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Clawback policy enforcement: To disclose or not to disclose

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ABSTRACT

The SEC proposed in 2015 to require the disclosure of incentive compensation recovery efforts by companies' boards of directors. While such disclosure of enforcement can signal the effectiveness of corporate governance as the SEC suggested, firms have argued that the proposed enforcement disclosure may harm executives' reputation regardless of their involvement in misstatement because the clawback includes a no-fault clause. Results of our experimental study suggest that when the board does not disclose its clawback enforcement, investors perceive weak corporate governance, particularly when a restatement results from an intentional misstatement. This, in turn, leads investors to be less willing to invest than when clawback enforcement is disclosed. We also find that investors' perception of management reputation is not negatively affected following the board's clawback enforcement disclosure. Overall, our study provides insights into the potential effect of the SEC's proposal requiring the disclosure of clawback enforcement and addresses concerns raised in comment letters.

1. Introduction

Clawback provisions ("clawbacks") are designed to enable incentive compensation paid to executives to be recouped if it is later determined that the compensation was not actually earned because of a material financial misstatement.[1] Such clawbacks are intended to deter executives from misreporting by directly linking their incentive compensation to financial reporting quality. During the last two decades, firm-initiated adoptions of clawback policies[2] have steadily increased.[3] Such voluntary adoption of clawback policies by a firm's board of directors (hereafter, the board) presumably signals to investors the board's commitment to ensure its financial reporting quality by deterring executives' earnings manipulation (Denis, 2012; Iskandar-Datta & Jia, 2013).

Early clawback studies of companies that have voluntarily adopted clawback provisions, document evidence of a number of actual and perceived benefits including a reduction in accounting restatements,[4] positive stock valuation, a decrease in financial reporting risks, and favorable loan contracting (Chan, Chen, & Chen, 2013; Chan, Chen, Chen, & Yu, 2012; DeHaan, Hodge, & Shevlin, 2013; Iskandar-Datta & Jia, 2013; Mburu & Tang, 2018), all of which suggests that the adoption of clawback provisions improved financial reporting quality. More

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[1] Clawback provisions were introduced in the Sarbanes-Oxley Act (SOX) Section 304 in 2002 (SOX, U.S. House of Representatives, 2002). In 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act, hereafter), Section 954 modified clawback provisions (the Dodd-Frank Act, U.S. House of Representatives, 2010). Whereas, under SOX, clawback provisions were enforceable only by the SEC, the DFA now gives a firm's board of directors the discretion to enforce them. Moreover, the DFA does not require misconduct on the part of the executives as a prerequisite for clawbacks.

[2] We use the term policies and provisions interchangeably.

[3] The number of firms that have voluntarily adopted clawback provisions since the passage of Sarbanes-Oxley Act (SOX) in 2002 has significantly increased. In 2006, only 18% of fortune 100 companies had adopted a clawback policy (Equilar, 2013). By 2016, 92% of S&P 500 companies had adopted a clawback policy (Equilar, 2017).

[4] The finding of a reduction in restatements should be interpreted with caution as it may be the result of management's choice not to file amended financial statements. For example, a recent study of the effect of clawback provisions by Pyzoha (2015) finds that executives who face a lower quality auditor, are less likely to agree with amending prior financial statements when a significant proportion of their pay is incentive-based.

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recent clawback research that investigates variations in clawback policies also finds evidence that implies strong clawback policies enhance financial reporting quality whereas weak clawback policies do not affect financial reporting quality (Erkens, Gan, & Yurtoglu, 2018). However, the adoption of clawback policies does not indicate the extent to which firms are enforcing them, and thus, may not necessarily be indicative of firms' true commitment to enhance financial reporting quality. Indeed, it is possible for firms to adopt strong clawback policies, but never enforce them even when a triggering event occurs (New York Times, 2013a, 2013b, 2016).[5] In such a case, the deterrence effect of a clawback policy on financial misreporting would be weak since executives would perceive the likelihood of being punished to be low (Tittle, 1980).

Importantly, under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (U.S. House of Representatives, 2010), companies are not required to disclose whether they have enforced their clawback provisions. Consequently, investors have no means of being informed of any enforcement of clawback policy unless firms disclose it.[6] To correct this deficiency, the SEC's (2015) proposed Rule 10D-1 titled "Listing Standards for Recovery of Erroneously Awarded Compensation," seeks to require all listed companies to have a written clawback policy in their annual reports, and to disclose *enforcement* of that policy (i.e., whether they have taken or not taken action) regardless of executives' fault.[7] The purpose of this study is to examine whether and how a firm's disclosure (versus nondisclosure) of its clawback enforcement may influence the attractiveness of the firm.

On the one hand, following the issuance of the SEC's proposal, a number of organizations expressed concerns in their comment letters about the potential negative effect of the clawback enforcement disclosure (e.g., American Bar Association Business Law Section, 2016; Compensation Advisory Partners, 2015; McGuireWoods LLP and Brownstein Hyatt Farber Schreck LLP, 2021; Polk & Wardwell, 2015; Shadow Financial Regulatory Committee, 2015). A major argument made by the commenters is that disclosure of clawback recovery can damage the reputation of non-culpable executives as, under the proposed Rule 10D-1, recoupment of erroneously awarded compensation is not dependent upon whether or not a restatement is due to an executive's fault. Thus, the disclosure of clawback enforcement (e.g., identification of executives who received erroneously awarded compensation) could signal to investors that a company's management may be questionable even when the misstatement that resulted in the restatement of financial statements was not the fault of any of the executive officers. Therefore, commenters assert that the disclosure should not be mandatory but rather be decided at the board's discretion.[8]

Concern about the potential damage to the reputation of non-culpable executives may be justified to the extent that research (e.g., Hennes, Leone, & Miller, 2008; Palmrose, Richardson, & Scholz, 2004) has documented more negative investor reactions for restatements that result from intentional than from unintentional misstatements. The more negative reactions are presumably due to investors' perception that management is more questionable (dishonest) when the misstatement is intentional than when it is unintentional. If clawback disclosure results in investors' perception of questionable management regardless of management's fault, then investors' reaction will similarly be negative whether the misstatement that required the restatement was intentional or unintentional. In such a case, clawback enforcement disclosure would exacerbate negative investor reactions to restatements in the case of unintentional misstatements.

On the other hand, when discussing potential effects on listed issuers, the SEC's suggestion is that disclosing a board's clawback recovery can serve as a signal of the effectiveness of its corporate governance to outsiders. The proposal notes for example, that "…disclosures would allow existing and prospective shareholders to observe whether issuers are enforcing their recovery policies consistent with Section 10D," and "the requirement to disclose instances in which the board does not pursue recovery and its reasons for doing so would permit shareholders to be aware of the board's actions in this regard and thus potentially hold board members accountable for their decisions," (SEC, 2015, p. 134). Thus, in the same way that the voluntary adoption of clawback provisions can signal firms' commitment to financial reporting quality (e.g., Chan et al., 2012; Denis, 2012; Iskandar-Datta & Jia, 2013), firms' disclosure of clawback enforcement may signal strong corporate governance. If so, investors should react less negatively to restatements than if there was no disclosure about clawback enforcement. That is, clawback enforcement disclosure would mitigate negative investor reactions to restatements, particularly in the case of intentional misstatements.[9] As discussed in the next section, the SEC's rationale for proposing the disclosure of clawback enforcement is consistent with deterrence theory (Becker, 1968). The disclosures are intended to communicate to investors the existence of deterrence measures (enforcement of clawback policies), and presumably signal a lower likelihood of misstatement in financial reporting than when there are no clawback enforcement disclosures.

Under current reporting requirements, whereas the voluntary adoption of clawback provisions has been documented among many firms, clawback enforcement and its disclosure are extremely rare (Babenko, Bennett, Bizjak, & Coles, 2017). Thus, compared to investors' reaction to the voluntary adoption of clawback provisions, their reaction to the disclosure of clawback enforcement is unknown. In this study, we provide insights into whether following a restatement, investors who are (versus who are not) provided with clawback enforcement disclosure will focus their attention on management's reputation as documented by

[5] A New York Times (2013a, 2013b) article notes, "It has taken a decade to get companies to talk the talk about executive pay clawbacks," and asks, "How many years before these companies walk the walk?" The article cites the example of some health care companies that paid large settlements because they engaged in illegal drug marketing, but "there were no indications that individual executives were made to return pay as a result." Another New York Times (2016) article notes, "Most companies already have such clawback policies in place, actual clawbacks remain unusual." The apparent lack of enforcement is further evidenced in a study by Babenko et al. (2017), which found no case in which a clawback was enforced by the board of directors in their sample of 232 firms that restated their earnings after the voluntary adoption of clawback provisions.

[6] Unfortunately, firms that clawback are apparently a rare breed. Although clawback triggering events were present as evidenced by the fact that the SEC received 557 accounting misreporting cases from whistle-blowers (The New York Times, 2013a, 2013b), it is rare to observe clawback policy being enforced. An exception is the McGraw-Hill Companies, which disclosed in its 2012 proxy statement that independent members of the board of directors required previously paid bonuses to Harold McGraw, the CEO, and Robert Bahash, the former CFO, to be returned because performance criteria used to calculate incentive compensation had to be recalculated. Furthermore, it confirmed that the excess amount had been returned to the company.

[7] In October 2022, the SEC finalized its proposal, "Listing Standards for Recovery of Erroneously Awarded Compensation" after it had reopened the comment period for the proposal in October 2021 and June 2022.

[8] For example, an American Bar Association (2016) comment letter noted that "owing to the no fault nature of the compensation recovery policy trigger and given the reputational stigma that may attach (however unintentional) to being identified as an individual who received erroneously-awarded compensation, we believe that such identification is wholly unwarranted, particularly where the individual in question had absolutely no involvement in the preparation of the issuer's financial statements."

[9] This is consistent with the notion that firms generally attempt to use reputation repair strategies to improve their financial reporting credibility (Charkravathy et al., 2014). One of the repairment strategies is to improve governance (Charkravathy et al., 2014; Farber, 2005). For example, Farber (2005) shows that changes in the composition of firms' boards of directors are associated with positive abnormal returns.

earlier restatement research (e.g., Hennes et al., 2008; Palmrose et al., 2004) or instead, shift their focus to the strength of the board based on the clawback enforcement disclosure as presumed by the SEC.

To examine investor reaction to the disclosure of clawback enforcement, we conducted an experiment using a 2 × 2 between-subjects design with misstatement intentionality (intentional vs. unintentional) and clawback enforcement disclosure (disclosed vs. not disclosed) as independent variables. Our participants were management-level employees from different industries enrolled in two online accounting courses at a large state university. They assumed the role of potential investors who evaluated the attractiveness of a hypothetical firm.

Our results indicate that in the absence of clawback enforcement disclosure, participants reacted more negatively when they perceived the misstatement to be intentional than when they perceived the misstatement to be unintentional. However, the negative effect of perceived misstatement intentionality was not significant when clawback enforcement was disclosed. More specifically, when there was no clawback enforcement disclosure, investors were less willing to invest when the restatement involved misstatements that were perceived to be intentional than unintentional. In contrast, when clawback enforcement was disclosed, investors' willingness to invest was not significantly different between the intentional and unintentional conditions.

Moreover, using Hayes' (2018) moderated mediation model, we find that perceived corporate governance mediates the influence of clawback enforcement disclosure on investor decisions. This mediation effect is more significant in the intentional misstatement condition than in the unintentional misstatement condition. This suggests that investors are more sensitive to corporate governance when the restatement is perceived to be the result of an intentional misstatement than an unintentional misstatement. In contrast, we do not find evidence to support that the disclosure of clawback enforcement harms non-culpable executives' reputation. Overall, our results provide preliminary evidence that clawback enforcement has incremental signaling value consistent with the SEC's explanation of the potential benefits of disclosing clawback enforcement.

Our study has practical as well as research implications. From a practical standpoint, we provide preliminary experimental evidence of how investors may react to firms' disclosure of clawback enforcement. As the SEC proposed rule (SEC, 2015) was recently adopted in October 2022, this study is important and timely as firms begin to adopt the clawback requirements. Our research findings should be of interest to regulators (e.g., SEC) and firms that have adopted a clawback policy. To the extent that investors shift their focus from management's reputation to corporate governance strength, our results support the SEC's comments related to the impact of its proposed clawback enforcement disclosure. Also, our results show that opposition to the SEC's proposal may not be justified as it does not indicate that clawback enforcement disclosure leads investors to infer that management is questionable.

From a research point of view, our results suggest that investors may be quite sophisticated in assessing a firm's commitment to reporting quality. In particular, our study extends earlier research (Chan et al., 2012; DeHaan et al., 2013) that finds clawback adoption to be indicative of reporting quality by providing evidence of investors' ability to consider and infer the strength of corporate governance based on their decision to disclose or not disclose clawback enforcement following a restatement. We also add to research that shows that firms can use reputation repairment strategies to improve governance after a serious restatement (Charkravathy, deHaan, & Rajgopal, 2014) and that improvement of corporate governance leads to positive market reaction (Denis, 2012; Farber, 2005). Equally noteworthy, our results suggest that investors assess the strength of the board based not only on its disclosure decision, but also on the intentionality of the misstatement that led to the restatement. Moreover, from a methodological standpoint, whereas corporate governance (Farber, 2005) is generally inferred in research using archival data, our experimental study directly measures the relevant construct and tests the mediating effect of investors' perceived corporate governance.

The remainder of this paper is organized as follows. Section II provides the background and develops our hypotheses. Section III describes the research method, Section IV presents our results, and Section V concludes with a discussion of our results.

2. Background and hypotheses development

2.1. Clawback provisions

Executives' incentive-based compensation is tied to some measure of a firm's performance. When performance is defined as earnings, executives have incentives to inflate them. Clawbacks were first introduced in Section 304 of the Sarbanes-Oxley Act (SOX) enacted in 2002. SOX clawback provisions enable the SEC to require the CEO and CFO of the firm to return any incentive compensation paid based on misstated financial statements caused by executives' misconduct (Fried & Shilon, 2011). This provision intends to prevent executives' excessive risk-taking financial reporting behaviors. However, because the SEC must demonstrate misconduct, litigating clawback cases is costly and with the SEC's significant resource constraints, enforcing clawbacks has been infrequent (Fried & Shilon, 2011).

Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (hereafter, DFA) was passed in 2010. Unlike Section 304 of SOX which can be exercised only by the SEC, the DFA clawback provision gives the board of directors in a company the discretion to recoup excessive executive compensation that would not have been awarded if accounting was done properly. Furthermore, all current and former executives are covered by this provision and clawbacks encompass the 3-year period preceding the misstated earnings. More importantly, executives are subject to recovery regardless of whether they were at fault for the inaccuracy of financial information.

In general, the rationale for the clawback provision is supported by deterrence theory. The theory identifies three factors that deter individuals from engaging in a deviant act: certainty, severity, and swiftness of punishment (Becker, 1968). Clawback policies communicate to executives the severity of punishment (e.g., recouped bonuses) in the case financial misstatement. The certainty and swiftness of the punishment are conveyed through the enforcement of the clawback policies. Thus, the clawback provision is intended to deter financial misreporting by executives. Importantly however, as noted earlier (see footnote 5), it is possible for firms to adopt strong clawback policies, but never enforce them. In such a case, the severity and swiftness of punishment would be absent, weakening the desired effect of clawbacks to reduce financial misstatements. In this study, we examine how investors perceive the *disclosure* of the board's clawback enforcement as proposed by the SEC.

2.2. Research on clawback provisions

Early clawback studies of companies that have voluntarily adopted clawback provisions, document evidence of a number of actual and perceived benefits of clawbacks. Specifically, these include a reduction in accounting restatements[10] (Chan et al., 2012; DeHaan et al., 2013), positive stock valuation (Iskandar-Datta & Jia, 2013), a decrease in financial reporting risks (Mburu & Tang, 2018), and favorable loan contracting (Chan et al., 2013). More recent research finds evidence that

[10] The finding of a reduction in restatements should be interpreted with caution as it may be the result of management's choice not to file amended financial statements. For example, a recent study of the effect of clawback provisions by Pyzoha (2015) finds that executives who face a lower quality auditor, are less likely to agree with amending prior financial statements when a significant proportion of their pay is incentive-based.

implies strong clawback policies enhance financial reporting quality whereas weak clawback policies do not (Erkens et al., 2018).[11]

In contrast to the positive aspects of voluntary adoption of the clawback provision above, unintended consequences of clawback adoption have been documented as well (Bao, Fung, & Su, 2018; Chan, Chen, Chen, & Yu, 2015; Kyung, Lee, & Marquardt, 2019; Levine & Smith, 2019). Clawback adoption induces managers to use alternative ways to conceal bad news. For example, firms substitute accruals-based earnings management with real transactions earnings management (Bao et al., 2018; Chan et al., 2015; Levine & Smith, 2019) and reduce the readability of 10-K reports after clawback adoption (Bao et al., 2018). Moreover, firms use non-GAAP earnings more opportunistically since costs of GAAP earnings misstatements increase after clawback adoption and thus, the quality of non-GAAP earnings decreases (Kyung et al., 2019).

Other unintended consequences of clawback adoption are related to executive compensation (DeHaan et al., 2013; Erkens et al., 2018; Kroos, Schabus, & Verbeeten, 2018; Natarajan & Zheng, 2019; Pyzoha, 2015). In Pyzoha's (2015) experiment, unless executives face a higher quality auditor, they are less willing to accept a restatement recommendation when their compensation structure is more heavily incentive-based. Additionally, clawback-adopting firms might have to pay executives a higher salary that is not subject to clawbacks to even out the risk associated with the clawbacks. Pay for performance measures (e.g., CEO cash compensation to accounting performance) are significantly higher for voluntary clawback adopters than for non-adopting firms (DeHaan et al., 2013). Moreover, CEO salary that is not subject to clawbacks increases to a greater extent in firms with a high restatement likelihood after clawback adoption (Natarajan & Zheng, 2019). Nonetheless, adopters of strong clawbacks[12] experience a decrease in CEO incentive pay (Erkens et al., 2018). In addition to CEO salary, CFO bonus incentives are also higher for clawback adopting firms (Kroos et al., 2018). Other studies (e.g., Addy, Chu, & Yoder, 2014; Babenko et al., 2017; Chen, Greene, & Owers, 2015) have examined types of firms that have a greater likelihood of voluntarily adopting clawback provisions.

In sum, prior studies have only investigated the effects of the *adoption* of clawback policies. To our knowledge, no published study has examined how investors perceive the *disclosure* (or non-disclosure) of the board's clawback enforcement following a pre-defined triggering event. We examine whether the negative effect of a restatement is mitigated or exacerbated by the disclosure of clawback enforcement.

2.3. Hypotheses development

2.3.1. Mitigation effect

As illustrated in Fig. 1 Panel A, when clawback enforcement is not disclosed, investment interest should be significantly lower for an intentional misstatement than for an unintentional misstatement.[13] In contrast, when clawback enforcement is disclosed, if consistent with the SEC's suggestion that it (clawback enforcement disclosure) may signal strong corporate governance to investors, their negative reaction following a restatement should be mitigated regardless of executives' fault. Consequently, the mitigation effect is expected to be greater when

Panel A: Predicted Mitigation Pattern of Results Supporting the SEC's Suggestion[24]

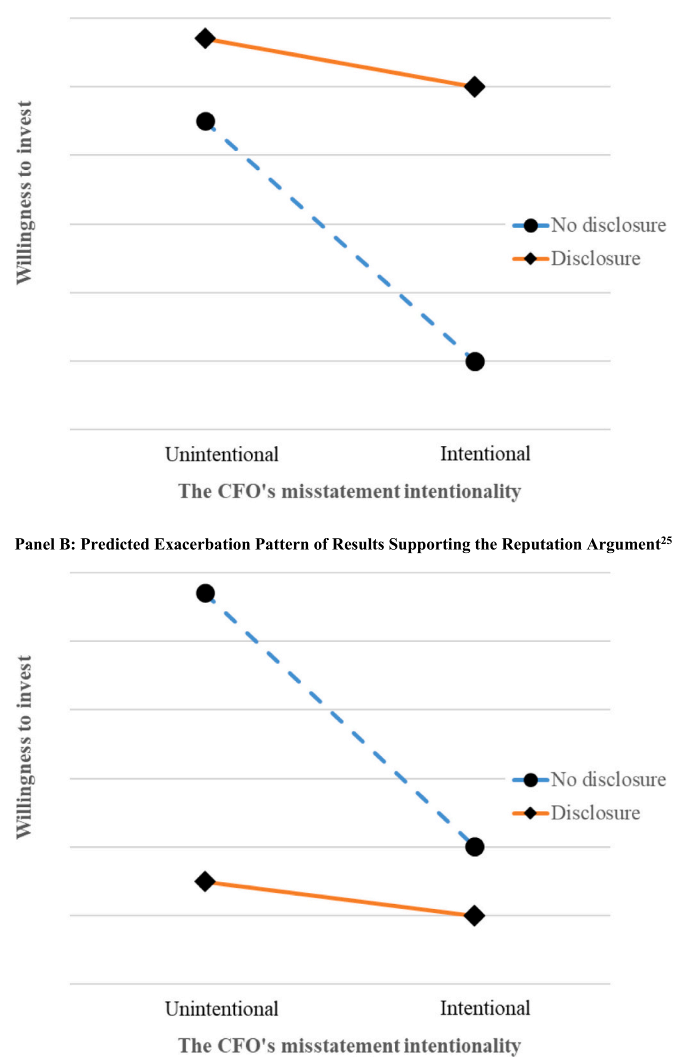

Fig. 1. Predicted results.
Panel A: Predicted mitigation pattern of results supporting the SEC's suggestion.
We test H1a to examine whether the negative effect of a restatement is mitigated by the disclosure of clawback enforcement. If consistent with the SEC's suggestion, investors perceive strong corporate governance as a result of clawback enforcement disclosure relative to non-disclosure, their negative reaction following a restatement should be mitigated. We posit that this mitigation will be more significant when the misstatement that led to the restatement is perceived to be intentional than when it is believed to be unintentional. This is because when there is no clawback enforcement disclosure following a restatement of earnings, investors are expected to react more negatively in the former than in the latter case. Thus, the mitigation effect is not expected to be as significant when the misstatement is perceived to be unintentional.
Panel B: Predicted exacerbation pattern of results supporting the reputation argument.
We test H1b to examine whether the negative effect of a restatement is exacerbated by the disclosure of clawback enforcement. If management's reputation is further damaged by clawback enforcement disclosure, as claimed by companies that oppose it, we expect an exacerbation effect. The magnitude of this effect is expected to be more significant when the misstatement is perceived to be unintentional. Again, this is because when there is no clawback enforcement disclosure following a restatement of earnings, investors are expected to react more negatively in the case of an intentional misstatement than in the case of an unintentional misstatement. Thus, the exacerbation effect would be less significant in the case of an intentional misstatement than in the case of an unintentional misstatement.

[11] In Erkens et al.'s (2018) study, the index that captures the strength of clawbacks is based on what firms reveal about their clawback policies.

[12] Erkens et al. (2018) distinguish between strong clawbacks and weak clawbacks. They define strong clawbacks as provisions whose design indicates that adoption of clawbacks is in name only and define weak clawbacks as provisions whose design suggests that firms intend to put real pressure on executives.

[13] This is based on research (e.g., Hennes et al., 2008) that shows that investors react more negatively when restatements are caused by intentional misstatement (e.g., irregularities) than by unintentional misstatement (e.g., errors).

investors perceive the misstatement to be due to an at-fault executive. This is because when clawback enforcement is not disclosed, in the case of an intentional misstatement, investors' reaction is expected to be more negative than in the case of an unintentional misstatement.

Our prediction of a mitigation effect is based on deterrence theory and consistent with the SEC's reasoning. As noted earlier, the three factors that affect individuals' judgments about engaging in a deviant act are certainty, severity, and swiftness of punishment (Becker, 1968). Among those, deterrence research provides consistent evidence that perceived certainty of punishment carries more weight in deterring undesirable behavior than severity or swiftness of punishment (Nagin & Pogarsky, 2001).

In the current context, enforcement of the clawback policies communicates the certainty of punishment. Thus, enforcement (lack of enforcement) would indicate high (low or no) likelihood of penalty. We reason that the disclosure of clawback policy enforcement signals to investors the existence and certainty of punishment to deter financial misreporting by executives.[14] Consequently, investors' perception of the likelihood of financial misreporting will be lower when the enforcement of clawback policies is disclosed than when it is not. Investors who are made aware that firms must disclose clawback enforcement should anticipate a lower likelihood of financial reporting misstatements than investors who are not aware of clawback enforcement disclosure.

2.3.2. Exacerbation effect

Fig. 1 Panel B again shows that when clawback enforcement is not disclosed, investment interest should be significantly lower for an intentional misstatement than for an unintentional misstatement. In contrast to the mitigation effect, when clawback enforcement is disclosed, if consistent with arguments in some comment letters to the SEC that it (clawback enforcement disclosure) damages management reputation, investors' negative reaction following a restatement should be exacerbated regardless of executives' fault. As a result, this exacerbation effect should be greater when the misstatement is perceived to be unintentional compared to when it is believed to be intentional. This is because in the absence of clawback disclosure, investors' reaction is expected to be negative to a greater extent for an intentional misstatement than for an unintentional misstatement. Thus, clawback enforcement disclosure is not likely to significantly worsen existing negative investors' reactions when the misstatement is perceived to be intentional. In contrast, investors who observe a paid bonus being recouped from a no-fault (unintentional) executive may question the credibility of the no-fault executive.[15] In sum, management reputation is expected to be damaged more for a no-fault executive than for an at-fault executive.

Our research question is twofold. First, we investigate how, following a restatement, the effect of misstatement intentionality on investors' willingness to invest will be moderated by clawback enforcement disclosure. We specifically examine whether the effect is consistent with that shown in Fig. 1 Panel A (mitigation) or that in Fig. 1 Panel B (exacerbation). We thus state the following competing hypotheses:

H1a. Following a restatement, the effect of clawback enforcement disclosure on investors' willingness to invest will be positive and greater when the misstatement is perceived to be intentional than when it is perceived to be unintentional (*mitigation effect*).

H1b. Following a restatement, the effect of clawback enforcement disclosure on investors' willingness to invest will be negative and greater when the misstatement is perceived to be unintentional than when it is perceived to be intentional (*exacerbation effect*).

Second, we investigate whether investors will focus their attention on management's reputation or shift their focus to the strength of the board. Specifically, we examine whether the effect of the disclosure of clawback enforcement on investor reaction is via perceived corporate governance or via perceived management reputation or both (see Fig. 2).

On the one hand, quite a few organizations expressed concerns about the potential adverse effect of the clawback enforcement disclosure. Specifically, they argue that identifying executives whose incentive compensation is being recouped can make non-culpable executives questionable, resulting in the reputation damage of those no-fault employees. Because the SEC's Rule 10D-1 applies to both fault and no-fault executives, reputation damage to no-fault executives can be greater when the board discloses its enforcement than when the board does not disclose it. On the other hand, the SEC pointed out the potential positive effect of the clawback enforcement disclosure. Following restatements, the clawback enforcement disclosure distinguishes sincere clawback policy adopters from self-serving adopters. Thus, the clawback enforcement disclosure can signal the strength of corporate governance to outsiders, especially when the misstatement is perceived to be intentional than when it is perceived to be unintentional. Based on the foregoing, we posit the following two hypotheses:

H2a. The interaction effect of clawback enforcement disclosure and misstatement intentionality on investors' willingness to invest is mediated by perceived corporate governance.

H2b. The interaction effect of clawback enforcement disclosure and misstatement intentionality investors' willingness to invest is mediated by perceived management reputation.

3. Research method

3.1. Design

To test our hypotheses, we conducted an experiment[16] using a 2 (misstatement intentionality: unintentional or intentional) x 2 (clawback enforcement disclosure: not disclosed or disclosed) between-subjects design. The first factor (misstatement intentionality) provides a baseline of the extent to which investors' reactions are more negative following an intentional misstatement compared to an unintentional one, given no clawback enforcement disclosure. We then examine the effect of our second factor (clawback enforcement disclosure) on investors' negative reactions across the two intentionality levels. Participants were randomly assigned to one of the resulting four experimental conditions.[17]

[14] Our research differs from deterrence studies (e.g., Brink, Eller, & Gao, 2021; Buchanan, Commerford, & Wang, 2021; Raddatz, Marett, & Trinkle, 2020) that investigate behavioral intentions of would-be wrongdoers. In our study, we examine investors' perception of wrongdoing by executives, based on the presence of deterrence measures as conveyed by clawback enforcement disclosures.

[15] As the SEC chairperson, Gary Gensler, argues, clawback enforcement can be viewed as a mere recalculation of incentive compensation based on misstated earnings (Gensler 2021). Nonetheless, some comment letters mention that disclosing individuals who received erroneously-awarded compensation can put the individuals' reputation in question although the individuals were not involved in the preparation of the misstated financial statements (American Bar Association, 2016, Compensation Advisory Partners, 2015). If firms identify executives who received erroneously awarded compensation, firms will have difficulties attracting talented executives. This is because individuals view a clawback contract less attractive than a bonus or penalty contract due to endowment effect (Brink & Rankin, 2013).

[16] The study was reviewed by our Institutional Review Board which determined that it satisfied the criteria for Exempt Research (IRB #14893-001).

[17] We compared participants' demographic data and found no significant ($p >$ 0.10, two-tailed) differences across treatments except for a gender difference which was marginally significant ($p = 0.053$, two-tailed) between disclosure conditions. None of the demographic variables was a significant covariate in our ANOVA model.

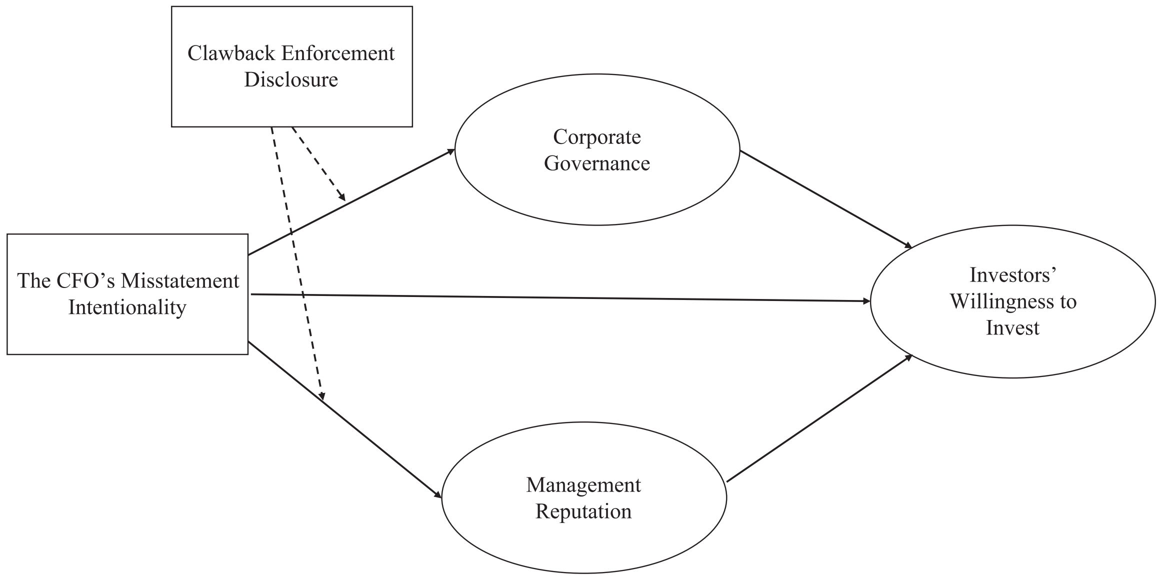

Fig. 2. Corporate governance and management reputation as mediators of the joint effect of clawback enforcement disclosure and misstatement intentionality on investors' willingness to invest.

3.2. Participants

Ninety-two business students enrolled in online accounting courses[18] at a large U.S. university participated in the experiment and served as proxies for potential investors. Our final sample of participants[19] had taken, on average, 4.78 accounting classes and 1.7 finance classes. Thirty eight percent of participants had purchased stock, while 72% planned to purchase stock in the next five years. Participants were between 26 and 30 years old, and had an average of 10.6 years of work experience. They completed the study via the web-based survey tool, Qualtrics, in exchange for extra credit in their course. There were no significant differences between the two classes for stock purchase experience and participants' willingness to invest (all p-values >0.49, two-tailed).[20]

3.3. Procedures

Once they accessed the Qualtrics web link, we provided participants with basic knowledge about clawback provisions, the role of the board of directors, and management's incentives to misreport earnings. This ensured that they had sufficient knowledge to complete the study. Subsequently, participants were randomly assigned to one of the four experimental conditions of our 2×2 design. Participants started by reading the profile of a hypothetical firm, YCK Tech. The company profile presented a brief description of YCK, a technology company started in 1969 and headquartered in San Jose, California, together with two years of financial information with industry average, including net earnings, earnings per share, net profit margin, and return on shareholders' equity. We also included YCK's clawback policy indicating that all bonus compensation awarded to YCK executive officers were subject to possible clawback in case of any accounting restatement. Following the clawback policy, we provided information about YCK's CEO and CFO executive compensation. Because stated actual net earnings exceeded target net earnings by $50 million, the board of directors of YCK awarded cash bonuses to the CEO (David Jones) and CFO (Paul Smith).

Participants then provided an initial judgment of their willingness to invest in YCK Tech. Subsequently, they read two press releases via Bloomberg. The first one was a restatement announcement and described the CFO's involvement in the misstatement that necessitated the restatement. The second press release was about the board of directors' disclosure (non-disclosure) action. Following the press releases, participants made their final investment decision and answered questions about their perceptions of corporate governance and executives' reputation. The last part of the study required participants to answer manipulation-check and other questions, and to provide demographic information. Except for the manipulation of the independent variables as described below, all other information was held constant across experimental conditions.

3.4. Independent variables

3.4.1. Misstatement intentionality

The intentionality variable was manipulated via a Bloomberg press release titled, "YCK will have to restate its 2015 earnings downward by $100 million." In the "unintentional misstatement" condition, the news article stated, "The problem with the overstated sales was related to changes in the U.S. accounting standard on revenue recognition. A number of firms, especially in the technology industry, faced similar problems due to the high level of judgment required by the new standard." In the "intentional misstatement" condition, the news article stated, "The problem with the overstated sales was related to the CFO's one time decision to accelerate the timing of revenue recognition. No other firm in the technology industry faced similar revenue recognition problem."

3.4.2. Clawback enforcement disclosure

We designed our disclosure manipulation based on actual cases of clawback policy enforcement disclosure. For example, McGraw-Hill Companies disclosed in its 2012 proxy statement that it recovered incentive compensation from the CEO and the former CFO because they had to recalculate the performance criteria used to determine executives'

[18] Participants in two different classes do not significantly differ in their willingness to invest ($p = 0.504$, two-tailed) and stock investment experience ($p = 0.964$, two-tailed).

[19] Ninety-one percent of participants (84 out of 92) correctly answered manipulation check questions.

[20] We also obtained a small sample ($n = 20$) of older investors from Prolific (an online research platform comparable to Amazon Mechanical Turk), to provide some evidence of the robustness of our findings. Those participants were between 31 and 35 years old and had an average of 14 years of work experience. Results are discussed in footnote 22.

incentive compensation (The McGraw-Hill Companies, 2012). They also mentioned that none of those executives was responsible for the activity causing a misstatement of performance criteria. Another example reported in *The* New York Times (2004) noted that according to U.S. Cellular's spokesman, the company had to restate net income downward, but the CEO and the CFO would not return any bonus.

The clawback enforcement disclosure was manipulated in the second press release. In the "disclosed" condition, participants read from a Bloomberg article, "The board of directors of YCK disclosed that it enforced its clawback policy and required its executives to return previously awarded bonuses and the bonuses were returned." In the "not disclosed" condition, participants read, also from a Bloomberg article, "The board directors of YCK has not announced whether it is requiring executives to return their bonuses or whether they returned their bonuses."

3.5. Dependent variable

3.5.1. Willingness to invest

We asked participants to imagine that they had just inherited $10,000 from a distant relative. A close friend recommended YCK Tech because it had performed relatively well in the technology industry. Following Elliott, Rennekamp, and White (2015), we asked two questions to measure participants' willingness to invest. First, we asked, "How likely are you to invest in YCK Tech?" Participants responded on an 11-point scale with 0 labeled "Very unlikely" and 10 labeled "Very likely." Second, we asked, "How attractive is YCK tech as a potential investment?" Participants responded on an 11-point scale with 0 labeled "Very unattractive" and 10 labeled "Very attractive." Participants responded to the two questions for both the initial and final willingness to invest. Cronbach's alpha for the two-item measure of initial willingness to invest was 0.886, and that for final willingness to invest was 0.950. Both are higher than the recommended level of 0.7 (Nunnally, 1978). We used the change in investors' willingness to invest as our dependent variable. This was computed as Final Willingness to Invest minus Initial Willingness to Invest.

3.6. Mediating variables

To provide evidence of investors' decision-making process, we included two possible mediators (process variables): 1) investors' perceived corporate governance to test if the SEC's argument is valid and 2) management reputation to test if the argument of the opposing firms is valid.

3.6.1. Corporate governance

We measured participants' perceptions of corporate governance by asking participants to indicate the extent to which they agreed with each of the following two statements: "I believe that YCK's board of directors is doing an excellent job monitoring the company's executives," and "I believe that YCK's board of directors is stringent at enforcing its clawback policy." The responses were recorded on an 11-point scale (0 = "strongly disagree"; 10 = "strongly agree"). Cronbach's alpha for the two-item measure of investors' perceived corporate governance was 0.894, which was higher than the recommended level of 0.7 (Nunnally, 1978).

3.6.2. Management reputation

Consistent with Barton and Mercer (2005), we assessed participants' perceptions of executives' reputation by asking participants to indicate the extent to which they agreed that the company's executives were competent, trustworthy, and honest (Barton & Mercer, 2005; Mercer, 2005). In our experimental study, rather than using multiple executives, we focus on a CFO who has to restate because of the acceleration of revenue recognition in one condition (intentional) and a CFO who has to restate because of a change in accounting policy in the other condition (unintentional). Focusing on a single executive minimizes the likelihood of confounding effects. Participants indicated the extent to which they agreed with each of the following statements: "I believe that YCK's CFO is competent at providing financial information disclosures," "I believe that YCK's CFO is trustworthy," and "I believe that YCK's CFO is honest." They responded on an 11-point scale (0 = "strongly disagree"; 10 = "strongly agree"). Cronbach's alpha for the three-item measure of management reputation was 0.934, which was higher than the recommended level of 0.7 (Nunnally, 1978).

4. Results

4.1. Manipulation and other checks

To verify whether our participants perceived misstatement intentionality as intended, we asked them to indicate, "To what extent do you believe that the misstatement of $100 million in net earnings was intentional by YCK's CFO?" Responses were recorded on an 11-point scale ranging from 0 = Not at all to 10 = To a great extent. Participants in the "intentional condition" (mean = 7.56, sd = 2.39) indicated a higher perceived intentionality than those in the "unintentional" condition (mean = 3.88, sd = 1.64). This difference was significant ($p <$ 0.001, two-tailed). Since the SEC's DFA clawback policy is no-fault in nature, we also asked them to rate on an 11-point scale (0 = Not at all; 10 = To a great extent), "To what extent do you believe that the misstatement of $100 million in net earnings was the fault of YCK's CFO?" Participants in the "unintentional" condition (mean = 5.44, sd = 2.79) attributed the misstatement significantly (p-value<0.001, two-tailed) less to the CFO's fault than participants in the "intentional" condition (mean = 7.9, sd = 1.45) condition. Together these results indicate that our manipulation of misstatement intentionality was successful.

We also asked participants in the post-test questionnaire to indicate whether Bloomberg reported that the board of directors of YCK announced or did not announce that it recouped erroneously paid executives bonus compensation after the restatement. Ninety-one percent of participants (84 out of 92) correctly answered this question. The results reported below are based on responses of the 84 participants who answered correctly.[21]

4.2. Tests of hypotheses

4.2.1. H1a and H1b

We hypothesize that the effect of misstatement intentionality on investors' willingness to invest will be moderated by clawback enforcement disclosure. Specifically, H1a predicts that the effect of clawback enforcement disclosure on investors' willingness to invest will be positive and greater when the misstatement is perceived to be intentional than when it is perceived to be unintentional. Conversely, H1b predicts that the effect of clawback enforcement disclosure on investors' willingness to invest will be negative and greater when the misstatement is perceived to be unintentional than when it is perceived to be intentional. Table 1, Panel A presents cell sizes, means, and standard deviations for participants' initial willingness to invest, final willingness to invest, and changes in willingness to invest. Higher (lower) values indicate more (less) willingness to invest in YCK.

Table 1, Panel B reports the results of the analysis of variance (ANOVA). Consistent with prior research (see for example, Hennes et al., 2008), investors react negatively to a firm when misstated earnings are perceived to be intentional than when they are believed to be unintentional ($p < 0.001$, two-tailed). Table 1, Panel B also shows a significant interaction between misstatement intentionality and clawback enforcement disclosure ($p = 0.007$, two-tailed), indicating that the negative effect of misstatement intentionality on investors' willingness to invest is moderated by the disclosure of clawback enforcement

[21] Our results are inferentially similar after we include the entire sample of 92 participants ($p = 0.001$).

Table 1
How misstatement intentionality and clawback enforcement disclosure affect investment decisions.

Panel A: Initial, final and changes in willingness to invest, Mean (Standard Deviation), $n = 84$

Condition					
The CFO's Misstatement	The Board's Action	*n*	Initial Willingness to Invest	Final Willingness to Invest	Changes in Willingness to Invest
Unintentional misstatement	No disclosure	22	7.48 (1.45)	5.09 (2.35)	−2.39 (2.28)
	Disclosure	21	7.9 (1.38)	6.55 (1.90)	−1.36 (2.26)
Intentional misstatement	No disclosure	22	8.54 (1.18)	2.64 (1.79)	−5.91 (2.11)
	Disclosure	19	7.82 (1.44)	5.68 (2.34)	−2.13(2.45)

Panel B: ANOVA Model of Changes in Willingness to Invest

Source of Variation	SS	df	MS	F-statistic	*p*-value
Misstatement intentionality	96.6	1	96.598	18.699	<0.001
Clawback enforcement disclosure	121	1	120.87	23.397	<0.001
Misstatement intentionality X clawback enforcement disclosure	39.5	1	39.512	7.649	0.007
Error	413	80	5.166		

Panel C: Follow-up Tests of Simple Effects for Changes in Willingness to Invest

Source of Variation	df	F-statistic	*p*-value
Effect of the clawback disclosure given unintentional misstatement	1	2.203	0.142
Effect of the clawback disclosure given intentional misstatement	1	28.161	<0.001
Effect of misstatement intentionality given no disclosure	1	26.424	<0.001
Effect of misstatement intentionality given disclosure	1	1.158	0.285

Note: all *p*-values are two-tailed.

disclosure. Table 1, Panel C presents follow-up simple effects tests. For participants who believed that the misstated earnings were intentional, the board's disclosure of its clawback enforcement reduced willingness to invest (mean = −2.13, sd = 2.45) significantly less ($p < 0.001$, two-tailed) than when it did not disclose clawback enforcement (mean = −5.91, sd = 2.11). However, among participants who believed that the misstatement was unintentional, the board's disclosure of its recoupment information did not significantly affect willingness to invest ($p = 0.142$, two-tailed).

Similarly, when there was no clawback enforcement disclosure following a restatement of earnings, participants reacted more negatively ($p < 0.001$, two-tailed) when the misstatement was perceived to be intentional (mean = −5.91, sd = 2.11) than when it was perceived to be unintentional (mean = −2.39, sd. = 2.28). This effect was not significant when clawback enforcement was disclosed ($p = 0.285$, two-tailed). Thus, H1a is supported and H1b is not supported. Fig. 3 exhibits that the overall pattern of results is consistent with that projected by the SEC.[22]

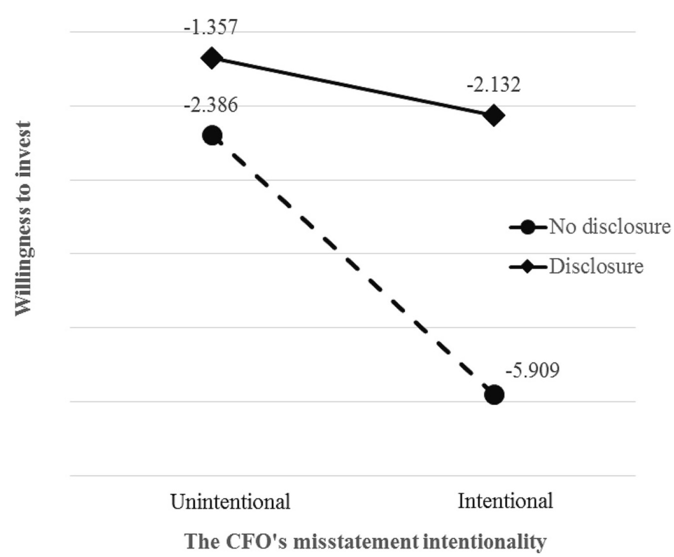

Fig. 3. The effect of misstatement intentionality and clawback enforcement disclosure on investors' willingness to invest.

4.2.2. H2a and H2b

We use a moderated mediation model to test whether investors' perceptions of corporate governance and management reputation both mediate the effect of misstatement intentionality on investors' willingness to invest, conditional on clawback enforcement disclosure. Using our moderated mediation model, we follow the procedures recommended by Zhao, Lynch, and Chen (2010).[23] We use bootstrapping to compute the 95% CI for the conditional indirect effect of misstatement intentionality via corporate governance and via management reputation when the board of directors discloses the recoupment information and

[22] We also analyzed the pattern of responses of Prolific participants. Among participants who believed that the misstated earnings were intentional, the mean investors' willingness was higher when the board discloses that it enforced clawback (mean = −0.1, sd = 2.53) than when it did not disclose clawback enforcement (mean = −4.5, sd = 2.78). For participants who believed that the misstated earnings were unintentional, the average investors' willingness was lower when the board did not disclose clawback enforcement (mean = −2, sd = 1.06) than when it disclosed its recoupment information (mean = 0.2, sd = 0.57). Overall, the pattern of the results for the Prolific sample is similar to that of the student sample. When we add Prolific participants' responses to the students' responses, the interaction effect stays statistically significant ($p = 0.003$) and exhibits the same pattern. Specifically, for participants who perceived that the misstatement was intentional, investors' willingness was higher on average when the board discloses its clawback enforcement (mean = −1.7, sd = 2.56) than when it did not disclose it (mean = −5.65, sd = 2.26). Among participants who believed that the misstatement was unintentional, investors' willingness to invest was lower on average when the board did not disclose its enforcement (mean = −2.32, sd = 2.09) than when it disclosed clawback enforcement (mean = −1.06, sd = 2.13). Our results thus appear to be robust across the two samples, and to some extent, generalizable.

[23] Baron and Kenny (1986) recommended testing the significance of the indirect path using the Sobel z-test. However, Sobel's z is not normal, and the 95% confidence interval of the indirect path often improperly includes zero (Zhao et al., 2010).

Table 2
Conditional process of the effect of misstatement intentionality on willingness to invest.

Panel A: Model Summary (Willingness to Invest)

R-square	F-statistic	*p*-value
0.4827	24.8825	<0.001

Model	Coefficient	t-stat	*p*-value	LOWER CI	UPPER CI
Corporate Governance	0.2918	2.8374	0.0058	0.0871	0.4965
Management Reputation	0.4495	3.0096	0.0035	0.1523	0.7468

Panel B: Direct effect of Intentionality on Willingness to Invest

Effect	t-stat	*p*-value	LOWER CI	UPPER CI
−0.9999	−1.7751	0.0797	−2.1209	0.1211

Panel C: Conditional indirect effect(s) of Misstatement Intentionality on Willingness to Invest at values of the Non-Disclosure of Clawback Information

Mediator	Disclosure	Effect	LOWER CI	UPPER CI
Corporate Governance	No disclosure	−0.3913	−0.9658	−0.0627
Corporate Governance	Disclosure	0.1411	−0.0483	0.4079
Mediator	Disclosure	Effect	LOWER CI	UPPER CI
Management Reputation	No disclosure	−1.0489	−2.0079	−0.4142
Management Reputation	Disclosure	−1.1177	−1.9949	−0.5482

Panel D: Index of Moderated Mediation

Mediator	Index	Boot SE	LOWER CI	UPPER CI
Corporate Governance	0.5324	0.2639	0.1277	1.1911
Management Reputation	−0.0687	0.3857	−0.8041	0.7339

when the board of directors does not disclose the recoupment information (Process model 7, Hayes, 2018).

The results of the moderated mediation test are shown in Table 2 and Fig. 4. As indicated in Panel C, the indirect effect of misstatement intentionality was stronger and significant when the board of directors did not disclose clawback enforcement (conditional indirect effect = −0.391; 95% confidence interval (−0.966 to −0.063)), but weaker and not significant when the board of directors disclosed clawback enforcement (conditional indirect = 0.141; 95% confidence interval (−0.048 to 0.408)). Panel D shows that the moderated mediation (index = 0.532) was significant at 0.05 since the 95% confidence interval (0.128 to 1.191) does not include zero. Thus, the mediation effect of corporate governance is stronger when the board of directors does not disclose clawback enforcement than when it does. These results are consistent with the SEC's argument.

Panel C also shows that management reputation significantly mediates the effect of misstatement intentionality on willingness to invest, whether the board of directors discloses (conditional indirect effect = −1.118; 95% confidence interval (−1.995 to −0.548)) or does not disclose (conditional indirect effect = −1.049; 95% confidence interval (−2.008 to −0.414)) clawback enforcement. However, Panel D shows that this mediation (index = −0.069) does not differ significantly between the two levels of the board of directors' disclosure (the moderator) since the 95% confidence interval (−0.804 to 0.734) includes zero. The results of our process analyses suggest that although the effect of misstatement intentionality on investors' willingness to invest is via perceived management reputation as expected, clawback enforcement disclosure has no effect on perceived management reputation. That is, contrary to firms' argument that clawback enforcement disclosure would hurt a no-fault executive's reputation, we find no evidence that clawback enforcement disclosure does incremental damage to a no-fault executive's reputation.

5. Discussion

Several studies (e.g., Chan et al., 2012; DeHaan et al., 2013; Iskandar-Datta & Jia, 2013) have documented that firms' disclosure of their voluntary adoption of clawback provisions indicates enhanced financial reporting quality. The SEC has suggested that disclosing clawback provision enforcement would similarly signal strong governance by firms' boards. To date there is no empirical research evidence to support this. In this study, we investigate the effect of clawback enforcement disclosure on investors' inferences about a firm's board and investors' investment decision. We find that following a restatement, investors infer that the board of directors is weaker when it makes no disclosure than when it discloses that it recouped bonuses erroneously paid to executives. This effect is more pronounced when the misstatement that led to the restatement is perceived to be intentional than unintentional.

Our findings have implications for practice as well as for research. From a practical standpoint, we provide experimental evidence of how investors may react to firms' disclosure versus non-disclosure of clawback enforcement. Our results are consistent with the SEC's comments related to disclosing clawback enforcement. We find evidence which suggests that investors expect firms that have adopted clawback

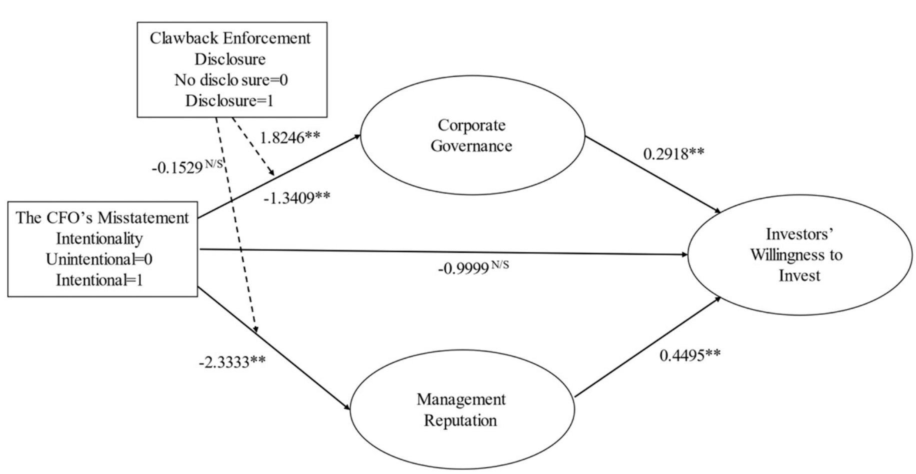

Fig. 4. Moderated mediation model: PROCESS model 7.
**Indicate significance at 0.05 level using Process Model.

provisions to also disclose their enforcement. Our results specifically indicate that investors react negatively to firms that adopt clawback policies but do not disclose whether they recouped erroneously paid compensation, especially when the clawback triggering event is intentional. These results provide insights about the potential effects of implementing the SEC's (2015) proposal to disclose clawback policy enforcement, and have implications for firms (e.g., JPMorgan Chase & Co, and Wal-Mart Stores, Inc.), which have argued against shareholders' proposal to disclose recoupment information. In contrast, we do not find evidence to suggest that the disclosure of clawback enforcement exacerbates the negative effect of restatements. This should alleviate concerns about the possible reputational harm to non-culpable executives.

Our study also adds to the research literature on clawbacks. We extend earlier research (e.g., Addy et al., 2014; Denis, 2012; Iskandar-Datta & Jia, 2013) on the effect of firms' disclosure of voluntary *adoption* of clawback provisions by providing preliminary evidence of investors' reaction to the disclosure of clawback *enforcement* following a restatement. Specifically, we document how investors can infer the strength of the board based on its decision to disclose or not disclose clawback enforcement. More importantly, we find that those inferences are influenced by investors' perception of the intentionality of the misstatement that led to the restatement. Equally noteworthy, our results suggest that although the market reacts negatively to restatement announcements consistent with prior research (Hennes et al., 2008; Palmrose et al., 2004), disclosing the board's clawback policy enforcement, especially when misstatements are perceived to be intentional, may help to restore financial reporting credibility by communicating to investors the effectiveness of the firm's corporate governance. The inferred strength of the board seemingly reassures investors when they perceive management to lack credibility.

Our results should be interpreted in light of our study's limitations. First, in the disclosure condition, we cannot separate clawback enforcement and its disclosure because investors have no way of knowing enforcement without firms disclosing it. Thus, the effect of clawback enforcement and its disclosure cannot be isolated. Second, in the no disclosure case, it is unclear whether investors assumed that the board had enforced its clawback provisions but had not disclosed it, or the board did not enforce its clawback provisions and chose not to disclose it. Analyses of data from our post-test questionnaire indicate that the assumptions were not homogeneous, although the majority assumed the latter, consistent with our overall results. Third, we examined how the effect of intentionality of a misstatement on investor decisions may be influenced by the effect of clawback enforcement disclosure. It is possible that other factors may similarly or more significantly moderate that effect on investor decisions.

Declaration of Competing Interest

None.

Data availability

Data will be made available on request.

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