Watts, R. L. (1994). Lawsuits against auditors. *Journal of Accounting Research*, 32(Supplement), 65–93.
- Messier, W. F., & Quilliam, W. C. (1992). The effect of accountability on judgment: Development of hypotheses for auditing. *Auditing*, 11(Supplement), 123–138.
- Nelson, M., & Tan, H.-T. (2005). Judgment and decision making research in Auditing: A task, person, and interpersonal interaction perspective. *Auditing: A Journal of Practice and Theory*, 24(1), 41–71.
- Palmrose, Z.-V., Richardson, V., & Scholz, S. (2004). Determinants of market reactions to restatement announcements. *Journal of Accounting and Economics*, 37, 59–89.
- Peecher, M. E., & Piercey, M. D. (2008). Judging audit quality in light of adverse outcomes: Evidence of outcome bias and reverse outcome bias. *Contemporary Accounting Research*, 25(1), 243–274.
- Pratt, J., & Stice, J. (1994). The effects of client characteristics on auditor litigation risk judgments, required audit evidence, and recommended audit fees. *The Accounting Review*, 69(4), 639–656.
- Preacher, K., & Hayes, A. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891.
- Public Company Accounting Oversight Board (PCAOB). (2010). *PCAOB Release No. 2010-004. Audit Risk. Auditing Standard No. 8*. Washington, DC: PCAOB.
- Pyzoha, J. S. (2015). Why do restatements decrease in a clawback environment? An investigation into financial reporting executives' decision-making during the restatement process. *The Accounting Review*, 90(6), 2515–2536.
- Pyzoha, J. S., & Jenkins, J. G. (2016) Clawback to the future: A guide to preparing for SEC clawback rules. Working paper, Miami University and Virginia Tech.
- Pyzoha, J. S., Taylor, M. H., & Wu, Y. (2017). Can auditors pursue firm-level goals nonconsciously on audits of complex estimates? An examination of the joint effects of tone-at-the-top messaging and management's specialist. Working paper, Miami University, Case Western Reserve University, and Texas Tech University.
- Reffett, A. B. (2010). Can identifying and investigating fraud risks increase auditors' liability? *The Accounting Review*, 85(6), 2145–2167.
- Reffett, A., Ballou, B., Heitger, D., & Heitger, L. (2017) An experimental examination of experienced and inexperienced auditors' reporting decisions versus initial judgments for management estimates. Working paper, Miami University and Missouri State University.
- Ricchiute, D. N. (2004). Effects of an attorney's line of argument on accountants' expert witness testimony. *The Accounting Review*, 79, 221–245.
- Rosenthal, R. (1976). *Experimenter effects in behavioral research* (2nd ed.). New York, NY: Wiley.
- Salterio, S., & Koonce, L. (1997). The persuasiveness of audit evidence: The case of accounting policy decisions. *Accounting, Organizations and Society*, 22, 573–587.
- Samsonova-Taddei, A., & Siddiqui, J. (2016). Regulation and the promotion of audit ethics: Analysis of the content of the EU's policy. *Journal of Business Ethics*, 139, 183–195.
- Schmidt, R. N. (2014). The effects of auditors' accessibility to "tone at the top" knowledge on audit judgments. *Behavioral Research in Accounting*, 26, 73–96.
- Securities and Exchange Commission (SEC). (2010). An insider's view of the SEC: Principles to guide reform. October 18. Speech, US Securities and Exchange Commission, Berkeley.
- Securities and Exchange Commission (SEC). (2011a). SEC obtains settlement with CEO to recover compensation and stock profits he received during company's fraud. (March 3). Washington, DC: SEC. <https://www.sec.gov/news/press/2011/2011-61.htm>.
- Securities and Exchange Commission (SEC). (2011b). Former CEO to Return \$2.8 million in bonuses and stock profits received during CSK auto accounting fraud. (November 15). Washington, DC: SEC. <https://www.sec.gov/news/press/2011/2011-243.htm>.
- Securities and Exchange Commission (SEC). (2015a). SEC charges CSC and former executives with accounting fraud. (June 5). Washington, DC: SEC. <https://www.sec.gov/news/pressrelease/2015-111.html>.
- Securities and Exchange Commission (SEC). (2015b). SEC proposes rules requiring companies to adopt clawback policies on executive compensation. (July 1). Washington, DC: SEC. <https://www.sec.gov/news/pressrelease/2015-136.html>.
- Stice, J. (1991). Using financial and market information to identify pre-engagement factors associated with lawsuits against auditors. *The Accounting Review*, 66, 516–553.
- Sweeney, B., Arnold, D., & Pierce, B. (2010). The impact of perceived ethical culture of the firm and demographic variables on auditors' ethical evaluation and intention to act decisions. *Journal of Business Ethics*, 93(4), 531–551.
- Trompeter, G. (1994). The effect of partner compensation schemes and generally accepted accounting principles on audit partner judgment. *Auditing: A Journal of Practice and Theory*, 13(2), 56–68.
- U.S. House of Representatives. (2002). The Sarbanes-Oxley Act. Public Law 107-204 [H.R. 3763]. Washington, DC: Government Printing Office.
- U.S. House of Representatives. (2010). The Dodd-Frank Wall Street Reform and Consumer Protection Act. Public Law 111-203 [H.R. 4173]. Washington, DC: Government Printing Office.
- White, R. A. (1977). The influence of the experimenter motivation, attitudes and methods of handling subjects in psi test results. In B. B. Wolman (Ed.), *Handbook of parapsychology* (pp. 273–304). New York, NY: Van Nostrand Reinhold.
- Wilks, T. J. (2002). Predecisional distortion of evidence as a consequence of real-time audit review. *The Accounting Review*, 77(1), 51–71.
- Willett, C., & Page, M. (1996). A survey of time budget pressure and irregular auditing practices among newly qualified UK chartered accountants. *The British Accounting Review*, 28(2), 101–120.
- Wolfe, C., Mauldin, E., & Chandler-Diaz, M. (2009). Concede or deny: Do management persuasion tactics affect auditor evaluation of internal control deviations? *The Accounting Review*, 84(6), 2013–2037.