

# **Executive Compensation Clawback Provisions and Voluntary Disclosure**

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September 10, 2025

**Abstract:** Executive compensation clawback provisions represent a critical governance mechanism designed to align managerial incentives with shareholder interests by requiring recovery of incentive-based compensation when financial statements require restatement due to material noncompliance with financial reporting requirements. While extensive literature examines voluntary disclosure determinants, limited research investigates how executive compensation recovery mechanisms specifically affect managers' voluntary disclosure choices through governance channels. This study addresses this fundamental gap by examining whether clawback provisions, by strengthening accountability mechanisms, lead to changes in voluntary disclosure behavior through corporate governance improvements. The economic mechanism operates through enhanced monitoring and accountability within the corporate governance structure, where agency theory suggests compensation clawbacks reduce moral hazard by creating personal financial consequences for executives. We predict that clawback provisions will decrease voluntary disclosure through the corporate governance channel, as enhanced accountability mechanisms cause managers to become more conservative in their disclosure practices to avoid potential scrutiny and liability. Our empirical analysis reveals statistically significant evidence that executive compensation clawback provisions reduce voluntary disclosure, with treatment effects ranging from -0.0455 to -0.0797 across specifications, all significant at the 1% level. The economic significance indicates clawback

provisions reduce voluntary disclosure by approximately 4.6 to 8.0 percentage points, representing meaningful changes in firms' information environments operating through strengthened corporate governance mechanisms. This study contributes to executive compensation and disclosure literature by providing the first comprehensive examination of how clawback provisions affect voluntary disclosure through corporate governance channels, demonstrating that governance-enhancing regulations can have nuanced effects on corporate transparency with improvements in mandatory reporting accuracy potentially coming at the cost of reduced voluntary information sharing.

## INTRODUCTION

Executive compensation clawback provisions represent a critical governance mechanism designed to align managerial incentives with shareholder interests by requiring the recovery of incentive-based compensation when financial statements require restatement due to material noncompliance with financial reporting requirements. Following the corporate scandals of the early 2000s, the Securities and Exchange Commission implemented these provisions in 2007 as part of broader efforts to enhance financial reporting quality and executive accountability (Cohen, Dey, and Lys, 2008; Larcker, Richardson, and Tuna, 2007). These provisions fundamentally alter the risk-reward calculus for executives by creating personal financial consequences for reporting failures, thereby strengthening the corporate governance framework within which disclosure decisions are made.

The relationship between clawback provisions and voluntary disclosure operates through enhanced corporate governance mechanisms that influence managerial disclosure incentives and information asymmetry between managers and stakeholders. While extensive literature examines the determinants of voluntary disclosure, including proprietary costs, litigation risk, and capital market pressures (Healy and Palepu, 2001; Beyer, Cohen, Lys, and Walther, 2010), limited research investigates how executive compensation recovery

mechanisms specifically affect managers' voluntary disclosure choices through governance channels. This study addresses a fundamental gap in understanding whether clawback provisions, by strengthening accountability mechanisms, lead to changes in voluntary disclosure behavior and how these effects manifest through corporate governance improvements.

The economic mechanism linking executive compensation clawback provisions to voluntary disclosure operates through enhanced monitoring and accountability within the corporate governance structure. Agency theory suggests that compensation clawbacks reduce moral hazard by aligning executive incentives with accurate financial reporting, as managers face personal financial consequences for restatements (Jensen and Meckling, 1976; Holmström, 1979). This alignment effect extends beyond mandatory reporting to voluntary disclosure decisions, as executives operating under clawback provisions face heightened scrutiny and reputational consequences that influence their overall disclosure strategy. The governance channel operates by strengthening board oversight, enhancing audit committee effectiveness, and improving internal control systems, all of which collectively influence the firm's information environment.

Corporate governance improvements resulting from clawback provisions affect voluntary disclosure through multiple theoretical pathways established in prior literature. Strong governance mechanisms reduce information asymmetry between managers and investors by encouraging more transparent communication and reducing managers' ability to withhold value-relevant information (Ajinkya, Bhojraj, and Sengupta, 2005; Karamanou and Vafeas, 2005). The signaling theory framework suggests that firms with robust governance structures use voluntary disclosure to signal their commitment to transparency and differentiate themselves from poorly governed firms (Spence, 1973; Verrecchia, 2001). Additionally, improved governance reduces the likelihood of proprietary cost concerns overriding disclosure

benefits, as well-governed firms are better positioned to manage competitive disadvantages that might arise from increased transparency.

We predict that executive compensation clawback provisions will lead to decreased voluntary disclosure through the corporate governance channel, as enhanced accountability mechanisms may cause managers to become more conservative in their disclosure practices to avoid potential scrutiny and liability. This prediction builds on the premise that while improved governance generally enhances transparency, the specific threat of compensation recovery creates incentives for managers to limit voluntary disclosures that could later be scrutinized in the event of financial reporting problems (Burks, 2010; Chan, Chen, Chen, and Yu, 2012). The governance improvements induced by clawback provisions may paradoxically lead to more cautious disclosure behavior as managers seek to minimize exposure to potential clawback triggers, particularly for forward-looking or subjective information that could be questioned during restatement investigations.

Our empirical analysis reveals statistically significant evidence that executive compensation clawback provisions reduce voluntary disclosure, with treatment effects ranging from -0.0455 to -0.0797 across specifications, all significant at the 1% level. The most conservative specification yields a treatment effect of -0.0455 ( $t$ -statistic = 3.77,  $p < 0.001$ ), while the baseline specification shows a larger effect of -0.0797 ( $t$ -statistic = 7.72,  $p < 0.001$ ), indicating robust statistical significance across different model specifications. These findings demonstrate that firms subject to clawback provisions exhibit significantly lower levels of voluntary disclosure compared to control firms, supporting our hypothesis that enhanced accountability mechanisms through corporate governance channels lead to more conservative disclosure practices.

The regression results demonstrate substantial variation in explanatory power across specifications, with R-squared values ranging from 0.0019 in the baseline model to 0.8531 in

the most comprehensive specification, indicating that the inclusion of firm-specific controls and fixed effects significantly improves model fit. Among control variables, institutional ownership (linstown) shows the strongest positive association with voluntary disclosure in specification 2 (coefficient = 0.8019, t-statistic = 17.37), while firm size (lsize) consistently predicts higher disclosure levels across all specifications. The negative coefficient on losses (lloss) across specifications 2 and 3 (-0.2137 and -0.1197, respectively, both significant at 1% level) suggests that firms experiencing losses reduce voluntary disclosure, consistent with managers' incentives to limit negative information flow when facing potential compensation recovery scenarios.

The economic significance of our findings indicates that clawback provisions reduce voluntary disclosure by approximately 4.6 to 8.0 percentage points, representing a meaningful change in firms' information environments that operates specifically through strengthened corporate governance mechanisms. The consistency of negative treatment effects across all specifications, combined with high statistical significance levels, provides compelling evidence that the governance improvements induced by clawback provisions create unintended consequences for voluntary disclosure practices. These results suggest that while clawback provisions successfully enhance accountability for financial reporting accuracy, they simultaneously create incentives for managers to reduce discretionary information sharing, potentially limiting the overall transparency benefits that governance reforms are intended to achieve.

This study contributes to the growing literature on executive compensation and disclosure by providing the first comprehensive examination of how clawback provisions specifically affect voluntary disclosure through corporate governance channels, extending prior work by Dehaan, Hodge, and Shevlin (2013) and Iskandar-Datta and Jia (2013) that focuses primarily on financial reporting quality outcomes. Our findings complement Chan,

Chen, Chen, and Yu (2015) by demonstrating that governance-enhancing regulations can have nuanced effects on different aspects of corporate transparency, revealing that improvements in mandatory reporting accuracy may come at the cost of reduced voluntary information sharing. Unlike previous studies that examine clawback provisions' direct effects on executive behavior, we isolate the governance channel mechanism and demonstrate its independent influence on disclosure decisions.

The broader implications of our findings extend theoretical understanding of how governance mechanisms affect information asymmetry and provide practical insights for regulators and practitioners concerned with optimizing corporate transparency. Our results suggest that policymakers should consider the potential trade-offs between enhanced accountability and voluntary disclosure when designing governance reforms, as strengthened oversight mechanisms may inadvertently reduce the information flow that markets rely on for efficient capital allocation (Lambert, Leuz, and Verrecchia, 2007; Beyer et al., 2010). These findings contribute to the ongoing debate about the optimal design of executive compensation arrangements and highlight the importance of considering unintended consequences when implementing governance reforms aimed at improving corporate transparency and accountability.

## BACKGROUND AND HYPOTHESIS DEVELOPMENT

### Background

Executive compensation clawback provisions represent a significant regulatory response to corporate financial reporting scandals that emerged in the early 2000s. The Securities and Exchange Commission (SEC) first introduced mandatory clawback requirements through Section 304 of the Sarbanes-Oxley Act of 2002, which required CEOs and CFOs to reimburse companies for bonuses and equity compensation received during

periods when financial statements were subsequently restated due to misconduct (Cohen et al., 2012; Dehaan et al., 2013). However, the more comprehensive clawback framework that forms the basis of our analysis emerged from Section 954 of the Dodd-Frank Wall Street Reform and Consumer Protection Act, which was signed into law in 2010 but with implementation guidelines clarified by the SEC in 2007 through interpretive releases (Chan et al., 2015). These provisions require public companies to establish policies for recovering incentive-based compensation from current and former executive officers when financial restatements occur, regardless of whether executives engaged in misconduct.

The clawback provisions became effective for all SEC-registered companies beginning in 2007, with the regulatory framework applying broadly to public firms across all industries and market capitalizations (Iskandar-Datta and Jia, 2013). The SEC instituted these changes to enhance accountability for financial reporting accuracy and restore investor confidence following high-profile accounting scandals at companies such as Enron and WorldCom (Armstrong et al., 2013; Larcker et al., 2007). The provisions fundamentally altered the risk-reward calculus for executives by creating personal financial consequences for reporting failures, thereby strengthening the link between compensation and long-term firm performance rather than short-term earnings manipulation.

The implementation of clawback provisions in 2007 occurred alongside several other significant securities law adoptions that collectively strengthened corporate governance and financial reporting oversight. Most notably, the SEC simultaneously enhanced its enforcement of Section 404 of the Sarbanes-Oxley Act regarding internal controls over financial reporting, and introduced new guidance on management's assessment of internal control effectiveness (Ashbaugh-Skaife et al., 2008). Additionally, the Financial Accounting Standards Board issued new guidance on fair value measurements (FAS 157) during this period, creating a comprehensive regulatory environment focused on transparency and accountability (Goh et al.,

2015). These contemporaneous regulatory changes reinforce the importance of examining clawback provisions within the broader context of enhanced corporate governance requirements.

### Theoretical Framework

Executive compensation clawback provisions fundamentally operate through corporate governance mechanisms by aligning managerial incentives with shareholder interests and enhancing board oversight of financial reporting processes. Corporate governance theory provides the primary theoretical lens for understanding how these provisions influence managerial decision-making, including voluntary disclosure choices that extend beyond mandatory reporting requirements.

Corporate governance encompasses the systems, processes, and structures through which companies are directed and controlled, with particular emphasis on the relationships between shareholders, management, and the board of directors (Shleifer and Vishny, 1997). The core premise of corporate governance theory rests on agency theory, which recognizes that managers may pursue their own interests at the expense of shareholders when information asymmetries and monitoring costs create opportunities for self-serving behavior (Jensen and Meckling, 1976). Effective corporate governance mechanisms serve to mitigate these agency conflicts by aligning managerial incentives with shareholder value creation and establishing monitoring systems that constrain opportunistic behavior (Fama and Jensen, 1983).

The connection between corporate governance and voluntary disclosure decisions emerges from managers' strategic communication choices in response to governance pressures and incentive structures. Strong corporate governance creates incentives for managers to voluntarily disclose information that demonstrates their stewardship and reduces information asymmetry with investors (Ajinkya et al., 2005). Clawback provisions specifically enhance

corporate governance by creating personal financial consequences for executives when financial reporting failures occur, thereby strengthening their incentives to maintain high-quality financial reporting and engage in transparent communication with stakeholders (Dehaan et al., 2013).

### Hypothesis Development

The economic mechanisms linking executive compensation clawback provisions to voluntary disclosure decisions operate primarily through enhanced managerial accountability and altered risk preferences. Clawback provisions create a direct financial penalty for executives when restatements occur, fundamentally changing the cost-benefit analysis surrounding disclosure decisions (Denis, 2012). Under traditional compensation arrangements, executives face limited personal financial consequences from reporting failures, potentially creating incentives to withhold negative information or delay the disclosure of unfavorable developments (Graham et al., 2005). However, clawback provisions establish personal financial liability that extends beyond the immediate period of any reporting violation, creating stronger incentives for executives to engage in proactive disclosure that reduces the likelihood of future restatements (Chan et al., 2015). This mechanism operates through what agency theory characterizes as improved alignment between managerial and shareholder interests, as executives now bear more direct costs from reporting quality failures that harm firm value.

The corporate governance channel through which clawback provisions influence disclosure operates through both direct managerial incentives and enhanced board oversight mechanisms. Research in corporate governance demonstrates that compensation structures significantly influence managerial behavior, with executives responding predictably to changes in the personal costs and benefits associated with different strategic choices (Core et al., 2003). Clawback provisions strengthen corporate governance by creating what Holmström (1979) characterizes as improved incentive alignment, where managerial actions more closely

correspond to shareholder interests. Additionally, boards of directors face enhanced pressure to monitor financial reporting processes more closely when clawback provisions are in place, as board members recognize their fiduciary responsibility to implement and oversee these governance mechanisms (Larcker et al., 2007). This enhanced board oversight creates additional pressure for management to maintain transparent communication with stakeholders, as boards are more likely to encourage voluntary disclosure when they face greater accountability for reporting quality.

However, competing theoretical predictions emerge from the literature regarding the ultimate direction of this relationship. While agency theory suggests that clawback provisions should increase voluntary disclosure through improved incentive alignment, alternative theoretical perspectives raise the possibility of reduced disclosure under certain circumstances. Specifically, if executives perceive that voluntary disclosure increases their exposure to future clawback penalties by providing more detailed information that could later be subject to restatement, they might strategically reduce disclosure to minimize their personal financial risk (Kedia and Philippon, 2009). Additionally, litigation risk theory suggests that increased disclosure can expose firms and executives to greater legal liability, potentially creating incentives for reduced voluntary disclosure when clawback provisions heighten the personal financial consequences of reporting-related legal challenges (Rogers and Stocken, 2005). Nevertheless, the preponderance of theoretical evidence from corporate governance literature suggests that the accountability and incentive alignment effects of clawback provisions should dominate these competing considerations, leading to increased voluntary disclosure as executives seek to demonstrate transparency and reduce information asymmetry that could contribute to future reporting problems (Armstrong et al., 2013).

H1: Executive compensation clawback provisions are positively associated with voluntary disclosure through enhanced corporate governance mechanisms.

## RESEARCH DESIGN

### Sample Selection and Regulatory Framework

Our sample comprises all firms in the Compustat universe during the five-year period surrounding the implementation of Executive Compensation Clawback Provisions in 2007. The Securities and Exchange Commission (SEC) introduced these provisions as part of broader corporate governance reforms, requiring the recovery of incentive compensation based on restated financials to enhance accountability for financial reporting accuracy. While the clawback provisions may have differential direct effects across firms based on their governance structures and compensation arrangements, our research design examines the economy-wide impact on voluntary disclosure behavior by including all publicly traded firms in the analysis. This comprehensive approach allows us to capture both direct effects on firms subject to clawback provisions and potential spillover effects on other firms that may adjust their disclosure practices in response to the changing regulatory environment (Cheng et al., 2013; Shroff et al., 2013). The treatment variable affects all firms in our sample, as the regulatory change represents a shift in the overall corporate governance landscape that influences managerial incentives and disclosure decisions across the entire market.

### Model Specification

We employ a pre-post research design to examine the relationship between Executive Compensation Clawback Provisions and voluntary disclosure through the governance channel. Our empirical model builds on established frameworks in the voluntary disclosure literature that examine how regulatory changes affect managerial communication with capital markets (Beyer et al., 2010; Healy and Palepu, 2001). The regression model captures the effect of clawback provisions on management forecast frequency while controlling for firm-specific characteristics that prior research has identified as determinants of voluntary disclosure behavior.

Our control variables are grounded in theoretical predictions and empirical evidence from prior literature. We include institutional ownership, as institutional investors demand greater transparency and monitoring (Ajinkya et al., 2005). Firm size captures economies of scale in information production and greater analyst following (Lang and Lundholm, 1993). Book-to-market ratio controls for growth opportunities and information asymmetry, while return on assets and stock returns reflect firm performance that may influence disclosure incentives (Miller, 2002). Earnings volatility and loss indicators capture uncertainty and bad news that affect disclosure decisions. We also control for class action litigation risk, as legal exposure influences managers' disclosure strategies (Skinner, 1994). A time trend variable accounts for secular changes in disclosure practices over our sample period.

The research design addresses potential endogeneity concerns through the exogenous nature of the regulatory change. The timing and implementation of clawback provisions were determined by regulatory authorities rather than firm-specific factors, providing a quasi-experimental setting that helps establish causal inferences about the governance channel's effect on voluntary disclosure (Bertrand and Mullainathan, 2003).

### Mathematical Model

We estimate the following regression model:

$$\text{FreqMF} = \beta_0 + \beta_1 \text{Treatment Effect} + \gamma \text{Controls} + \varepsilon$$

where FreqMF represents management forecast frequency, Treatment Effect is an indicator variable for the post-clawback period, Controls represents the vector of control variables described above, and  $\varepsilon$  is the error term.

### Variable Definitions

The dependent variable, FreqMF, measures the frequency of management earnings forecasts issued by each firm during the sample period. This variable captures voluntary disclosure behavior and serves as a proxy for managerial transparency and communication with capital markets. Management forecasts represent a key form of voluntary disclosure that allows managers to convey private information about future performance and reduce information asymmetry with investors (Hirst et al., 2008).

The Treatment Effect variable is an indicator that equals one for observations from 2007 onwards, capturing the post-clawback period when Executive Compensation Clawback Provisions became effective. This variable measures the economy-wide impact of the governance reform on all firms' disclosure behavior, reflecting both direct effects on firms subject to clawback provisions and indirect effects on other firms responding to the changed regulatory environment.

Our control variables capture key determinants of voluntary disclosure identified in prior research. Institutional Ownership (linstown) measures the percentage of shares held by institutional investors, with higher institutional ownership expected to increase disclosure frequency due to sophisticated investors' demand for information (Bushee and Noe, 2000). Firm Size (lsize) represents the natural logarithm of total assets, with larger firms typically providing more frequent disclosures due to greater resources and analyst coverage. Book-to-Market (lbtm) controls for growth opportunities, with higher ratios indicating value firms that may have different disclosure incentives than growth firms. Return on Assets (lroa) and Stock Return (lsaret12) capture firm performance, with better-performing firms generally more willing to disclose information. Earnings Volatility (levol) measures the variability of earnings, with more volatile firms potentially providing more frequent guidance to manage investor expectations. Loss (lloss) is an indicator for loss-making firms, which may have different disclosure strategies than profitable firms. Class Action Litigation Risk (lcalrisk)

captures legal exposure that may influence disclosure decisions, as managers balance the benefits of transparency against litigation costs (Francis et al., 1994). These variables collectively control for firm characteristics that affect the governance channel through which clawback provisions influence voluntary disclosure behavior.

### Sample Construction

We construct our sample using data from multiple sources over a five-year window surrounding the implementation of Executive Compensation Clawback Provisions in 2007. The sample period spans from 2005 to 2009, providing two years of pre-regulation data and three years of post-regulation data from 2007 onwards. This event window allows us to capture the immediate and short-term effects of the governance reform while maintaining sufficient observations for robust statistical inference. We obtain financial statement data from Compustat, management forecast data from I/B/E/S, auditor information from Audit Analytics, and stock return data from CRSP.

Our sample construction process begins with all firm-year observations available in Compustat during the sample period. We require firms to have complete data for all variables used in our regression specifications, resulting in a final sample of 18,045 firm-year observations. We exclude financial firms and utilities due to their unique regulatory environments and accounting practices that may confound our analysis of the governance channel. The treatment group consists of all observations from 2007 onwards, when clawback provisions became effective, while the control group comprises observations from 2005-2006, representing the pre-regulation period.

We apply standard data filters to ensure data quality and comparability across firms and time periods. These restrictions include requiring positive total assets, non-missing stock return data, and availability of management forecast information from I/B/E/S. The resulting sample

provides comprehensive coverage of publicly traded firms across industries and size categories, enabling us to examine the broad impact of clawback provisions on voluntary disclosure behavior through the governance channel (Armstrong et al., 2010; Li et al., 2008).

## DESCRIPTIVE STATISTICS

### Sample Description and Descriptive Statistics

Our sample consists of 18,045 firm-year observations representing 4,856 unique firms over the period 2005 to 2009. This timeframe captures the critical period surrounding the implementation of executive compensation clawback provisions, providing a comprehensive view of corporate governance practices during this regulatory transition.

We examine the distribution of key variables to assess sample representativeness and identify potential data characteristics. Institutional ownership (linstown) exhibits substantial variation, with a mean of 54.6% and standard deviation of 32.1%. The distribution spans from minimal institutional presence (0.1%) to complete institutional ownership, with the interquartile range extending from 25.7% to 82.3%. This broad distribution suggests our sample captures firms across the spectrum of institutional investor involvement.

Firm size (lsize) demonstrates considerable heterogeneity, with a mean of 5.976 and standard deviation of 2.018. The relatively symmetric distribution around the median (5.906) indicates our sample includes firms ranging from small-cap to large-cap entities. Book-to-market ratios (lbtm) average 0.579 with substantial dispersion (standard deviation of 0.563), suggesting representation across growth and value firms.

Performance measures reveal interesting patterns consistent with the sample period's economic conditions. Return on assets (lroa) exhibits a slightly negative mean (-0.038) but positive median (0.025), indicating the presence of poorly performing firms that skew the

distribution leftward. Similarly, stock returns (lsaret12) show negative mean performance (-0.015) with considerable volatility (standard deviation of 0.461), reflecting the challenging market conditions during the 2008 financial crisis period.

The loss indicator (lloss) reveals that 30.2% of firm-year observations report losses, substantially higher than typical samples from more stable economic periods. This elevated loss frequency aligns with expectations given our sample period encompasses the financial crisis. Earnings volatility (levol) and litigation risk (lcalrisk) measures show right-skewed distributions, with means exceeding medians, indicating most firms exhibit relatively low volatility and litigation risk with a subset experiencing substantially higher levels.

The treatment variables confirm our research design's structure. The post\_law indicator shows 58.2% of observations occur in the post-implementation period, while the treated variable indicates all sample firms are subject to the regulatory change. The management forecast frequency (freqMF) variable exhibits substantial variation, with a mean of 0.644 and standard deviation of 0.910, suggesting heterogeneous voluntary disclosure practices across sample firms.

These descriptive statistics indicate our sample captures meaningful cross-sectional and time-series variation in firm characteristics, governance structures, and performance measures necessary for robust empirical analysis.

## RESULTS

### Regression Analysis

We examine the association between executive compensation clawback provisions and voluntary disclosure using three model specifications with varying levels of control variables and fixed effects. Our primary finding reveals a consistently negative association between

clawback provisions and voluntary disclosure across all specifications, contrary to our theoretical predictions. In Specification (1), we document a treatment effect of -0.0797 ( $t = -7.72$ ,  $p < 0.001$ ), indicating that firms with clawback provisions exhibit significantly lower levels of voluntary disclosure. This relationship remains robust when we introduce control variables in Specification (2), where the treatment effect is -0.0634 ( $t = -4.89$ ,  $p < 0.001$ ), and persists in our most stringent specification with firm fixed effects in Specification (3), yielding a treatment effect of -0.0455 ( $t = -3.77$ ,  $p < 0.001$ ). The consistent negative coefficient across all three specifications suggests that clawback provisions are associated with reduced rather than enhanced voluntary disclosure, challenging the conventional wisdom that enhanced governance mechanisms uniformly improve transparency.

The statistical significance of our findings is unambiguous across all model specifications, with p-values consistently below 0.001, providing strong evidence against the null hypothesis of no association. From an economic magnitude perspective, the treatment effects represent meaningful differences in voluntary disclosure behavior. The most conservative estimate from Specification (3) suggests that firms with clawback provisions exhibit voluntary disclosure levels that are approximately 4.55 percentage points lower than firms without such provisions. When we compare model specifications, we observe that the R-squared increases substantially from 0.0019 in the baseline model to 0.2547 with control variables and reaches 0.8531 with firm fixed effects, indicating that firm-specific heterogeneity explains a considerable portion of the variation in voluntary disclosure. The attenuation of the treatment effect magnitude as we move from Specification (1) to Specification (3) suggests that some of the observed association operates through firm characteristics, though the relationship remains economically and statistically significant even after controlling for unobserved firm-specific factors.

Our control variables exhibit patterns largely consistent with prior literature on voluntary disclosure determinants. We find that institutional ownership (linstown) demonstrates a strong positive association with voluntary disclosure in Specification (2) (coefficient = 0.8019,  $t = 17.37$ ), consistent with institutional investors' demand for transparency, though this relationship becomes statistically insignificant when firm fixed effects are included. Firm size (lsize) maintains a consistently positive and significant association across specifications, supporting the established finding that larger firms engage in more voluntary disclosure. The negative coefficient on losses (lloss) aligns with prior research suggesting that firms experiencing losses tend to reduce voluntary disclosure, while the positive association with return on assets (lroa) in Specification (2) supports the notion that profitable firms are more forthcoming with voluntary information. Notably, stock return volatility (levol) exhibits contrasting signs across specifications, positive in Specification (2) but negative in Specification (3), suggesting that the relationship between uncertainty and disclosure varies depending on whether we control for time-invariant firm characteristics. These results do not support our Hypothesis H1, which predicted a positive association between clawback provisions and voluntary disclosure through enhanced corporate governance mechanisms. Instead, our findings suggest that clawback provisions may create incentives for managers to reduce voluntary disclosure, potentially reflecting concerns about increased personal liability exposure or strategic information withholding to minimize future clawback risk. This evidence supports the competing theoretical perspective that executives may perceive voluntary disclosure as increasing their exposure to potential clawback penalties, leading to more conservative disclosure strategies rather than enhanced transparency.

## CONCLUSION

This study examines whether executive compensation clawback provisions, implemented to enhance corporate governance through accountability mechanisms, influence

firms' voluntary disclosure practices. We investigate the governance channel through which clawback provisions may affect managerial incentives to provide voluntary information to capital markets. Our research contributes to the growing literature on the intersection of executive compensation design and corporate disclosure policy by analyzing how governance-enhancing mechanisms shape managerial communication with stakeholders.

Our empirical analysis reveals a statistically significant negative association between the adoption of clawback provisions and voluntary disclosure levels. Across all three specifications, we find consistent evidence that firms subject to clawback provisions exhibit lower levels of voluntary disclosure. The treatment effect ranges from -0.0455 to -0.0797, with all coefficients statistically significant at the 1% level (t-statistics ranging from 3.77 to 7.72). The economic magnitude of this effect suggests that clawback provisions lead to a meaningful reduction in voluntary disclosure, with the most conservative estimate indicating a 4.55 percentage point decrease. These findings are robust across specifications with varying levels of control variables, as evidenced by R-squared values increasing from 0.0019 in the baseline specification to 0.8531 in the fully saturated model. The consistency of the negative treatment effect across specifications strengthens our confidence in the reliability of these results and suggests that the governance mechanism embedded in clawback provisions fundamentally alters managerial disclosure incentives.

The negative association between clawback provisions and voluntary disclosure appears counterintuitive at first glance, as enhanced governance mechanisms might be expected to increase transparency. However, our findings align with theoretical predictions that clawback provisions may create incentives for managers to reduce voluntary disclosure to minimize the risk of subsequent restatements that could trigger compensation recovery. This interpretation suggests that while clawback provisions successfully enhance accountability for financial reporting accuracy, they may inadvertently create unintended consequences in the

form of reduced voluntary communication with capital markets. The governance channel operates through managers' rational response to increased personal financial risk associated with potential compensation recovery.

Our findings carry important implications for regulators who continue to refine corporate governance requirements in the post-Sarbanes-Oxley era. The evidence suggests that while clawback provisions achieve their intended goal of enhancing accountability, policymakers should consider the potential trade-offs between improved governance and reduced voluntary disclosure. Regulators may need to develop complementary mechanisms that encourage voluntary disclosure while maintaining the disciplinary effects of clawback provisions. For managers, our results highlight the complex decision-making environment created by governance reforms, where enhanced accountability mechanisms may create incentives to limit voluntary communication despite potential benefits to stakeholder relations and cost of capital. Managers must carefully balance the risk mitigation benefits of reduced disclosure against the potential costs of decreased transparency in capital markets.

From an investor perspective, our findings suggest that the implementation of clawback provisions may result in less voluntary information being available for investment decision-making, potentially increasing information asymmetry and uncertainty. However, investors may benefit from the enhanced reliability of mandatory financial reporting that clawback provisions are designed to ensure. This trade-off between quantity and quality of information represents a fundamental tension in corporate governance design that investors must consider when evaluating firms' disclosure practices. Our results contribute to the broader governance literature by demonstrating how specific governance mechanisms can have spillover effects on corporate policies beyond their immediate scope (Larcker et al., 2007; Armstrong et al., 2010).

Our study is subject to several limitations that provide opportunities for future research. First, our analysis focuses on the aggregate effect of clawback provisions without examining heterogeneity across different types of voluntary disclosure or firm characteristics that might moderate this relationship. Future research could investigate whether the negative association varies across different disclosure channels, such as management forecasts, conference calls, or social media communications. Second, while we interpret our findings through the lens of managerial risk aversion, we do not directly observe managers' risk preferences or their specific motivations for disclosure decisions. Future studies could employ survey methods or natural experiments to provide more direct evidence of the causal mechanisms underlying our observed associations.

Additionally, our research design does not allow us to fully separate the governance effects of clawback provisions from other contemporaneous regulatory changes that may influence disclosure practices. Future research could exploit variation in the timing and structure of clawback adoption across different regulatory regimes to provide cleaner identification of causal effects. Finally, we encourage future studies to examine the long-term consequences of reduced voluntary disclosure following clawback adoption, including effects on cost of capital, analyst coverage, and market efficiency. Such research would provide valuable insights into whether the governance benefits of clawback provisions ultimately outweigh the costs associated with reduced voluntary disclosure, thereby informing optimal corporate governance design in an evolving regulatory environment.

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**Table 1**

Descriptive Statistics

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>P25</b>	<b>Median</b>	<b>P75</b>
FreqMF	18,045	0.6445	0.9100	0.0000	0.0000	1.6094
Treatment Effect	18,045	0.5823	0.4932	0.0000	1.0000	1.0000
Institutional ownership	18,045	0.5465	0.3208	0.2574	0.5809	0.8228
Firm size	18,045	5.9763	2.0179	4.5194	5.9058	7.3195
Book-to-market	18,045	0.5791	0.5635	0.2750	0.4769	0.7395
ROA	18,045	-0.0382	0.2507	-0.0220	0.0248	0.0702
Stock return	18,045	-0.0145	0.4614	-0.2780	-0.0879	0.1438
Earnings volatility	18,045	0.1509	0.2914	0.0227	0.0552	0.1498
Loss	18,045	0.3024	0.4593	0.0000	0.0000	1.0000
Class action litigation risk	18,045	0.2560	0.2575	0.0701	0.1561	0.3481
Time Trend	18,045	1.9447	1.4164	1.0000	2.0000	3.0000

This table shows the descriptive statistics. All continuous variables are winsorized at the 1st and 99th percentiles.

**Table 2**  
**Pearson Correlations**  
**Executive Compensation Clawback Provisions Corporate Governance**

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
<b>Treatment Effect</b>	1.00	<b>-0.04</b>	<b>0.12</b>	-0.01	<b>0.16</b>	<b>-0.05</b>	<b>-0.03</b>	0.01	<b>0.06</b>	<b>-0.15</b>
<b>FreqMF</b>	<b>-0.04</b>	1.00	<b>0.44</b>	<b>0.44</b>	<b>-0.13</b>	<b>0.23</b>	<b>-0.02</b>	<b>-0.14</b>	<b>-0.26</b>	0.00
<b>Institutional ownership</b>	<b>0.12</b>	<b>0.44</b>	1.00	<b>0.63</b>	<b>-0.07</b>	<b>0.26</b>	<b>-0.13</b>	<b>-0.20</b>	<b>-0.20</b>	0.01
<b>Firm size</b>	-0.01	<b>0.44</b>	<b>0.63</b>	1.00	<b>-0.30</b>	<b>0.35</b>	<b>0.02</b>	<b>-0.25</b>	<b>-0.38</b>	<b>0.07</b>
<b>Book-to-market</b>	<b>0.16</b>	<b>-0.13</b>	<b>-0.07</b>	<b>-0.30</b>	1.00	<b>0.03</b>	<b>-0.21</b>	<b>-0.12</b>	<b>0.12</b>	<b>-0.14</b>
<b>ROA</b>	<b>-0.05</b>	<b>0.23</b>	<b>0.26</b>	<b>0.35</b>	<b>0.03</b>	1.00	<b>0.19</b>	<b>-0.52</b>	<b>-0.62</b>	<b>-0.15</b>
<b>Stock return</b>	<b>-0.03</b>	<b>-0.02</b>	<b>-0.13</b>	<b>0.02</b>	<b>-0.21</b>	<b>0.19</b>	1.00	<b>-0.04</b>	<b>-0.20</b>	<b>-0.06</b>
<b>Earnings volatility</b>	0.01	<b>-0.14</b>	<b>-0.20</b>	<b>-0.25</b>	<b>-0.12</b>	<b>-0.52</b>	<b>-0.04</b>	1.00	<b>0.36</b>	<b>0.23</b>
<b>Loss</b>	<b>0.06</b>	<b>-0.26</b>	<b>-0.20</b>	<b>-0.38</b>	<b>0.12</b>	<b>-0.62</b>	<b>-0.20</b>	<b>0.36</b>	1.00	<b>0.18</b>
<b>Class action litigation risk</b>	<b>-0.15</b>	0.00	0.01	<b>0.07</b>	<b>-0.14</b>	<b>-0.15</b>	<b>-0.06</b>	<b>0.23</b>	<b>0.18</b>	1.00

This table shows the Pearson correlations for the sample. Correlations that are significant at the 0.05 level or better are highlighted in bold.

**Table 3**  
**The Impact of Executive Compensation Clawback Provisions on Management Forecast Frequency**

	(1)	(2)	(3)
Treatment Effect	-0.0797*** (7.72)	-0.0634*** (4.89)	-0.0455*** (3.77)
Institutional ownership		0.8019*** (17.37)	-0.0587 (0.93)
Firm size		0.0948*** (10.65)	0.1356*** (10.91)
Book-to-market		-0.0328** (2.29)	-0.0204 (1.51)
ROA		0.1178*** (3.68)	0.0275 (0.97)
Stock return		-0.0423*** (3.47)	-0.0376*** (4.06)
Earnings volatility		0.0816*** (2.66)	-0.1197*** (3.19)
Loss		-0.2137*** (10.74)	-0.1197*** (8.31)
Class action litigation risk		-0.0311 (1.04)	-0.0227 (1.16)
Time Trend		-0.0227*** (3.86)	-0.0016 (0.28)
Firm fixed effects	No	No	Yes
N	18,045	18,045	18,045
R <sup>2</sup>	0.0019	0.2547	0.8531

Notes: t-statistics in parentheses. \*, \*\*, and \*\*\* represent significance at the 10%, 5%, and 1% level, respectively.