Experimental Evidence on How Clawback Provisions and Board Monitoring Affect Managers’ Use of Discretion

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Abstract

We examine how clawback provisions and board monitoring affect managers’ use of discretion to achieve earnings targets. We manipulate clawbacks (present versus absent) and board monitoring (weak versus strong) in an experiment and assess managers’ preference for operational discretion versus accounting discretion in a setting where managers are under pressure to meet short-term earnings targets. We predict that mandated clawbacks will increase managers’ tendency to use operational discretion (relative to accounting discretion) when monitoring by boards is weak but not when monitoring is strong. Our results are consistent with this prediction. We find that managers who propose cuts to operational expenses recognize that these cuts come at a cost to short-term competitive advantage, but rationalize that these cuts are immaterial to long-term competitive advantage (consistent with motivated reasoning). We also find evidence that participants’ overall use of discretion and their views about the long-term impact of using their discretion to meet short-term targets varies systematically based on board monitoring strength (consistent with accountability tempering motivated reasoning and disciplining the use of discretion). Our results contribute to the literature on corporate governance by demonstrating that the impact of mandated clawbacks on managerial behavior depends on the strength of board monitoring. Our results also contribute to policy discussion on the impact of clawbacks by showing that mandated clawbacks (in the absence of strong board monitoring) alter how managers use their discretion, whereas strong board monitoring alters how much discretion managers are willing to use.

Keywords: earnings management, clawback provisions, corporate governance, board of directors.
I. INTRODUCTION

On July 1, 2015, the Securities and Exchange Commission proposed new rules requiring that public companies “clawback” incentive pay of executives if a company’s financial statements are subsequently restated. The proposed rules are contentious and passed by a 3–2 vote. The five SEC commissioners took the unusual step of releasing separate statements in favor of or against the proposed rules. In his dissenting statement, commissioner Gallagher noted that “(these rules) reflect a view that a corporate board is the enemy of the shareholder, not to be trusted to do the right thing” suggesting that the proposed rules undermine firms’ internal governance mechanisms. Those in favor, however, largely focused on how mandated clawbacks would improve financial reporting and benefit shareholders (Stein 2015, Aguilar 2015).

Managers, however, have a considerable amount of discretion, both in directing the economic activities of an organization (operational discretion) and in making the accounting judgments that map these activities into a set of financial statements (accounting discretion). This latitude available to managers suggests that the proposed clawbacks may not necessarily achieve regulators’ stated goals. If clawbacks deter managers from exercising accounting discretion, but instead, increase their sub-optimal use of operational discretion, shareholders may not necessarily benefit from clawbacks (although financial reporting quality may improve). Importantly, the impact of clawbacks on managers’ willingness to trade-off operational discretion for accounting discretion may vary depending on the strength of a firms’ internal monitoring mechanisms (Cohen et al. 2010). In this paper, we experimentally examine how

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1 The literature on earnings management distinguishes between two broad methods of managing earnings. This literature uses the term “accrual earnings management” (AEM) to refer to the use of accounting discretion in a biased, non-neutral, manner to help achieve a desired financial reporting outcome and the term “real earnings management” (REM) to refer to the use of operational discretion to achieve a desired financial reporting outcome. We use the terms accounting discretion and operational discretion interchangeably with AEM and REM respectively.
mandated clawbacks influence managers’ willingness to exercise operational discretion over accounting discretion and how this influence varies as a function of firms’ internal monitoring mechanisms (boards).

Understanding the impact of clawbacks and board monitoring on how managers use their discretion is important for both theoretical and practical reasons. From a theoretical perspective, the impact of firm-specific governance mechanisms (e.g., monitoring by boards) and regulatory mechanisms (e.g., clawbacks) on the trade-off between operational and accounting discretion represents an important research area that remains largely unexamined (Libby et al. 2015, p.35).  

Baber et al. (2010) emphasize the importance of considering interactions between internal and external governance characteristics when investigating the role of governance as a determinant of financial reporting quality. From a practical perspective, although survey evidence (Graham et al. 2005) and theoretical models (Ewert and Wagenhofer 2005) suggest that managers prefer operational discretion over accounting discretion, there is little evidence in a controlled setting that speaks to how governance mechanisms such as board monitoring can affect this preference. Our experiment provides empirical evidence on how mandated clawbacks and board monitoring influence managers’ willingness to use their accounting and operational discretion.

Specifically, we draw on research in psychology to theorize that these two governance mechanisms will differentially influence the type and amounts of discretion that managers find acceptable. Research on motivated reasoning suggests that people’s preferences can influence how they evaluate, recall, and search for information (Kunda 1990), and so would suggest that managers who face pressure to meet earnings targets will view their available discretion in a way

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2 On this point, Libby et al. (2015) comment on the “lack of literature examining interactions among accounting choices and how they are affected by context and the regulatory environment” (p. 35). They go on to say that the “tradeoff between real and accrual earnings management represents one such broad category. Very few papers (including archival papers) over the last decade have examined this issue” (p. 35).
that also benefits their personal interests. When managers know that clawbacks are mandatory for accounting restatements, we expect them to have a more difficult time rationalizing cuts to accounting accruals because exercising accounting discretion can be costly. Prior research shows that large abnormal accruals are correlated with an increased likelihood of future earnings restatements (Larcker and Tayan 2011). While this would reduce the use of accounting discretion, managers who engage in motivated reasoning might simultaneously be able to justify more extensive cuts to operations, thus limiting the ability of clawbacks to effectively curtail managers’ overall use of discretion.

Prior research in psychology suggests that accountability can be an effective countervailing force for motivated reasoning (Crowley and Zentall 2013, Lerner and Tetlock 1999). If so, strong board monitoring, by making managers more accountable for making decisions consistent with long-term shareholder interests could make it difficult for managers to justify making extensive cuts in any area where they have discretion, unless those cuts are consistent with increasing shareholder value. Thus, compared to mandatory clawbacks, we expect strong board monitoring to be more effective in curtailing managers’ overall use of discretion in a self-serving manner by reducing the extent to which managers exercise both accounting and operational discretion. However, adding mandated clawbacks in an environment where monitoring is strong will do little to alter managers’ relative preference for accounting over operational discretion. Our primary prediction is that mandated clawbacks will increase managers’ tendency to use operational discretion (relative to accounting discretion) when monitoring by boards is weak but not when monitoring is strong.

To test this prediction, we conduct an experiment wherein managers face pressure to meet an earnings target. We believe that an experiment is particularly appropriate to address our
research question for several reasons. It is difficult to ascertain in archival studies whether reductions in discretionary operational expenses are a function of changed business conditions or a consequence of earnings management motivations (Vorst 2017). Similarly, it is difficult to distinguish discretionary accruals from legitimate applications of GAAP (Nelson et al. 2002, Ball 2011). Using an experiment to hold constant all other factors except our treatments of interest, allows us to draw stronger causal inferences related to managers’ exercise of discretion. Second, the archival literature on governance provides decidedly mixed results on the association between monitoring and abnormal accruals (or restatements) which is surprising because more effective monitoring should decrease opportunistic behavior. Larcker et al. (2007) conjecture that part of the explanation for these mixed results is that measures used to capture governance / monitoring in empirical analyses may be poor proxies for the underlying constructs. An experimental manipulation of the strength of board monitoring (although not perfect) allows us a more proximate measure of the underlying construct by holding other factors constant, thereby limiting alternative interpretations. Finally, unlike archival studies that are limited to examining the effects of existing regulatory regimes, an experimental setting allows us to study the potential impact of a proposed regulatory regime (the Dodd-Frank clawback provisions) for which archival data are unavailable (Kachelmeier and King 2002, Libby et al. 2015).

In our experiment, participants assume the role of a CEO charged with making a proposal to the board in the face of an earnings shortfall. We employ a $2 \times 2$ between-participants design where we manipulate clawbacks (present versus absent) and board monitoring (strong versus weak). Participants in the clawback condition are told that they will be forced to return any bonus if a future restatement showed that they were ineligible to receive a bonus. By contrast, participants in the no clawback condition are told that they are not required to return their bonus if there was
a restatement. In the strong board monitoring condition, participants are told that the board has overruled the CEO’s proposals on four occasions in the last three years on grounds of violating shareholder interests. In the weak board monitoring condition, participants are told that Zeta’s board had given them wide latitude in making decisions and had not questioned their proposals or their judgment about what was in the best interests of the shareholders.

Across conditions, executive-MBA participants in the role of a CEO for a hypothetical firm are told that their firm is significantly short of analysts’ earnings estimates for the upcoming quarter—missing this benchmark could negatively affect the firm’s stock price, lead to downgrades by analysts, and result in lost bonuses across the organization. The CEO can choose to cut selling, general and administrative expenses (SG&A) in the current quarter by decreasing the accrual for warranty expense (accounting discretion) and/or by postponing advertising expenses (operational discretion). We subtract managers’ cuts to warranty expense from their cuts to advertising expense to construct a measure of their relative preference for operational discretion over accounting discretion.

Our primary prediction that mandated clawbacks will increase managers’ tendency to use operational discretion (relative to accounting discretion) when monitoring by boards is weak but not when monitoring is strong is supported. We find that mandated clawbacks positively impact managers’ preference for operational discretion, but only when monitoring by boards is weak. When monitoring by boards is strong, we find that adding clawbacks does not affect this preference. Importantly, we find evidence suggesting that strong monitoring alters participants’ reasoning processes in line with our theory. We find that participants who propose cuts to operational expenses recognize that these cuts come at a cost to short-term competitive advantage, but rationalize that these cuts are immaterial to long-term competitive advantage.
(consistent with motivated reasoning). We also find evidence that participants’ overall use of discretion and their views about the long-term impact of using their discretion to meet short-term targets varies systematically based on monitoring strength (consistent with accountability tempering motivated reasoning and altering the set of proposals that are considered reasonable in the first place).

Our study contributes to the literature on corporate governance and earnings management. First, we provide empirical evidence that the impact of mandated clawbacks on managerial behavior depends on the strength of board monitoring. Larcker et al. (2007) posit that the relation between corporate governance and managerial behavior is of fundamental importance to practitioners, academics, and policy makers. Yet, empirical support for the impact of governance on managerial behavior (particularly when it comes to abnormal accruals and restatements) is mixed. They conjecture that these mixed results are, at least, in part the result of governance measures that have a “very modest level of reliability and construct validity (p. 1004).” We believe that our experiment allows us to more directly manipulate an aspect of internal monitoring (number of proposals rejected by a board on grounds of being against shareholder interest) and, in doing so, presents a more reliable proxy for internal monitoring.

Second, we find that when regulators make it costly to exercise accounting discretion, managers substitute accounting discretion with operational discretion. Our results present an empirical test of the theoretical predictions contained in Ewert and Wagenhofer (2005) and also extend the empirical results of Cohen et al. (2008) and Evans et al. (2015) who find a similar substitution effect (a decline in AEM followed by a corresponding increase in REM). Our results depart from these papers in at least two important respects. We show that when internal monitoring is strong, mandated clawbacks do little to alter managers’ preference for operational
discretion over accounting discretion. In other words, our results suggest that the strength of a firm’s internal monitoring could represent a boundary condition to the substitution effect previously documented. Second, unlike previous papers, we also provide process evidence that the justifications constructed for this substitution effect vary systematically depending on the strength of internal monitoring. Our results suggest that managerial discretion, which underlies most of earnings management, is malleable and that firms’ internal governance mechanisms can provide some discipline on the extent of this malleability.

Our results should be of interest to policy makers. To the policy maker who views restatements as the most egregious symptom of earnings management, our results suggest that mandated clawbacks may, indeed, be able to curtail restatements when internal monitoring is weak. However, this fix is likely to come at the cost of increased exercise of operational discretion, which could damage a firm’s long-term competitiveness.3 Ironically, that damage is most likely for the firms that need clawbacks the most—those with weak existing corporate governance. Our results should not be interpreted as an argument against clawbacks per se, but rather as a caveat against how mandatory clawbacks could affect managerial behavior in a firm with weak internal governance. The rest of the paper is organized as follows. Section 2 outlines our theory and hypotheses. Section 3 describes our experiment designed to test our hypotheses. Section 4 describes the results and section 5 concludes with implications.

II. BACKGROUND AND THEORY

Earnings Management and Managerial Discretion

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3 See Gunny (2010) and Cohen and Zarowin (2010) for competing viewpoints on REM. Gunny (2010) finds that when managers use REM to meet earnings benchmarks, REM is positively associated with future operating performance. In contrast, Cohen and Zarowin (2010) find that firms that have engaged in REM prior to seasoned equity offerings show lower subsequent operating performance.
A large body of research provides evidence that firms manage earnings to meet or exceed important benchmarks (see Healy and Wahlen 1999 and Dichev et al. 2013 for surveys of the earnings management literature). Managers have two sources of discretion that allow them to manage earnings. The discretion available in GAAP provides managers some latitude to report an income number consistent with their preferences. For example, when firms face earnings pressure, managers might choose to accrue a lower allowance for bad and doubtful accounts than they would, absent such pressure. A second source of discretion comes from managers’ ability to defer discretionary operational expenses such as an R&D project or an advertising campaign. Prior literature (e.g., Larcker et al. 2007, Roychowdhury 2006) refers to the use of accounting discretion to manage earnings as accrual earnings management (AEM) and the use of operational discretion to influence reported earnings numbers as real activities manipulation or real earnings management (REM). In this paper, we use the term accounting discretion and operational discretion interchangeably with AEM and REM respectively.

To be clear, managers are paid to use their discretion, both with respect to accounting and operational activities. However, when facing earnings pressure, some managers, either deliberately or unconsciously use this discretion in self-serving ways rather than doing what is best for the firm. The literature on corporate governance examines how internal governance mechanisms (such as boards or activist shareholders) and external governance mechanisms (such as regulatory mandates) can constrain managers’ unfettered use of discretion. Baber et al. argue that that it is particularly important to consider interactions among firms’ internal and external governance characteristics when investigating governance as a determinant of financial reporting

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The discretion available under GAAP to manage accruals, however, is (a) not unlimited (Barton and Simko 2002), (b) does not always have to be income-increasing (Wahlen, Baginski & Bradshaw 2010), and (c) does not necessarily have to be against shareholder interest (Arya et al. 2003).
quality. However, theorists and practitioners appear to recognize that external governance mechanisms may be somewhat limited in their ability to curb managerial opportunism. For instance, Jensen (1993) argues that “the legal/political/regulatory system is far too blunt an instrument to handle the problems of wasteful managerial behavior effectively.” Consistent with this intuition, Arthur Levitt, the former commissioner of the SEC, in his famous “numbers game” speech, states that earnings management, broadly speaking, is “a financial community problem…[that] can't be solved by a government mandate: it demands a financial community response” (Levitt 1998). Despite these observations, there has been little empirical examination of how these different approaches to corporate governance affect managers’ use of discretion.

We examine two governance mechanisms that aim to curb opportunistic behavior by managers. The first is an externally imposed governance mechanism—mandated clawbacks. In describing the expectations from the proposed clawbacks, SEC Chair White (2015) states that “the proposed rules would result in increased accountability and greater focus on the quality of financial reporting, which will benefit investors and the markets.” SEC commissioner Aguilar (2015) states that “the existence of a clawback policy should, among other things, incentivize executives to create a culture of compliance that results in accurate reporting of financial performance…[and], hopefully, fewer financial statements will be required to be restated.” These expectations mirror the more general expectations for internal governance as mechanisms by which the shareholders ensure that the board of directors ensure that managers’ interests are aligned with those of shareholders (Armstrong et al. 2010). Before we describe how we expect these two mechanisms to impact managers’ use of operational and accounting discretion, we first provide some background on clawbacks.

**Mandated Clawbacks and Managerial Discretion**
Externally mandated clawbacks are regulatory provisions that require managers to return their incentive-based compensation if a firm restates its financial statements and it is determined that managers were not entitled to the incentive-compensation based on the restated financials. Clawbacks were originally mandated as part of the Sarbanes-Oxley Act (2002), but the scope of clawbacks has changed considerably under the provisions of the Dodd-Frank Act (2010). The key point of similarity between the Sarbanes-Oxley (SOX) and the Dodd-Frank (DF) clawbacks is that the triggering event is the same—restatements. However, there are several differences between the SOX and DF provisions. The key differences are that the board of directors (and stock exchanges) are tasked with enforcing the DF clawbacks whereas the SEC was tasked with the SOX clawbacks. Whereas the SOX clawback provisions applied only to the CEO and the CFO, the DF provisions apply to all “executive officers”. Finally, the SOX clawback provides for a shorter look-back period and covers only compensation one year following the issuance of a misstated financial statement whereas, under DF, the look-back period is three years. Overall, mandated clawbacks make it personally costly to managers to engage in actions that could lead to a restatement.

While it might be clear to managers that they should not make egregious changes to accounting estimates in order to achieve earnings targets, many may feel that some level of adjustment is allowable or even warranted under certain circumstances (e.g., if they anticipate changing operations in a manner that would support the accrual change). However, mandated clawbacks are likely to deter managers from using exercising accounting discretion in a way that would boost earnings, whether egregious or not. Prior research suggests that aggressive use of

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5 See Fichtner et al. (2016) for a detailed comparison of the clawback provisions under SOX and DF.
6 Indeed, many researchers seem to agree given the common use of the phrase “within-GAAP earnings management”.
accounting discretion (AEM) is a leading cause of financial restatements (Larcker and Tayan 2011, Ettredge et al. 2010, Richardson et al. 2002).

Although it might seem straightforward that mandatory clawbacks would likely lead to fewer restatements because of fewer instances of egregious use of accounting discretion, they may have a spillover effect on how managers think about exercising their operational discretion. Most directly, if mandatory clawbacks reduce egregious use of accounting discretion to achieve an earnings target, the managers who would have turned to accounting manipulations in the absence of mandatory clawbacks may now be willing to use their operational discretion to boost short-term earnings. But this substitution may be non-trivial. Because it requires deviating from an operational plan that was previously thought to be optimal (Ewert and Wagenhofer 2005), a manager’s willingness to do so will depend on their view of how costly the tradeoff is between short- and long-term earnings performance.

Research in psychology suggests that, which faced with judgmental uncertainty, people’s incentives can influence how they construct justifications when making decisions (Kunda 1990, Hsee 1995, Epley and Gilovich 2016). This research suggests that managers will be more likely to believe that certain operational cuts, such as delaying a project to the next quarter, will not impede the firm’s long-term competitive advantage, if making those cuts are aligned with managers’ directional preferences. The inherent uncertainty associated with operational decisions affords managers plenty of latitude to engage in motivated reasoning even if these justifications may not be in the managers’ long-term interest.7 In addition, the more deterred a manager is from using accounting discretion, the greater will be their incentive to justify a costly operational

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7 Such behavior would be analogous to prior research showing that investors randomly assigned to different investment positions make judgments about that firm’s prospects consistent with their investment positions, even when they are paid to process information accurately (Hales 2007).
tradeoff. Thus, we expect a substitution effect—i.e., managers will be relatively more (less) inclined to propose operational cuts in the presence (absence) of mandatory clawbacks for accounting restatements.

Our prediction that managers will use sources of operational discretion to replace sources of accounting discretion is similar, in spirit, to the predictions of analytical models (Ewert and Wagenhofer 2005) and the empirical results of Cohen et al. (2008) who find a decline in AEM following SOX and a corresponding increase in REM. However, our prediction departs from these papers in two key respects. First, we expect that the extent to which managers are willing to trade-off operational discretion for accounting discretion depends on the strength of internal monitoring. When internal monitoring is strong, we expect the introduction of mandated clawbacks to do little to alter managers’ preference for operational discretion over accounting discretion. Second, we also expect (and test) that the justifications constructed for the trade-off will systematically vary depending on the strength of internal monitoring. We outline these predictions next.

The Joint Impact of Mandated Clawbacks and Monitoring on Managers’ Use of Discretion

The reasoning in the previous section ignores that managers make decisions in a control environment, which can be designed to reinforce key organizational goals and objectives. To the extent that a control environment focuses narrowly on accounting discretion, we would expect that type of monitoring to shape manager behavior in a way that is similar to mandatory clawbacks. Alternatively, the control environment could be more broadly designed to focus on shareholder value. The definition of corporate governance by Larcker and Tayan (2011) echoes

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8 It is important to note that Sarbanes-Oxley contained a whole host of provisions that could have made exercising accounting discretion costly whereas we focus on a specific provision—clawbacks. Although clawbacks make exercising accounting discretion costly, they are, but one element in SOX and it is not clear that clawbacks, in isolation, should have the same substitution effect.
this idea. They define corporate governance as “the collection of control mechanisms that an organization adopts to prevent or dissuade potentially self-interested managers from engaging in activities detrimental to the welfare of shareholders and stakeholders.”

Indeed, the primary role of board members is to ratify and monitor important decisions made by managers (Brickley and Zimmerman 2010). Boards do this by raising questions, debating policy choices, and ultimately, by adopting or rejecting recommendations brought to them by the CEO (Bowen 2011). In doing so, boards can signal the broad standards (e.g., shareholder value) to which they will hold CEOs accountable. This is important because research on accountability argues that the prospect of having to justify one’s actions to an audience can make people anticipate potential counter-arguments and impose greater discipline on the arguments they generate. Consequently, when decision makers are accountable, they may reach different conclusions than they otherwise would—often, though not always, for the better (Lerner and Tetlock 1999, Russo et al. 2000). Supporting this expectation, Koonce et al. (1995) find that auditors in an experiment who anticipated that their audit report would be reviewed spent more time on their reports and provided significantly more justifications compared to auditors who did not expect their reports to be reviewed. Therefore, we expect that when board monitoring is strong, managers are less likely to use both accounting and operational discretion in a self-serving fashion, relative to when board monitoring is weak.

When board monitoring is weak, psychological processes, such as elastic justification (Hsee 1996) and motivated reasoning (Kunda 1990), can help managers construct rationalizations which make it easier for them to justify operational cuts which they might

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9 Hazarika et al. (2010) provide empirical evidence that boards tend to act proactively to discipline managers who manage earnings aggressively even when the manipulations do not lead to costly external consequences such as restatements or enforcement actions. They report that a one-standard-deviation decrease in earnings management is associated with a 15–26% decrease in the odds of a forced CEO turnover.
otherwise be unwilling to make in environments where they were less averse to using accounting
discretion. By contrast, when board monitoring is strong, the prospect of having to justify
proposals as being consistent with shareholder value can alter the set of arguments generated in
the first place. When mandated clawbacks are introduced in this environment, we expect the
clawbacks to have little additional impact on managers’ relative preference for operational versus
accounting discretion to accomplish their preferred reporting objectives because mandatory
clawbacks are unlikely to deter managers from using any discretion that they view as consistent
with shareholder value. Formally:

**Hypothesis:** When under pressure to meet earnings benchmarks, mandated clawbacks
will increase managers’ tendency to use operational discretion (relative to accounting
discretion) in a self-serving manner when monitoring by boards is weak but not when
monitoring is strong.

III. EXPERIMENT

PARTICIPANTS

Participants in our experiment are 127 students from an executive MBA program in a
business school in the Southeastern U.S. On average, our participants have 14 years of work
experience and are 37 years old. This provides us some assurance that our participants are likely
to understand the incentive-structures for senior managers of publicly-traded firms which is
important, given our research question and our experimental context. Given our participant pool,
we do not expect that monetary incentives for participation will induce them to exert additional
effort on the experimental task. Consistent with other studies that employ a comparable
participant pool and examine questions related to earnings management (Clor-Proell and Maines
2014, Rose et al. 2014), we do not pay our participants for their participation.
PROCEDURE & SETTING

Participants in our experiment assume the role of a CEO of a hypothetical firm—Zeta. They first see summarized financial statement data for three years for this firm. These data suggest that Zeta’s recent financial performance has been strong. They are told that Zeta has met or exceeded analysts’ EPS expectations in the past three years. Next, they are told that, for the upcoming year, Zeta expects to fall short of analysts’ consensus EPS estimate. The principal decision that participants make is how they propose to deal with this shortfall. As we describe in greater detail below, the choice(s) that participants propose to address this shortfall represent(s) our primary dependent variable. Before proceeding to the choices available to them to help them with their decision, participants are told that if Zeta misses analysts’ earnings estimates, Zeta’s stock price could decline, Zeta’s stock could be downgraded and employee bonuses across the board would not be paid.10

Participants are told that the analysts’ consensus earnings estimate for Zeta is $1.80 for the year whereas internal estimates show that the company is on track to report only an EPS of $1.65—that is, a significant shortfall. They are further informed that all options to increase earnings to meet or exceed the analysts’ consensus have been exhausted except for reducing two line items from selling, general & administrative expenses (SG&A). The two line items are (1) reducing the accrual for warranty expense (our proxy for managers’ accounting discretion) and (2) postponing some advertising expenses slated for Q4 of the current year (our proxy for

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10 We believe that the pressure to meet earnings benchmarks represents a key setting where earnings management pressures come to the fore. Anecdotal and survey evidence suggests that managers are keenly aware of the importance of meeting or exceeding analysts’ consensus (Graham et al. 2005). Several papers document the importance of meeting or beating analysts’ earnings expectations (MBE) and also the negative consequences of having a string of MBE interrupted (Burgstahler and Dichev 1997, Cheng and Warfield 2005). We remind participants of some of the adverse consequences associated with missing analysts’ estimates. Arguably, this reminder could encourage more participants to manage earnings than they would without the reminder, but this reminder is provided to participants across experimental treatment conditions.
managers’ *operational discretion*).

Participants are told that both line items can be cut (up to $2 million each) to make up the 15 cent ($1.5 million) shortfall between internal projections and analysts’ earnings expectations. However, we wanted our participants to recognize that cutting either expense (or both) may neither be necessary nor sufficient to meet analysts’ consensus estimates. Accordingly, participants are reminded that if there are no cuts, they are highly unlikely to meet analysts’ estimates (but the possibility is not ruled out). Similarly, they are reminded that if they cut $2 million in expenses, they are highly likely (but not certain) to meet analysts’ expectations. Further, participants are reminded that a one dollar cut in advertising expenses and an equivalent cut in warranty accrual would have exactly the same impact on EPS. However, reducing the warranty accrual could lead to a restatement—postponing advertising expenses carries no restatement risk. Following these reminders, the two independent variables are introduced.

**INDEPENDENT VARIABLES**

Participants are told that there are two additional factors they need to consider before making their final decision—oversight by the board of directors and by regulators. These are our two independent variables. They correspond to board monitoring (strong versus weak) and the mandated clawback (present versus absent). We do not use the terms “strong” board, “weak” board, or “clawbacks” in the experiment for obvious reasons. Participants in both the strong and the weak board monitoring conditions are told that the board has broad powers to discipline the CEO and review the CEO’s decisions to assess whether these decisions have been in the interest of Zeta’s shareholders. In the strong board monitoring condition, participants are told that, in the past three years, Zeta’s board has overturned the CEO’s decisions on four separate occasions.

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11 The experimental materials do not use the term “earnings management” nor do they use the terms “real” or “accrual” earnings management to avoid predisposing the participants in favor of an option.
because they were judged by the board to be not in the best interests of the shareholders. In contrast, participants in the weak board condition are told that, in the past three years, Zeta’s board has unanimously agreed with all CEO decisions.

We then provide information on the regulatory oversight conditions. Participants in the mandated clawback condition are told that if Zeta restates their past financial statements, the SEC requires that any bonus based on past inaccurate financial statements will have to be returned. In contrast, participants in the no clawback condition are told that there is no SEC regulatory policy governing bonuses; even if a firm has to restate past financial statements, there is no SEC requirement to return the original bonus. Following these manipulations, participants are asked to decide how much they would propose to cut from their SG&A expenses, which represents our dependent variable, discussed in greater detail next.

**DEPENDENT VARIABLES AND OTHER QUESTIONS**

Participants are told to assume that it is sufficiently early in the fourth quarter such that they have enough time to effect reductions of either warranty accruals or advertisement expense (or both). Participants are first asked to indicate in their proposal to the board by how much they would cut SG&A, in aggregate. Participants were told previously that both warranty accruals and advertisement expense fall under the broad head of SG&A. Next, we ask participants to disaggregate this amount (assuming it was non-zero) between the warranty accrual and the advertisement expense. Again, participants are reminded that they can cut one or both of these items, or choose not to cut either. The only constraint imposed is that the sum of the two cuts should add up to the amount they specified in response to the first question. Participants’ responses to the warranty accrual and the advertisement expense questions represent our measure of accounting discretion and operational discretion respectively.
Following their responses to our dependent variables, participants indicate whether their choice was consistent with shareholder value maximization and how they believe their choice will affect Zeta’s competitive position and stock price, both in the short and in the long run. Next, participants answer two questions to confirm that they understood the manipulations as we intended. Finally, participants answer a question not directly related to Zeta. They indicate the extent to which they think that company boards are more important in ensuring that companies do not misreport their financials compared to external regulators like the SEC. Before participants are dismissed, we obtain demographic information to check whether any of their responses vary systematically based on demographic variables.

IV. RESULTS

TEST OF PRIMARY HYPOTHESIS

Our primary hypothesis is that, when managers are under pressure to meet earnings benchmarks, mandated clawbacks will increase managers’ tendency to use operational discretion (relative to accounting discretion) when monitoring by boards is weak but not when monitoring is strong. To test this hypothesis, we construct a measure that captures managers’ relative preference for operational discretion (OD) over accounting discretion (AD) by taking their proposed cut to advertising expense (our proxy for managers’ operational discretion) and then subtracting their proposed cut to warranty accrual expense (our proxy for managers’ accounting discretion).

Panel A of Figure 1 graphically presents the results for this measure (OD – AD) for all our treatment conditions. The graph indicates a noticeably stronger preference for operational discretion when clawbacks are mandated and board monitoring is weak relative to the other three conditions. Panel A of Table 1 presents the descriptive statistics for this measure (OD – AD).
Panel B presents the results of an ANOVA using this measure (OD – AD) as our dependent variable and our manipulated variables (clawback and board monitoring strength) and the interaction term as independent variables. Consistent with our predictions, we find a significant clawback × board monitoring interaction (F = 8.605, p = 0.004), consistent with our prediction that the influence of clawbacks on managerial discretion varies as a function of board monitoring. Follow-up tests presented in panel C reveal that mandated clawbacks significantly increase a manager’s tendency to propose operational cuts relative to accounting cuts when board monitoring is weak (F = 14.788, p < 0.001), but we find no such effect when board monitoring is strong (F = 0.067, p = 0.796). These results provide fairly direct evidence that the presence of mandatory clawbacks induces a substitution effect and that strong monitoring for shareholder value can hold that effect in check.

INSERT FIGURE 1 AND TABLE 1 ABOUT HERE

TESTS OF COMPONENTS OF MANAGERIAL DISCRETION

Although our results support our primary hypothesis, our dependent variable offers limited insight into how managers exercise discretion over the individual components of discretion at their disposal. For example, does the substitution effect induced by clawbacks when board monitoring is weak arise somewhat mechanically simply by reducing the tendency of managers to propose cuts to the warranty accrual or do the clawbacks also increase the amount managers propose to cut from advertising? To better understand what is driving our primary tests, we next analyze the separate components of managerial discretion as well as their combined effect.

Panel A of Table 2 provides the descriptive statistics related to managers’ exercise of accounting, operational, and total discretion in all our treatment conditions. Panel B presents the
results of three separate ANOVAs with mandated clawbacks and board monitoring as the independent variables: accounting, operational, and total discretion as the dependent variables.\textsuperscript{12} With respect to accounting discretion, we find a significant clawback $\times$ monitoring interaction ($F = 6.898, p = 0.01$), indicating that the discretion exercised by managers in response to mandated clawbacks is contingent on board monitoring. When board monitoring is weak, managers exercise lesser (greater) accounting discretion in the presence (absence) of clawbacks, but when board monitoring is strong, managers’ exercise of accounting discretion is unaltered by clawbacks. This interaction is consistent with our expectation that mandated clawbacks do not incrementally influence managers’ exercise of accounting discretion when board monitoring is strong because managers’ proposals to a board may already be tempered by their sense of accountability.

\textbf{INSERT TABLE 2 HERE}

With respect to operational discretion, again, we find a significant clawback $\times$ monitoring interaction ($F = 3.322, p = 0.07$ 2-tailed), but here the interaction suggests that when board monitoring is weak, managers exercise greater (lesser) operational discretion in the presence (absence) of clawbacks. This interaction is consistent with the substitution we expect from accounting to operational sources of discretion, but only when board monitoring is weak.

Finally, given how managers use accounting and operational sources of discretion as substitutes when board monitoring is weak, we find only a main effect of board monitoring ($F = 8.531, p = 0.004$) on managers’ total discretion. This main effect is consistent with our premise that stronger board monitoring imposes greater discipline on the proposals managers bring to the

\textsuperscript{12} Ideally, with multiple dependent variables, we should run a MANOVA to control for type I error, but our dependent variables are correlated. Further, Huberty and Morris (1989) point out that multiple ANOVAS (rather than a MANOVA) may be appropriate “when some or all of the outcome variables under current study have been previously studied in univariate contexts”. (p.303)
board in the first place by altering what managers consider to be *reasonable*. In other words, clawbacks affect *how* managers use their discretion whereas strong monitoring by boards affects not only how, but also *how much* discretion managers choose to exercise.

Figure 2 breaks down the impact of clawbacks based on the strength of board monitoring. Panel A of Figure 2 shows that, when board monitoring is weak, managers’ use of accounting discretion drops sharply whereas their use of operational discretion goes up correspondingly after clawbacks are introduced. By contrast, panel B of figure 2 shows that, when board monitoring is strong, there is no discernible change in managers’ exercise of either source of discretion following clawbacks. Follow up simple effect tests reported in panel B confirm that use of accounting discretion decreases ($F = 14.361, p < 0.001$) and use of operational discretion increases ($F = 4.427, p = 0.038$) following mandated clawbacks when board monitoring is weak. In contrast, use of accounting discretion remains unchanged ($F = 0.015, p = 0.902$) as does the use of operational discretion ($F = 0.206, p = 0.651$) when board monitoring is strong. This result suggests that although mandated clawbacks significantly alter the relative preference for operational over accounting discretion when board monitoring is weak, they have limited effect on this preference when board monitoring is strong.

**ADDITIONAL ANALYSIS**

*Strategic Proposals versus Altered Judgments*

One possible explanation for the substitution effect we observe is that some managers are willing to use discretion in a self-interested way to hit earnings targets, using the least costly set of choices in their available toolkit, and that mandatory clawbacks change the calculus of that analysis. While economic incentives could play a big role in the set of cuts a self-interested
manager will propose, we note two points. First, mandatory clawbacks, by changing the incentives associated with restatements, would alter the cost-benefit tradeoff in both our weak board monitoring and strong board monitoring conditions. Yet, we find no evidence of this substitution effect in our strong board monitoring conditions, suggesting that managers’ willingness to exercise greater operating discretion in lieu of accounting discretion depends on the strength of board monitoring.

Second, the binary nature of restatements implies that strategic manager would only alter their proposals if the accounting cuts they would prefer to propose would be reasonably likely to trigger a restatement. In other words, to the extent that economic considerations are the main driver of the observed substitution, we should expect to see a noticeable difference in managers’ exercise of discretion between two groups—those who exercise discretion to likely meet or exceed a benchmark (in this case, analysts’ consensus estimates of $1.5 million) versus those who do not. To check for evidence of a threshold effect, we slice the data based on the total amount of cuts each manager proposes. As shown in Figure 1 (Panels B and C), there are no discernible differences in how the two groups of managers use accounting and operational discretion, suggesting that economic factors alone may not completely explain managers’ exercise of discretion across conditions.13

Table 2 breaks down managers’ total discretion by condition into its component parts (how much of the cuts came from warranty accruals expense versus cuts to advertising expense). In other words, how much accounting discretion and operational discretion did managers

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13 Our results for the full sample indicate a noticeably stronger preference for operational discretion when clawbacks are mandated and board monitoring is weak relative to the other three conditions. We conduct a planned contrast to compare whether the same pattern prevails in both sub-groups. Untabulated results show that in both groups, the preference for operational discretion is strongest when clawbacks are mandated and board monitoring is weak compared to all other conditions (F = 13.9, p < 0.001 for those who meet / exceed the benchmark and F = 7.46, p = 0.01 for those who do not).
exercise across treatment conditions. Interestingly, managers exercise less accounting discretion in the clawback, weak board condition than in the clawback, strong board condition (0.28 vs. 0.51, p = .067) and in the no clawback, strong board condition (0.28 vs. 0.52, p = 0.025). These numbers could be viewed as evidence that strong boards are less effective than clawbacks at reducing managers’ exercise of accounting discretion (which is the primary objective of the mandated clawback regulation). However, we would caution against drawing such inferences for two reasons. First, this comparison is not only a test of how effectively our two treatments are at deterring exercise of accounting discretion, but also a test of the relative strength of the two treatments in our experimental setting. Because experiments are not ideally suited for “levels” comparisons like this, we focus primarily on the directional effects of our treatments. However, even if the evidence above came from a naturally occurring setting, where levels comparisons would be more appropriate, drawing an inference that clawbacks are more effective at deterring (misuse of) accounting discretion would still be incomplete because it narrowly focuses on accounting discretion without considering how each mechanism will also influence operational discretion and, in turn, total discretion. The ANOVA in Table 2 (panel B) shows a strong main effect of board monitoring (p = 0.004) on managers’ total discretion, suggesting that a more complete picture should take into consideration the impact of any intervention on both accounting and operational discretion.

**Process Measures**

As we acknowledged earlier, both economic and motivated reasoning could generate some of the behaviors we predict. However, the underlying mechanisms leading to the predicted outcomes would differ leading us to examine the process measures. Participants across treatment conditions report believing that they are acting in the interest of shareholder value maximization.
On an 8-point scale ranging from 0 to 7 with higher values indicating greater congruence with shareholder value maximization, participants across conditions average 5.19, which is significantly above the midpoint \( (t = 13.7, p < 0.001) \). An ANOVA by treatment condition reveals no significant difference in participants’ perceptions across conditions that their decisions are consistent with shareholder value maximization \( (F = 0.807, p = 0.492) \).

However, as previously noted, participants in the weak board monitoring, clawback condition exhibit a marked preference for operational discretion relative to participants in all other conditions. Overall, these participants appear to recognize that this preference comes at some cost to competitive advantage. On an 8-point scale, where 0 (7) indicates a negative (positive) impact on competitive advantage, participants in the weak board, clawback condition, on average, rate that their cuts could impact short-run competitive advantage more negatively than participants in all other conditions. Pairwise comparisons indicate that their assessment is more negative compared to participants in all other conditions \( (all p < 0.05 \text{ one-tailed}) \). However, when the same participants rate the implications of their cuts on long-run competitive advantage, their assessment is no different from participants in all other conditions \( (all p > 0.20 \text{ two-tailed}) \). We interpret this result as consistent with motivated reasoning – participants in the clawback, weak board monitoring condition appear to be rationalizing that, although the cuts to advertising expenses might affect their short-run competitive advantage, these cuts will not affect the firm’s competitive advantage in the long-run.\(^\text{14}\) Yet, other participants are unwilling to make such cuts in the presence of a strong board.

\(^\text{14}\) Our study is not designed to provide direct evidence of motivated reasoning because we do not also provide participants with incentives to accurately reveal their beliefs, as has been done in prior research (e.g., Hales 2007). Still, we believe our evidence is consistent with motivated reasoning. While motivated reasoning allows participants some malleability in terms of interpreting evidence in a preference-consistent fashion, it does not allow them to believe “anything they like” (Kunda 1990, 490). Consistent with this, participants admit that the firm’s short-term competitive advantage will be threatened if they cut advertising expenses (consistent with case facts), whereas they
To better understand participants’ perceptions about how their decisions affect the firm in the long run, we average their responses to two questions—how their total cuts affect the firm’s stock price and competitive advantage in the long-run.\textsuperscript{15} We label this measure long-term impact (LTI). A regression (untabulated) with LTI as the dependent variable, total discretion (TD), board monitoring strength (BOARD), and the interaction term (TD $\times$ BOARD) as independent variables reveals a significant TD $\times$ BOARD interaction ($p=0.03$, one-tailed). Participants in the weak board monitoring condition believe that TD is positively associated with LTI whereas participants in the strong board conditions believe that TD is not significantly associated with LTI. We interpret this result as evidence consistent with our theory that strong board monitoring constrains motivated reasoning to some extent. While it is not surprising that participants’ views about the long-term impact of their cuts varies across conditions, there is no reason why this variation should be systematically associated with the strength of board monitoring.

V. CONCLUSION

This study experimentally examines the impact of mandated clawbacks and board monitoring on managers’ use of accounting and operating discretion. We predict and find that mandated clawbacks increase managers’ tendency to use operational discretion (relative to accounting discretion) when monitoring by boards is weak but not when monitoring is strong. When monitoring by boards is strong, we find that adding clawbacks does not alter managers’ preference for operational over accounting discretion. Importantly, we find evidence suggesting that strong monitoring alters participants’ reasoning processes in line with our theory. We find are able to dismiss the long-term, more uncertain, negative effects of their actions.

\textsuperscript{15} The Cronbach’s Alpha for these two measures is 0.86 suggesting that the two questions capture the same underlying construct. A factor analysis of participants’ responses to the post-experimental questions also reveal two clear factors—one denoting the long-run and the other denoting the short-run. Using the factor scores on the long-run factor as the dependent variable in the regression yields similar inferences.
that participants who propose cuts to operational expenses recognize that these cuts come at a cost to short-term competitive advantage, but rationalize that these cuts are immaterial to long-term competitive advantage (consistent with motivated reasoning). We also find evidence that participants’ overall use of discretion and their views about the long-term impact of using their discretion to meet short-term targets varies systematically based on monitoring strength (consistent with accountability tempering the use of discretion and monitoring altering the set of proposals that are considered reasonable in the first place).

Our experiment is subject to limitations. First, we use a very specific type of accounting discretion (reducing warranty accruals) and operational discretion (cutting advertising expense). Although these are representative contexts in which earnings management has been studied, it is important to verify that our findings hold for alternative contexts of accounting and operational discretion. Second, our experiment assumes that managers consider accounting and operational discretion simultaneously when coming up with proposals to help them meet their earnings benchmarks. Although prior research shows that managers, indeed, trade-off accounting and operational discretion (Badertscher 2011, Chan et al. 2015), we do not know whether managers consider the two options simultaneously. Accounting discretion can be exercised even after the end of the fiscal year (Dhaliwal et al. 2004) but operational discretion is more likely to be available during the fiscal year (Ahearne et al. 2016). Future research can ascertain whether our results hold in situations where managers consider these sources of discretion at different points in time.

Our results on the importance of board monitoring in curtailing self-serving use of discretion speak to another important issue in the governance literature. Governance theorists argue that externally imposed sanctions can crowd out internal mechanisms for ensuring
desirable behavior. The Dodd Frank clawback provisions considerably limit boards’ discretion in terms of the actual implementation of clawbacks. In a dissenting vote against the Dodd Frank clawback provisions, SEC Commissioner Gallagher noted that the proposed rule “puts corporate boards not just in handcuffs but in a straitjacket… and reflects a view that a corporate board is the enemy of the shareholder, not to be trusted to do the right thing”. Although our experiment cannot speak to this important point, it is worth examining whether mandatory clawbacks that curtail board discretion eventually end up weakening boards as feared by some regulators (Gallagher 2015). We leave this question for future research.
REFERENCES


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Figure 1 presents managers’ relative preference for operational over accounting discretion in our four treatment conditions obtained by crossing mandated clawbacks (present vs. absent) and board monitoring (weak vs. strong). We measure managers’ preference by subtracting cuts to warranty accrual expense (accounting discretion) from cuts to advertising expense (operational discretion). The numbers above represent the difference in the proposed cuts (in $ millions).

Panel A presents this measure for the full sample (n = 122). Panel B presents the numbers for managers whose total cuts were greater than or equal to $1.5 million (n = 82). Panel C presents the corresponding numbers for managers whose total cuts were less than $1.5 million (n = 40).
Panel A: The Impact of Mandated Clawbacks Conditional on Board Monitoring Strength

Panel B: Simple Main Effects of Mandated Clawbacks on Accounting and Operational Discretion Conditional on Board Monitoring

<table>
<thead>
<tr>
<th>Source</th>
<th>Weak Board Monitoring</th>
<th>Strong Board Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>d.f.</td>
<td>M.S.</td>
</tr>
<tr>
<td>Main effect of clawbacks: Accounting discretion</td>
<td>1</td>
<td>2.888</td>
</tr>
<tr>
<td>Main effect of clawbacks: Operational discretion</td>
<td>1</td>
<td>1.310</td>
</tr>
</tbody>
</table>

Panel A of figure 2 presents managers’ cuts to warranty accrual expense (our proxy for managers’ accounting discretion) and their cuts to advertising expense (our proxy for managers’ operating discretion) for our four treatment conditions. The numbers reported above represent the proposed cuts (in $ millions). Panel B presents the simple main effects of mandated clawbacks on managers’ accounting and operational discretion when board monitoring is weak and when board monitoring is strong.
# TABLE 1:
Managers’ Relative Preference for Operational Discretion over Accounting Discretion

**Panel A: Descriptive Statistics: Mean (standard deviation)**

<table>
<thead>
<tr>
<th><strong>Mandated Clawback</strong></th>
<th><strong>Board Monitoring</strong></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Weak</strong></td>
<td><strong>Strong</strong></td>
<td><strong>Row Means</strong></td>
<td></td>
</tr>
<tr>
<td>Absent</td>
<td>0.25 (0.78)</td>
<td>0.26 (0.57)</td>
<td>0.25 (0.68)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n = 34</td>
<td>n = 30</td>
<td>n = 64</td>
<td></td>
</tr>
<tr>
<td>Present</td>
<td>0.99 (0.86)</td>
<td>0.21 (0.73)</td>
<td>0.56 (0.84)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n = 26</td>
<td>n = 32</td>
<td>n = 58</td>
<td></td>
</tr>
<tr>
<td>Column Means</td>
<td>0.57 (0.89)</td>
<td>0.24 (0.65)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>n = 60</td>
<td>n = 62</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Panel B: ANOVA**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>d.f.</th>
<th>Mean Squares</th>
<th>F-statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clawback</td>
<td>3.619</td>
<td>1</td>
<td>3.619</td>
<td>6.616</td>
<td>0.011</td>
</tr>
<tr>
<td>Monitoring</td>
<td>4.308</td>
<td>1</td>
<td>4.308</td>
<td>7.876</td>
<td>0.006</td>
</tr>
<tr>
<td>Clawback × Monitoring</td>
<td>4.706</td>
<td>1</td>
<td>4.706</td>
<td>8.605</td>
<td>0.004</td>
</tr>
<tr>
<td>Error</td>
<td>64.54</td>
<td>118</td>
<td>0.547</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Panel C: Simple Main Effects: Relative Preference for Operational over Accounting Discretion**

<table>
<thead>
<tr>
<th>Source</th>
<th>d.f.</th>
<th>M.S.</th>
<th>F-Statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect of clawbacks on managers’ preference for operational discretion when board monitoring is weak</td>
<td>1</td>
<td>8.089</td>
<td>14.788</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Effect of clawbacks on managers’ preference for operational discretion when board monitoring is strong</td>
<td>1</td>
<td>0.037</td>
<td>0.067</td>
<td>0.796</td>
</tr>
</tbody>
</table>
Panel A of table I presents managers’ relative preference for operational over accounting discretion in our four treatment conditions obtained by crossing mandated clawbacks (present vs. absent) and board monitoring (weak vs. strong). We measure managers’ relative preference for operational over accounting discretion by subtracting their cuts to warranty accrual expense (our proxy for managers’ accounting discretion) from their cuts to advertising expense (our proxy for managers’ operating discretion). The numbers reported above represent the difference in the proposed cuts (in $ millions).

Panel B presents the results of an ANOVA with managers’ relative preference for operational discretion as the dependent variable; clawbacks, board monitoring, and the interaction (clawbacks × monitoring) as the independent variables.

Panel C presents the simple main effects of mandated clawbacks on managers’ relative preference for operational discretion when board monitoring is weak and when board monitoring is strong.
### TABLE 2: Accounting Discretion, Operational Discretion, and Total Discretion

#### Panel A: Descriptive Statistics: Mean (standard deviation)

<table>
<thead>
<tr>
<th></th>
<th>Accounting Discretion</th>
<th>Operational Discretion</th>
<th>Total Discretion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Board Monitoring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mandated Clawback</td>
<td>Weak</td>
<td>Strong</td>
<td>Row Means</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absent</td>
<td>0.72 (0.49) n=34</td>
<td>0.52 (0.38) n=30</td>
<td>0.63 (0.45) n=64</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present</td>
<td>0.28 (0.40) n=26</td>
<td>0.51 (0.50) n=32</td>
<td>0.41 (0.47) n=58</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Column Means</td>
<td>0.53 (0.50) n=60</td>
<td>0.51 (0.44) n=62</td>
<td>0.51 (0.44) n=62</td>
</tr>
</tbody>
</table>

#### Panel B: Analysis of Variance Results

<table>
<thead>
<tr>
<th>Source</th>
<th>Accounting Discretion</th>
<th>Operational Discretion</th>
<th>Total Discretion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>d.f.</td>
<td>M.S.</td>
<td>F-Statistic</td>
</tr>
<tr>
<td>Clawback</td>
<td>1</td>
<td>1.576</td>
<td>7.834</td>
</tr>
<tr>
<td>Monitoring</td>
<td>1</td>
<td>0.004</td>
<td>0.019</td>
</tr>
<tr>
<td>Clawback ×</td>
<td>1</td>
<td>1.387</td>
<td>6.898</td>
</tr>
<tr>
<td>Monitoring</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Panel A of this table presents descriptive statistics for participants’ proposed cuts to SG&A. Experimental participants in the role of a CEO are facing a likely shortfall in earnings compared to analyst expectations and are asked to indicate how much they would cut SG&A. Participants further indicate how much of this...
proposed cut in SG&A would come from warranty accrual expense and from advertising expense. The proposed reduction in warranty accrual expense constitutes our measure of managers’ accounting discretion; the proposed reduction in advertising expense constitutes our measure of managers’ operational discretion. The overall cut in SG&A represents our measure of managers’ total discretion. We manipulate two factors: mandated clawbacks (present versus absent) and board monitoring strength (strong versus weak) resulting in four treatment conditions. All numbers are reported in $ millions.

Panel B presents the results of three separate ANOVAs with mandated clawbacks and board monitoring strength as independent variables and the dollar amount of accounting, operational, and total discretion as the dependent variables. All reported p-values are two-tailed.