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Internal Governance Mechanisms and Corporate Misconduct^{*}

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Abstract

This study aims to provide new evidence linking internal corporate governance mechanisms and corporate misconduct, using a sample of 2,844 public US companies during the period 2007-2019. The results reveal that optimal size and diverse boards, including well-functioning audit committees, are negatively related to corporate violations. In contrast, we show that board members' independence, activity, and ownership are positively related to a firm's fraudulent activities. Therefore, not all internal governance mechanisms are related to lower corporate misconduct. Moreover, we show that some internal governance mechanisms, such as the share of female board members, mitigate only certain types of corporate misconduct. The results show that attempts to regulate corporate governance mechanisms should be considered with caution as they do not always provide the expected outcome.

Keywords: corporate misconduct; internal governance mechanisms; board of directors; committees; ownership;

JEL: G01; G34; G38; K22; L51; M41

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1. Introduction

Dyck et al. (2021) estimate that the cost of corporate fraud, detected and undetected, destroys 1.7% of the value of equity each year in the United States, which equaled US\$ 744 billion in 2020. A commonly held view is that corporate misconduct is the result of deficiencies in companies' internal governance. Therefore, it is not surprising that legislative reforms have been implemented with the aim of improving company governance worldwide. These reforms are aimed, in the first place, at improving internal governance and also external corporate governance mechanisms. The key internal mechanisms are the board of directors and the ownership structure. The primary external mechanism is the market for corporate control and the mass media (Heese et al., 2021), which are more difficult to regulate. These different mechanisms work together in a system to affect the governance of firms but should be considered complementary (Cremers and Nair, 2005).

Acharya et al. (2011) argue that internal governance mechanisms can mitigate agency problems and ensure that firms have substantial value even with little or no external governance by investors. In this study, we investigate violations of laws in US public companies that are exposed to the same external governance factors as governmental regulatory bodies or media, which complement internal governance and improve its efficiency. More importantly, this setting allows us to investigate the effect of various internal mechanisms on corporate misconduct and should not be biased by different external mechanisms.

In general, the literature shows a positive effect of internal governance reforms on firm performance and value (Fauver et al., 2017). However, corporate fraud has increased further in recent years despite reforms to better align managers' and shareholders' interests and institutionalize codes of conduct that improve managers' ethical performance (House, 2004). A good example of this is recent corporate scandals, such as the Volkswagen 2015 emission scandal (Bachmann et al., 2019) or the Wirecard bankruptcy (Jo et al., 2021), which generated billions of dollars in shareholder losses. These scandals have considerably renewed research attention on the link between companies' perceived governance problems and fraudulent activities.

Existing research shows that poor governance can cause fraudulent management activities, such as earnings restates (Agrawal and Chadha, 2005), environmental pollution (McKendall et al., 1999), stock manipulation (Cumming et al., 2015), and civil prosecution (Hutton et al., 2015). Despite a considerable body of research on the influence of corporate governance on corporate mis-

conduct, detailed evidence linking these two elements across different dimensions is lacking in the literature. At the same time, the literature recognizes the importance of internal governance as a method of preventing corporate misconduct but focuses on specific firm crimes, such as fraudulent financial reporting (Amiram et al., 2018, 2020; Efendi et al., 2007)¹; however, in our opinion, a broader view is needed to better understand the complex relationship.

This study empirically investigates the relationship between various internal governance constituencies and corporate misconduct in multiple dimensions. We focus on internal governance, as it should prevent corporate violations, even with little or no external governance from investors. However, external governance, even if crude and uninformed, can complement internal governance and improve efficiency (Acharya et al., 2011). The internal governance mechanisms that we analyze in this study relate to the composition of boards and audit committees and their activities, the position and characteristics of the chief executive officer (CEO), and the ownership structure of the company. We used a data set on the governance of 2,844 non-financial US listed companies that we merged with financial data and information on various categories of corporate violations for the years 2007-2020.

We show that it is important for a company to have an optimal board size to mitigate corporate misconduct. However, the results indicate that the relationship between the number of directors and corporate misconduct is convex (U-shaped). We also show that board diversity, including the presence of female board members, discourages corporate misconduct. A closer analysis of the types of misconduct indicates that the presence of female board members is negatively related to violations of environmental, safety, and financial laws. In contrast, we find that greater gender board diversity is positively related to violations of employment, government, and health-related laws. The results suggest that the type of law violation plays an important role in understanding its relationship with a firm's governance factors. Additionally, we confirm that the composition and activity of audit committees are important in fraud prevention and confirm that the use of one of the four largest accounting firms (Big 4) is associated with less corporate fraud. We also find that large blockholders and institutional investors help reduce corporate misconduct. By contrast, we show that board independence is positively related to corporate misconduct. Similarly, we find

¹Amiram et al. (2018) provide a review of the literature on financial reporting misconduct from the perspectives of law, accounting, and finance.

that a strong position of the CEO on the board, proxied by CEO duality, and board ownership are also positively related to corporate misconduct.

To check the robustness of our baseline results, we performed a series of robustness tests, such as adding a large set of control variables for board characteristics, using alternative measurements of the main variables, and employing a matching method for the sample. Our results remain unchanged after these robustness checks.

Our study contributes to the existing literature on internal governance in several ways. To our knowledge, this is the first empirical study to analyze the relationship between internal governance mechanisms and a wide range of corporate violations. Our results document that not all internal governance mechanisms work as expected in fraud protection, which could explain the increasing number of corporate misdeeds despite changes in laws in the past decade. Second, we analyze different types of corporate misconduct, including labor violations, government fraud, worker discrimination, and securities fraud (Heese and Pérez-Cavazos, 2020). In contrast, existing literature has typically considered only one specific type of misconduct (e.g., accounting- or security-related). Furthermore, our data focus on corporate misconduct, while previous literature has also considered violations committed by individuals, physicians, or politicians (Heese et al., 2021). The data set includes both the frequency of corporate violations and the value of the penalty imposed on the company. The granularity of the data allows us to analyze the relationship between existing governance mechanisms and corporate misconduct more closely. These findings have important policy implications for the ongoing discussion on improving the effectiveness of corporate internal governance.

The remainder of this paper is organized as follows. Section 2 describes the data and the research methods. Section 3 presents the main empirical results and a discussion. In Section 4, we present the results of an analysis in which we introduce additional control variables for firms' internal governance, and Section 5 concludes the paper.

2. Data and methodology

2.1. Sample composition

The sample was generated from an overlap between two comprehensive data sets. The first data set, Violation Tracker, covers corporate misconduct from 2000 to 2020. The database was

created and is being maintained by a non-governmental organization called Good Jobs First. It includes a wide range of corporate misconduct by US-incorporated companies, including the subsidiaries of foreign companies. The second data set includes information on the firm board size and composition, board committees, audit, CEO, and ownership for the years 2007-2019. The data were retrieved from the NRG Metrics database, which provides detailed hand-collected information on the corporate governance and ownership of listed firms worldwide. In our analysis, we concentrate only on listed US non-financial firms, and merge the two databases using company names, ISIN numbers, and trackers. We supplement the database with firm-level financial information retrieved from DataStream and Worldscope. After merging, our final sample consisted of 15,029 firm-year observations for 2,844 individual firms with data for the years 2007-2020. As we do not have observations for all firms during this period, the panel is unbalanced.

The sample spans many sectors of the economy and has a distribution of firms that is consistent with the composition of the US stock market. Table A1 in the Appendix presents the distribution of observations across sectors and years in the sample. The increase in observations over time is mainly due to NRG Metrics, which increased the coverage of companies listed in the US.

2.2. Corporate misconduct measures

The variable of interest in our study is corporate misconduct, defined as the activities and actions that organizational members engage in to deceive or manipulate investors or other key stakeholders (Baucus, 1994; Baucus and Baucus, 1997; Neville et al., 2019). In our study, corporate misconduct, which we recovered from the Violation Tracker database, includes only acts that violate laws. The data cover banking, consumer protection, false claims, environmental, wage and hour, safety, discrimination, price fixing, and other cases resolved by federal regulatory agencies and all parts of the Justice Department, plus cases from state Attorney Generals and selected state regulatory agencies. Consequently, we do not cover acts that are legal but are considered morally wrong (Moore et al., 2006).

Soltes (2019) used the Violation Tracker data for the period 2010-2017 and found that the probability that a publicly traded US firm will be sanctioned is 23% during a year. Thus, we can infer that corporate misconduct is considerably more common than indicated by previous studies, particularly in finance and accounting, using sanctions imposed by the Department of Justice or

Security and Exchange Commission. This difference implies that corporate misconduct may be under-reported in past studies as they ignore the sanctions of other administrative agencies.

Table 1 presents the distribution of the different categories of violations according to the number of violations and value of the penalties in the sample. The data show that most violations are related to safety, employment, and the environment. Further, the highest average value of fines is related to the environment, which reflects the tougher sentencing of environmental offenses. Karpoff and Lott Jr (1993) present evidence that the reputational cost of corporate fraud is high and constitutes the majority of costs incurred by companies accused or convicted of fraud. Therefore, both the number and value of misconduct have a negative impact on a company's long-term value.

Table 1

We follow Heese et al. (2021) and use two alternative dependent variables in our models. The first variable is the log of the total value of violation by firm i in year t (*Value*). This shows the direct damage to shareholders, as the fines do not present an expense position for the company. Indeed, they are paid from net income and reduce the amount of cash available to shareholders. The second variable is the log of the total number of violations by firm i in year t (*Number*), which shows the dynamics of the frequency of corporate violations in a given year. Although the second variable does not directly cause damage to shareholders, we assume that companies involved in numerous violations may have a reputation problem. Therefore, the second variable is a proxy for general misconduct in companies.

In the sensitivity analysis, we also use the log of the value and number between the different types of violation as dependent variables. Although we presume a negative relationship between corporate violation and governance, we may expect some variations, as some violations may be partially justified by the interests of shareholders.

Our sample of observed corporate misconduct has the bias of excluding those violations that have not been detected by the authorities. Our sample, however, consists only of US-listed companies that are under intense public scrutiny, which is likely to significantly reduce the problem of undetected misconduct Dyck et al. (2010).

As we are not able to establish the date of the misconduct, our empirical methodology uses the

date of sanction to proxy for corporate misconduct, not the date on which the violation of the law occurred. However, we may assume that corporate violations are quickly exposed, as our sample covers the period in which US regulations were in place to encourage whistleblowers to expose firms' law violations. This includes an award implemented by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010. The Act requires the Securities and Exchange Commission (SEC) to reward whistleblowers who voluntarily provide original information that leads to a successful enforcement action, yielding monetary sanctions of more than US\$ 1 million. Moreover, in the US, authorities have taken the most aggressive stance against white-collar crimes, which is reflected in the short period between exposure to corporate misconduct and legal sanctions.

In addition, we do not observe corporate violations that have been detected and prevented by companies' internal control mechanisms. Soltes (2019) argues that the vast majority of misconduct is detected by internal mechanisms but is not sanctioned by regulatory bodies for a variety of political and economic reasons, and reducing the aggregate incidence of corporate misconduct is likely to rely on firms' own efforts. However, our data set includes companies where corporate violations have not been reported as well as companies where they have been repeatedly reported over the years. Therefore, we argue that our data allow us to evaluate the most effective internal mechanism to prevent corporate violations. This limited but important aspect of governance has received little attention in current literature.

2.3. Internal corporate governance measures

We use five variables to measure a firm's internal corporate governance. First, we include the log of the number of directors on the board (*Board Size*). Jensen (1993) argues that large boards are less effective in internal governance than small boards. In his opinion, large boards are less effective in coordination, communication, and decision-making and are more likely to be controlled by the CEO. Beasley (1996) reported that board size is positively associated with the probability of changes in financial statements. On the one hand, small boards may not be efficient in detecting corporate misconduct because of missing knowledge and services. On the other hand, large boards may also be less efficient because of coordination problems. Henceforth, we expect a non-linear effect of the number of directors on monitoring, particularly for corporate violation prevention; therefore, we also include the variable representing the square of board size (*Board Size²*).

However, Raheja (2005) argues that the optimal board structure and effectiveness of the board in monitoring depend on the characteristics of the firm and its directors. Uzun et al. (2004) found no evidence of a relationship between board size and corporate fraud, while documenting that board composition is significantly related to the incidence of corporate fraud. Thus, the following variables control for board composition.

Second, we include a dummy variable that equals 1 if the chairman is also the CEO of the company, and 0 otherwise (*CEO Duality*). Finkelstein and D'aveni (1994) argue that CEO duality promotes CEO entrenchment by reducing the effectiveness of board monitoring. O'Connor Jr et al. (2006) confirm this by showing that in certain contexts, CEO duality can lead to larger agency problems and the likelihood of fraudulent financial reporting. Moreover, Farber (2005) found that fraudulent firms have a higher percentage of dual CEOs. Similarly, Chen et al. (2006) show that firms with CEO duality have an increased propensity to fraud. Therefore, we expect that the risk of CEO wrongdoing increases while the CEO also serves as the chairman of the board.

Third, we include the percentage of independent directors on the board (*Board Independence*). The monitoring role of independent directors has been widely documented. Thus, increased board independence is a commonly offered solution to curbing corporate misconduct, yet empirical evidence thus far has provided mixed results. In a meta-analysis of 135 studies on board independence and corporate misconduct, Neville et al. (2019) show that the relationship is generally negative but varies depending on the form of implementation that independence takes on, that is, independence of the audit committee or between the roles of CEO and board chairman. Hence, we do not make any strong assumptions regarding board independence.

Fourth, we control for the proportion of female board members (*Female Director*) since the relationship between gender and criminality is strong. Existing literature documents the predominance of men in virtually all forms of crime, including white-collar crimes (Benson and Gottschalk, 2015). Benson and Gottschalk (2015) report that despite gender inequality being much lower in Norway than in the United States, the gender gap in Norwegian white-collar crimes appears to be nearly identical to that observed in the United States. They report that in Norway, only 6.7% of the white-collar offenders were women, a rate similar to that observed in the US. An explanation they consider for these results is that women are less willing to take risks than men and less willing to hurt, victimize, or take advantage of others. It is not surprising that a growing number of studies

have shown that women are more ethical and less likely to be involved in crime and litigation than men at the company level (Adhikari et al., 2019). Similarly, Arnaboldi et al. (2021) report that a greater representation of women on the board of banks significantly reduces the frequency of misconduct fines. Therefore, we expect a negative relationship between female representation and company misconduct.

Fifth, we include a dummy variable *Big4* that equals 1 if the company is audited by one of the Big-4 audit companies and 0 otherwise. Auditors are associated with external governance, but the board decides to choose a particular firm. Therefore, we decided to control for internal decisions on the quality of the audit performed by audit companies. We follow the literature and use the size of the auditor, measured as the membership of the Big 4, to proxy for the quality of the audit, as large auditors are expected to have stronger incentives and greater competencies to provide high-quality auditing (DeAngelo, 1981). DeFond and Zhang (2014) document that Big N auditors also have greater competence in delivering high audit quality because of advantages such as their ability to attract higher quality input. Similarly, Che et al. (2020) show that Big 4 firms provide higher-quality audits than non-Big 4 firms, as they can recruit higher-quality personnel, place greater emphasis on learning, and have stronger incentives and monitoring systems. Therefore, Lennox et al. (2010) argue that there is a lower likelihood of fraudulent financial reporting if financial reports are audited by Big 4 accounting firms, because the auditors are concerned about their reputation. Therefore, we expect that the presence of the Big 4 audit companies is negatively related to company misconduct.

Panel A of Table 2 presents the summary statistics for the five internal corporate governance measures at the firm level for our sample. The data show that the average board consists of nine members, the majority of which are independent. At the same time, we find that female directors still represent a minority on US boards. Finally, a large majority of our firms are audited by one of the Big 4 companies.

Table 2

2.4. CEO characteristics

In the main analysis, we also use three characteristics of the CEO, which can determine the functioning of the board and violations of the firm. First, we use a dummy variable *CEO Woman*

that takes the value of 1 if the CEO is female and 0 otherwise. The gender of the CEO may be considered one of the characteristics that can influence a firm’s strategic decision-making process due to the different experiences, knowledge, and values held by women when compared to men (Triana et al., 2014).

Second, we control for CEO tenure (*CEO Tenure*) and the age (*CEO Age*), as we expect that age and tenure determine the CEO’s incentive, reputation, and career concerns (Gibbons and Murphy, 1992). However, we can assume that CEOs who stay longer with a company have stronger connections with other managers within the firm. Khanna et al. (2015) found that the connections developed by CEOs with top executives and directors through their appointment decisions increase the risk of corporate fraud. Furthermore, they argue that the greater the influence of a CEO on the board and audit committee, the less likely the board is to detect corporate wrongdoing. However, Khanna et al. (2015) suggested that CEO connectedness based on education, employment, or social network ties with top executives or directors has insignificant effects on both fraud and the expected cost of wrongdoing. Consequently, CEO tenure can affect corporate fraud in both ways.

Panel B of Table 2 presents the summary statistics for CEO characteristics. The average age of the CEO is 56 years, with a tenure of 10 years. In line with previous findings, we find that still very few women occupy a position as CEO (less than 5%).

2.5. Methodology

In this study, we use the following pooled ordinary least-squares (OLS) model to estimate how corporate governance influences corporate misconduct:

$$\text{Violation}_{i,t+j} = \alpha_0 + \alpha_1 \text{CG}_{i,t} + \alpha_2 \text{CEO}_{i,t} + \alpha_3 \text{Finance}_{i,t} + I_i + \eta_t + \varepsilon_{i,t} \quad (1)$$

where the dependent variable *Violation* is measured by the log of the total value of fines (*Value*) or the log of the total number of prosecuted violations (*Number*) in firm *i* in year *t*, where *j* is equal to 0, 1, 2, or 3. *CG*, *CEO*, and *Finance* are the vectors of governance, CEO-level, and firm-level control variables, respectively. Finally, *I* and η are industry and year fixed effects, respectively, and ε is an error term.

We follow the literature and control for firm characteristics related to corporate misconduct.

Wang et al. (2010) argue that larger and high-growth firms are less likely to engage in fraudulent activity as these companies attract more investor attention. We measure the size of the firm using the log of the book value of total assets (*Size*) and the sales growth rate as the annual growth rate of sales for one year (*Sales Growth*). We included the return on assets (*ROA*) and Tobin's Q (*Q*) which can also affect the incidence of corporate violations, as fraud is more likely to occur when a company is experiencing operating difficulties (Arlen and Carney, 1992). We further control for firms' leverage (*Leverage*) because firms with higher financial leverage are likely to be closely monitored by banks and fixed-income investors (Jensen and Meckling, 1976). Panel C of Table 2 presents the summary statistics for the control variables at the firm level and shows significant variation, particularly for the variables that proxy for firm growth, profitability, and size.

3. Empirical results

3.1. Main analysis

In Tables 3A and 3B , we show the results of the regression models using the log of the total value of fines and the total number of violations as the corporate misconduct measure. In both tables, the dependent variable is contemporaneous in column (1), as in Zaman et al. (2021), while in columns (2)–(4) it is forward lagged by one, two, and three periods, respectively. On the one hand, we are interested mainly in the results using the one-period forward-lagged measures of misconduct, as we want establish if prior internal governance affects corporate misbehavior. On the other hand, some of the misconducts are minor in our study and henceforth the consequences follow soon after. Therefore, we will mainly focus on the results presented in columns (1) and (2) of Tables 3A and 3B, where we find that the coefficients of interest are quite similar.

The results confirm that board size is related to the number of cases of corporate misconduct and the value of penalties. However, as expected, we find a non-linear relationship between board size and corporate misconduct, and the coefficients for board size are statistically significant at the 1% level in all specifications. In other words, the results indicate that the number and value of penalties will decrease as the number of directors increases to a point where the relationship reaches a maximum, from which the relationship will change and misconduct will start to grow again as the number of directors increases. Similarly, consistent with the literature, we find that the likelihood of corporate fraud decreases in terms of both the number and volume of fines if the

auditor is one of the top four accounting firms. The coefficient of Big 4 is negative and statistically significant for all the specifications at the 1% level.

We find that the coefficient of the ratio of independent board members is positively related to the number and value of corporate misconduct. The coefficient is statistically significant for all specifications in both tables. Therefore, board independence, which is commonly used to curb corporate misconduct, is ineffective. Neville et al. (2019) reported that the literature on board independence presents mixed evidence. However, they show that board composition is important, particularly the separation of the CEO-board chair. In fact, our results confirm that the separation of the CEO and board chair is positively and significantly related to corporate misconduct. These findings are consistent with the argument that CEO duality increases the power of the CEO over the board, preventing the independence between the board and management that is necessary to control managerial establishment (Fama and Jensen, 1983). Moreover, the greater the influence of a CEO on the board, the less likely the board is to suspect irregularities that a more independent board may have encountered.

Furthermore, the results suggest that the leadership characteristics may come at a price. We find that the coefficient of CEO age is positive and significant in all specifications, at least at the 5% level. In our opinion, the results indicate that older and more reputed CEOs have more power and are therefore more likely to influence the board to ignore misconduct. This reasoning is supported by the coefficient of CEO duality, which is positive and statistically significant in columns (1)-(3). Thus, we confirm that corporate misconduct is more frequent in companies in which the CEO is also the chairman of the board. In contrast, we find that CEO tenure is negatively related to corporate fraud. These results indicate that new CEOs are appointed because of uncovered corporate fraud. This theory is supported by the fact that the coefficient of CEO tenure is significant only in columns (1) and (2), but only in panel B.

We did not find evidence that a female CEO has an impact on corporate violations. In all specifications, the coefficient for female CEO is insignificant. In contrast, the coefficient of female directors is negative in all specifications, yet it is significant only when the dependent variable is the number of company violations. Therefore, the results indicate that an increase in female directors is more likely to scale misconduct by firms, but not the volume of fines. Most studies show that large fines could be attributed to male board members, which prevail; we do not observe

a significant reduction in this area.

Furthermore, we confirm that some firm-specific characteristics are related to corporate fraud. As expected, we find that the size of the company is positively related to corporate misconduct, with coefficients significant at the 1% level in all specifications. Conversely, the coefficient of ROA is negative and statistically significant for all specifications at the 1% level. In other words, the results show that less-ethical companies are larger and less profitable. Furthermore, we find that companies with lower leverage are more likely to commit fraud because the coefficient of leverage is negative and also significant in all specifications at the 1% level. Thus, the results confirm that monitoring by the debtors can reduce corporate fraud. In general, the results for the control variables are consistent with existing literature on corporate fraud (Khanna et al., 2015; Cumming et al., 2015).

Tables 3A and 3B

Potential endogeneity between governance measures and performance is a primary concern in the literature. We address the problem using lagged periods between the governance and violation measures, as we assume that prior internal governance may affect companies' current misconduct, yet we are also aware that the relationship could still go in both directions.

First, we extend the length of the lags further. The results are shown in columns (3)–(4). We used our dependent variable forward-lagged by two and three periods. We find that the coefficients for different lagged periods generally remain unchanged. The coefficients have the same signs yet are only statistically weaker. Thus, our results are robust, and likely to present a causal relationship between governance and corporate misconduct. For this reason, we employ only one-period forward-lagged measures of misconduct in the remaining regressions.

Next, we employ matching methodologies to address the potential problem of bias in omitted variables. We use the coarsened exact matching (CEM) algorithm which enables the estimation of causal effects by reducing the imbalance in covariates between the treated and control groups (Iacus et al., 2009). In our study, we encode the treated control group as those companies that were engaged in misconduct and matched it with the control group based on industry, size, and book-to-market. The results of the matching sample are listed in Table 4, where we employ two CEM matching algorithms. In columns (1) and (3), the one-to-many matching method is used

to maximize information on the sample, and weights are used in the subsequent regressions. In columns (2) and (4), one-to-one matching is used, where non-unique matched control observations are dropped randomly. The drawback of this method is that the companies in the control sample differ when re-running regressions. Columns (1)-(2) show the results using the penalty value as the dependent variable, while columns (3)-(4) show the number of instances of misconduct.

In Table 4, the coefficients of the governance variables have the same signs as in the main regressions. In addition, the coefficients for board size and the ratio of independent board members are statistically significant in all specifications. Furthermore, the coefficient of CEO age is positively and significantly related to corporate misconduct. Hence, the results confirm that board size and composition are important for firms' governance and, consequently, influence the likelihood of misconduct. Furthermore, we find that the coefficient for Big 4 is negative, but it is only significant in one of the specifications and only at the 10% level. Moreover, we find that the coefficient of the share of female directors is insignificant in all specifications. Therefore, the results indicate that the effect of female board members is limited.

Table 4

3.2. Sensitivity analysis

Next, we analyze the sensitivity of our results by applying our main specification separately to each type of corporate violation, as listed in Table 1. This allows us to test whether managers and monitors have different attitudes toward different types of fraud. In particular, financial fraud may be seen as positive by managers and supervisors as it may increase profitability and, consequently, their remuneration.

The results in Tables 5A and 5B confirm that the relationship between the level of governance and the misconduct of firms, both in volume and number of fines, are stable across violation types. We find that for most types of violations, the coefficients of the governance variables have the same sign and statistical significance, as in Tables 3A and 3B. The only exceptions are offenses related to finance, including accounting fraud, economic sanction violations, tax evasion, and investor protection abuses. When we control for financial fraud, we find that only the share of female directors is negatively related to the volume of fines paid and the number of financial offenses at the 5% level. Conversely, we find that the variable CEO Woman is positively related

to offenses linked to finance and negatively to the CEO tenure, but only at the 10% level. Interestingly, being audited by a Big 4 company decreases all types of penalties except financial ones.

The results are consistent with the literature showing that boards with greater gender differences are associated with lower tax avoidance (Richardson et al., 2016), fewer instances of account misreporting (Lara et al., 2017), less frequent and less severe securities fraud (Cumming et al., 2015), and less bank misconduct (Arnaboldi et al., 2021). Furthermore, we find that the share of female directors is negatively associated with violations related to the environment and safety. In all specifications, the coefficients are statistically significant, at least at 5%. By contrast, we find that the coefficient of the share of female directors is positively associated with crimes related to employment, government, and health. The coefficients are significant for all specifications at the 5% level. Consequently, we find that the direction of the impact of gender diversity is strongly related to the type of corporate misconduct. Furthermore, the results show that the relationship between governance and corporate misconduct differs depending on the type of offense. We attribute this to different perceptions of misconduct by the management board.

In all specifications, the firm-level variables influence the dependent variable in the directions identified in Tables 3A and 3B. Furthermore, these variables do not change their statistical significance and their magnitudes are highly stable. Therefore, to keep the following tables concise, we include only the coefficients for the variables that present additional proxies for governance that are crucial to the testing of our hypotheses.

Tables 5A and 5B

4. Other governance mechanisms

The literature on corporate governance uses additional proxy services to investigate the effectiveness of internal governance. We employ these variables to test the sensitivity of our main results. The summary statistics for these additional variables are presented in Table A2 of the Appendix.

4.1. Board activity

Vafeas (1999) showed that the frequency of board meetings is related to corporate governance and ownership characteristics. Therefore, we control for the number of board meetings in a given year, indicating the strength of board supervision and monitoring (*Meetings*). Furthermore, we control for the participation of board members in monitoring by considering their attendance at meetings (*Attendance*).

Corporate boards often delegate tasks under their responsibility to standing board committees, which often oversee important decisions of the firm. In our study, we control for the existence of an executive committee and a corporate social responsibility (CSR) committee using the dummy variable *Executive Comm.* and *CSR Comm.*, respectively. The variables take a value of 1 if an executive or a CSR committee exists within the board, and 0 otherwise. An executive committee is a standing committee that often acts as a steering committee for the entire board. In general, it is responsible for overseeing board policies and ensuring good governance. The CSR committee formulates and recommends a CSR policy to the board. The absence of a CSR committee is generally associated with corporate misconduct (Zaman et al., 2021).

We expand our analysis and add new variables that control board activity, which proxies the participation of members in the company's monitoring. We present the results in Table 6, which includes all governance- and firm-level variables, as shown in Tables 3A and 3B. In panels A and B, the dependent variables are the total value of penalties and the total number of violations, respectively.

We find that the number of board meetings and board members' attendance are positively related to the volume of fines paid by the company and the scale of corporate misconduct. In columns (1) and (2), the coefficients of the variables are positive and statistically significant, at the least at 5% level. Our results are in line with those of Chen et al. (2006), who argue that this may imply that the board discussed the questionable or illegal activities of the firm.

The results in columns (3) and (4) show that the presence of an executive committee and CSR committee is positively and statistically related to corporate misconduct. In column (5), we perform a horse race analysis and employ all variables simultaneously. We find that the coefficient of the variable CSR committee is positively related both to the value and to the number of penalties, and is statistically significant at the 1% level. An explanation for the results is that companies

heavily involved in misconduct try to mitigate the consequences by evolving the board, including the setup of a CSR committee. In fact, we observe that the coefficient for board meetings and attendance is also positive but statistically significant at the 10% level in panels A and B, respectively. Therefore, the results support Farber (2005), who showed that fraudulent companies take action to improve corporate governance after revealed misconduct.

Table 6

4.2. *Audit Committee*

The audit committee is one of the most powerful committees, responsible for the supervision of corporate governance, financial reporting, internal control structures, and audit functions (Arthaud-Day et al., 2006). In fact, several studies have reported that audit committees play an important role in fraud detection (Deli and Gillan, 2000; Johnson et al., 2009). Moreover, Owens-Jackson et al. (2009) report an inverse relationship between fraudulent financial statements and the number of meetings. Therefore, to provide effective supervision for the disclosure of financial information, the committee must have more frequent meetings. We control the activity of the committee using *Comm. Meetings*, measuring the frequency of committee meetings during a fiscal year.

Agrawal and Chadha (2005) document that the presence of an audit committee is related to the probability that a public company in the US restates its earnings. They show that the probability of restatement is lower in companies whose boards or audit committees have independent directors with financial expertise. Johnson et al. (2009) find that fraudulent firms have a higher proportion of insiders on their audit committees. They suggest that the number of insiders on the committee reduces the likelihood that the committee and external auditors they hire would detect corporate violations. Similarly, Ghafran and O’Sullivan (2013) associate firms’ fraudulent behavior with the existence of an audit committee and its composition.

Therefore, we control for the number of directors on the audit committee (*Comm. Size*) and the share of independent members in the committee (*Comm. Independent*). Additionally, we control for the share of members with a financial background (*Mem. Financial*) and share of female representatives (*Mem. Female*).

The results in Table 7 complement the existing results by documenting that the structure and activity of the audit committee are closely related to the volume of penalties (panel A) and the number of fraudulent activities (panel B). Column (1) shows that the share of independent members in the audit committee is negatively related to the value and number of penalties. The coefficients are statistically significant at the 1% level. Consistent with this result, we find that the number of committee meetings is negatively related to corporate misconduct. The coefficient is significant at the 1% level but only when the dependent variable is the number of corporate violations. By contrast, we find that the coefficient for the size of the audit committee is positive and statistically significant at the 1% level. Therefore, the results suggest that as an audit committee grows in size, its inefficiency increases, leading to additional corporate misconduct. In column (6), we rerun a horse race analysis and employ all the variables simultaneously. We find that all three variables remain significant, at least at the 5% level. Thus, we confirm the important role of audit committees in proving corporate misconduct. We show that audit committees, including independent board members who meet frequently, are more likely to report corporate misconduct. In contrast, we find that large audit committees are positively related to corporate misconduct, which we attribute to their inefficiency. Interestingly, we find that the coefficients for committee members with a financial background or female committee members are statistically insignificant in all the specifications.

Table 7

4.3. *Additional CEO characteristics*

In subsequent analyses, we control for the position and ownership of the CEO. We control for CEO origin using dummy variables. The dummy variable *Founder* takes the value of 1 if the CEO is the founder of the company and 0 otherwise. Similarly, we control for whether the CEO is a descendant of the founding family or an external hire using the variables *Descendant* and *Hire*, respectively. Agrawal and Chadha (2005) show that the probability of restating earnings is higher when the CEO belongs to a founding family. Moreover, the CEO's influence on the board should be greater when belonging to the founding family. The influence of a CEO on the board can reduce the effectiveness of these mechanisms in monitoring managers.

Thus, on the one hand, we may expect that the greater the influence of a CEO on the board, the less likely the board is to suspect irregularities that a more independent board may have detected. However, family members, particularly founders, identify with the firm and are highly motivated to protect the reputation of the firm and the family (Deephouse and Jaskiewicz, 2013). In fact, Dyer Jr and Whetten (2006) document that family companies are more socially responsible than non-family companies, which they attribute to family concerns about reputation and the desire to protect family assets. On the other hand, Agrawal and Chadha (2005) show that the probability of restatement is higher in companies where the CEO belongs to the founding family.

Similarly, CEO connections through other boards or social connections can influence board effectiveness. The more distracted a CEO, the less likely will their attention be directed to the identification of corporate violations. However, the counterargument is that busy CEOs are more experienced and connected than single-firm executives, which may be beneficial to the company. Thus, the trade-off between these two effects on board effectiveness has been mixed in the literature. We control the multi-directorship of CEOs using a dummy *Other Boards* that takes the value of 1 if the CEO is on another board of a company and 0 otherwise.

Finally, we control for the voting rights (*Voting Rights*) and ownership (*Ownership*) of the CEO. The existing literature shows that top managers with substantial stakes in their companies are relatively difficult to dismiss from the role, even in poorly performing companies (Denis et al., 1997). We assume that higher voting rights or ownership increases CEO power, which may help cover fraud or at least mitigate its consequences.

Our main regression suggests that the CEO's leadership role may influence companies' fraud activities. This is supported by the results in Table 8, whereas in panels A and B, the dependent variables are the total value of penalties and the total number of violations, respectively.

In columns (1) and (2), we find that the coefficient for CEO founder is negatively related to corporate misconduct, yet the coefficient is only significant in panel A. In contrast, we find in columns (3) and (4) that the coefficient for CEO descendant is positively related to corporate misconduct, yet the coefficients are again only statistically significant in panel A. Thus, the results indicate that companies with CEO founders are less likely to be involved in corporate fraud, while the opposite is true for those with CEO descendants. Columns (5)-(6) show that the coefficient of CEO hire, which indicates an outside member, is positively related to corporate fraud. However,

the coefficients are insignificant for all specifications. In general, the results indicate that founders are more attached to the company and less likely to engage in fraud.

In addition, we find that the coefficient for a CEO with multiple directorships is negative, which indicates that CEOs from less fraudulent companies are more likely to be offered a directorship position at another company. However, the coefficient is statistically insignificant for all specifications. By contrast, we find that a high share of CEO voting rights are positively related to corporate fraud. Similarly, we find a positive relationship between corporate misconduct and CEO shareholdings. The coefficients for voting rights and ownership are positive and statistically significant at least at the 5% level in panel A, but only significant for ownership in panel B. The results supplement the existing literature, showing that CEO ownership can weaken the internal governance of a company (Weisbach, 1988).

Table 8

4.4. Ownership structure

Previous results indicate that CEO ownership and voting rights are positively related to corporate misconduct. We expand the analysis by controlling for board shareholding and the shareholding of the executive and independent board members. Moreover, we introduce variables that control for large external and institutional shareholders, as well as the use of dual-class shares.

Denis et al. (1997) show that management ownership structure has an important influence on internal monitoring efforts, and that this influence is mainly due to the effect of the ownership structure on external control threats. Alexander and Cohen (1999) examined the relationship between ownership structure and corporate misconduct, and found that it occurs less frequently among firms in which management has a greater ownership stake. Based on these results, they argue that the ownership structure plays an important role in aligning the hidden actions of top management with shareholder interests. Similarly, Armstrong et al. (2010) find evidence that accounting irregularities occur less frequently in firms where CEOs have relatively higher levels of equity incentives. By contrast, Dechow et al. (1996) find that firms convicted by the SEC for fraudulent financial reporting tend to have a large ownership interest by insiders.

Similarly, Jensen (1993) argues that encouraging outside board members to have substantial equity interests provides better incentives to align their interests with shareholders. In contrast,

Dechow et al. (1996) document that the ownership of outside directors relative to insiders contributes to poor corporate governance and fraudulent reporting.

Consequently, the existing empirical results on the impact of insiders and outsiders on misconduct are ambiguous. Thus, we introduce a variable that controls for the share of ownership in the company by board members *Board*. We then break up this variable and control for the share of ownership held by executive directors *Executive* and independent board members *Independent*.

Another significant internal control mechanism is monitoring by holders of a large block of shares. Large external shareholders have incentives to replace inefficient managers to improve company performance. They have a general interest in maximizing profits and sufficient control over the firm's assets to have their interests respected (Shleifer and Vishny, 1997). Due to a sufficiently large stake in the company, the major shareholders find it profitable to monitor the top management, as their return on their own shares suffices to cover their monitoring costs (Shleifer and Vishny, 1986; Holderness and Sheehan, 1988). Moreover, they have not only an incentive to exercise control, but also the power to activate it through their voting rights. Similarly, institutional shareholders have an incentive to exercise control and prevent management from engaging in fraudulent behavior. Institutional investors can influence corporate decisions by playing an active role in their decision-making process. Chung et al. (2002) document that institutional investors monitor and constrain corporate managers' self-serving behavior. They report that the presence of large institutional shareholdings inhibits managers from manipulating reported profits toward the desired level or range of profits. Therefore, they argue that institutional investors contribute to improving corporate governance. Thus, we control the share of external shareholders, *Blockholders* and *Institutional*, respectively.

Lastly, we introduce a dummy variable, *Dual Class*, that takes the value of 1 if the company has dual-class shares and 0 otherwise. Companies with dual-class share structures are usually companies in which a separate class of stock offers its holders superior voting rights compared to common shareholders. The holders of superior shares are typically the company founder and/or top executives, who maintain company control even as their economic stake in the business may diminish. The divergence between voting and cash flow rights in dual-class firms exacerbates the agency conflicts between managers and external investors. Gompers et al. (2010) document that firm value is positively associated with insider cash flow rights, and negatively associated

with insider voting rights. Furthermore, Masulis et al. (2009) show that large excess control rights in dual-class firms lead to both greater private benefits of control and reduced market value for external shareholders. Therefore, we may assume that managers in dual-class share companies are more prone to violate laws because their governance structure is weaker.

We present the results in Table 9, where in panels A and B, the dependent variables are the total value of penalties and the total number of violations, respectively. In line with our previous results, we find that board member ownership is positively related to corporate fraud. The coefficient of board ownership in column (1) is positive and significant in both specifications. Our analysis shows that this result can be explained by the share of both executive and independent board members. The coefficients for both groups of board members are positive. The coefficients are statistically significant at the 5% level, except for executive board members in panel B. Therefore, our results confirm that the independence of board members and their ownership is not strongly protected against corporate fraud.

By contrast, we find that the ownership of large external shareholders and/or institutional shareholders is negatively related to corporate fraud. The coefficients of the blockholders and institutional shareholders are negative and statistically significant at the 1% level for all specifications. Our results are in line with those of Chung et al. (2002), who find that large institutional ownership is associated with less earnings management. The results show that large shareholders and institutional investors have the incentive and power to impose effective management monitoring (Shleifer and Vishny, 1997) and consequently, reduce corporate misconduct. However, another explanation could be that institutional shareholders prefer to invest in companies with good governance and a low level of corporate misconduct. Thus, the ownership of blockholders and institutional shareholders might be the result of good governance of companies, which in turn leads to lower misconduct.

On the one hand, in contrast to our expectations, we find that the coefficient for the dual class of dummy variables is negative and statistically significant at the 1% level in all specifications. Although often depicted as a poor governance characteristic, the results show that the use of dual-class shares is negatively related to corporate misconduct. On the other hand, a closer analysis of our data shows that the dual class shares in our sample are in those companies where the founder descendants and their affiliates hold at least 5% of the voting in the company and are represented

on the board of directors. Hence, in our data set, companies with a dual-class share represent a subsample of family firms. Thus, the results are in line with our previous findings and show that companies managed or controlled by the founder descendent are more likely to be involved in misconduct.

Column (6) shows the results of the horse race analysis. We find that the coefficients of the variables for blockholders, institutional investors, and dual-class shares remain negative and statistically significant. Therefore, the results confirm that large external shareholders, including institutional shareholders, are more likely to be present in ethical companies. In contrast, we find that the existence of dual-class shares in a company, which in our data set is a subsample of family firms, is positively related to corporate misconduct.

We further analyze the impact of ownership in the company and repeat this analysis using voting rights instead of ownership rights. We present the results in the Appendix of Table A3 and find that employing an alternative ownership variable does not change our main results. The coefficients of the variables in Table A3 have almost the same signs and statistical significance as shown in Table 9. Moreover, a horse race analysis using voting rights reconfirms the importance of external shareholders, including institutional shareholders, as well as the use of dual-class shares to explain the level of corporate misconduct.

Table 9

5. Conclusion

In the last two decades, there has been a comprehensive overhaul of corporate governance regulations in the United States and worldwide. Reforms were initiated after large scandals and were aimed to prevent future fraud. Despite legal and public efforts to improve corporate governance, corporate misconduct in the US has not decreased in recent decades. Our results show that one reason for this is that not all governance mechanisms work as expected.

Although we show that board size and composition are important for fraud prevention, we do not find that improving board independence decreases corporate misconduct. We find that gender diversity may reduce corporate misconduct, but only for female directors as opposed to female CEOs, and not for all types of offenses. We further show that an audit committee and its activities

are important for fraud prevention. In contrast, we document that the strong position of the CEO, proxied by their dual position on the board and voting or ownership rights, and board ownership are positively related to corporate misconduct. In contrast, we find that the founder CEO, large external blockholders, and institutional shareholders prevent companies from violating laws.

Our findings are important for understanding the different mechanisms of internal governance in corporate misconduct, which is a relevant topic in light of the ongoing debates on how to further improve corporate governance.

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Table 1: Penalties according to the type of violation in years 2007 - 2020

The table shows the average and maximal value of the penalty paid by a company, total number of violations, and firms affected by violation type over the years 2007-2020. Value of fines in millions of USD. *Source:* Good Jobs First's Violation Tracker and the authors' calculations.

| Violation Category | Average | Max | Count | No. Unique Firms |
|--------------------|---------|---------|--------|------------------|
| Environment | 5.3 | 9,357.0 | 4,857 | 496 |
| Safety | 0.2 | 900.0 | 14,809 | 791 |
| Employment | 3.3 | 694.7 | 2,453 | 519 |
| Competition | 19.9 | 500.4 | 240 | 133 |
| Consumer | 8.1 | 5,002.4 | 1,279 | 149 |
| Financial | 51.9 | 2,300.0 | 151 | 110 |
| Gov. Contracting | 36.7 | 1,156.0 | 416 | 131 |
| Healthcare | 107.1 | 3,166.1 | 143 | 36 |
| Other | 8.0 | 50.0 | 7 | 7 |
| Total | 3.7 | 9,357.0 | 24,355 | 988 |

Table 2: Descriptive statistics

The table provides the means and the 25th, 50th, and 75th percentiles of the main variables used in the analysis. The sample consists of 15,029 firm-year observations of 2,844 public companies between 2007 and 2019. Board Size is the number of board members. CEO Duality is a dummy variable that takes the value of 1 if the positions of the CEO and chairman are held by the same person, and 0 otherwise. Board Independence is the ratio of independent members to board size. Female Director refers to the number of female directors on the board. Big 4 is a dummy variable that takes the value of 1 if the firm's audit company belongs to the top four auditor firms, and 0 otherwise. CEO Woman is a dummy variable that equals 1 if the CEO of the company is female and 0 otherwise. CEO Age is the log of CEO age. CEO Tenure is the log of the CEO tenure. Size is the log of total assets in millions of dollars. Sales growth is the percentage of change in sales from the previous year. ROA is the ratio of pre-tax income to the total assets. Q is the ratio of the market value to the book value of equity. Leverage is the ratio of total debt to assets.

| | Mean | p25 | p50 | p75 | Obs. |
|--|--------|--------|--------|--------|--------|
| <i>Panel A: Internal governance measures</i> | | | | | |
| Board Size | 9.266 | 8.000 | 9.000 | 11.000 | 15,014 |
| CEO Duality | 0.434 | 0.000 | 0.000 | 1.000 | 15,029 |
| Board Independence | 0.809 | 0.750 | 0.850 | 0.880 | 15,029 |
| Female Director | 0.159 | 0.100 | 0.143 | 0.222 | 15,014 |
| Big 4 | 0.894 | 1.000 | 1.000 | 1.000 | 14,975 |
| <i>Panel B: CEO characteristics</i> | | | | | |
| CEO Woman | 0.048 | 0.000 | 0.000 | 0.000 | 15,029 |
| CEO Age | 55.914 | 51.000 | 56.000 | 60.000 | 14,813 |
| CEO Tenure | 10.010 | 4.000 | 7.000 | 13.000 | 14,825 |
| <i>Panel C: Firm characteristics</i> | | | | | |
| Size | 10.970 | 0.818 | 2.687 | 8.973 | 14,832 |
| Sales Growth | 0.101 | -0.007 | 0.058 | 0.143 | 14,605 |
| ROA | 0.033 | 0.022 | 0.058 | 0.097 | 14,797 |
| Q | 2.166 | 1.233 | 1.670 | 2.504 | 14,790 |
| Leverage | 0.229 | 0.065 | 0.212 | 0.337 | 14,801 |

Table 3A: Corporate governance and the total value of penalties

This table reports the results of the internal corporate governance measures. The dependent variable is the log of the total penalty value. Table 2 presents the independent variables. All specifications include constant, industry, and year fixed effects. Robust standard errors are in parentheses. ***, **, * indicate statistical significance at the 1, 5, and 10% levels, respectively.

| | Value _t | Value _{t+1} | Value _{t+2} | Value _{t+3} |
|-------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Board Size | -18.545*** (1.997) | -19.118*** (1.970) | -17.641*** (2.256) | -14.607*** (2.654) |
| Board Size ² | 4.597*** (0.479) | 4.753*** (0.476) | 4.324*** (0.539) | 3.573*** (0.626) |
| CEO Duality | 0.268*** (0.099) | 0.245** (0.098) | 0.201* (0.109) | 0.055 (0.124) |
| Board Independence | 2.217*** (0.437) | 2.429*** (0.431) | 1.989*** (0.496) | 1.447** (0.593) |
| Female Director | -0.505 (0.442) | -0.681 (0.440) | -0.531 (0.501) | -0.496 (0.593) |
| Big 4 | -0.582*** (0.121) | -0.590*** (0.119) | -0.497*** (0.141) | -0.527*** (0.181) |
| CEO Woman | 0.032 (0.212) | 0.224 (0.215) | 0.108 (0.244) | -0.037 (0.283) |
| CEO Age | 0.749** (0.349) | 0.735** (0.351) | 0.823** (0.401) | 0.968** (0.477) |
| CEO Tenure | -0.059 (0.054) | -0.031 (0.054) | 0.023 (0.060) | 0.157** (0.071) |
| Size | 1.519*** (0.040) | 1.486*** (0.041) | 1.553*** (0.045) | 1.669*** (0.051) |
| Sales | -0.272*** (0.104) | -0.115 (0.099) | -0.061 (0.139) | -0.004 (0.218) |
| ROA | -2.073*** (0.228) | -2.375*** (0.225) | -2.002*** (0.300) | -1.064* (0.583) |
| Q | -0.016 (0.027) | 0.026 (0.026) | 0.052 (0.033) | 0.021 (0.045) |
| Leverage | -1.388*** (0.231) | -1.414*** (0.230) | -1.761*** (0.266) | -2.039*** (0.326) |
| Constant | -1.770 (2.618) | -0.782 (2.618) | -3.094 (2.996) | -7.830** (3.517) |
| Industry FE | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes |
| Observations | 14.194 | 14.194 | 12.011 | 9.848 |
| R ² | 0.267 | 0.266 | 0.254 | 0.241 |
| Adj. R ² | 0.265 | 0.264 | 0.252 | 0.239 |

Table 3B: Corporate governance and the number of company violations

This table reports the results of the internal corporate governance measures. The dependent variable is the log of the number of misconducts. Table 2 presents the independent variables. All specifications include constant, industry, and year fixed effects. Robust standard errors are in parentheses. ***, **, * indicate statistical significance at the 1, 5, and 10% levels, respectively.

| | Number _t | Number _{t+1} | Number _{t+2} | Number _{t+3} |
|-------------------------|----------------------|-----------------------|-----------------------|-----------------------|
| Board Size | -2.803*** (0.258) | -2.865*** (0.254) | -2.569*** (0.284) | -2.212*** (0.333) |
| Board Size ² | 0.686*** (0.062) | 0.702*** (0.062) | 0.623*** (0.069) | 0.536*** (0.079) |
| CEO Duality | 0.052*** (0.012) | 0.047*** (0.012) | 0.044*** (0.014) | 0.023 (0.015) |
| Board Independence | 0.399*** (0.049) | 0.401*** (0.048) | 0.347*** (0.055) | 0.322*** (0.067) |
| Female Director | -0.153*** (0.053) | -0.166*** (0.052) | -0.153** (0.059) | -0.159** (0.070) |
| Big 4 | -0.100*** (0.013) | -0.098*** (0.013) | -0.086*** (0.015) | -0.084*** (0.019) |
| CEO Woman | -0.021 (0.024) | -0.002 (0.024) | 0.000 (0.027) | -0.014 (0.032) |
| CEO Age | 0.211*** (0.041) | 0.212*** (0.040) | 0.219*** (0.046) | 0.247*** (0.054) |
| CEO Tenure | -0.024*** (0.007) | -0.019*** (0.007) | -0.013* (0.007) | 0.004 (0.009) |
| Size | 0.199*** (0.005) | 0.190*** (0.005) | 0.199*** (0.006) | 0.214*** (0.007) |
| Sales | -0.010 (0.012) | 0.006 (0.012) | 0.019 (0.016) | 0.024 (0.026) |
| ROA | -0.403*** (0.031) | -0.419*** (0.030) | -0.407*** (0.041) | -0.245*** (0.077) |
| Q | 0.004 (0.003) | 0.008*** (0.003) | 0.012*** (0.004) | 0.008 (0.005) |
| Leverage | -0.213*** (0.027) | -0.214*** (0.027) | -0.248*** (0.031) | -0.289*** (0.039) |
| Constant | -0.259 (0.329) | -0.061 (0.325) | -0.473 (0.367) | -1.102** (0.431) |
| Industry FE | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes |
| Observations | 14.194 | 14.194 | 12.011 | 9.848 |
| R ² | 0.289 | 0.286 | 0.278 | 0.270 |
| Adj. R ² | 0.287 | 0.284 | 0.276 | 0.268 |

Table 4: CEM

This table reports the results of the matched samples obtained using coarsened exact matching. The matching criteria are industry, firm size, and book-to-market ratio. In Columns (1) and (3), the employed matching algorithm is one-to-many, whereas in Columns (2) and (4), matching is performed one-to-one. In Columns (1)-(2) and (3)-(4), the dependent variables are the log of the penalty value and number of penalties, respectively. Table 2 presents the independent variables. All specifications include constant, industry, and year fixed effects, as well as firm-level control variables, as in Table 3A, which are not presented here for brevity. Robust standard errors are in parentheses. ***, **, * indicate statistical significance at the 1, 5, and 10% levels, respectively.

| | (1) | (2) | (3) | (4) |
|-------------------------|-----------------------|---------------------|----------------------|---------------------|
| Board Size | -12.335*** (3.937) | -8.956** (4.527) | -1.643*** (0.490) | -1.176** (0.535) |
| Board Size ² | 3.175*** (0.909) | 2.487** (1.035) | 0.416*** (0.113) | 0.315** (0.123) |
| CEO Duality | 0.013 (0.154) | 0.162 (0.170) | 0.016 (0.019) | 0.036* (0.020) |
| Board Independence | 4.210*** (0.635) | 1.930** (0.787) | 0.562*** (0.074) | 0.298*** (0.085) |
| Female Director | -0.117 (0.711) | -0.077 (0.813) | -0.097 (0.084) | -0.149 (0.092) |
| Big 4 | -0.175 (0.254) | -0.096 (0.338) | -0.047* (0.027) | -0.043 (0.035) |
| CEO Woman | 0.097 (0.334) | 0.179 (0.386) | -0.026 (0.038) | -0.041 (0.039) |
| CEO Age | 1.501** (0.595) | 0.645 (0.686) | 0.334*** (0.071) | 0.284*** (0.074) |
| CEO Tenure | 0.013 (0.084) | 0.043 (0.096) | -0.014 (0.010) | -0.014 (0.011) |
| Firm controls | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes |
| Observations | 12.379 | 6.843 | 12.379 | 6.843 |
| R ² | 0.040 | 0.034 | 0.073 | 0.071 |
| Adj. R ² | 0.038 | 0.030 | 0.071 | 0.071 |

Table 5A: Corporate governance and the total value of penalties by offense group

This table reports the results of the internal corporate governance measures and diverse corporate violations. The dependent variable is the log of the total penalty value for the main violation categories: environment, safety, employment, competition, consumer, financial, government contracting, and healthcare. Table 2 presents the independent variables. All specifications include constant, industry, and year fixed effects, as well as firm-level control variables, as in Table 3A, which are not presented here for brevity. Robust standard errors are in parentheses. ***, **, * indicate statistical significance at the 1, 5, and 10% levels, respectively.

| | Env | Safety | Empl | Comp | Cons | Fin | Gov | Health |
|-------------------------|-----------------------|-----------------------|-----------------------|----------------------|----------------------|---------------------|----------------------|----------------------|
| Board Size | -12.535*** (1.483) | -11.701*** (1.492) | -11.858*** (1.555) | -2.775*** (0.773) | -3.262*** (1.043) | -0.889 (0.665) | -3.233*** (1.055) | -1.772** (0.803) |
| Board Size ² | 3.092*** (0.362) | 2.962*** (0.360) | 2.892*** (0.381) | 0.672*** (0.192) | 0.671*** (0.256) | 0.206 (0.162) | 0.752*** (0.262) | 0.379** (0.192) |
| CEO Duality | 0.139** (0.069) | 0.300*** (0.074) | 0.015 (0.069) | -0.006 (0.029) | -0.069 (0.043) | 0.030 (0.024) | 0.161*** (0.042) | 0.003 (0.024) |
| Board Indep. | 1.795*** (0.266) | 1.824*** (0.297) | 0.844*** (0.285) | 0.233** (0.106) | 0.465*** (0.164) | 0.080 (0.086) | -0.058 (0.184) | 0.200** (0.078) |
| Female Dir. | -0.937*** (0.290) | -0.700** (0.329) | 0.723** (0.307) | -0.121 (0.117) | 0.143 (0.188) | -0.283** (0.115) | 0.475*** (0.162) | 0.246*** (0.087) |
| Big 4 | -0.325*** (0.069) | -0.179** (0.088) | -0.390*** (0.068) | -0.119*** (0.030) | -0.290*** (0.039) | -0.012 (0.024) | -0.205*** (0.032) | -0.147*** (0.024) |
| CEO Woman | -0.173 (0.141) | -0.023 (0.156) | -0.197 (0.150) | -0.092* (0.051) | 0.015 (0.105) | 0.120* (0.071) | 0.132 (0.108) | -0.071* (0.038) |
| CEO Age | 0.987*** (0.214) | 0.851*** (0.246) | 0.421* (0.237) | -0.152* (0.085) | -0.209 (0.175) | -0.059 (0.101) | 0.187 (0.137) | 0.094 (0.076) |
| CEO Tenure | -0.100*** (0.036) | -0.044 (0.039) | 0.023 (0.039) | 0.017 (0.015) | 0.023 (0.024) | -0.025* (0.015) | -0.037 (0.023) | -0.025* (0.013) |
| Firm controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 14.194 | 14.194 | 14.194 | 14.194 | 14.194 | 14.194 | 14.194 | 14.194 |
| R ² | 0.193 | 0.195 | 0.115 | 0.025 | 0.096 | 0.012 | 0.055 | 0.045 |
| Adj. R ² | 0.191 | 0.193 | 0.112 | 0.023 | 0.093 | 0.010 | 0.052 | 0.043 |

Table 5B: Corporate governance and the number of company violations by offense group

This table reports the results of the internal corporate governance measures and diverse corporate violations. The dependent variable is the log of total number of misconducts by the main violation categories: environment, safety, employment, competition, consumer, financial, government contracting and healthcare. Table 2 presents the independent variables. All specifications include constant, industry, and year fixed effects, as well as firm-level control variables, as in Table 3A, which are not presented here for brevity. Robust standard errors are in parentheses. ***, **, * indicate statistical significance at the 1, 5, and 10% levels, respectively.

| | Env | Safety | Empl | Comp | Cons | Fin | Gov | Health |
|-------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Board Size | -1.209*** (0.155) | -1.813*** (0.209) | -0.934*** (0.120) | -0.151*** (0.043) | -0.233** (0.107) | -0.034 (0.033) | -0.180*** (0.062) | -0.074* (0.042) |
| Board Size ² | 0.299*** (0.038) | 0.451*** (0.051) | 0.227*** (0.029) | 0.037*** (0.011) | 0.043 (0.026) | 0.008 (0.008) | 0.041*** (0.015) | 0.015 (0.010) |
| CEO Duality | 0.017** (0.007) | 0.049*** (0.010) | 0.004 (0.005) | -0.001 (0.002) | -0.015*** (0.004) | 0.002 (0.001) | 0.008*** (0.002) | -0.000 (0.001) |
| Board Indep. | 0.176*** (0.026) | 0.264*** (0.036) | 0.059*** (0.021) | 0.015** (0.006) | 0.052*** (0.014) | 0.003 (0.005) | -0.000 (0.010) | 0.014*** (0.004) |
| Female Dir. | -0.089*** (0.029) | -0.159*** (0.043) | 0.057** (0.023) | -0.008 (0.006) | 0.013 (0.015) | -0.017*** (0.006) | 0.024*** (0.009) | 0.014*** (0.005) |
| Big 4 | -0.035*** (0.006) | -0.046*** (0.010) | -0.031*** (0.005) | -0.006*** (0.002) | -0.029*** (0.004) | -0.001 (0.001) | -0.012*** (0.002) | -0.008*** (0.001) |
| CEO Woman | -0.018 (0.013) | -0.017 (0.018) | -0.015 (0.011) | -0.004 (0.003) | 0.014 (0.012) | 0.005 (0.003) | 0.005 (0.005) | -0.004* (0.002) |
| CEO Age | 0.107*** (0.021) | 0.176*** (0.032) | 0.025 (0.017) | -0.008* (0.005) | -0.001 (0.014) | -0.003 (0.005) | 0.016** (0.008) | 0.008* (0.004) |
| CEO Tenure | -0.010*** (0.004) | -0.018*** (0.005) | 0.001 (0.003) | 0.001 (0.001) | 0.002 (0.002) | -0.002* (0.001) | -0.003*** (0.001) | -0.001* (0.001) |
| Firm controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 14.194 | 14.194 | 14.194 | 14.194 | 14.194 | 14.194 | 14.194 | 14.194 |
| R ² | 0.193 | 0.194 | 0.118 | 0.023 | 0.084 | 0.012 | 0.052 | 0.041 |
| Adj. R ² | 0.191 | 0.192 | 0.116 | 0.021 | 0.082 | 0.010 | 0.050 | 0.039 |

Table 6: Board activity

This table reports the results for the additional variables that control for board activity. The dependent variable is the log of the total penalty value and the log of the total number of misconducts in Panels A and B. The independent variables are defined in Table A2 of the Appendix. All specifications include constant, industry, and year fixed effects, as well as the governance and firm-level control variables, as in Table 3A, which are not presented here for brevity. Robust standard errors are in parentheses. ***, **, * indicate statistical significance at the 1, 5, and 10% levels, respectively.

| | (1) | (2) | (3) | (4) | (5) |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|
| <i>Panel A: Total value of penalties</i> | | | | | |
| Meetings | 0.318*** (0.106) | | | | 0.205* (0.109) |
| Attendance | | 1.554*** (0.255) | | | 0.070 (0.461) |
| Executive Comm. | | | 0.274** (0.127) | | 0.152 (0.128) |
| CSR Comm. | | | | 1.477*** (0.206) | 1.399*** (0.207) |
| Governance Controls | Yes | Yes | Yes | Yes | Yes |
| Firm Controls | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |
| Observations | 13.829 | 14.171 | 12.441 | 12.441 | 12.130 |
| R ² | 0.269 | 0.267 | 0.260 | 0.264 | 0.267 |
| Adj. R ² | 0.267 | 0.265 | 0.258 | 0.262 | 0.265 |
| <i>Panel B: Total number of violations</i> | | | | | |
| Meetings | 0.029** (0.012) | | | | 0.019 (0.012) |
| Attendance | | 0.209*** (0.034) | | | 0.104* (0.057) |
| Executive Comm. | | | 0.054*** (0.016) | | 0.038** (0.016) |
| CSR Comm. | | | | 0.220*** (0.028) | 0.205*** (0.028) |
| Governance Controls | Yes | Yes | Yes | Yes | Yes |
| Firm Controls | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes |
| Observations | 13.829 | 14.171 | 12.441 | 12.441 | 12.130 |
| R ² | 0.290 | 0.288 | 0.276 | 0.282 | 0.286 |
| Adj. R ² | 0.288 | 0.286 | 0.274 | 0.280 | 0.284 |

Table 7: Audit Committee

This table reports the results of additional variables controlling for audit committee. The dependent variable is the log of the total penalty value and the log of the total number of misconducts in Panels A and B. The independent variables are defined in Table A2 of the Appendix. All specifications include constant, industry, and year fixed effects, as well as the governance and firm-level control variables, as in Table 3A, which are not presented here for brevity. Robust standard errors are in parentheses. ***, **, * indicate statistical significance at the 1, 5, and 10% levels, respectively.

| | (1) | (2) | (3) | (4) | (5) | (6) |
|--|----------------------|----------------------|---------------------|------------------|-------------------|----------------------|
| <i>Panel A: Total value of penalties</i> | | | | | | |
| Comm. Independent | -3.641*** (1.239) | | | | | -3.598*** (1.312) |
| Comm. Meetings | | -0.169 (0.129) | | | | -0.160 (0.129) |
| Comm. Size | | | 1.001*** (0.223) | | | 0.931*** (0.230) |
| Mem. Financial | | | | 0.145 (0.192) | | 0.247 (0.199) |
| Mem. Female | | | | | -0.212 (0.317) | -0.193 (0.321) |
| Governance Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Firm Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 12.446 | 12.135 | 12.446 | 12.446 | 12.446 | 12.135 |
| R ² | 0.260 | 0.260 | 0.260 | 0.259 | 0.259 | 0.262 |
| Adj. R ² | 0.258 | 0.258 | 0.258 | 0.257 | 0.257 | 0.260 |
| <i>Panel B: Total number of violations</i> | | | | | | |
| Comm. Independent | -0.368*** (0.133) | | | | | -0.359** (0.140) |
| Comm. Meetings | | -0.049*** (0.015) | | | | -0.048*** (0.015) |
| Comm. Size | | | 0.089*** (0.026) | | | 0.077*** (0.027) |
| Mem. Financial | | | | 0.008 (0.023) | | 0.018 (0.024) |
| Mem. Female | | | | | -0.012 (0.036) | -0.009 (0.036) |
| Governance Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Firm Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 12.446 | 12.135 | 12.446 | 12.446 | 12.446 | 12.135 |
| R ² | 0.275 | 0.277 | 0.275 | 0.275 | 0.275 | 0.278 |
| Adj. R ² | 0.273 | 0.275 | 0.274 | 0.273 | 0.273 | 0.276 |

Table 9: Ownership and cash flow rights

This table reports the results of additional variables controlling for firms' ownership and cash flow rights. The dependent variable is the log of the total penalty value and the log of the total number of misconducts in Panels A and B. The independent variables are defined in Table A2 of the Appendix. All specifications include constant, industry, and year fixed effects, as well as the governance and firm-level control variables, as in Table 3A, which are not presented here for brevity. Robust standard errors are in parentheses. ***, **, * indicate statistical significance at the 1, 5, and 10% levels, respectively.

| | (1) | (2) | (3) | (4) | (5) | (6) |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| <i>Panel A: Total value of fines</i> | | | | | | |
| Board | 1.448*** (0.485) | | | | | |
| Executive | | 1.591** (0.624) | | | | 0.738 (0.639) |
| Independent | | | 2.612* (1.450) | | | 2.348 (1.454) |
| Blockholders | | | | -2.457*** (0.492) | | -3.072*** (0.516) |
| Institutional | | | | | -1.254*** (0.304) | -1.611*** (0.322) |
| Dual Class | -0.531*** (0.164) | -0.527*** (0.164) | -0.485*** (0.163) | -0.373** (0.163) | -0.507*** (0.162) | -0.415** (0.164) |
| Governance Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Firm Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 14.184 | 14.184 | 14.184 | 14.184 | 14.184 | 14.184 |
| R ² | 0.267 | 0.267 | 0.266 | 0.267 | 0.267 | 0.269 |
| Adj. R ² | 0.265 | 0.265 | 0.265 | 0.266 | 0.265 | 0.267 |
| <i>Panel B: Total number of violations</i> | | | | | | |
| Board | 0.086* (0.050) | | | | | |
| Executive | | 0.064 (0.064) | | | | -0.063 (0.066) |
| Independent | | | 0.334** (0.157) | | | 0.255 (0.158) |
| Blockholders | | | | -0.206*** (0.063) | | -0.328*** (0.066) |
| Institutional | | | | | -0.245*** (0.036) | -0.292*** (0.038) |
| Dual Class | -0.079*** (0.019) | -0.078*** (0.019) | -0.077*** (0.019) | -0.067*** (0.019) | -0.082*** (0.019) | -0.068*** (0.019) |
| Governance Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Firm Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 14.184 | 14.184 | 14.184 | 14.184 | 14.184 | 14.184 |
| R ² | 0.287 | 0.287 | 0.287 | 0.287 | 0.289 | 0.290 |
| Adj. R ² | 0.285 | 0.285 | 0.285 | 0.285 | 0.287 | 0.288 |

Appendix

Table A1: Frequency table by year and industry
 This table reports the distribution across the industries and years for our sample of 15,029 firm-year observations.

| Industry | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--------------------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Basic Materials | 26 | 28 | 28 | 31 | 80 | 83 | 81 | 83 | 76 | 78 | 75 | 110 | 104 | 883 |
| Consumer Goods | 57 | 59 | 57 | 60 | 145 | 146 | 149 | 150 | 145 | 151 | 153 | 260 | 257 | 1,789 |
| Consumer Services | 69 | 74 | 74 | 82 | 206 | 211 | 205 | 198 | 203 | 213 | 212 | 356 | 350 | 2,453 |
| Health Care | 49 | 48 | 48 | 52 | 132 | 134 | 133 | 134 | 136 | 136 | 137 | 424 | 474 | 2,037 |
| Industrials | 81 | 89 | 87 | 86 | 291 | 304 | 309 | 312 | 309 | 304 | 302 | 527 | 510 | 3,511 |
| Oil & Gas | 38 | 58 | 56 | 57 | 93 | 97 | 99 | 103 | 100 | 94 | 98 | 171 | 159 | 1,223 |
| Technology | 63 | 67 | 66 | 72 | 193 | 201 | 192 | 178 | 170 | 161 | 162 | 339 | 333 | 2,197 |
| Telecommunications | 8 | 9 | 9 | 10 | 18 | 19 | 19 | 20 | 19 | 19 | 17 | 28 | 28 | 223 |
| Utilities | 34 | 39 | 39 | 39 | 66 | 63 | 61 | 59 | 59 | 55 | 51 | 76 | 72 | 713 |
| Total | 425 | 471 | 464 | 489 | 1,224 | 1,258 | 1,248 | 1,237 | 1,217 | 1,211 | 1,207 | 2,291 | 2,287 | 15,029 |

Table A2: Descriptive statistics of additional variables

The table provides the means and the 25th, 50th, and 75th percentiles of the additional variables used in the study. In the Panel Board, Meetings refers to the number of board meetings, Attendance is the average percentage of meeting attendance of board members, and Executive Comm. equals 1 if the company has an executive committee and 0 otherwise; CSR Comm equals 1 if the company has a CSR committee and 0 otherwise. In the Panel Audit Committee, Comm. Meetings refers to the number of committee meetings; Comm. Size is the number of committee members; Comm. Independent is the ratio of independent committee members to its size; Mem. Financial is the number of financial experts participating in the committee; Mem. Female is the number of female directors on the committee. In the Panel Additional CEO characteristics: Founder equals 1 when the CEO is a founder and 0 otherwise; Descendant equals 1 when the CEO is a founder descendant and 0 otherwise; Hire equals 1 when the CEO is an outsider and 0 otherwise; Other boards equals the number of other public companies that the CEO is a member of. Voting rights and ownership are the percentage of voting rights and shares held by the CEO, respectively. In Panel Ownership and cash flow rights, Board is the percentage of shares held by board members. The Executive variable is the percentage of shares held by the executive directors of the board. Independent is the percentage of shares held by independent directors. Blockholders refers to the percentage of shares held by the external blockholders. Institutional is the percentage of shares held by the institutional investors. Dual Class equals 1 if a company has more than one share class and 0 otherwise.

| | Mean | p25 | p50 | p75 | Obs. |
|---------------------------------------|-------|-------|-------|-------|--------|
| Board | | | | | |
| Meetings | 7.831 | 5.000 | 7.000 | 9.000 | 14,823 |
| Attendance | 0.747 | 0.750 | 0.750 | 0.750 | 15,000 |
| Executive Comm. | 0.214 | 0.000 | 0.000 | 0.000 | 13,169 |
| CSR Comm. | 0.098 | 0.000 | 0.000 | 0.000 | 13,169 |
| Audit Committee | | | | | |
| Comm. Meetings | 7.401 | 5.000 | 7.000 | 9.000 | 12,841 |
| Comm. Size | 3.828 | 3.000 | 4.000 | 4.000 | 13,175 |
| Comm. Independent | 0.995 | 1.000 | 1.000 | 1.000 | 13,175 |
| Mem. Financial | 0.787 | 0.667 | 0.800 | 1.000 | 13,175 |
| Mem. Female | 0.176 | 0.000 | 0.200 | 0.333 | 13,175 |
| Additional CEO characteristics | | | | | |
| Founder | 0.123 | 0.000 | 0.000 | 0.000 | 14,863 |
| Descendant | 0.043 | 0.000 | 0.000 | 0.000 | 14,863 |
| Hire | 0.833 | 1.000 | 1.000 | 1.000 | 14,863 |
| Other boards | 0.386 | 0.000 | 0.000 | 1.000 | 13,169 |
| Voting rights | 0.030 | 0.002 | 0.006 | 0.018 | 15,025 |
| Ownership | 0.024 | 0.002 | 0.006 | 0.018 | 15,015 |
| Ownership and cash flow rights | | | | | |
| Board Own. | 0.054 | 0.006 | 0.017 | 0.053 | 15,015 |
| Executive Own. | 0.035 | 0.002 | 0.008 | 0.026 | 15,015 |
| Independent Own. | 0.012 | 0.001 | 0.003 | 0.009 | 15,015 |
| Blockholders Own. | 0.029 | 0.000 | 0.000 | 0.000 | 15,015 |
| Institutional Own. | 0.256 | 0.153 | 0.250 | 0.351 | 15,015 |
| Dual Class | 0.094 | 0.000 | 0.000 | 0.000 | 15,029 |

Table A3: Ownership and voting rights

This table reports the results of an alternative variable controlling for firm ownership using voting rights. The dependent variable is the log of the total penalty value and the log of the total number of misconducts in Panels A and B. The independent variables are defined in Table A2 of the Appendix. All specifications include constant, industry, and year fixed effects, as well as the governance and firm-level control variables, as in Table 3A, which are not presented here for brevity. Robust standard errors are in parentheses. ***, **, * indicate statistical significance at the 1, 5, and 10% levels, respectively.

| | (1) | (2) | (3) | (4) | (5) | (6) |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| <i>Panel A: Total value of penalties</i> | | | | | | |
| Board | 1.142*** (0.399) | | | | | |
| Executive | | 1.504*** (0.474) | | | | 0.372 (0.492) |
| Independent | | | 0.790 (1.313) | | | 0.713 (1.313) |
| Blockholders | | | | -2.694*** (0.396) | | -3.092*** (0.421) |
| Institutional | | | | | -1.157*** (0.304) | -1.657*** (0.323) |
| Dual Class | -0.640*** (0.173) | -0.651*** (0.170) | -0.484*** (0.163) | -0.170 (0.167) | -0.568*** (0.164) | -0.300* (0.177) |
| Governance Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Firm Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 14.192 | 14.192 | 14.192 | 14.192 | 14.192 | 14.192 |
| R ² | 0.267 | 0.267 | 0.266 | 0.268 | 0.267 | 0.270 |
| Adj. R ² | 0.265 | 0.265 | 0.264 | 0.267 | 0.265 | 0.268 |
| <i>Panel B: Total number of violations</i> | | | | | | |
| Board | 0.025 (0.040) | | | | | |
| Executive | | 0.031 (0.046) | | | | -0.124** (0.049) |
| Independent | | | 0.132 (0.142) | | | 0.067 (0.141) |
| Blockholders | | | | -0.234*** (0.051) | | -0.347*** (0.055) |
| Institutional | | | | | -0.242*** (0.036) | -0.316*** (0.039) |
| Dual Class | -0.079*** (0.021) | -0.079*** (0.020) | -0.076*** (0.019) | -0.049** (0.020) | -0.094*** (0.019) | -0.046** (0.021) |
| Governance Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Firm Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Industry FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 14.192 | 14.192 | 45 14.192 | 14.192 | 14.192 | 14.192 |
| R ² | 0.287 | 0.287 | 0.287 | 0.288 | 0.288 | 0.291 |
| Adj. R ² | 0.285 | 0.285 | 0.285 | 0.286 | 0.287 | 0.289 |