Protection for All? How Classified Boards Benefit Rank-and-File Employees: Evidence from OSHA Safety Data

Abstract

This study examines how classified boards affect workplace safety, an important dimension of employee welfare. Using comprehensive establishment-level injury data from the U.S. Occupational Safety and Health Administration and a novel classified board database, we document that firms with classified boards experience 12-13% lower workplace injury rates. To establish causality, we employ instrumental variable and difference-in-differences approaches exploiting staggered board declassifications. The safety benefits of classified boards operate through increased safety expenditures, reduced employee workloads, and enhanced external monitoring through analyst coverage. These effects are strongest in financially constrained firms and those with weaker monitoring mechanisms. Our findings support the bonding hypothesis that anti-takeover provisions facilitate long-term value creation by protecting stakeholder relationships and provide novel evidence that classified boards benefit rank-and-file employees, not just executives and major customers. The results reveal an important mechanism through which governance structures impact employee welfare and challenge the conventional view that classified boards primarily serve managerial entrenchment.

Keywords: Classified Board; Anti-Takeover; Workplace Safety; Employee Well-being; Stakeholder

JEL: G30; G34; J28

1. Introduction

The governance of modern corporations embodies a fundamental tension: do governance structures like classified boards primarily serve to entrench management at shareholders' expense, or do they enable valuable long-term investments in stakeholder relationships that ultimately benefit all parties? This question strikes at the heart of debates about the purpose of the corporation itself. While shareholder-centric governance models have dominated corporate policy and academic discourse for decades, mounting evidence suggests that exclusive focus on shareholder value maximization can lead to underinvestment in stakeholder relationships critical for long-term value creation. We examine how one of the most potent and controversial anti-takeover mechanisms—classified boards—affects a critical yet understudied dimension of stakeholder welfare: workplace safety for rank-and-file employees.

Workplace safety represents both a significant economic concern and a core aspect of corporate responsibility. Accidents stemming from safety lapses impose substantial economic costs, exceeding $250 billion annually in the United States alone (Cohn & Wardlaw, 2016). Beyond direct costs, workplace injuries damage firm value, reputation, reduce employee morale and productivity, and increase turnover and retraining expenses (Kniesner & Leeth, 2014; Larcker et al., 2023). Despite these sizable costs and the centrality of employee welfare to business operations, the relationship between corporate governance structures and workplace safety remains largely unexplored in finance literature.

Corporate takeover defenses, particularly classified boards, stand at the center of contentious debates in corporate governance (Johnson, Karpoff, & Yi, 2015). By dividing directors into typically three classes with staggered elections, classified boards prevent hostile acquirers from replacing a majority of the board in a single year. This creates a stark theoretical tension: agency

theory suggests that such provisions primarily serve to entrench underperforming management, allowing them to pursue personal objectives at shareholders' expense (Bebchuk & Cohen, 2005; Faleye, 2007). Conversely, stakeholder theory suggests that classified boards enable firms to make valuable long-term investments by insulating decision-makers from short-term market pressures and protecting relationship-specific investments with stakeholders, including employees (Freeman, 1984; Blair & Stout, 1999). The "bonding hypothesis" (Shleifer & Summers, 1988; Johnson, Karpoff, & Yi, 2015) offers a theoretical middle ground, suggesting that takeover protection enables firms to credibly commit to maintaining implicit contracts with key stakeholders, thereby encouraging relationship-specific investments that enhance long-term value creation.

Recent empirical work has provided growing support for the bonding hypothesis, demonstrating that anti-takeover provisions (ATPs) facilitate valuable long-term relationships with specific stakeholders. Johnson, Karpoff, and Yi (2015, 2022) show that ATPs enhance IPO firm value when companies have important external stakeholder relationships. Cen, Dasgupta, and Sen (2016) find that takeover threats disrupt customer-supplier relationships, reducing relationship-specific investments. Cremers, Litov, and Sepe (2017) document that classified boards are associated with increased firm value, particularly in innovation-intensive industries where stakeholder relationships are crucial. Guernsey, Sepe, and Serfling (2022) show that ATPs protect firm value during market shocks by preserving stakeholder relationships. Most recently, Fich, Harford, and Yore (2025) demonstrate how takeover protection benefits firms through both the "quiet life" and bonding channels.

Despite these important advances, the bonding hypothesis literature has focused almost exclusively on how ATPs and classified boards affect relationships with major customers,

suppliers, and top management. Surprisingly little attention has been paid to how these governance structures influence commitments to rank-and-file employees—despite substantial evidence that these employees often bear significant costs during corporate takeovers through layoffs, wage reductions, and benefits cuts (Dessaint, Golubov, & Volpin, 2017; Liang, Renneboog, & Vansteenkiste, 2020; Masulis, Wang, & Xie, 2020; Chatt, Gustafson, & Welker, 2021). As Dey and White (2021) note, while some research examines how firms use ATPs to bond with knowledge workers, the broader impact on ordinary workers remains understudied. This oversight is particularly significant given that rank-and-file employees represent the largest stakeholder group in most organizations and are often the most vulnerable during corporate control contests.

Our investigation builds on two complementary theoretical mechanisms within the bonding hypothesis framework. First, classified boards enable firms to credibly commit to maintaining implicit contracts with employees regarding workplace conditions and safety (Shleifer & Summers, 1988; Johnson, Karpoff, & Yi, 2015). By reducing takeover vulnerability, classified boards allow management to prioritize employee well-being without fear that such investments will be undermined by opportunistic acquirers seeking short-term cost reductions. This protection is particularly valuable for rank-and-file employees who typically lack the explicit contractual protections or bargaining power of other stakeholders. Second, classified boards mitigate managerial myopia (Stein, 1988, 1989; Knoeber, 1986), enabling firms to undertake long-term investments in safety infrastructure, training programs, and hazard mitigation that might otherwise be sacrificed for short-term financial performance.

To test our hypotheses about classified boards and workplace safety, we utilize comprehensive establishment-level injury data from the U.S. Occupational Safety and Health Administration (OSHA) combined with a novel classified board database from Guernsey et al. (2025) covering all

U.S. public firms. Our final sample comprises 50,457 establishment-year observations from 1,049 unique firms spanning 2002-2011. We employ multiple identification strategies to address potential endogeneity concerns, including instrumental variables, entropy balancing, and a difference-in-differences approach exploiting staggered declassification events.

Our baseline analysis documents a statistically significant and economically meaningful negative relationship between classified boards and workplace injury rates. Establishments of firms with classified boards experience approximately 12-13% lower injury rates compared to those without classified boards, a substantial improvement in workplace safety. These results are robust to controlling for a comprehensive set of firm-level and establishment-level characteristics, as well as various fixed effects specifications that account for unobserved heterogeneity at the industry, firm, establishment, and state levels.

To address potential endogeneity concerns, we implement three complementary identification strategies. First, using entropy balancing to achieve covariate balance between treatment and control firms, we continue to find that classified boards are associated with significantly lower injury rates. Second, we employ an instrumental variable approach based on directors' historical preferences for classified boards formed through their experiences at other firms. The two-stage least squares estimates show an even stronger negative relationship between instrumented classified board status and injury rates, suggesting that endogeneity may attenuate rather than drive our baseline results. Third, we exploit the staggered declassification of classified boards as a quasi-natural experiment. Our difference-in-differences analysis reveals that workplace injury rates increase by approximately 11% following declassification events, with dynamic treatment effects showing no pre-trends but persistent increases in injury rates for at least two years post-declassification.

We explore three primary mechanisms through which classified boards enhance workplace safety. First, firms with classified boards allocate approximately 8% more resources to discretionary expenses per employee, which includes safety-related expenditures. Second, these firms maintain 11% lower abnormal production requirements per employee, reducing the excessive workloads that often lead to accidents. Third, classified boards are associated with 12% greater analyst coverage, which prior research has shown improves workplace safety through enhanced monitoring (Bradley, Mao, & Zhang, 2022). These findings suggest that classified boards improve workplace safety both through direct resource allocation decisions and by fostering an environment of greater oversight and reduced production pressure.

Cross-sectional analyses reveal that the safety benefits of classified boards are most pronounced in financially constrained firms, with effects approximately 40% stronger in firms with high SA index values and low Z-scores. This pattern is consistent with our theoretical framework: firms facing financial constraints are precisely those most likely to sacrifice safety investments for short-term financial considerations in the absence of takeover protection. Similarly, the relationship is stronger when internal and external monitoring mechanisms are weaker, with effects approximately 35% larger in firms with high opacity and low institutional ownership. These findings suggest that classified boards serve as a particularly important governance mechanism for protecting employee welfare when other oversight structures are less robust.

This paper makes several novel contributions to the corporate finance literature. First, we are the first to identify a specific mechanism—workplace safety—through which classified boards benefit rank-and-file employees. While substantial research examines how governance structures affect shareholders and executives (e.g., Bebchuk and Cohen, 2005; Faleye, 2007; Cohen and

Wang, 2013), far less attention has been paid to their impact on ordinary workers. Our findings reveal that governance structures designed primarily to regulate the shareholder-manager relationship can have substantial spillover effects on employee welfare, highlighting an important but understudied dimension of corporate governance.

Second, we significantly expand the scope and applicability of the bonding hypothesis (Shleifer and Summers, 1988; Johnson, Karpoff, and Yi, 2015, 2022) by demonstrating that anti-takeover provisions protect not only relationships with major customers (Cen, Dasgupta, and Sen, 2016; Guernsey, Sepe, and Serfling, 2022; Fich, Harford, & Yore, 2025) and top management, but also commitments to rank-and-file employee welfare. This extension is particularly important given that rank-and-file employees represent the largest and often most vulnerable stakeholder group affected by corporate control changes. As M&As frequently lead to significant layoffs and workforce reductions (Dessaint, Golubov, and Vansteenkiste, 2017; Liang, Renneboog, and Vansteenkiste, 2020), our findings suggest that classified boards help protect employees from such disruptions by creating a more stable work environment with stronger safety commitments.

Third, we contribute to the workplace safety literature by identifying an important governance determinant of safety outcomes. Prior work has focused primarily on financial constraints (Cohn and Wardlaw, 2016), monitoring mechanisms (Bradley, Mao, and Zhang, 2022), and regulatory factors (Caskey and Ozel, 2017), while largely overlooking how broader governance structures influence safety investments and outcomes. By documenting a substantial 12-13% reduction in workplace injuries associated with classified boards, we highlight how corporate governance choices can have material impacts on a critical dimension of employee welfare and firm operations, translating to significant cost savings and human welfare improvements.

Finally, our findings contribute to the ongoing debate about the value implications of classified boards. While some studies document negative valuation effects associated with classified boards (Bebchuk and Cohen, 2005; Faleye, 2007), others find positive effects under certain conditions (Cremers, Litov, and Sepe, 2017; Daines, Li, and Wang, 2021). Our analysis helps reconcile these conflicting findings by identifying a specific channel—workplace safety—through which classified boards can create value. We document that the positive association between classified boards and firm value is stronger when workplace injury rates are lower, suggesting that the value-enhancing effect of classified boards operates in part through improved employee welfare. This aligns with the perspective that promoting stakeholder welfare is not a zero-sum game but can create value for shareholders as well.

These findings have important implications for ongoing debates about shareholder versus stakeholder governance models. While critics argue that classified boards entrench management and potentially harm shareholder value (Cremers, Litov, & Sepe, 2017; Faleye, 2007; Cohen & Wang, 2013), our results suggest a more nuanced reality: classified boards enable greater investment in workplace safety, thereby improving employee welfare. This empirical evidence helps resolve the theoretical tension between agency and stakeholder theories, challenging simplistic narratives about the costs of takeover defenses by highlighting their concrete benefits for rank-and-file employees. Our study thus illuminates how corporate governance structures can significantly affect stakeholder outcomes, particularly for employees who might otherwise lack protection during corporate control events.

The remainder of this paper is organized as follows. Section 2 reviews the relevant literature and develops our theoretical framework and hypotheses. Section 3 describes our data sources and empirical methodology. Section 4 presents our main empirical results, including baseline findings,

identification strategies, robustness checks, economic mechanisms, and cross-sectional analyses of the relationship between classified boards and workplace safety. Section 5 concludes with a discussion of our contributions, implications for corporate governance theory and practice, and directions for future research.

2. Literature Review and Theoretical Framework

2.1 Classified Boards and Anti-Takeover Provisions

Classified boards represent one of the most consequential anti-takeover mechanisms available to public firms (Bebchuk, Coates, and Subramanian, 2002). By dividing directors into classes with staggered terms, classified boards prevent hostile acquirers from replacing a board majority in a single proxy contest, thereby increasing the costs and time required to complete a takeover. This protective feature has made classified boards a focal point in debates regarding shareholder versus stakeholder interests in corporate governance.

The literature on classified boards presents conflicting evidence regarding their effect on firm value, reflecting the fundamental tension between shareholder primacy and stakeholder welfare perspectives. Several studies document negative valuation effects, consistent with the agency theory view that classified boards primarily serve managerial entrenchment (Bebchuk and Cohen, 2005; Faleye, 2007; Cohen and Wang, 2013). These studies argue that by insulating management from market discipline, classified boards exacerbate agency problems and reduce shareholder value by allowing managers to pursue their private benefits at shareholders' expense.

Conversely, recent work finds positive effects of classified boards under certain conditions, supporting the stakeholder theory perspective. Cremers, Litov, and Sepe (2017) show that classified boards are associated with increased firm value in innovation-intensive industries where

relationship-specific investments are particularly valuable. Similarly, Daines, Li, and Wang (2021) find that classified boards lead to greater innovation output and more valuable patents. Amihud and Stoyanov (2017) document that classified boards can enhance firm value under specific circumstances. These studies suggest that classified boards can enhance long-term value creation by protecting firms from short-term market pressures when long-term investments are crucial.

This theoretical tension creates an empirical puzzle: if classified boards primarily serve managerial entrenchment, we would expect them to be associated with worse outcomes for rank-and-file employees as entrenched managers extract private benefits. However, if classified boards facilitate bonding with stakeholders, we would expect improved outcomes for these employees. The mixed evidence highlights the need to move beyond examining direct effects on shareholder value to investigate specific mechanisms through which classified boards affect organizational outcomes and stakeholder welfare. We contribute to this literature by examining how classified boards affect a critical yet understudied dimension of stakeholder welfare: workplace safety for rank-and-file employees.

2.2 The Bonding Hypothesis and Stakeholder Relationships

The "bonding hypothesis," initially proposed by Shleifer and Summers (1988) and further developed by Johnson, Karpoff, and Yi (2015, 2022), offers a theoretical framework for understanding how anti-takeover provisions affect stakeholder relationships. This hypothesis posits that anti-takeover provisions enable firms to credibly commit to maintaining implicit contracts with key stakeholders, thereby facilitating relationship-specific investments that enhance long-term value creation.

Recent empirical work has provided support for the bonding hypothesis across various stakeholder relationships. Johnson, Karpoff, and Yi (2015) find that anti-takeover provisions enhance IPO firm value when companies have important external stakeholder relationships. Cen, Dasgupta, and Sen (2016) demonstrate that takeover threats disrupt customer-supplier relationships, reducing relationship-specific investments. Specifically, they show that customer firms reduce their dependence on suppliers that become exposed to takeover threats, consistent with concerns about potential disruptions to supply relationships.

Despite extensive work on the bonding hypothesis, prior research has focused almost exclusively on relationships with major customers, suppliers, and top management. Little attention has been paid to how anti-takeover provisions affect relationships with and commitments to rank-and-file employees—despite evidence that these employees often bear significant costs during corporate takeovers (Dessaint, Golubov, and Vansteenkiste, 2017; Masulis, Wang, and Xie, 2020; Liang, Renneboog, and Vansteenkiste, 2020). This represents a crucial gap in our understanding of how governance structures influence the largest and often most vulnerable stakeholder group in most corporations.

2.3 Workplace Safety Determinants

Workplace safety represents a critical dimension of employee welfare with substantial economic consequences. Cohn and Wardlaw (2016) document that workplace injuries cost U.S. firms over $250 billion annually through direct medical expenses, workers' compensation claims, lost productivity, and reputational damage. They demonstrate that financial constraints lead firms to reduce safety investments, resulting in increased injury rates.

Recent studies have identified several factors influencing workplace safety. Bradley, Mao, and Zhang (2022) find that analyst coverage improves workplace safety through enhanced external

monitoring. They document that firms with greater analyst following experience lower workplace injury rates, with this effect being stronger when analysts specialize in the firm's industry. Caskey and Ozel (2017) show that firms increase employee workloads to meet earnings expectations, leading to higher injury rates. They find that managers pressure employees to work harder when firms are at risk of missing earnings benchmarks, with detrimental consequences for workplace safety. Bai, Lee, and Zhang (2020) document that regulatory changes affecting financial markets can impact workplace safety through their effects on human capital investments.

Despite these advances, the literature has largely overlooked how broader corporate governance structures, particularly takeover defenses, influence safety outcomes. Our study addresses this significant gap by examining how classified boards affect workplace safety for rank-and-file employees, connecting the largely separate literatures on corporate governance and workplace safety.

2.4 Theoretical Framework and Economic Mechanisms

Building on these literatures, we develop a theoretical framework linking classified boards to workplace safety through three primary economic mechanisms:

First, classified boards enable firms to credibly commit to maintaining implicit contracts with rank-and-file employees regarding workplace conditions and safety (Shleifer and Summers, 1988; Johnson, Karpoff, and Yi, 2015). By reducing takeover vulnerability, classified boards mitigate the risk that safety commitments will be undermined by acquirers seeking short-term cost reductions. This protection is particularly valuable for rank-and-file employees who typically lack the explicit contractual protections or bargaining power of executives and other stakeholders. Consistent with this mechanism, we expect firms with classified boards to exhibit lower workplace injury rates relative to firms without such protections.

Second, classified boards reduce managerial myopia (Stein, 1988, 1989; Knoeber, 1986) by insulating managers from short-term market pressures. This reduced myopia enables greater investment in safety measures that entail short-term costs but yield substantial long-term benefits. Safety investments typically represent significant upfront expenditures with benefits accruing gradually over time, making them particularly vulnerable to short-term pressures. If this mechanism is operative, we expect firms with classified boards to allocate more resources to discretionary expenses per employee relative to firms without classified boards.

Third, classified boards may affect workplace safety through production intensity and workload management. Short-term market pressures often lead firms to increase employee workloads to boost productivity and reduce labor costs (Caskey and Ozel, 2017). By reducing such pressures, classified boards may enable more sustainable workload levels. We therefore expect firms with classified boards to maintain lower production requirements per employee relative to firms without classified boards.

The relationship between classified boards and workplace safety likely varies based on firm characteristics that influence the underlying bonding mechanism. Financial constraints intensify the trade-off between short-term financial performance and safety investments (Cohn and Wardlaw, 2016). Without takeover protection, financially constrained firms face particularly strong incentives to cut safety expenditures to improve short-term performance metrics. Therefore, we expect the relationship between classified boards and workplace safety to be stronger in financially constrained firms relative to financially unconstrained firms.

Additionally, the bonding hypothesis suggests that classified boards will have stronger protective effects when alternative monitoring mechanisms are weaker, as the commitment value

of the classified board becomes more essential for protecting implicit contracts with employees. Therefore, we expect the relationship between classified boards and workplace safety to be stronger in firms with weaker internal and external monitoring mechanisms.

This theoretical framework creates an empirical puzzle that helps distinguish between competing perspectives on classified boards: if classified boards primarily serve managerial entrenchment, we would expect them to be associated with worse outcomes for rank-and-file employees as entrenched managers extract private benefits. However, if classified boards facilitate bonding with stakeholders and reduce myopia, we would expect improved safety outcomes for employees. By testing these theoretical predictions, we provide a comprehensive analysis of how classified boards affect workplace safety and the mechanisms underlying this relationship, which speaks directly to fundamental questions about the purpose of corporate governance structures.

3. Data and Empirical Design

3.1 Data Sources and Sample Construction

We utilize two primary data sources to examine the relationship between classified boards and workplace safety. First, we obtain establishment-level injury data from the U.S. Occupational Safety and Health Administration (OSHA), which collects comprehensive workplace safety information from approximately 80,000 private sector establishments annually. The OSHA data include establishment name, location, employment figures, worked hours, and detailed injury statistics. Second, we employ a novel classified board database compiled by Guernsey, Guo, Liu, and Serfling (2025), which offers significant advantages over traditional governance databases like the Institutional Shareholder Services (ISS). While ISS covers only S&P 1500 firms and lacks data for periods before or after index inclusion, the Guernsey et al. database encompasses all U.S. public firms from 1991 to 2020, providing substantially broader coverage.

Our sample period spans 2002 to 2011, with these boundaries determined by data availability constraints. The starting year reflects a significant change in OSHA injury reporting standards in 2002, making earlier data incomparable with later observations. The ending year corresponds to the cessation of the OSHA data collection program due to federal funding cuts in 2012.

To construct our sample, we manually match OSHA establishments to their corresponding firms in Compustat based on name similarity. When direct matches are unavailable, we conduct additional searches through Hoovers, company websites, and other online resources to identify establishments belonging to subsidiaries of Compustat-listed firms. Each Compustat firm may have multiple associated establishments in our dataset.

We apply several filters to ensure data quality and comparability. We exclude financial firms and regulated utilities (SIC codes 6000-6999 and 4900-4999), following standard practice in the corporate finance literature. To align financial data with injury statistics, which are measured on a calendar-year basis, we restrict the sample to firms with December fiscal year-ends. We require non-missing values for all variables employed in our primary analyses. These criteria yield a final sample of 50,457 establishment-years from 13,097 unique establishments belonging to 1,135 distinct Compustat firms. We winsorize all continuous variables, excluding logged values, at the 1st and 99th percentiles to mitigate the influence of outliers.

Table 1, Panel A presents the distribution of workplace injuries over our sample period. The average Total Case Rate (TCR) shows a general downward trend from 11.17 in 2002 to 5.67 in 2010, with a notable decline occurring after 2005. The number of observations increases steadily over the period, from 5,234 in 2002 to 6,885 in 2005. Panel B displays the average TCR by industry using the Fama-French 12-industry classification. Healthcare, Medical Equipment, and

Drugs exhibit the highest injury rates (9.99), followed by Wholesale, Retail, and Some Services (9.49), while Chemicals and Allied Products show the lowest (3.04).

[Insert Table 1 here]

3.2 Variable Measurement and Descriptive Statistics

Our primary dependent variable is the Total Case Rate (*TCR*), which measures the number of workplace injuries and illnesses per 100 full-time equivalent workers. Following OSHA guidelines and prior literature (Caskey and Ozel, 2017; Bradley, Mao, and Zhang, 2022), we calculate *TCR* as the total number of recordable incidents in an establishment-year divided by the total hours worked by all employees, multiplied by 200,000. The multiplication factor represents the hours worked by 100 full-time employees over a year (2,000 hours per employee), standardizing the measure across establishments of different sizes. Higher *TCR* values indicate worse workplace safety outcomes.

Our key independent variable, *Classified Board*, is an indicator equal to one if a firm maintains a classified (staggered) board structure and zero otherwise. This information comes from the comprehensive database compiled by Guernsey et al. (2025), which provides classified board status for all U.S. public firms from 1991 to 2020.

We include a comprehensive set of firm-level and establishment-level controls following the established literature on workplace safety determinants (Cohn and Wardlaw, 2016; Bradley, Mao, and Zhang, 2022). At the firm level, we control for *Size* (natural logarithm of beginning total assets) to account for scale economies in safety investments. *Leverage* (ratio of total debt to total assets) captures financial constraints that may limit safety expenditures. *PPE* (net property, plant, and equipment scaled by total assets) controls for capital intensity, which affects workplace hazard

exposure. *Sales* (current period sales divided by beginning total assets) captures operational intensity, while *CAPEX* (capital expenditures scaled by beginning total assets) accounts for new investments that may influence workplace conditions. *Market-to-book ratio* (M/B, market value of assets divided by book value) proxies for growth opportunities and intangible assets.

At the establishment level, we control for *HoursPerEmployee* (annual hours worked divided by the number of employees), as longer work hours are associated with increased fatigue and accident risk. This combination of firm-level and establishment-level controls helps isolate the effect of classified boards on workplace safety from other potential determinants.

Table 2 presents summary statistics for our sample. Panel A reports establishment-level variables. The mean *TCR* of 8.3 implies that, in an average establishment-year, approximately 8.3 recordable injuries or illnesses occur per 100 full-time workers. The median *TCR* of 6.82 suggests a right-skewed distribution. The typical establishment in our sample employs 284 workers, with employees working an average of 1,925 hours annually.

Panel B summarizes firm-level characteristics. The median firm in our sample has a natural logarithm of assets of approximately 7.1, corresponding to total assets of around $1.2 billion. The average leverage ratio is 24%, while property, plant, and equipment represent 27% of total assets on average. Sales turnover averages $1.27 per dollar of beginning assets, and capital expenditures average 4% of beginning assets. The median market-to-book ratio is 1.38, consistent with values reported in prior studies (Cohn and Wardlaw, 2016).

[Insert Table 2 here]

3.3 Empirical Design

To investigate the relationship between classified boards and workplace safety, we estimate the following baseline specification:

$$TCR_{i,j,t} = \beta_0 + \beta_1 CB_{j,t} + \gamma X_{i,t} + \partial Y_{j,t} + \theta_i + \delta_{lt} + \varphi_{st} + \varepsilon_{ijt} \quad (1)$$

where $TCR_{i,j,t}$, is the injury rate equivalent for 100 full-time employees of firm *j*'s establishment *i* in year *t*;. $CB_{j,t}$ is an indicator variable that equals one if the firm has classified board and zero otherwise. The vector $X_{i,t}$ and $Y_{j,t}$ stands for the establishment-level and firm-level control variables. θ_i represents establishment fixed effects; δ_{lt} denotes industry-by-year fixed effects; and φ_{st} captures state-by-year fixed effects. The coefficient of interest, β_1, measures the effect of classified boards on workplace injury rates.

Our identification strategy leverages multiple fixed effects to address potential omitted variable bias. Establishment fixed effects control for time-invariant establishment characteristics that may influence injury rates, such as physical layout, location, and persistent safety culture. This approach focuses our analysis on within-establishment variation in safety outcomes following changes in classified board status rather than cross-sectional comparisons that may be subject to selection bias. Industry-by-year fixed effects account for time-varying industry factors that might affect workplace safety, such as technological changes or industry-specific regulatory developments. In some specifications, we also include state-by-year fixed effects to control for state-level economic conditions and regulatory changes.

We estimate Equation (1) using ordinary least squares (OLS) with standard errors clustered at the firm level to account for potential correlation in error terms across establishments within the same firm and over time. This approach follows established practice in both the workplace safety literature (Cohn and Wardlaw, 2016; Bradley, Mao, and Zhang, 2022) and corporate governance

research (Cremers, Litov, and Sepe, 2017). While our baseline specification with multiple fixed effects addresses many concerns about omitted variable bias, we acknowledge that endogeneity may still affect our estimates. To establish a more convincing causal relationship, we implement three complementary identification strategies in subsequent analyses: entropy balancing to achieve covariate balance, an instrumental variable approach based on directors' governance preferences, and a difference-in-differences design exploiting staggered declassification events.

4. Empirical Results

This section tests our primary theoretical prediction that classified boards enhance workplace safety by enabling firms to make credible commitments to employees and reducing managerial myopia. We begin by examining the baseline relationship between classified boards and workplace injury rates, then address potential endogeneity concerns through three complementary identification strategies. Subsequently, we explore the economic mechanisms through which classified boards affect safety outcomes and analyze how these effects vary across firm characteristics. Finally, we investigate the implications of our findings for firm value.

4.1 Classified Boards and Workplace Safety

To test our hypothesis that classified boards reduce workplace injuries, we estimate fixed-effects regressions relating injury rates to classified board status while controlling for firm and establishment characteristics. Table 3 presents these results, with all specifications including industry-by-year fixed effects to account for time-varying industry factors.

In Column (1), we include firm fixed effects to control for time-invariant firm characteristics that may influence safety outcomes. The coefficient on Classified Board is negative and statistically significant at the 1% level (-1.072), indicating that establishments of firms with

classified boards experience significantly lower injury rates. This represents approximately a 12.9% reduction relative to the sample mean TCR of 8.3, a substantial economic effect. The control variables largely align with expectations from prior literature (Cohn and Wardlaw, 2016): workplace injuries exhibit positive associations with leverage (0.032), property, plant, and equipment (0.018), and capital expenditures (0.037), reflecting heightened injury risk in firms with greater financial constraints and capital intensity. Larger establishments, indicated by Size, are associated with lower injury rates (-0.085), potentially reflecting economies of scale in safety investments.

To address concerns about unobserved heterogeneity at the establishment level, Column (2) employs establishment fixed effects, which subsume firm-level fixed effects and allow us to identify the effect of classified boards on workplace safety from within-establishment variation over time. Despite this more demanding specification, the coefficient on Classified Board remains negative and statistically significant at the 1% level (-0.885), representing a 10.7% reduction in injury rates relative to the sample mean. The persistence of this effect across specifications suggests that our results are not driven by time-invariant establishment characteristics.

Column (3) further includes state-by-year fixed effects to control for time-varying local economic conditions and regulatory environments that might influence workplace safety. The coefficient on Classified Board remains negative and significant at the 1% level (-0.931), corresponding to an 11.2% reduction in injury rates. This robust result indicates that our findings are not attributable to state-level economic or regulatory changes coinciding with classified board status changes.

Collectively, these results provide strong initial evidence supporting our hypothesis that classified boards enhance workplace safety. The economic magnitude—an 11-13% reduction in injury rates—is substantial, particularly given that workplace injuries cost U.S. firms over $250 billion annually (Cohn and Wardlaw, 2016). However, despite our comprehensive set of controls and fixed effects, concerns about endogeneity may persist. We address these concerns in the following section.

[Insert Table 3 here]

4.2 Endogeneity Concerns and Identification Strategies

The observed relationship between classified boards and workplace safety may reflect endogeneity rather than a causal effect. For instance, firms with better safety records might adopt classified boards to protect their human capital investments, or unobserved factors might simultaneously determine both classified board adoption and safety outcomes. To establish a more convincing causal relationship, we employ three complementary identification strategies: entropy balancing, instrumental variable analysis, and a difference-in-differences design exploiting staggered declassification events.

4.2.1 Entropy Balancing Method

Our first approach addresses potential selection bias using the Entropy Balancing Method (EBM) introduced by Hainmueller (2012). Unlike traditional matching techniques that discard observations, EBM reweights the control group to achieve covariate balance with the treatment group while maintaining statistical efficiency. We balance firms with and without classified boards on observable characteristics that might influence workplace safety, ensuring that differences in these characteristics do not drive our results.

Panel A of Table 4 presents the results using the entropy-balanced sample. The coefficient on Classified Board remains negative and statistically significant at the 1% level in both specifications. With firm fixed effects (Column 1), the coefficient is -0.894, representing a 10.8% reduction in injury rates relative to the sample mean. With establishment fixed effects (Column 2), the coefficient is -0.663, corresponding to an 8.0% reduction. These results suggest that observable differences between firms with and without classified boards do not explain our findings.

4.2.2 Instrumental Variable Approach

Our second approach employs a Two-Stage Least Squares (2SLS) method using directors' governance preferences as an instrument for classified board adoption. This instrument, *IV_Board Interlock*, reflects the historical and current classified board preferences of directors serving on the focal firm's board. This approach builds on Upper Echelons Theory (Hambrick and Mason, 1984) and research showing that directors' governance experiences at other firms influence their governance decisions (Chin et al., 2013; Foroughi et al., 2022).

The validity of this instrument rests on two conditions. First, relevance: directors' preferences for classified boards, formed through experiences at other firms, should influence adoption decisions at the focal firm. Second, exclusion: these preferences should affect workplace safety only through their impact on classified board adoption.

Directors' preferences likely satisfy the exclusion restriction for several compelling reasons. First, these preferences are primarily shaped by directors' diverse experiences across different corporate contexts, industry norms, and professional backgrounds, which are largely disconnected from establishment-level safety policies at any particular firm they serve. Second, directors typically serve on multiple boards simultaneously and across their careers, with exposure to various governance structures across different industries, market conditions, and time periods.

This diversity of exposure means that their governance preferences reflect aggregated experiences rather than specific workplace safety considerations at any single firm. Third, board-level governance decisions about classified boards are typically made at corporate headquarters and are several organizational layers removed from establishment-level safety practices and outcomes, which are generally managed by operational personnel rather than directors (Finkelstein, Hambrick, & Cannella, 2009; Crossland et al., 2014).

Furthermore, while directors may develop preferences for certain governance structures based on their experiences, these preferences are unlikely to directly influence operational decisions at individual establishments, such as safety training frequency, equipment maintenance schedules, or hazard mitigation procedures. Instead, directors' influence on these operational outcomes would flow through their impact on broader governance structures like classified boards, which then shape management incentives and organizational priorities. This indirect pathway reinforces the plausibility of the exclusion restriction for our instrument.

The relevance condition is well-supported by prior literature demonstrating that directors' experiences at other firms significantly influence their governance decisions and preferences (Chin et al., 2013; Foroughi et al., 2022). Directors who have previously served on boards with classified structures are more likely to implement or maintain such structures in other firms where they serve, partly due to familiarity and preference for governance mechanisms they have previously experienced (Pirinsky & Wang, 2010; Beck, Nicoletti, & Stuber, 2022). This connection between directors' past experiences and current governance choices provides a strong first-stage relationship necessary for a valid instrumental variable.

Panel B of Table 4 presents the 2SLS results. The first-stage results in Column 1 show that *IV_Board Interlock* is significantly positively associated with Classified Board at the 1% level (0.374). The F-statistic of 18.85 substantially exceeds the conventional threshold of 10, confirming instrument relevance. The second-stage results in Column 2 show a negative and significant coefficient on the instrumented Classified Board variable (-5.703, significant at the 5% level), which is larger in magnitude than our baseline OLS estimates. This suggests that endogeneity may actually attenuate rather than drive our baseline results, potentially due to measurement error or omitted variables that bias the coefficient toward zero.

4.2.3 Difference-in-Differences Analysis

Our third identification strategy exploits the staggered declassification of classified boards as a quasi-natural experiment. Importantly, as documented by Guernsey et al. (2025), these declassification events during our sample period were primarily driven by pressure from activist investors, proxy advisory firms, and institutional shareholder campaigns advocating for what they considered "good governance" practices.

Several factors support the plausible exogeneity of these declassification events to workplace safety considerations. First, the declassification wave during our sample period was primarily triggered by broad governance reform campaigns led by influential institutional investors and proxy advisory firms like ISS and Glass Lewis, which advocated for the elimination of classified boards based on general governance principles rather than firm-specific operational concerns (Karpoff & Wittry, 2023; Catan & Klausner, 2017). These campaigns targeted classified boards across the board, regardless of firms' workplace safety records or employee welfare policies, suggesting that declassification decisions were orthogonal to workplace safety considerations.

Second, the timing of declassifications was largely determined by factors external to individual firms, such as the schedule of shareholder meetings, the timing of activist campaigns, and the broader evolution of governance norms in the market. Guernsey et al. (2025) document that declassification decisions typically followed industry waves, peer pressure, and changes in proxy advisory firm guidelines rather than firm-specific operational considerations like workplace safety. This pattern of externally-driven timing supports the argument that declassification events represent plausibly exogenous shocks to firms' governance structures.

Third, workplace safety outcomes are typically not central considerations in shareholder proposals advocating for board declassification. An extensive review of shareholder proposals and proxy statements during our sample period reveals that proponents of declassification primarily argue for enhanced board accountability to shareholders, increased takeover vulnerability, and alignment with perceived governance best practices, with little to no mention of employee welfare or workplace safety considerations (Cohen & Wang, 2017; Ge, Tanlu, & Zhang, 2016). This evidence further supports the notion that declassification decisions were made for reasons unrelated to workplace safety.

Moreover, while firm managers might anticipate certain financial or operational effects of declassification, they are unlikely to specifically predict or target changes in workplace injury rates when deciding whether to oppose or acquiesce to declassification pressure. Workplace safety outcomes are determined by complex interactions of multiple organizational factors, making them difficult to anticipate as direct consequences of board structure changes. This disconnect between the governance decision and the specific outcome we study further strengthens the plausible exogeneity of our treatment.

These externally-driven declassification decisions are thus plausibly exogenous to workplace safety considerations, providing a suitable setting for causal inference. We implement a difference-in-differences design comparing changes in workplace injury rates around declassification events to contemporaneous changes in firms that maintained classified boards. Panel C of Table 4 presents these results. Column 1 shows a positive and statistically significant coefficient on *Declassified* (1.069, significant at the 1% level), indicating that workplace injury rates increase by approximately 12.9% following declassification of classified boards. This finding is consistent with our baseline results suggesting that classified boards improve workplace safety.

To test the parallel trends assumption, Column 2 presents a dynamic treatment effects analysis using indicators for relative time periods around declassification events. The coefficients on pre-declassification indicators (*Declassified(-2)* and *Declassified(-1)*) are statistically insignificant, confirming that treated and control firms followed similar trends in workplace safety prior to declassification. In contrast, the coefficients on *Declassified(0)*, *Declassified(+1)*, and *Declassified(2+)* are all positive and statistically significant, indicating that workplace injury rates increase immediately following declassification and remain elevated for at least two years. The magnitude of these effects increases over time, with coefficients corresponding to increases of 18.2%, 15.7%, and 22.1% for the year of declassification, one year after, and two or more years after, respectively.

Together, these three identification strategies provide compelling evidence that classified boards causally reduce workplace injury rates. The consistency of results across these approaches, each addressing different sources of endogeneity concern, strengthens our confidence in a causal interpretation of the relationship between classified boards and workplace safety.

4.3 Robustness Checks

We conduct a comprehensive set of robustness checks to ensure that our main findings are not sensitive to alternative specifications, variable definitions, or sample restrictions. These tests address potential concerns regarding measurement, omitted variables, and sample composition.

4.3.1 Alternative Measures of Workplace Safety

Following previous research (Cohn and Wardlaw, 2016; Bradley, Mao, and Zhang, 2022), we employ alternative measures of workplace safety to verify that our results are not driven by our specific operationalization of the dependent variable. Panel A of Table 5 presents these results, using our preferred specification with establishment and industry-by-year fixed effects.

Columns 1-4 use alternative OSHA-recommended safety metrics: Ln(num), the natural logarithm of the number of injuries; DART, the rate of cases with days away from work, restricted work activity, or job transfer; DAFWII, the rate of cases with days away from work; and IRII, the injury-related incident index. Columns 5-8 reconstruct these measures by scaling them by the number of employees instead of working hours, following Chen et al. (2022) and Stroschein (2017), to address potential concerns about data errors in reported working hours.

Across all eight specifications, the coefficient on *Classified Board* remains negative and statistically significant at conventional levels, with magnitudes indicating economically meaningful effects. These results confirm that our main findings are robust to alternative measures of workplace safety and are not artifacts of a particular measurement approach.

4.3.2 Additional Control Variables

Our next set of robustness checks incorporates additional control variables that might influence both classified board adoption and workplace safety. Panel B of Table 5 presents these results. Column 1 adds firm age as a control, following Guernsey et al. (2023) who documented

age-related variations in classified board adoption. Column 2 incorporates board-level controls including size, independence, and gender composition, addressing the possibility that board characteristics influence both governance choices and corporate social responsibility performance, including employee treatment (Bai, 2013; Boulouta, 2013).

Column 3 adds the E-index to control for alternative anti-takeover mechanisms that might affect both classified board adoption and workplace safety. Column 4 includes insider ownership and institutional ownership to account for potential changes in the shareholder base associated with classified board status, which might independently influence safety-related decisions.

Across all four specifications, the coefficient on Classified Board remains negative and statistically significant, with magnitudes comparable to our baseline estimates. These results indicate that our findings are not driven by omitted variables related to firm age, board characteristics, alternative governance mechanisms, or ownership structure.

4.3.3 Alternative Industry Classifications

Given significant variation in workplace safety across industries, we verify that our results are robust to alternative industry classification schemes. Panel C of Table 5 presents results using various industry classification standards employed in prior research (Cohn et al., 2021; Cohn and Wardlaw, 2016; Liang et al., 2023). The coefficient on Classified Board remains negative and statistically significant across all specifications, indicating that our findings are not sensitive to how industries are defined or how we control for industry-specific factors.

4.3.4 Firm-Level Analysis

Our main analysis uses establishment-level data, which provides granular insights but raises concerns about firms with multiple establishments having disproportionate influence on the results. Following Bradley, Mao, and Zhang (2022), we aggregate TCR and establishment-level

variables to the firm level and re-estimate our models. Panel D of Table 5 presents these firm-level results, which continue to show a negative and statistically significant relationship between classified boards and workplace injury rates. This confirms that our findings are not driven by the multi-establishment structure of some firms in our sample.

[Insert Table 5 here]

4.3.5 Classified Board and Safety Index

To provide additional evidence on the relationship between classified boards and workplace safety using an alternative data source, we examine KLD ratings related to employee health and safety. Following Bradley, Mao, and Zhang (2022), we focus on "Health and Safety Strengths" and "Health and Safety Concerns" from the KLD database. We also construct a safety index, defined as "Health and Safety Strengths" minus "Health and Safety Concerns," to assess a company's net performance in health and safety.

Table 6 presents these results, which show that classified boards are positively and significantly associated with both Health and Safety Strengths and the Safety Index. These findings corroborate our main results using an independent measure of workplace safety from a different data source, further supporting our conclusion that classified boards enhance employee safety.

[Insert Table 6 here]

4.3.6 Classified Board and Labor Violations

As a final robustness check, we examine whether classified boards affect labor violations, providing another perspective on how governance structures influence employee welfare. Following Li and Raghunandan (2021), we obtain labor violation data from Violation Tracker, a comprehensive database of federal agency enforcement actions. We construct two measures:

Labor_penalty, the natural logarithm of one plus the total dollar value of penalties paid; and *Labor_violation*, an indicator for whether at least one violation occurred in a year.

Table 7 presents firm-level analyses of these measures. The coefficient on Classified Board is negative and significant for both *Labor_penalty* and *Labor_violation*, indicating that firms with classified boards experience fewer labor violations and pay lower penalties when violations do occur. These results provide additional evidence that classified boards improve workplace conditions beyond our primary injury rate measures.

These comprehensive robustness checks collectively demonstrate that the negative relationship between classified boards and workplace injury rates is not an artifact of our specific measurement approaches, control variables, industry classifications, or level of analysis. The consistency of results across these alternative specifications strengthens our confidence in the robustness of our main findings.

[Insert Table 7 here]

4.4 Economic Mechanisms

Having established a robust negative relationship between classified boards and workplace injury rates, we now explore the economic mechanisms through which this effect operates. Based on our theoretical framework developed in Section 2, we investigate three potential channels: safety expenditures, workload management, and external monitoring.

4.4.1 Safety Expenditures

Our theoretical framework suggests that classified boards enable managers to invest in long-term safety measures by reducing short-term takeover pressures. Ideally, we would measure

specific safety-related expenditures such as maintenance, training, and oversight programs. However, companies do not report such expenditures separately. Following prior literature, we use *Ln(SGA/emp)*, the natural logarithm of selling, general, and administrative expenses per employee, as a proxy for safety-related investments.

Column 1 of Table 8 reports the results of regressing *Ln(SGA/emp)* on *Classified Board*, controlling for firm characteristics and including establishment and industry-by-year fixed effects. The coefficient on *Classified Board* is positive and statistically significant at the 1% level (0.077), indicating that firms with classified boards allocate approximately 8.0% more resources to discretionary expenses per employee. This finding supports the mechanism that classified boards enable greater investment in employee safety by reducing pressure for short-term cost-cutting.

4.4.2 Workload Management

Our second hypothesized mechanism involves workload management. Drawing on Daines et al. (2021), we propose that classified boards enable managers to focus on long-term development rather than pursuing short-term gains through excessive workloads, which often lead to safety incidents. Following Caskey and Ozel (2017) and Wu et al. (2023), we measure employee workload using Abnormal Discretionary Production (*AbDiscPro*), calculated as the residual from a production cost model estimated within each two-digit SIC code/year.

Column 2 of Table 8 shows that the coefficient on Classified Board is negative and statistically significant at the 5% level (-0.051), indicating that firms with classified boards maintain approximately 5.1% lower abnormal production requirements per employee. This result suggests that classified boards enable more sustainable workload management, potentially reducing fatigue and associated safety risks.

4.4.3 External Monitoring

Our third mechanism involves external monitoring through analyst coverage. Classified boards may enhance management stability and reduce agency problems related to information disclosure, creating a more transparent environment that attracts analyst following (Jiraporn et al., 2012). Bradley, Mao, and Zhang (2022) document that analyst coverage improves workplace safety through enhanced external monitoring.

Column 3 of Table 8 reports the results of regressing Ln(1+Analysts), the natural logarithm of one plus the number of analysts following the firm, on Classified Board. The coefficient is positive and statistically significant at the 1% level (0.113), indicating that firms with classified boards have approximately 11.9% greater analyst coverage. This result suggests that classified boards may indirectly improve workplace safety by fostering an environment conducive to external monitoring.

These findings collectively support our theoretical framework, demonstrating that classified boards improve workplace safety through multiple complementary channels: increased safety expenditures, reduced employee workloads, and enhanced external monitoring. These mechanisms help explain how governance structures designed primarily to regulate the shareholder-manager relationship can have substantial spillover effects on employee welfare.

[Insert Table 8 here]

4.5 Cross-Sectional Variation in Classified Board Effects

Our theoretical framework suggests that the relationship between classified boards and workplace safety should vary predictably with firm characteristics that influence managers' flexibility and the potential trade-off between short-term financial performance and employee

well-being. We examine this cross-sectional variation to provide further insights into the conditions under which classified boards most effectively enhance workplace safety.

4.5.1 Financial Constraints

Cohn and Wardlaw (2016) demonstrate that financial constraints negatively impact safety investments, leading to increased injuries. We hypothesize that financially constrained firms face stronger pressure to cut safety expenditures for short-term financial gains and therefore should benefit more from the protection against such pressures offered by classified boards.

Panel A of Table 7 presents results from splitting our sample based on measures of financial constraints, including the SA index, Z-score, free cash flow, and cash holdings. Across all measures, the coefficient on Classified Board is more negative (larger in magnitude) and more statistically significant in subsamples of firms facing higher financial constraints. For instance, the effect of classified boards on injury rates is approximately 40% stronger in firms with high SA index values compared to those with low values (-1.284 vs. -0.917). Similarly, the effect is substantially larger in firms with low Z-scores compared to those with high Z-scores (-1.316 vs. -0.876).

These results strongly support our hypothesis that classified boards are particularly valuable for protecting employee welfare in financially constrained firms, precisely those most likely to sacrifice safety investments for short-term financial considerations in the absence of takeover protection.

4.5.2 Monitoring Environment

Our theoretical framework suggests that classified boards will have stronger protective effects when alternative monitoring mechanisms are weaker, as the commitment value of the classified board becomes more essential for protecting implicit contracts with employees. We examine this

prediction by splitting our sample based on measures of the internal and external monitoring environment.

Panels B and C of Table 7 present results using measures of opacity and institutional ownership to proxy for the strength of monitoring. Consistent with our predictions, the coefficient on Classified Board is more negative and more statistically significant in subsamples with weaker monitoring environments. Specifically, the effect of classified boards on injury rates is approximately 35% stronger in firms with high opacity compared to those with low opacity (-1.215 vs. -0.897). Similarly, the effect is substantially larger in firms with low institutional ownership compared to those with high institutional ownership (-1.258 vs. -0.932).

These findings support our theoretical prediction that classified boards are particularly important for protecting employee welfare when other monitoring mechanisms are less robust. In such environments, the commitment device provided by classified boards plays a crucial role in ensuring that managers maintain their implicit contracts with employees regarding workplace safety.

[Insert Table 9 here]

4.6 Classified Boards and Firm Value

The relationship between classified boards and firm value remains contentious in academic discourse. While some scholars argue that classified boards negatively impact firm value by entrenching management (Faleye, 2007; Cohen and Wang, 2013), others maintain that they contribute positively to long-term growth by enabling valuable stakeholder investments (Cremers, Litov, and Sepe, 2017; Daines, Li, and Wang, 2021). Our findings of improved workplace safety in firms with classified boards raise an important question: Does this benefit for employees come at

the expense of shareholders, or can firms with classified boards achieve both social and financial benefits simultaneously?

To address this question, we analyze the relationship between classified boards and firm value, measured by Tobin's Q. Table 10 presents these results. Column 1 shows a positive and statistically significant coefficient on *Classified Board* (0.069, significant at the 5% level), indicating that firms with classified boards in our sample exhibit higher valuations on average. This finding aligns with stakeholder theory and the bonding hypothesis, suggesting that by enabling firms to maintain implicit contracts with employees and make valuable long-term investments, classified boards can enhance rather than destroy firm value.

Column 2 examines how this relationship varies with workplace safety by including an interaction term between *Classified Board* and *TCR*. The coefficient on *Classified Board* remains positive and significant (0.083), while the interaction term is negative and significant (-0.026). This indicates that the positive association between classified boards and firm value is stronger when workplace injury rates are lower.

These results suggest that the value-enhancing effect of classified boards operates in part through improved workplace safety. By enabling management to focus on long-term investments in employee well-being, classified boards can simultaneously reduce workplace injuries and enhance firm value. This finding supports the view presented by Shleifer and Summers (1988) that promoting stakeholder welfare is not a zero-sum game but can create value for shareholders as well.

Our analysis thus resolves an apparent paradox in the corporate governance literature: classified boards can enhance firm value precisely by protecting stakeholder interests, including

workplace safety for rank-and-file employees. This aligns with our theoretical framework, which emphasizes how governance structures that facilitate credible commitments to stakeholders can enhance long-term value creation.

[Insert Table 10 here]

5. Conclusion

This study represents the first direct test of whether classified boards benefit rank-and-file employees through improved workplace safety, extending the bonding hypothesis beyond its traditional focus on executives and major customers. Using comprehensive establishment-level injury data from OSHA and a novel classified board database, we document that firms with classified boards experience significantly lower workplace injury rates—approximately 12-13% below their counterparts without such governance provisions. Through multiple identification strategies including instrumental variables, entropy balancing, and a difference-in-differences design exploiting staggered declassifications, we establish a plausibly causal relationship between classified boards and improved workplace safety.

Our findings reveal several important economic mechanisms through which classified boards enhance workplace safety. First, firms with classified boards allocate approximately 8% more resources to discretionary expenses per employee, consistent with greater investment in safety infrastructure and training. Second, these firms maintain lower abnormal production requirements, reducing the excessive workloads that often contribute to workplace accidents. Third, classified boards are associated with increased analyst coverage, which enhances external monitoring of corporate practices including safety outcomes. The relative importance of these mechanisms varies predictably across firm characteristics, with the safety benefits of classified boards most pronounced in financially constrained firms and those with weaker monitoring environments.

These results provide significant contributions to several strands of literature. First, we identify a specific channel—workplace safety—through which classified boards benefit rank-and-file employees, addressing a critical gap in corporate governance research that has largely overlooked effects on ordinary workers. By documenting substantial safety improvements associated with classified boards, we demonstrate that governance structures primarily designed to regulate the shareholder-manager relationship can have material spillover effects on employee welfare.

Second, we extend the bonding hypothesis by showing that anti-takeover provisions protect not only relationships with executives and major customers but also commitments to rank-and-file employees—the largest and often most vulnerable stakeholder group affected by corporate control changes. This broadens our understanding of how governance structures enable valuable relationship-specific investments with diverse stakeholders.

Third, we contribute to the workplace safety literature by identifying an important governance determinant of safety outcomes. While prior work has focused primarily on financial constraints, monitoring mechanisms, and regulatory factors, our study highlights how broader governance structures influence safety investments and outcomes, with implications that translate to significant cost savings and human welfare improvements.

Our findings suggest a more nuanced view of classified boards than traditionally presented in the literature. While critics argue that classified boards primarily serve managerial entrenchment at shareholders' expense, we find that they enable greater investment in workplace safety, thereby improving employee welfare. Moreover, our analysis of firm valuations indicates that these improvements in employee welfare do not come at shareholders' expense—firms with classified boards exhibit higher Tobin's Q values, especially when they maintain better safety records. This

result suggests that the stakeholder benefits of classified boards can translate into enhanced shareholder value, challenging the notion that there must be a trade-off between shareholder and stakeholder interests.

These findings have important implications for ongoing debates about corporate governance. The evidence that classified boards enhance both workplace safety and firm value challenges the simplified agency-cost narrative that has dominated discourse on takeover defenses. Instead, our results support a stakeholder-oriented perspective that recognizes how governance structures allowing firms to make credible commitments to employees and other stakeholders can facilitate valuable long-term investments that ultimately benefit all parties.

In conclusion, our study provides compelling evidence that classified boards benefit rank-and-file employees by improving workplace safety. By enabling firms to make credible commitments to maintaining implicit contracts with employees and reducing managerial myopia, classified boards facilitate long-term investments in employee well-being that enhance both stakeholder welfare and firm value. These findings suggest that the purpose of corporate governance extends beyond merely aligning manager and shareholder interests to include facilitating valuable relationships with a broader set of stakeholders whose contributions are essential for long-term value creation.

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Appendix A Variable Definitions

Variable	Definition	Source
Variables in the Baseline Analysis in Table 3		
Total Case Rate (TCR)	The total number of work injury cases, divided by total working hours of the establishment in the year, then multiplied by 200,000. The multiplier 200,000 is approximately the annual working hours of 100 full-time employees (100 × 40 hours/week × 50 weeks/year).	OSHA
Classified Board (CB)	Indicator variable equal to one (zero otherwise) if the board is staggered in year t.	Guernsey et al. (2025)
EstSize	Natural logarithm of the number of employees in an establishment.	OSHA
Hours/Emp	Total hours (in thousands) worked in an establishment-year divided by the size of employees.	OSHA
Shut	Dummy variable equal to one if an establishment experienced a shutdown/lockout in a year, and zero otherwise.	OSHA
Strike	Dummy variable equal to one if an establishment experienced a labor force action in a year, and zero otherwise.	OSHA
Disaster	Dummy variable equal to one if an establishment observed a natural disaster in a particular year, and zero otherwise.	OSHA
Seasonal	Dummy variable equal to one if an establishment employed seasonal workers in a given year, and zero otherwise.	OSHA
Size	Natural logarithm of firm's beginning of year total assets.	Compustat
Leverage	Firm's total short-term and long-term debt divided by total assets, at the beginning of the year.	Compustat
PPE	Firm's net property, plant, and equipment divided by total assets, at the beginning of the year.	Compustat
CAPEX	Firm's current year capital expenditures divided by beginning total assets.	Compustat
Sales	Firm's current year sales divided by beginning total assets.	Compustat
Cash	Cash and short-term investments divided by total assets.	Compustat
MtB ratio	Ratio of market value of assets to book value of total assets.	Compustat
Dividend	Firm's total cash dividends paid to common shares divided by total assets.	Compustat
Additional Variables in Table 4		
IV_ Board Interlock	The average CB preferences of all directors in the board, and we calculate the CB preferences of each director based on historical governance experiences in other companies.	BoardEx
Additional Variables in Table 5		
Lnnum	Sum of injuries and illnesses that result in days away from work or transfers and other recordable cases divided by total hours worked and multiplied by 200,000	OSHA
DART	Number of cases that resulted in days away from work, job restrictions or transfers in an establishment-year divided by total hours worked and multiplied by 200,000.	OSHA
DAFWII	Number of cases that resulted in days away from work in an establishment-year divided by total hours worked and multiplied by 200,000.	OSHA
IRII	The total number of employee injury and illness cases divided by total hours worked and multiplied by 200,000.	OSHA
TCR/emp	Number of cases in a given establishment-year divided by the size of employees.	OSHA

Lnnum/emp	Sum of injuries and illnesses that result in days away from work or transfers and other recordable cases divided by the size of employees.	OSHA
DART/emp	Number of cases that resulted in days away from work, job restrictions or transfers in an establishment-year divided by the size of employees.	OSHA
DAFWII/emp	Number of cases that resulted in days away from work in an establishment-year divided by the size of employees.	OSHA
Ln(age)	Natural logarithm of firm age, calculated as the difference in year t and the first year the company appeared in the CRSP.	CRSP
Board Size	Number of directors on the board.	BoardEx
Board Independence	The fraction of independent directors among all directors.	BoardEx
Board Gender	The fraction of male directors among all directors.	BoardEx
E-index (minus CB)	The count of six shareholder rights: classified board, limits to shareholder bylaw amendments, poison pill, golden parachute, supermajority requirements for mergers, and charter amendments (Bebchuk, Cohen, and Ferrell, 2009) minus classified board.	ISS
IOins	The percentage of total ownership by institutional blockholders relative to all institutional investors.	Refinitiv
IO5	The percentage of the largest 5 institutional ownerships' size relative to total institutional ownership.	Refinitiv
Additional Variables in Table 6		
AbDiscPro	Abnormal production costs per employee.	Caskey and Ozel (2017)
Ln(SGA/emp)	Natural logarithm of Firm's selling, general, and administrative expenses divided by the size of employees.	Compustat
Ln(1+Coverage)	Natural logarithm of one plus the arithmetic mean number of unique monthly earnings forecasts during each calendar year for each firm.	I/B/E/S
Additional Variables in Table 7		
SA Index	$-0.737\text{Size}+0.043\text{Size}^2-0.040\text{Age}$	Hadlock et al. (2010)
Z-Score	0.3ib/at+sale/at+1.4re/at+1.2(act-lct)/at+0.6prcc_f*csho/lt	Altman's (1968)
Opaque	the prior three years' moving sum of the absolute value of discretionary accruals.	Hutton et al. (2009)
Institutional Ownership	Number of outstanding shares held by institutional investors divided by the total number of shares outstanding.	Thomson Reuters
Free Cash Flow	Firm's total free cash flows divided by total assets, which equals (oibdq – xint – txdi – capx)/at.	Compustat
Cash Holding	Sum of cash and cash equivalents (ceq) divided by total assets (at).	Compustat
Additional Variables in Table 8		
Health and Safety Strengths	The value of "Health and Safety Strengths".	KLD
Safety Index	"Health and Safety Strengths" minus "Health and Safety Concerns".	KLD
Additional Variables in Table 9		
Labor_penality	The natural logarithm of one plus the total dollar value of penalties paid at the firm level.	Violation Tracker
Labor_violation	An indicator variable for whether at least one violation occurred in a year.	Violation Tracker
Additional Variables in Table 10		

TobinQ	Market value of equity plus book value of assets minus book value of equity, minus balanced sheet deferred taxes, divided by book value of assets.	Compustat

Table 1: Sample Distribution

Panel A presents information on the number of establishment-year observations, firm-year observations, and the average number of *TCR*. Panel B presents cross-sectional information on the distribution of *TCR* by Fama-French 12 industry over the sample period from 2002 to 2011. *TCR* is the number of cases in a given establishment-year divided by the number of hours worked by all employees in the establishment and multiplied by 200,000.

Panel A: Observations and Average TCR by Year

Year	Est.-year Obs.	% of Obs.	Firm-year Obs.	% of Obs.	Average TCR
2002	5,234	10.37	552	9.17	11.17
2003	5,504	10.91	584	9.71	10.76
2004	5,949	11.79	609	10.12	10.43
2005	6,885	13.65	774	12.86	8.37
2006	6,386	12.66	755	12.55	7.93
2007	6,366	12.62	701	11.65	7.10
2008	5,959	11.81	779	12.95	6.02
2009	3,856	7.64	488	8.11	6.63
2010	3,490	6.92	522	8.68	5.67
2011	828	1.64	253	4.2	7.86

Panel B: Observations and Average TCR by Industry

Fama–French 12-industry	Obs.	% of Obs.	Average TCR
Consumer Nondurables	5,846	11.59	8.94
Consumer Durables	2,185	4.33	8.23
Manufacturing	12,403	24.58	5.26
Oil, Gas, and Coal Extraction and Products	151	0.3	4.21
Chemicals and Allied Products	1,370	2.72	3.04
Business Equipment	1,951	3.87	3.47
Wholesale, Retail, and Some Services	34	0.07	9.49
Healthcare, Medical Equipment, and Drugs	8,908	17.65	9.99
Other	5,227	10.36	7.04

Figure 1: Injury Rates of Classified Board and Non-classified Board Firms over Time

This figure depicts the yearly average injury rates of establishments owned by firms with classified board versus establishments owned by firms without classified board. *TCR* is the number of cases in a given establishment-year divided by the number of hours worked by all employees in the establishment and multiplied by 200,000.

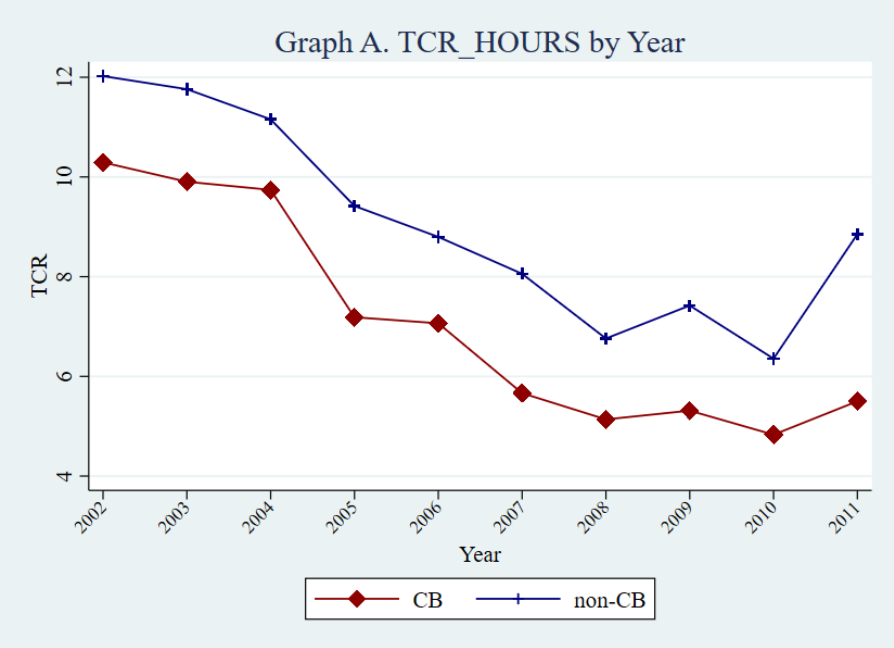

Table 2: Sample Statistics

This table reports summary statistics of the main variables used in the regressions. Variable definitions are provided in Appendix A. Panel A presents summary statistics of variables at the establishment level. Panel B presents the summary statistics of variables at the firm level. Panel C presents the correlation matrix of main variables

Panel A: Establishment-Level Summary Statistics

Variables	Obs	Mean	SD	P25	Median	P75
TCR	50,457	8.343	7.006	2.896	6.823	12.045
EstSize	50,457	4.981	1.010	4.317	4.883	5.485
Employees(000s)	50,457	0.284	0.654	0.075	0.132	0.241
Hours/Emp	50,457	1.925	0.349	1.706	1.979	2.119
Shut	50,457	0.085	0.279	0.000	0.000	0.000
Strike	50,457	0.002	0.048	0.000	0.000	0.000
Disaster	50,457	0.005	0.072	0.000	0.000	0.000
Seasonal	50,457	0.030	0.169	0.000	0.000	0.000

Panel B: Firm-Level Summary Statistics

Variables	Obs	Mean	SD	P25	Median	P75
Classified Board	6,017	0.557	0.497	0.000	1.000	1.000
Size	6,017	7.234	1.845	5.871	7.100	8.422
Leverage	6,017	0.236	0.173	0.101	0.222	0.339
PPE	6,017	0.277	0.176	0.140	0.240	0.380
CAPEX	6,017	0.044	0.035	0.020	0.033	0.056
Sales	6,017	1.275	0.719	0.790	1.106	1.574
Cash	6,017	0.108	0.110	0.024	0.069	0.153
MB	6,017	1.589	0.702	1.094	1.380	1.861
Dividend	6,017	0.011	0.016	0.000	0.003	0.017

Panel C: Pearson correlations

	TCR	CB	EstSize	Hours/Emp	Shut	Strike	Disaster	Seasonal	Size	Leverage	PPE	Capex	Sales	Cash	MB	Dividend
TCR	1															
CB	-0.11***	1														
EstSize	-0.01***	-0.01***	1													
Hours/Emp	-0.28***	0.11***	-0.04***	1												
Shut	-0.05***	0.03***	0.04***	0.04***	1											
Strike	0.02***	0.01	0.02***	0.01	0.03***	1										
Disaster	0.01	0.02***	0.01	0.02***	0.02***	0.01	1									
Seasonal	0.03***	-0.02***	0.04***	-0.05***	0.04***	0.01	0.03***	1								
Size	0.03***	-0.26***	0.14***	-0.12***	-0.06***	0.01	-0.01**	0.01	1							
Leverage	-0.01**	0.03***	-0.01***	0.08***	0.06***	0.01***	-0.01	-0.05***	0.04***	1						
PPE	0.23***	0.01***	-0.07***	-0.24***	-0.11***	-0.01**	-0.01*	-0.01**	0.09***	-0.05***	1					
CAPEX	0.18***	-0.01	-0.03***	-0.15***	-0.15***	-0.01*	0.01*	-0.01*	0.08***	-0.27***	0.65***	1				
Sales	0.11***	0.05***	0	-0.06***	-0.07***	0.01	0.01	0.02***	-0.28***	-0.25***	0.17***	0.28***	1			
Cash	0.03***	-0.14***	0.02***	-0.07***	0.07***	0.01	-0.01	0.04***	-0.11***	-0.26***	-0.21***	-0.10***	-0.11***	1		
MB	0.07***	-0.08***	0.04***	-0.12***	-0.13***	-0.01**	-0.01	0.05***	0.21***	-0.30***	0.12***	0.24***	0.06***	0.10***	1	
Dividend	-0.07***	-0.12***	0.05***	-0.03***	-0.05***	-0.01**	-0.01*	0.05***	0.27***	-0.13***	0.02***	-0.03***	-0.03***	-0.05***	0.60***	1

Table 3: Classified Board and Workplace Safety

This table reports the estimation results of fixed-effects OLS regressions on the effect of classified board and workplace safety. *TCR* is the number of accident cases in a given establishment-year divided by the number of hours worked by all employees in the establishment and multiplied by 200,000. *Classified Board* is an indicator variable equal to one (zero otherwise) if the board is staggered in year *t*. All other variables are defined in the Appendix. The sample period is from 2002 to 2011. All columns control for SIC3-digit industry-year fixed effects. In addition, column (1) controls for firm fixed effects, column (2) controls for establishment fixed effects, and column (3) controls for establishment - and establishment state-year fixed effects. *t*-statistics computed using standard errors adjusted for heteroscedasticity and clustered at the firm level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

	TCR		
	(1)	(2)	(3)
Classified Board	-1.032***	-1.073***	-1.049***
	(-3.077)	(-3.141)	(-3.265)
EstSize	-0.047	-0.381**	-0.376**
	(-0.566)	(-2.065)	(-2.068)
Hours/Emp	-2.740***	-2.125***	-2.114***
	(-4.674)	(-7.634)	(-7.902)
Shut	0.428***	0.099	0.087
	(3.582)	(0.752)	(0.675)
Strike	2.817***	1.426**	1.428**
	(3.305)	(2.196)	(2.239)
Disaster	1.154***	0.942*	1.014*
	(2.626)	(1.796)	(1.859)
Seasonal	0.575*	-0.268	-0.195
	(1.773)	(-0.738)	(-0.540)
Size	-0.193	-0.032	-0.030
	(-0.512)	(-0.081)	(-0.077)
Leverage	1.290	0.828	0.797
	(0.760)	(0.458)	(0.457)
PPE	3.002**	2.580*	2.611*
	(2.012)	(1.663)	(1.701)
CAPEX	-8.649**	-9.507**	-9.574**
	(-2.105)	(-2.403)	(-2.413)
Sales	-0.670*	-0.386	-0.399
	(-1.773)	(-1.016)	(-1.087)
Cash	-0.129	0.441	0.420
	(-0.101)	(0.340)	(0.320)
MB	0.227	0.236	0.242
	(1.097)	(1.308)	(1.380)
Dividend	-13.780	-7.067	-5.562
	(-1.346)	(-0.689)	(-0.588)
Firm_FE	Yes	No	No
Estab_FE	No	Yes	Yes
Industry_Year_FE	Yes	Yes	Yes
State_Year_FE	No	No	Yes
N	50,457	50,457	50,457
Adj_R2	0.390	0.628	0.630

Table 4: Tests to Address Endogeneity-Related Concerns

This table presents the estimation results of *Entropy Balancing Method* and *2SLS Method*. *TCR* is the number of accident cases in a given establishment-year divided by the number of hours worked by all employees in the establishment and multiplied by 200,000. *Classified Board* is an indicator variable equal to one (zero otherwise) if the board is staggered in year *t*. *IV_ Board Interlock* is the average CB preferences of all directors in the board, and we calculate the CB preferences of each director based on historical governance experiences in other companies. *Declassified* is an indicator that equals 1 if a firm declassified its classified board and 0 otherwise. The variables *Declassified(-2)* to *Declassified(2+)* are indicator variables that equal 1 if the observation corresponds to two years before, one year before, the year of, one year after, or two or more years after the declassification of the classified board, respectively, and zero otherwise. The sample period is from 2002 to 2011. Columns control for establishment- and SIC3-digit industry-year fixed effects. *t*-statistics computed using standard errors adjusted for heteroscedasticity and clustered at the firm level are reported in parentheses. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Entropy Balancing Method

	EBM	
	TCR	
	(1)	(2)
Classified Board	-1.025***	-0.744***
	(-3.421)	(-2.767)
Controls	Yes	Yes
Firm_FE	Yes	No
Estab_FE	No	Yes
Industry_Year_FE	Yes	Yes
N	50,457	50,457
Adj_R2	0.415	0.661

Panel B: IV-2SLS Method

	First Stage	Second Stage
	Classified Board	*TCR*
	(1)	(2)
IV_ Board Interlock	0. 465***	
	(4.34)	
Classified Board		-5.703**
		(-2.54)
Controls	Yes	Yes
Estab_FE	Yes	Yes
Industry_Year_FE	Yes	Yes
N	43,666	43,666
F-test	18.85	
Adj_R2	0.916	

Panel C: Difference-in-differences Analysis Based on Declassification

	TCR	
	(1)	(2)
Declassified	1.069***	
	(3.013)	
Declassified(-2)		0.029
		(0.076)
Declassified(-1)		0.572
		(1.129)
Declassified(0)		1.513***
		(3.218)
Declassified(+1)		1.306**
		(2.319)
Declassified(2+)		1.834**
		(2.459)
Controls	Yes	Yes
Estab_FE	Yes	Yes
Industry_Year_FE	Yes	Yes
N	12,036	12,036
Adj_R2	0.444	0.444

Table 5: Robustness Tests

This table presents the results of the robustness tests. Constant, control variables, establishment fixed effects, and industry-year fixed effects based on three digit SIC codes are included in all regressions, unless specified otherwise. The regressions are performed using OLS, with t-statistics computed using standard errors adjusted for heteroscedasticity and clustered at the firm level. Variable definitions are presented in the Appendix. *, **, *** indicates significance at the 10%, 5%, and 1% levels respectively.

Panel A: Alternative Measures of Workplace Safety

	Lnnum	*DART*	*DAFWII*	*IRII*
	(1)	(2)	(3)	(4)
Classified Board	-0.088***	-0.935***	-0.759***	-1.123***
	(-3.383)	(-3.074)	(-3.287)	(-3.018)
Controls	Yes	Yes	Yes	Yes
Estab_FE	Yes	Yes	Yes	Yes
Industry_Year_FE	Yes	Yes	Yes	Yes
N	50,457	50,457	50,457	50,438
Adj_R2	0.850	0.580	0.546	0.613
	TCR/emp	*Lnnum/emp*	*DART/emp*	*DAFWII/emp*
	(5)	(6)	(7)	(8)
Classified Board	-2.003***	-0.862***	-1.587***	-1.272***
	(-3.298)	(-3.351)	(-3.272)	(-3.506)
Controls	Yes	Yes	Yes	Yes
Estab_FE	Yes	Yes	Yes	Yes
Industry_Year_FE	Yes	Yes	Yes	Yes
N	50,457	50,457	50,457	50,457
Adj_R2	0.611	0.623	0.578	0.548

Panel B: Additional Controls

			TCR	
	(1)	(2)	(3)	(4)
Classified Board	-0.978***	-1.156***	-1.172***	-1.034***
	(-2.978)	(-3.519)	(-3.653)	(-3.381)
Ln(age)	-0.720*	0.042	0.106	-0.338
	(-1.836)	(0.095)	(0.246)	(-0.640)
Board size		1.514	1.569	0.058
		(1.581)	(1.640)	(0.123)
Board Independence		-3.339*	-2.857	-1.477
		(-1.895)	(-1.621)	(-0.782)
Board Gender		-0.444	-0.679	0.780
		(-0.179)	(-0.283)	(0.296)
E-index (minus CB)			-0.274***	-0.276***
			(-2.929)	(-2.781)
IOins				1.226*
				(1.676)
IO5				-2.207**
				(-2.035)
Controls	Yes	Yes	Yes	Yes
Estab_FE	Yes	Yes	Yes	Yes
Industry_Year_FE	Yes	Yes	Yes	Yes
N	49,366	43,178	43,178	31,222
Adj_R2	0.628	0.624	0.625	0.622

Panel C: Different Industry Fixed Effects

	TCR			
	(1)	(2)	(3)	(4)
Classified Board	-1.130***	-1.016***	-1.364***	-1.379**
	(-3.363)	(-2.971)	(-2.825)	(-2.453)
Controls	Yes	Yes	Yes	Yes
Estab_FE	Yes	Yes	Yes	Yes
Industry_Year_FE	Yes	Yes	Yes	Yes
Industry	four-digit SIC	two-digit SIC	FF 12	FF 48
N	49,584	50,457	50,457	50,383
Adj_R2	0.629	0.628	0.623	0.625

Panel D: Firm-level Evidence

	TCR			
	(1)	(2)	(3)	(4)
Classified Board	-0.818*	-0.779**	-1.046***	-1.192***
	(-1.944)	(-2.203)	(-2.969)	(-3.308)
Controls	Yes	Yes	Yes	Yes
Firm_FE	Yes	Yes	Yes	Yes
Industry_Year_FE	Yes	Yes	Yes	Yes
State_Year_FE	Yes	Yes	Yes	Yes
Industry	three-digit SIC	two -digit SIC	FF 12	FF 48
N	5,285	5,716	5,809	5,792
Adj_R2	0.650	0.663	0.650	0.653

Table 6: Classified Board and Safety Index

This table presents the results the classified board and safety index. *Classified Board* is an indicator variable equal to one (zero otherwise) if the board is staggered in year t. *Safety Index* is equal to 'Health and Safety Strengths' minus 'Health and Safety Concerns'. Constant, establishment fixed effects, and industry-year fixed effects based on three digit SIC codes are included in all regressions. The regressions are performed using OLS, with t-statistics computed using standard errors adjusted for heteroscedasticity and clustered at the firm level. Variable definitions are presented in the Appendix. *, **, *** indicates significance at the 10%, 5%, and 1%, levels respectively.

	Health and Safety Strength	*Safety_Index*
	(1)	(2)
Classified Board	0.258**	0.281*
	(2.517)	(1.906)
Controls	Yes	Yes
Estab_FE	Yes	Yes
Industry_Year_FE	Yes	Yes
N	31,655	31,653
Adj_R2	0.792	0.687

Table 7: Classified Board and Labor Violation

This table presents the results the classified board and labor violation. *Classified Board* is an indicator variable equal to one (zero otherwise) if the board is staggered in year t. *Labor penalty* is the natural logarithm of one plus the total dollar value of penalties paid at the firm level. *Labor violation* is an indicator variable for whether at least one violation occurred in a year. Constant, establishment fixed effects, and industry-year fixed effects based on three digit SIC codes are included in all regressions. The regressions are performed using OLS, with t-statistics computed using standard errors adjusted for heteroscedasticity and clustered at the firm level. Variable definitions are presented in the Appendix. *, **, *** indicates significance at the 10%, 5%, and 1%, levels respectively.

	Firm level	
	Labor penalty	*Labor violation*
	(1)	(2)
Classified Board	-0.735**	-0.078**
	(-2.090)	(-2.272)
Controls	Yes	Yes
Firm_FE	Yes	Yes
Year_FE	Yes	Yes
N	6,017	6,017
Adj_R2	0.413	0.377

Table 8: Underlying Channels

This table presents the results of the tests of the underlying channels behind the classified board-workplace safety relation. Constant, establishment fixed effects, and industry-year fixed effects based on three digit SIC codes are included in all regressions. The regressions are performed using OLS, with t-statistics computed using standard errors adjusted for heteroscedasticity and clustered at the firm level. Variable definitions are presented in the Appendix. *, **, *** indicates significance at the 10%, 5%, and 1%, levels respectively.

	AbDiscPro	*Ln(SGA/emp)*	*Ln(1+Coverage)*
	(1)	(2)	(3)
Classified Board	-1.735***	0.045***	0.137***
	(-2.802)	(3.167)	(2.697)
Controls	Yes	Yes	Yes
Estab_FE	Yes	Yes	Yes
Industry_Year_FE	Yes	Yes	Yes
N	45,257	42,024	50,457
Adj_R2	0.655	0.986	0.959

Table 9: Cross-Sectional Tests

This table presents the results of cross-sectional tests. Constant, controls, establishment fixed effects, and industry-year fixed effects based on three digit SIC codes are included in all regressions. The regressions are performed using OLS, with t-statistics computed using standard errors adjusted for heteroscedasticity and clustered at the firm level. Variable definitions are presented in the appendix. *, **, *** indicates significance at the 10%, 5%, and 1% levels respectively.

Panel A: Financial Constraints

	SA	
	High	Low
	TCR	
	(1)	(2)
Classified Board	-1.508***	-1.051**
	(-4.305)	(-2.468)
Controls	Yes	Yes
Estab_FE	Yes	Yes
Industry_Year_FE	Yes	Yes
N	25,428	24,136
Adj_R2	0.587	0.680

Panel B: Financial Distress

	Z-Score	
	High	Low
	TCR	
	(1)	(2)
Classified Board	-1.239**	-1.639***
	(-2.273)	(-3.731)
Controls	Yes	Yes
Estab_FE	Yes	Yes
Industry_Year_FE	Yes	Yes
N	25,312	22,211
Adj_R2	0.589	0.679

Panel C: Accounting Information Transparency

	Opaque	
	High	Low
	TCR	
	(1)	(2)
Classified Board	-0.811***	-0.317
	(-2.622)	(-0.916)
Controls	Yes	Yes
Estab_FE	Yes	Yes
Industry_Year_FE	Yes	Yes
N	25,540	20,631
Adj_R2	0.633	0.638

Panel D: External Supervision

	Institutional Ownership	
	High	Low
	TCR	
	(1)	(2)
Classified Board	-0.711	-1.242***
	(-1.477)	(-4.106)
Controls	Yes	Yes
Estab_FE	Yes	Yes
Industry_Year_FE	Yes	Yes
N	22,497	24,187
Adj_R2	0.633	0.646

Panel E: Cash

	Free Cash Flow		Cash Holding	
	High	Low	High	Low
	TCR		*TCR*	
	(1)	(2)	(3)	(4)
Classified Board	-0.235	-1.180***	-0.186	-0.850***
	(-0.771)	(-2.993)	(-0.469)	(-3.099)
Controls	Yes	Yes	Yes	Yes
Estab_FE	Yes	Yes	Yes	Yes
Industry_Year_FE	Yes	Yes	Yes	Yes
N	21,817	23,453	23,410	23,000
Adj_R2	0.636	0.637	0.621	0.667

Table 10: Classified Board and Firm Value

This table presents the relationship between classified board and firm's long-term value. Constant, firm fixed effects, and year fixed effects are included in all regressions. The regressions are performed using OLS, with t-statistics computed using standard errors adjusted for heteroscedasticity and clustered at the firm level. Variable definitions are presented in the Appendix. *, **, *** indicates significance at the 10%, 5%, and 1%, levels respectively.

	Firm level	
	TobinQ	
	(1)	(2)
Classified Board	0.041*	0.062**
	(1.862)	(2.543)
*Classified Board*TCR*		-0.003*
		(-1.832)
TCR		0.002*
		(1.853)
Controls	Yes	Yes
Firm_FE	Yes	Yes
Year_FE	Yes	Yes
N	6,017	6,017
Adj_R2	0.930	0.930