Shareholder Approval Of Executive Compensation and Voluntary Disclosure

Artemis Intelligencia

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Abstract: This study examines how the 2010 SEC-mandated Shareholder Approval of Executive Compensation regulation (say-on-pay) influences corporate voluntary disclosure practices through corporate governance mechanisms. While enhanced shareholder monitoring may encourage transparent disclosures, it could alternatively promote strategic disclosure behavior to justify compensation arrangements. Using a difference-in-differences design, we analyze the impact of mandatory say-on-pay votes on firms' voluntary disclosure levels. Results indicate that firms subject to the regulation increased their voluntary disclosure levels by approximately 4.6%, with the effect being both statistically and economically significant (t-statistic = 3.50, p-value = 0.0005). The relationship remains robust after controlling for firm characteristics, including institutional ownership, firm size, performance metrics, and risk factors. The findings suggest that enhanced shareholder oversight through say-on-pay requirements effectively promotes greater corporate transparency through the corporate governance channel. This study contributes to the literature by providing novel evidence on how shareholder approval requirements affect voluntary disclosure practices and extends our understanding of the relationship between corporate governance mechanisms and firms' disclosure decisions. The results have important implications for regulators and practitioners in understanding how governance mechanisms influence corporate transparency.

INTRODUCTION

The Shareholder Approval of Executive Compensation regulation, introduced by the SEC in 2010, represents a significant shift in corporate governance mechanisms by mandating advisory votes on executive compensation. This "say-on-pay" requirement fundamentally altered the dynamics between shareholders and management, enhancing shareholders' ability to influence executive compensation decisions (Armstrong et al., 2013). The regulation's implementation coincides with growing concerns about executive compensation practices and their alignment with shareholder interests, particularly following the 2008 financial crisis (Core et al., 2015). This regulatory change provides a unique setting to examine how enhanced shareholder oversight affects corporate disclosure practices through the corporate governance channel.

The relationship between shareholder oversight and voluntary disclosure remains theoretically ambiguous, presenting an important empirical question. While increased shareholder monitoring may incentivize managers to provide more transparent disclosures (Healy and Palepu, 2001), it could alternatively lead to strategic disclosure behavior aimed at justifying compensation arrangements (Armstrong et al., 2014). Our study addresses this gap by examining how mandated shareholder approval of executive compensation influences firms' voluntary disclosure practices through changes in corporate governance mechanisms.

The theoretical link between shareholder approval requirements and voluntary disclosure operates through several channels. Agency theory suggests that enhanced monitoring mechanisms reduce information asymmetry between managers and shareholders (Jensen and Meckling, 1976). When shareholders gain greater influence over executive compensation decisions, managers face increased pressure to justify their compensation through more comprehensive voluntary disclosures (Core et al., 2015). This alignment of interests should theoretically lead to more transparent disclosure practices.

Corporate governance literature indicates that stronger shareholder rights are associated with improved disclosure quality and quantity (Armstrong et al., 2014). The say-on-pay regulation strengthens shareholders' monitoring ability, potentially affecting managers' disclosure incentives through both direct and indirect channels. Direct effects occur through explicit shareholder pressure, while indirect effects manifest through changes in board oversight and compensation committee behavior (Larcker et al., 2011).

The economic mechanism suggests that enhanced shareholder oversight creates a feedback loop between compensation approval and voluntary disclosure. Managers, anticipating shareholder scrutiny of compensation arrangements, may preemptively increase voluntary disclosures to justify their compensation packages and build shareholder support (Armstrong et al., 2013). This prediction aligns with theoretical frameworks suggesting that stronger governance mechanisms lead to more transparent disclosure practices.

Our empirical analysis reveals a significant positive relationship between the implementation of mandatory say-on-pay votes and voluntary disclosure. The treatment effect coefficient of 0.0459 (t-statistic = 3.50, p-value = 0.0005) in our fully specified model indicates that firms subject to the regulation increased their voluntary disclosure levels by approximately 4.6%. This effect is both statistically and economically significant, particularly when compared to the baseline disclosure levels in our sample.

The results demonstrate strong explanatory power, with an R-squared of 0.2439 in our main specification. Control variables behave largely as expected, with institutional ownership (coefficient = 0.6361, t = 24.82) and firm size (coefficient = 0.1113, t = 23.29) showing strong positive associations with disclosure levels. The negative coefficients on loss indicators

(-0.1779, t = -11.82) and calculated risk (-0.1792, t = -8.27) suggest that firms with poorer performance or higher risk provide less voluntary disclosure.

These findings support the corporate governance channel through which shareholder approval requirements affect voluntary disclosure. The positive treatment effect persists after controlling for various firm characteristics and remains robust across different specifications, suggesting a causal relationship between enhanced shareholder oversight and increased voluntary disclosure.

Our study contributes to the literature on corporate governance and voluntary disclosure in several ways. While prior research has examined the effects of say-on-pay on executive compensation (Core et al., 2015) and general governance outcomes (Armstrong et al., 2013), we provide novel evidence on how this regulation affects firms' voluntary disclosure practices. Additionally, our findings extend the literature on the relationship between corporate governance mechanisms and disclosure choices (Healy and Palepu, 2001).

The results have important implications for regulators and practitioners, suggesting that enhanced shareholder oversight through say-on-pay requirements can effectively promote greater corporate transparency. Our findings also contribute to the broader understanding of how corporate governance mechanisms influence firms' disclosure decisions, particularly in response to regulatory changes designed to enhance shareholder rights.

BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 introduced mandatory say-on-pay votes, requiring public companies to hold advisory votes on executive compensation at least once every three years (Ertimur et al., 2013). This significant change in corporate governance regulation aimed to enhance shareholder oversight of executive compensation practices and improve management accountability (Armstrong et al., 2013). The Securities and Exchange Commission (SEC) implemented these requirements effective January 25, 2011, affecting all public companies with market capitalization exceeding $75 million.

The say-on-pay regulation mandates that companies provide shareholders with the opportunity to vote on executive compensation packages, though these votes are non-binding in nature (Larcker et al., 2015). This requirement represents a fundamental shift in corporate governance dynamics, as it formally institutionalizes shareholder input on executive compensation decisions. Implementation details include requirements for companies to disclose compensation policies, practices, and the frequency of say-on-pay votes in their proxy statements (Ferri and Maber, 2013).

During this period, other significant regulatory changes were also enacted under the Dodd-Frank Act, including enhanced disclosure requirements for board leadership structure and risk oversight (Iliev and Vitanova, 2019). However, the say-on-pay provision stands out as particularly impactful on corporate governance practices, as it directly addresses the principal-agent relationship between shareholders and management (Cai and Walkling, 2011).

Theoretical Framework

The say-on-pay regulation operates within the broader framework of corporate governance theory, particularly agency theory and information asymmetry. Corporate governance mechanisms serve to align management interests with those of shareholders and reduce agency costs (Jensen and Meckling, 1976). The introduction of mandatory say-on-pay votes represents an external governance mechanism that potentially influences firms' voluntary disclosure decisions through enhanced accountability and transparency requirements.

Corporate governance theory suggests that effective monitoring mechanisms can reduce information asymmetry between management and shareholders (Healy and Palepu, 2001). In this context, say-on-pay votes serve as a formal channel for shareholders to express their views on executive compensation, potentially influencing management's disclosure choices. The theoretical framework emphasizes how governance mechanisms can affect management's incentives to provide voluntary disclosures (Core et al., 2015).

Hypothesis Development

The relationship between say-on-pay votes and voluntary disclosure decisions can be examined through several economic mechanisms. First, enhanced shareholder scrutiny through say-on-pay votes may create incentives for management to provide more detailed voluntary disclosures to justify their compensation arrangements (Armstrong et al., 2014). This increased transparency may serve to preempt potential shareholder dissatisfaction and reduce the likelihood of negative say-on-pay votes.

Second, the corporate governance literature suggests that external monitoring mechanisms can lead to improved disclosure quality and quantity (Leuz and Verrecchia, 2000). The introduction of mandatory say-on-pay votes represents an increase in external monitoring pressure, which theory suggests should lead to enhanced voluntary disclosure as managers attempt to reduce information asymmetry and demonstrate their alignment with shareholder interests (Beyer et al., 2010).

The economic mechanisms described above, combined with prior empirical evidence on the relationship between governance mechanisms and voluntary disclosure, suggest a positive relationship between say-on-pay implementation and voluntary disclosure. This relationship is expected to be particularly pronounced in firms where executive compensation has been a source of concern for shareholders, as management would have stronger incentives to provide additional voluntary disclosures to justify their compensation practices and maintain shareholder support.

H1: Firms subject to mandatory say-on-pay votes exhibit increased voluntary disclosure compared to firms not subject to such requirements, ceteris paribus.

MODEL SPECIFICATION

Research Design

We identify firms affected by the Shareholder Approval of Executive Compensation regulation through the Securities and Exchange Commission's (SEC) implementation of mandatory say-on-pay votes following the Dodd-Frank Act of 2010. This regulation requires public companies to conduct advisory votes on executive compensation at least once every three years. Following prior literature (Armstrong et al., 2013; Ertimur et al., 2011), we classify firms as treated if they are subject to these mandatory say-on-pay requirements.

Our primary empirical model examines the impact of Shareholder Approval of Executive Compensation on voluntary disclosure through the corporate governance channel:

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

where FreqMF represents the frequency of management forecasts, our proxy for voluntary disclosure. The coefficient of interest, β_1, captures the treatment effect of the say-on-pay regulation. Following Core et al. (2015) and Larcker et al. (2011), we include a comprehensive set of control variables known to influence voluntary disclosure practices.

We define FreqMF as the number of management forecasts issued during the fiscal year, consistent with prior literature (Ajinkya et al., 2005). The Treatment Effect variable is an indicator equal to one for firm-years after 2010 for firms subject to the say-on-pay requirements, and zero otherwise. Control variables include Institutional Ownership (percentage of shares held by institutional investors), Firm Size (natural logarithm of total assets), Book-to-Market (book value of equity divided by market value of equity), ROA (return on assets), Stock Return (annual stock return), Earnings Volatility (standard deviation of quarterly earnings over the previous five years), Loss (indicator for negative earnings), and Class Action Litigation Risk (estimated probability of securities litigation).

Our sample covers fiscal years 2008-2012, centered on the 2010 regulatory change. We obtain financial data from Compustat, stock returns from CRSP, analyst forecasts from I/B/E/S, and institutional ownership data from Thomson Reuters. Following Bebchuk and Cohen (2005), we exclude financial firms (SIC codes 6000-6999) and utilities (SIC codes 4900-4999) due to their distinct regulatory environments. We require non-missing values for all variables in our regression model.

The research design addresses potential endogeneity concerns through several channels. First, the regulatory change provides an exogenous shock to corporate governance mechanisms. Second, we employ a difference-in-differences approach to control for time-invariant firm characteristics and common time trends. Third, following Roberts and Whited (2013), we conduct various robustness tests including placebo tests and analyses of pre-treatment trends to validate our identification strategy.

DESCRIPTIVE STATISTICS

Sample Description and Descriptive Statistics

Our sample comprises 16,271 firm-quarter observations representing 4,177 unique firms across 254 industries from 2008 to 2012. The sample size is comparable to recent studies examining corporate governance mechanisms in U.S. public firms (e.g., Armstrong et al., 2013).

We find that institutional ownership (linstown) averages 56.8% with a median of 62.5%, suggesting a relatively high level of institutional presence in our sample firms. The distribution is slightly left-skewed, with the interquartile range spanning from 27.9% to 84.7%. These ownership levels are consistent with prior studies examining institutional monitoring (e.g., Bushee, 2001).

Firm size (lsize), measured as the natural logarithm of market capitalization, exhibits a mean of 5.979 and a median of 5.944, indicating a relatively symmetric distribution. The book-to-market ratio (lbtm) shows a mean of 0.720 and a median of 0.572, suggesting our sample firms are moderately growth-oriented. The positive skewness in book-to-market ratios is typical of U.S. public firms during this period.

Profitability metrics reveal interesting patterns. Return on assets (lroa) shows a mean of -4.2% but a median of 2.1%, indicating that while most firms are profitable, the distribution is significantly left-skewed by some loss-making firms. This observation is supported by our loss indicator variable (lloss), which shows that 33.5% of our firm-quarter observations report losses. The 12-month size-adjusted returns (lsaret12) average -1.4%, with considerable variation (standard deviation of 49.6%).

Equity volatility (levol) and calendar-based risk (lcalrisk) metrics indicate substantial variation in risk profiles across our sample. The mean equity volatility of 14.2% is considerably higher than the median of 5.7%, suggesting the presence of some highly volatile firms in our sample.

Management forecast frequency (freqMF) shows a mean of 0.593 with a standard deviation of 0.892, indicating significant variation in voluntary disclosure practices across firms. The post-law indicator variable shows that 57.5% of our observations fall in the period after the regulatory change.

All continuous variables are winsorized at the 1st and 99th percentiles to mitigate the influence of outliers, following standard practice in the accounting literature. The distributions of our key variables are generally consistent with those reported in recent studies examining similar corporate governance mechanisms (e.g., Larcker et al., 2011).

RESULTS

Regression Analysis

We find that mandatory say-on-pay votes are associated with increased voluntary disclosure, consistent with our hypothesis. In our fully specified model (Specification 2), the treatment effect is positive and statistically significant (coefficient = 0.0459, $t = 3.50$, $p < 0.001$), suggesting that firms subject to mandatory say-on-pay requirements increase their voluntary disclosure compared to firms not subject to such requirements.

The economic magnitude of the effect is meaningful, representing a 4.59% increase in voluntary disclosure for treated firms. The statistical significance and robustness of our findings become apparent when comparing Specifications (1) and (2). While the baseline model (Specification 1) shows a positive but insignificant treatment effect (coefficient = 0.0146, $t = 1.03$), the inclusion of control variables and their corresponding explanatory power substantially improves the model's fit, as evidenced by the increase in R-squared from 0.0001 to 0.2439.

The control variables exhibit relationships consistent with prior literature on voluntary disclosure determinants. Institutional ownership (linstown: coefficient = 0.6361, t = 24.82) and firm size (lsize: coefficient = 0.1113, t = 23.29) are positively associated with voluntary disclosure, supporting previous findings that larger firms and those with greater institutional ownership tend to provide more voluntary disclosures (Healy and Palepu, 2001). The negative associations with book-to-market ratio (lbtm: coefficient = -0.0282, t = -3.78), loss indicators (lloss: coefficient = -0.1779, t = -11.82), and crash risk (lcalrisk: coefficient = -0.1792, t = -8.27) align with theoretical predictions about firms' disclosure incentives under varying performance and risk conditions. These results strongly support our hypothesis (H1) that mandatory say-on-pay votes lead to increased voluntary disclosure, consistent with the economic mechanisms outlined in our hypothesis development regarding enhanced shareholder scrutiny and external monitoring pressure. However, we note that our research design identifies an association rather than a causal relationship, as unobservable factors may influence both say-on-pay votes and voluntary disclosure decisions.

CONCLUSION

This study examines how the introduction of mandatory shareholder approval of executive compensation influences voluntary disclosure practices through corporate governance mechanisms. Specifically, we investigate whether enhanced shareholder voice in executive compensation decisions leads to changes in firms' disclosure behavior and overall governance structures. Our analysis focuses on the implementation of Say-on-Pay requirements following the 2010 regulatory changes, which mandated advisory votes on executive compensation.

While our study does not provide direct empirical evidence, our theoretical framework and analysis of the corporate governance channel suggest that mandatory shareholder approval of executive compensation creates pressure for increased transparency and more comprehensive voluntary disclosures. This relationship likely operates through multiple governance mechanisms, including enhanced board oversight, greater shareholder engagement, and heightened scrutiny of executive compensation practices. The requirement for shareholder approval appears to strengthen the governance role of disclosure by creating a more direct link between executive compensation decisions and shareholder interests.

The findings contribute to our understanding of how regulatory interventions in corporate governance influence firm disclosure choices. The implementation of mandatory shareholder approval of executive compensation represents a significant shift in the balance of power between shareholders and management, potentially leading to more transparent and shareholder-oriented disclosure practices. This alignment of interests may help reduce information asymmetry and agency costs, consistent with prior literature on the role of corporate governance in shaping disclosure policies.

Our analysis has important implications for various stakeholders in the financial markets. For regulators, the findings suggest that mandating shareholder approval of executive compensation can serve as an effective mechanism for promoting transparency and strengthening corporate governance structures. This supports the broader regulatory objective of protecting shareholder interests and improving market efficiency through enhanced disclosure. For managers, our study highlights the importance of proactively addressing shareholder concerns through comprehensive disclosure practices, particularly regarding executive compensation decisions. For investors, the results suggest that shareholder approval requirements may provide additional leverage in demanding greater transparency and accountability from management.

The study's findings also contribute to the broader literature on corporate governance and disclosure. Prior research has documented the importance of governance mechanisms in determining disclosure quality (e.g., Armstrong et al., 2010; Larcker and Tayan, 2015). Our analysis extends this literature by examining how specific governance reforms, particularly those related to executive compensation, influence firms' disclosure choices and information environment.

Several limitations of our study warrant mention and suggest directions for future research. First, the lack of direct empirical evidence limits our ability to draw definitive conclusions about the causal relationship between shareholder approval requirements and voluntary disclosure practices. Future research could employ quasi-experimental designs to better identify the causal effects of Say-on-Pay requirements on disclosure outcomes. Second, our analysis focuses primarily on the corporate governance channel, while other mechanisms may also influence the relationship between shareholder approval requirements and disclosure practices. Additional research could explore alternative channels through which mandatory shareholder approval affects firm behavior.

Future studies might also examine how the effectiveness of shareholder approval requirements varies across different institutional settings, ownership structures, and governance environments. Additionally, researchers could investigate the long-term effects of these requirements on corporate governance practices, executive compensation design, and firm performance. Such analyses would provide valuable insights for policymakers considering similar governance reforms in other contexts.

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Table 1

Descriptive Statistics

Variables	**N**	**Mean**	**Std. Dev.**	**P25**	**Median**	**P75**
FreqMF	16,271	0.5926	0.8919	0.0000	0.0000	1.6094
Treatment Effect	16,271	0.5747	0.4944	0.0000	1.0000	1.0000
Institutional ownership	16,271	0.5684	0.3241	0.2795	0.6249	0.8469
Firm size	16,271	5.9789	2.0861	4.4348	5.9438	7.4120
Book-to-market	16,271	0.7200	0.6945	0.3136	0.5721	0.9405
ROA	16,271	-0.0416	0.2520	-0.0322	0.0213	0.0667
Stock return	16,271	-0.0142	0.4964	-0.3131	-0.0925	0.1658
Earnings volatility	16,271	0.1418	0.2747	0.0236	0.0568	0.1445
Loss	16,271	0.3349	0.4720	0.0000	0.0000	1.0000
Class action litigation risk	16,271	0.3360	0.2918	0.1005	0.2322	0.5104

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

Table 2
Pearson Correlations
ShareholderApprovalofExecutiveCompensation Corporate Governance

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
Treatment Effect	1.00	0.01	**-0.07**	**0.06**	**-0.04**	**0.06**	**0.02**	**-0.04**	**-0.03**	**0.35**
FreqMF	0.01	1.00	**0.42**	**0.45**	**-0.17**	**0.22**	-0.01	**-0.15**	**-0.27**	-0.01
Institutional ownership	**-0.07**	**0.42**	1.00	**0.62**	**-0.19**	**0.28**	**-0.08**	**-0.21**	**-0.24**	**0.05**
Firm size	**0.06**	**0.45**	**0.62**	1.00	**-0.37**	**0.36**	**0.04**	**-0.25**	**-0.41**	**0.14**
Book-to-market	**-0.04**	**-0.17**	**-0.19**	**-0.37**	1.00	**0.04**	**-0.22**	**-0.12**	**0.14**	**-0.09**
ROA	**0.06**	**0.22**	**0.28**	**0.36**	**0.04**	1.00	**0.13**	**-0.52**	**-0.59**	**-0.08**
Stock return	**0.02**	-0.01	**-0.08**	**0.04**	**-0.22**	**0.13**	1.00	0.01	**-0.15**	**0.02**
Earnings volatility	**-0.04**	**-0.15**	**-0.21**	**-0.25**	**-0.12**	**-0.52**	0.01	1.00	**0.32**	**0.12**
Loss	**-0.03**	**-0.27**	**-0.24**	**-0.41**	**0.14**	**-0.59**	**-0.15**	**0.32**	1.00	**0.13**
Class action litigation risk	**0.35**	-0.01	**0.05**	**0.14**	**-0.09**	**-0.08**	**0.02**	**0.12**	**0.13**	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 Shareholder Approval of Executive Compensation on Management Forecast Frequency

	(1)	(2)
Treatment Effect	0.0146 (1.03)	0.0459*** (3.50)
Institutional ownership		0.6361*** (24.82)
Firm size		0.1113*** (23.29)
Book-to-market		-0.0282*** (3.78)
ROA		0.0138 (0.61)
Stock return		-0.0281** (2.46)
Earnings volatility		-0.0081 (0.41)
Loss		-0.1779*** (11.82)
Class action litigation risk		-0.1792*** (8.27)
N	16,271	16,271
R^2	0.0001	0.2439

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