FIRMS RESPONSE TO MISCONDUCT: EVIDENCE FROM INTERNAL CONTROL

By

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Declaration of Authorship

I declare that this thesis is my own work and, to the best of my knowledge and belief, it does not contain material published or written by a third party, except where permission has been obtained and/or appropriately cited through full and accurate referencing.

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Abstract

In our research, we examine how firms respond to instances of misconduct, with a particular focus on the critical role of internal control systems in mitigating the negative consequences of unethical behavior. By exploring various forms of corporate wrongdoing, such as financial misreporting and ethical violations, we highlight the significant impact such misconduct can have on a company's reputation, stakeholder trust, and overall organizational integrity. Using a comprehensive, data-driven methodology, we provide a nuanced analysis of how firms can effectively navigate the challenges posed by misconduct. Our key findings reveal that robust internal controls not only enhance compliance with legal and ethical standards but also play a crucial role in restoring stakeholder confidence following incidents of wrongdoing. Our research offers valuable insights into corporate governance and risk management, providing actionable recommendations for organizations seeking to strengthen their ethical frameworks and resilience against misconduct. The implications of our research extend beyond academia, offering practical guidance for practitioners and policymakers in fostering a culture of accountability and ethical leadership within the corporate landscape.

Search Terms: Corporate Misconduct, Internal Control Mechanism, Corporate Governance, Stakeholder Trust, Risk Management, Audit Committee.

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Chapter 1. Introduction

Instances of corporate misconduct pose significant challenges to organizations, stakeholders, and the broader business landscape. The response of firms to such misconduct has emerged as a critical area of study, reflecting the growing recognition of the importance of corporate governance, ethical leadership, and risk management. Previous research has delved into the myriad responses undertaken by organizations following instances of corporate misconduct. Among the strategies outlined in literature are endeavors to rebuild reputation, wherein companies prioritize restoring trust and credibility through corrective actions (Haunschild & Rhee, 2004), cultivating transparent cultures, and adapting disclosure practices post-scandal (ChaBellucci, M., Acuti, D., Simoni, L., & Manetti, G.,2021). Signaling theory has been employed to convey a firm's dedication to rehabilitation, often through executive changes (Arthaud-Day et al., 2006) or policy reforms (Gomulya & Boeker, 2014), signaling commitment to rectification and assuaging stakeholder uncertainty. Despite the burgeoning literature in these domains, a noticeable research gap persists in understanding how firms strategically respond to misconduct through the enhancement of internal controls. This gap presents a compelling opportunity to delve deeper into the initiative-taking measures undertaken by organizations to address past wrongs and fortify their internal control systems.

Understanding how firms bolster their internal controls in the aftermath of misconduct holds paramount importance for organizational resilience and stakeholder trust. The efficacy of internal control mechanisms in mitigating risks and safeguarding the long-term sustainability of firms hinges on the strategic responses adopted by organizations post-misconduct. Moreover, insights into firms' responses to misconduct can provide practical guidance to practitioners, regulators, and stakeholders on effective strategies for enhancing corporate governance and risk management practices. However, investing in internal control is not without cost and time commitment, and is also not a prompt visible strategy to stakeholders. Thus, it is an empirical question as to whether focal firms would take internal control as a salvation strategy to restore a damaged reputation in the aftermath of corporate misconduct.

To address the research gap and contribute to the existing body of knowledge, this study aims to quantitatively assess firms' responses to misconduct by analyzing changes in internal control systems following instances of wrongdoing. Specifically, the implementation of internal control enhancements will be scrutinized as a reputation response strategy, elucidating the extent to which firms prioritize strengthening their control environment in the wake of misconduct events. Key metrics of internal control encompass both output and input measures. Output metrics typically include the disclosure of material weaknesses (MWs) (Bardhan, I., Lin, S., & Wu, 2015) in compliance with regulations such as Sarbanes-Oxley Section 404 (SOX 404). Input metrics focus on investments in audit committee effectiveness and internal audit function, serving as proxies for internal control quality. These metrics reflect legislative changes, such as those introduced by the Sarbanes-Oxley Act of 2002, which emphasizes requirements for independent audit committees and internal control function. Investments in these areas, including changes in committee composition and establishment of internal audit functions, indicate improvement in internal control.

Another important aspect to consider is measuring misconduct within the organization. Metrics for evaluating misconduct involve analyzing the occurrence, location, and severity of corporate misconduct through diverse data outlets. This includes examining criminal prosecutions by authorities such as the Department of Justice, civil penalties levied by regulatory bodies like the Securities and Exchange Commission, and legal actions initiated by private plaintiffs. These metrics provide insight into the extent and nature of misconduct within the organization, aiding in assessment of risk and effectiveness of internal controls in mitigating such behavior.

We hypothesize that organizations will display an initiative-taking stance in fortifying their internal control systems post-misconduct to rebuild trust with stakeholders, enhance their reputation, and mitigate the risks of future transgressions. We expect to uncover patterns indicative of a strategic shift towards prioritizing internal control improvements as a response to misconduct events, reflecting a commitment to ethical conduct and organizational integrity. Collectively, we predict a positive association

between corporate misconduct and the implementation of internal control enhancements within firms.

Our key findings can be summarized as follows. We find that firms having corporate misconduct increase the audit committee effectiveness immediately after the occurrence of the misconduct. On the other hand, the affected firms do not invest in the board of directors who has oversight role in risk management immediately after the misconduct case. Specifically, the improvement in this area happens at least two years after the misconduct.

In addition to advancing theoretical understanding, this research seeks to offer practical implications for practitioners, regulators, and industry stakeholders. By empirically examining the link between misconduct, internal control enhancements, and firm reputation, the study aims to provide actionable insights for enhancing corporate governance practices, strengthening risk management strategies, and fostering ethical leadership within organizations. Ultimately, the proposed research aims to contribute to the enhancement of organizational resilience, integrity, and trustworthiness in the face of misconduct challenges.

Our research makes a significant contribution to the literature on corporate governance and organizational behavior by addressing the critical gap in understanding how firms strategically respond to misconduct through the enhancement of internal controls. By quantitatively assessing the relationship between instances of corporate wrongdoing and subsequent improvements in internal control systems, our study provides empirical evidence that highlights the proactive measures organizations take to restore their reputation and mitigate future risks.

Furthermore, the research extends existing theories on corporate governance by integrating insights from signaling theory, which posits that firms communicate their commitment to rectification and ethical practices through tangible actions, such as strengthening internal controls. This contribution not only enriches the academic discourse on corporate misconduct but also offers practical guidance for practitioners and regulators seeking to enhance corporate governance frameworks and risk management strategies.

Ultimately, the findings of this study promote a deeper understanding of the dynamics between corporate misconduct, internal controls, and firm reputation, thereby fostering organizational resilience, integrity, and trustworthiness in the corporate sphere. Our research serves as a foundational step for future studies exploring the long-term impacts of internal control enhancements on stakeholder trust and organizational performance following misconduct events.

Chapter 2. Literature Review

2.1 Business Misconduct / Wrongdoing

Organizational wrongdoing refers to actions by a company that are illegal, unethical, or socially irresponsible and cause harm to its stakeholders (Greve et al., 2010). Following the unearthing of the misconduct, firms can experience a significant adverse impact on firm value such as a stock price drop (Sun et al., 2015; Chakravarthy, deHaan, and Rajgopal, 2014; Wei, Ouyang, and Chen, 2017), the long-lasting taint of entity reputation (Chava, Huang, and Johnson, 2018; Zavyalova, Pfarrer, Reger and Shapiro, 2012), legitimacy loss (Siegel, 2007; Desai, 2011; Johsson, Greve, and Fujiwara-Greve, 2009), resources destruction (Jiang, Jia, Bai, and Bruton, 2021), and public boycotts (McDonnell, and Cobb, 2019). Davies, G., & Olmedo-Cifuentes, I. (2016) use a broader definition of wrongdoing, that of unsatisfactory or inappropriate conduct.

Types of business misconduct can encompass a wide range of behaviors that deviate from ethical standards and legal regulations within an organizational setting. It can take various forms including: serious accounting misstatement (Chakravarthy, J., deHaan, E., & Rajgopal, S. 2014), product failure (Tejssins 2010), sexual harassment (Luo & Zhang 2022), social and environmental responsibilities misconduct (Dean 2004), employee deviances such as corruption (Lasthuizen, K., Huberts, L., & Heres, L. 2011), financial malfeasance (Haland Prechel, Lu Zheng 2016), and business research fraud (Tourish, D., & Russell, C. 2020).

If we delve into each type of misconduct, it is imperative to begin with financial misconduct due to its profound adverse effects not only on stakeholders but also on the broader economy. Financial misconduct manifests in various forms, as we will elaborate. Among the most concerning instances of internal financial misconduct is serious accounting restatement. This involves the revision of previously issued financial statements to rectify inaccuracies or misstatements in reported financial data. Restatements become necessary when original financial statements contain errors, omissions, or deliberate misreporting. They are crucial for providing stakeholders, including investors, regulators, and the public, with accurate and reliable financial information. Factors such as accounting

errors, fraud, changes in accounting standards, or new information necessitate financial statement modifications leading to restatements. A significant restatement involves deliberate misreporting or anomalies that profoundly impact on the firm's reputation and shareholder trust. This misconduct may encompass fraudulent behaviors like financial statement manipulation, misrepresentation of financial data, or other deceptive practices requiring restatements to rectify errors (Chakravarthy, J., deHaan, E., & Rajgopal, S., 2014).

Karpoff, Lee, and Martin (2008a) present significant findings on the costs borne by firms involved in fraudulent accounting practices. They explore the disparity between legal penalties and market consequences, revealing an average legal penalty of $23.5 million imposed on corporations. In contrast, market penalties, notably reputational damage, loom large. Reputational penalty, defined as the anticipated loss in future cash flows' present value due to decreased sales and heightened contracting and financing costs, surpasses 7.5 times the sum of all legal and regulatory fines. Their analysis delves into the cross-sectional impact, revealing a positive correlation between reputation loss and firms' reliance on implicit contracts in operations. Additionally, weaker results indicate heightened reputation loss for financially distressed enterprises or those burdened with significant debt. This underscores the varied penalties of financial misconduct based on operational and financial characteristics (Murphy, Shrieves, and Tibbs, 2009).

In their study, Li, J., Shi, W., Connelly, B. L., Yi, X., & Qin, X. (2022) identify multiple financial wrongdoings perpetrated by CEOs seeking appointment. Firstly, they highlight the unethical practice of reporting inflated profits, achieved through manipulating accounting records, misstating revenues, or participating in fraudulent actions. Such misrepresentation can mislead investors and stakeholders, leading to detrimental financial decisions and long-term harm to the firm (Piff, P. K., 2014). Secondly, asset fabrication involves the fraudulent creation of new assets or the exaggeration of the value of existing ones in a company's financial statements. This deceptive practice entails misrepresenting the quantity, quality, or existence of assets to artificially enhance the organization's financial position. Examples of asset fabrication include inventing non-existent assets, inflating the value of inventory or property, or falsifying asset ownership to deceive

stakeholders about the company's financial health (Mustafa, S. T., & Ben Youssef, N., 2010). Such manipulation can lead to inaccurate financial reporting, misallocation of resources, and potential legal and regulatory consequences for the firm and its executives.

Thirdly, executives such as the CEO, CFO, or other senior management personnel, may orchestrate illegal share buybacks to manipulate the company's stock price, inflate earnings per share, or deceive investors about the company's financial health. Share buybacks are generally considered legitimate and customary corporate finance activities when carried out in accordance with regulatory regulations and company governance norms. However, unlawful share buybacks may include fraudulent or manipulative practices that violate securities laws and endanger investors or the financial markets' integrity. The executives also may issue illegal guarantees by making unauthorized pledges on behalf of the firm, such as guaranteeing unrealistic returns or financial performance, or misrepresenting the company's financial health. Those guarantees can be provided in different means such as false representation by making false or misleading assertions about the nature, terms, or dangers of a guarantee in order to defraud individuals or entities, forged documents by creating phony documents or contracts to support fraudulent pledges and provide respectability to illegitimate obligations, coercion or pressure by using coercion, manipulation, or undue influence to force others to accept illegal promises against their will or better judgment and other unlawful practices by engaging in acts that violate laws, rules, or ethical standards to provide guarantees that are neither legally acceptable nor ethically sound. (Cumming, Leung, & Rui, 2015).

Overall, financial misconduct has substantial consequences on individuals, firms, and the broader economy. One of the most important drawbacks of all types of business misconduct is reputational damage. Reputational damage can have long-term consequences for trust and credibility, affecting future commercial chances. All firms that have faced such a misconduct take serious actions to rebuild their reputation. (Ashton, J., Burnett, T., Diaz-Rainey, I., & Ormosi, P. 2021). They also quantify the misconduct actions and discuss how new laws help to deter those actions and help firms to rebuild the damaged reputation.

Customers are pivotal stakeholders in any business, expecting optimal value for their investment. Product failures significantly impact customer relationships and tarnish a firm's reputation. Described as the inability of a product to fulfill its intended purpose or meet customer expectations, product failure results from several factors such as design flaws, quality issues, market misalignment, or ineffective marketing strategies (Tejssins, 2010). The repercussions of product failure are profound, encompassing financial setbacks, reputational harm, and erosion of customer trust. Previous research indicates that firms with strong reputations endure greater consequences than those with weaker reputations when confronted with product failures, as heightened expectations accompany a robust reputation (Rhee and Haunschild, 2006).

Another form of business misconduct is brand misconduct, which significantly impacts customer brand loyalty and advocacy intentions and can lead to reputational damage (Aaker, Fournier, & Brasel, 2004; Huber et al., 2009; Xie & Heung, 2012). When a brand engages in misconduct, such as failing to meet consumer expectations or breaching ethical norms, the quality of the brand-customer relationship diminishes (Huber et al., 2010). This erosion of trust and dissatisfaction with the brand's conduct may diminish the customer's emotional connection and loyalty to the brand.

Business misconduct concerning social and environmental issues is a pressing issue in today's corporate realm, signaling a disregard for ethical standards and sustainability imperatives despite heightened awareness and emphasis on sustainable practices. According to Dean (2004), firms risk losing social legitimacy if they are perceived as irresponsible, dishonest, or indifferent to societal concerns. One prevalent form of misconduct in this realm is greenwashing, a deceptive communication tactic widely used in marketing and corporate strategies to conceal contentious aspects of business sustainability (Delmas and Burbano, 2011; Seele and Gatti, 2015). This trend is driven by mounting pressure from stakeholder groups and the potential financial and reputational gains associated with portraying a sustainable image (Aras and Crowther, 2009; Testa et al., 2015; Jonsen, Galunic, Weeks, & Braga, 2015; Aras & Crowther, 2011). However, greenwashing practices can lead to significant negative consequences, including erosion of trust, damage to reputation, legal compliance issues, financial instability, environmental

harm, strained employee relations, and compromised competitive positioning (Coombs & Holladay, 2012, 2015; Ramus & Montiel, 2005). To mitigate these risks, companies must prioritize authentic sustainability efforts and transparent communication practices to avoid the pitfalls of greenwashing.

Encountering significant or even enduring reputational damage, firms are compelled to take action to salvage their tarnished corporate image. These actions may include policy changes and executive dismissals. Harris & Bromiley (2007) discuss how CEO compensation, such as bonuses and options, can incentivize financial restatements, emphasizing the importance of revising firm policies to mitigate such misconduct. Gomulya & Boeker (2014) provide insights into how firms respond to reputation damage by appointing a successor CEO with specific characteristics that signal the firm's commitment to restoring its reputation. Their research indicates that stakeholders, including the stock market, investment analysts, and the media, respond favorably to CEO successors with prior experience, elite educational backgrounds, and functional expertise in finance or accounting. The severity of the restatement underscores the importance of policy changes related to CEO appointments to rebuild the firm's reputation and mitigate negative market reactions (Gangloff, K. A., Connelly, B. L., & Shook, C. L., 2016). Additionally, increasing the firm’s involvement in societal projects is another strategy to rebuild its reputation (Xia, Teng & Gu, 2019). Studies have shown a surge in charitable donations following penalties due to wrongdoing, albeit temporarily, indicating these actions are primarily aimed at reputation repair. Such strategies are rooted in signaling theory, where firms demonstrate their commitment to change after misconduct incidents, or scapegoating theory, where blame is shifted onto third parties such as C-level management.

Another example of rebuilding strategies involves the use of product recall strategies, often considered the optimal approach for addressing failures and rebuilding firm reputation. However, the effectiveness of this strategy is subject to debate in the literature. Thirumalai & Sinha (2011) revealed that product recalls can have a detrimental effect on a company's credibility and reputation. Confidence in the company's ability to produce reliable and high-quality products may diminish, impacting its market position.

Additionally, product recalls incur significant costs and may result in decreased revenue. From a regulatory standpoint, product recalls can expose companies to legal liabilities, including lawsuits from affected parties. The impact of a product recall on the stock market varies depending on factors such as the severity of the product hazard (Ni et al., 2014) and the nature and cost of the recall (Ketchen et al., 2014). Haunschild & Rhee (2004) underscore the importance of the recall strategy in rebuilding firm reputation and customer trust, noting that voluntary recalls can reduce the occurrence of future failures and contribute to organizational learning (Luo and Zhang, 2022).

Furthermore, organizational accountability is a commonly employed strategy in response to environmental misconduct. Elsbach (1994) demonstrates the effectiveness of using verbal accounts following legitimacy-threatening events to defend, excuse, justify, or enhance organizational behaviors and protect legitimacy. Additionally, firms often adjust their reporting practices after environmental scandals. ChaBellucci, M., Acuti, D., Simoni, L., & Manetti, G. (2021) discuss the importance of adapting nonfinancial disclosures following a scandal. They argue that openly disclosing the scandal, its consequences, and the remedial actions taken garners recognition from independent parties. Independent validation supports coherence and transparency, as evidenced by counter-accounts analysis. Managers are advised to provide comprehensive descriptions of the scandals, including their causes, and detail the steps taken to address them. The findings suggest that stakeholders value disclosures that acknowledge failures or mistakes, particularly voluntary disclosures. Additionally, other strategies can be employed to rebuild the firm's reputation after environmental scandals, such as changes in leadership to signal accountability and a commitment to addressing underlying issues, investments in brand enhancement to improve public image and reputation, and substantial investments in environmental campaigns to demonstrate commitment to sustainability and environmental stewardship (McGuire, W., Holtmaat, E. A., & Prakash, A. 2022).

Numerous minor strategies are also employed to rebuild firms' reputations after scandals. Enhancing marketing strategies, as highlighted by Priluck (2003), is one such approach, where a company's marketing efforts can mitigate the negative effects of misconduct. Increasing advertising investment aids in reshaping the brand's image and

rebuilding customer confidence. Moreover, developing customer communication strategies to adapt to their feedback and enhancing service quality strategies are vital steps to regain customer loyalty (Hsiao, C.-H., Shen, G. C., & Chao, P.-J. 2015).

Yet, there remains a dearth of studies exploring this issue from an accounting perspective: whether firms take action to enhance their business reputation after misconduct by utilizing and strengthening internal controls. The question arises: Can enhancing internal controls after misconduct effectively rebuild business reputation?

On the other hand, however, is it necessary for all the firms that would take action to restore the damaged reputation immediately. We went through different examples stated in previous literature clearly show the difference if action taken immediately or denied and left for further time.

The Peanut Corporation of America (PCA) scandal is a stark example of the consequences of negligence and denial in the face of a crisis. The scandal revolved around a widespread salmonella outbreak linked to PCA's products, resulting in numerous illnesses and fatalities. Despite evidence of unhygienic conditions at PCA facilities, particularly the Plainview, Texas plant where tainted items were produced, the company failed to take appropriate action and denied responsibility for the outbreak. Ultimately, PCA's inaction led to its declaration of Chapter 7 bankruptcy and liquidation to settle debts. Additionally, several PCA executives, including CEO Stuart Parnell, faced indictment by the Department of Justice on charges including violations of the Food, Drug, and Cosmetic Act, mail and wire fraud, obstruction of justice, and conspiracy (Leighton, P. 2016).

The Weinstein Company, LLC (TWC) provides another example of the detrimental consequences of denied misconduct. Founded in New York City in 2005 by Bob and Harvey Weinstein, TWC was an American independent film studio. However, the company's reputation was tarnished when investigative reports by The New York Times and The New Yorker uncovered decades of sexual misbehavior by Harvey Weinstein, a prominent movie producer, in October 2017. These reports triggered the Harvey Weinstein controversy, revealing numerous accusations of sexual harassment, assault, and rape against Weinstein by women in the entertainment industry, including actresses and former staff members. Initially, Weinstein denied the allegations, portraying himself as the victim

of a smear campaign. However, as more women came forward with detailed accounts of harassment and assault, Weinstein faced mounting criticism and scrutiny. Eventually, he publicly apologized, acknowledging his inappropriate behavior and seeking legal counsel to address the accusations. Weinstein's stance shifted from denial to conciliation as the crisis escalated. Subsequently, he faced legal repercussions, including criminal prosecution and civil lawsuits, resulting in a well-publicized trial in New York where he was found guilty of rape and sexual assault and sentenced to prison. The scandal and its aftermath significantly impacted Weinstein's career and reputation. In March 2018, TWC declared bankruptcy due to financial difficulties stemming from the scandal, filing for bankruptcy as part of its efforts to reorganize the business, resolve legal disputes, and fulfill financial obligations.

In conclusion, it is paramount to recognize the severity of business misconduct. Taking prompt and resolute action to address such misconduct and implementing robust strategies to restore the firm's reputation are crucial steps toward rebuilding trust and integrity within the corporate landscape. By prioritizing ethical and legal conduct and embracing sustainable practices, businesses can not only mitigate the adverse effects of misconduct but also foster a more responsible and resilient future.

2.2 Internal Control Literature

Ensuring an effective internal control system necessitates a clear understanding of its concept and components. Internal controls encompass the policies and processes established by an organization to offer a reasonable level of assurance concerning dependable financial reporting, operational efficiency, and compliance with pertinent laws and regulations (Weygandt et al., 2021; Ray & Kurt, 2001). It is widely believed that well-planned and executed internal control systems typically lead to enhanced financial reporting practices, bolstering management's accountability role within an institution (Doyle et al., 2007). However, inherent limitations exist in every internal control system. Emasu (2007) emphasizes that while these systems strive to achieve the goals set by the board of directors and management, they can only provide a fair, rather than absolute, assurance.

Internal controls are established with the overarching objective of safeguarding assets, thus mitigating the risks of misuse or misappropriation within the company. Serving as a protective mechanism against potential frauds, they ensure adherence to both external regulations and internal policies governing operational activities within the organization (Abiodu, 2020). Furthermore, internal controls play a pivotal role in proactively identifying and managing risks, thereby enabling the organization to anticipate and effectively mitigate potential threats to its operations (Rittenberg & Schwieger, 2005). Moreover, they contribute to the smooth execution of administrative operations, ensuring their proper conduct and alignment with organizational objectives (Kenyon & Tilton, 2006).

To achieve a comprehensive control system as outlined in COSO's framework, an organization must recognize and strategize to instill the five different components envisaged by the framework. The first essential component is the control environment, which encompasses the standards, processes, and structures guiding the organization's internal control activities (COSO, 2013). A crucial aspect of the control environment is the concept of "tone at the top," reflecting how senior management communicates and exemplifies expected behaviors regarding control activities (COSO, 2013). Research by Patelli and Padrini (2015) finds that the tone at the top correlates with employees' ethical conduct, including their propensity for aggressive financial reporting. However, a recent study by Rose et al. (2021) suggests a more nuanced relationship between the tone at the top and employee behavior. This study indicates that employees might engage in imprudent behavior, such as misreporting expenses, to support a compassionate boss's success, contrary to the leader's expectations, possibly characterized as servant leaders who discourage misconduct (Paesen et al., 2019). Despite this complexity, the control environment remains crucial, as highlighted by the COSO framework, influencing aspects such as employee recruitment, performance measurement, reward systems, and the establishment of acceptable norms within the organization. When management fails to establish a robust tone, instances of fraudulent financial reporting may increase, as the control environment largely stems from the directives of directors and executives, shaping organizational policies, behaviors, and governance (Rittenberg et al., 2005).

In addition to the control environment, the internal control system encompasses risk assessment and control activities. Risk assessment is an ongoing process aimed at evaluating events that could potentially harm the organization. Nocco and Stulz (2006) contend that effective corporate risk management (ERM) provides businesses with a sustained competitive advantage over those that manage risks individually. Schroeck (2002) promotes the improvement of profits through the implementation of sound practices via meticulous risk management. The sustainability and performance of a financial institution heavily rely on its adept handling of risks (Khan & Ahmed, 2001). Subsequently, the process of risk assessment informs the third component of internal control, control activities, which are the measures implemented through policies and procedures to mitigate identified risks (COSO, 2013). Whittington and Panny (2001) recognize that control operations serve as guidelines facilitating the execution of management directives. Al-Thuneibat, Al-Rehaily, and Basodan (2015) document that risk assessment and control procedures positively impact corporate profitability.

The fourth and fifth components of internal control are information and communication, and monitoring activities, respectively. Information and communication encompass the protocols implemented by a company to gather, analyze, and disseminate reliable data promptly, ensuring that employees fulfill their duties punctually. Efficient information and communication systems enable the timely generation of reports containing operational, regulatory, and financial data, facilitating effective operation and management of the corporation. These reports, sourced from both internal and external channels and inclusive of relevant circumstances and actions, aid in decision-making and external reporting (Channar, Khan & Shakri, 2019).

An expanding body of research suggests that strategically positioned monitoring mechanisms play a significant role in shaping performance metrics, thereby highlighting the growing demand for effective monitoring systems in businesses (Weisbach, 1988). To evaluate performance trends over time, internal control mechanisms require continuous monitoring. Given the evolving nature of conditions, necessitating ongoing monitoring, management endeavors to determine the ongoing suitability and efficacy of existing internal control mechanisms in addressing emerging risks. Ongoing review of the

aforementioned five components helps a firm to sustain a system effective in meeting its operational, reporting, and compliance objectives.

2.2.1 Internal control determinants

The quality of internal controls within organizations is influenced by a myriad of factors, broadly categorized into internal and external determinants. Internal determinants encompass board and board sub-committee characteristics, ownership structure, internal audit characteristics, and other structural variables. On the other hand, external determinants include audit-related characteristics, financial analysts, national culture, and the regulatory and market environment. Understanding and addressing these determinants are crucial for organizations aiming to establish effective internal control systems that mitigate risks, ensure compliance, and enhance operational efficiency. This literature review delves into the key internal and external determinants shaping the quality of internal controls and their implications for organizational governance and risk management.

2.2.1.1 Internal determinants:

Ensuring effective internal control is a shared responsibility between corporate management, including both the board of directors (Goh, 2009), and the audit committee. The audit committee plays a crucial role in overseeing internal controls, as highlighted by Krishnan (2005). Krishnan's research explores the relationship between the audit committee and the quality of internal controls, revealing a negative correlation between internal control issues and factors such as audit committee independence and the presence of members with financial expertise. This finding is further supported by Schneider et al. (2009), who also find a positive correlation between frequent audit committee meetings and internal control quality. However, Balsam, Jiang, and Lu (2014) do not find a significant association between audit committee financial expertise and internal control weaknesses.

Several recent studies delve into the relationship between board independence and the disclosure of internal control. It has been observed that board independence exhibits a negative correlation with the disclosure of internal control weaknesses (Chen, Knechel, Marisetty, Truong, and Veeraraghavan, 2017). Similarly, Michelon, Bozzolan, and Beretta

(2015) identify a comparable association within the European market. Furthermore, Agyei-Mensah (2016) corroborates this finding in his examination of firms in Ghana.

Lin, Wang, Chiou, & Huang (2014) investigate the influence of CEO characteristics on internal control quality in non-financial firms subject to Sarbanes-Oxley Section 404 (SOX 404). Their findings suggest that CEOs with higher levels of ownership, longer tenure (Krishnan, 2005), and younger age are associated with material weaknesses. Furthermore, Krishnan's (2005) study discusses additional factors linked to the occurrence of internal control issues, including past on-the-job experience of managers (such as CFOs and controllers) and the management's propensity for fraudulent activities.

Moreover, gender dynamics can significantly shape the quality of internal controls within organizations. Research suggests that the presence of female CEOs could contribute to the establishment of robust internal control systems, leading to improved control quality and reduced occurrences of material weaknesses (Lin, Wang, Chiou, & Huang, 2014). However, conflicting evidence arises concerning the influence of female representation on audit committees and boards. For instance, while some studies indicate a negative correlation between female board membership and the reporting of internal control weaknesses, others suggest a positive association between female presence on audit committees and control quality (Parker et al., 2017).

Family enterprises constitute a significant portion of businesses worldwide and play a crucial role in the socio-economic development of both developed nations and emerging markets. Recent studies conducted in various countries, including the United States and China, have investigated the relationship between firms' ownership structures and the quality of internal controls, revealing diverse outcomes across different regions. In the United States, Bardhan et al. (2015) find that family-owned firms tend to exhibit more internal control deficiencies compared to their non-family-owned counterparts. Similarly, research by Ji, Lu, and Qu (2015) in China examines the influence of ownership structure on internal control quality, revealing a negative impact of ownership concentration on the voluntary disclosure of material internal control weaknesses. However, Weiss (2014) observes contrasting results in other countries, where family ownership is associated with significantly fewer instances of material internal control weaknesses.

The aforementioned studies provide support for both entrenchment and alignment effects. The entrenchment effect suggests that ownership concentration, whether in block ownership or family ownership, may lead to a decrease in IC effectiveness as owners prioritize their own interests and diminish future accountability (e.g., Bardhan et al., 2015). Conversely, the alignment effect suggests that dominant shareholders may seek to uphold their reputation, thereby aligning their interests with stakeholders and potentially leading to higher IC quality (e.g., Weiss, 2014).

The internal audit department plays a critical role in overseeing and identifying weaknesses within internal controls (IC), subsequently reporting them to top management for timely corrective measures. Fadzil, Haron, and Jantan (2005) scrutinize the impact of internal audit quality on IC quality through a survey-based approach. Their findings indicate that the professional proficiency, objectivity, and review processes within the internal audit department significantly affect the monitoring aspect of the IC system.

Similarly, Mazza and Azzali (2015) explore the influence of internal audit quality on the severity and persistence of IC deficiencies in Italy, utilizing surveys among Italian internal auditors. Their research reveals that enhanced internal audit quality correlates with reduced severity and persistence of IC deficiencies, thereby enhancing overall IC quality. Both studies in this domain provide evidence suggesting that superior internal auditing is linked with improved IC quality.

Various other factors influencing internal controls have been investigated, among them, is employee treatment policies. Guo et al. (2016) find that the implementation of employee-friendly policies substantially reduces the probability of internal control weaknesses related to employees. Additionally, Chen and Keuong (2016) observe a positive correlation between corporate diversification and the likelihood of disclosing internal control weaknesses.

In conclusion, the internal determinants of internal control play a pivotal role in shaping the effectiveness and resilience of an organization's control systems. Factors such as board characteristics, ownership structure, internal audit quality, and organizational culture significantly influence how well internal controls function in mitigating risks and ensuring compliance. By understanding and addressing these internal determinants,

organizations can enhance their governance frameworks, promote ethical behavior, and ultimately safeguard their assets and reputation. A proactive approach to strengthening these determinants not only fosters a robust internal control environment but also contributes to the overall sustainability and integrity of the organization in the face of challenges. As firms navigate the complexities of the corporate landscape, prioritizing these internal factors will be essential for achieving long-term success and maintaining stakeholder trust.

2.2.1.2 External determinants:

The effectiveness of internal controls within organizations is not solely influenced by internal factors given that external determinants also play a crucial role. These external determinants encompass the oversight provided by external audit processes, evaluations by financial analysts, the influence of national cultural norms, and the regulatory and market environment in which the organization operates.

External factors influencing the quality of internal controls encompass elements associated with external auditor attributes. For instance, it has been suggested that heightened auditor competence positively correlates with internal control quality. The type of auditor, whether Big4 or non-Big4, significantly impacts the quality of internal controls. Big4 firms, owing to their independence, are more able to exert pressure on companies to enhance their internal control systems (Khlif & Samaha, 2016). López, Rich, and Smith (2013) attribute the superior quality of internal controls observed in firms audited by Big4 firms to their reputation capital and high visibility in the industry. Conversely, Chen, Gul et al. (2016) find a negative association between firms with long audit tenure and internal control weaknesses. Moreover, researchers investigate the correlation between unexpected fees and internal control deficiencies, suggesting that the anticipation of fees arises from the detection of internal control deficiencies. As a result, auditors allocate additional time and request supplementary fees to rectify these issues. Subsequently, Albring et al. (2016) uncover a negative correlation between unexpected fees and company-level internal control weaknesses. Additionally, there is a positive association between IT auditor expertise and internal control quality. Haislip, Peters et al. (2016) reveal that the probability of firms reporting IT internal control weaknesses decreases when the auditor possesses IT

expertise. Finally, De Simone, Ege, and Stomberg (2015) investigate the relationship between tax services offered by auditors, quantified by tax fees, and the quality of tax internal controls. Their findings suggest that an increase in auditor-provided tax services reduces the likelihood of tax material weaknesses, thereby enhancing the quality of tax internal controls.

Prior research also shows that internal control quality is impacted by national culture. Kanagaretnam, K., Lobo, G. J., Ma, C., & Zhou, J. (2016) consider three dimensions for national culture which are: individualism, uncertainty avoidance and power distance. Managers who work in countries characterized by high levels of individualism prioritize personal goals and self-interest over shareholder interest. Managers in countries with higher degree of uncertainty tend to follow explicit rules and avoid taking risk. Finally, managers in countries with high power distance tend to take centralized decisions and have a greater influence on financial reporting choices. Research findings indicate a positive correlation between individualism and the disclosure of internal controls (Hooghiemstra et al., 2015), with similar results observed regarding the relationship between power distance and internal control disclosures (Kanagaretnam et al., 2016). Conversely, an inverse association is noted for uncertainty avoidance.

Another external determinant of internal control is market competition. Alternative explanations for the impact of market competition on internal control (IC) quality have been proposed. Intense competition within markets, particularly in terms of product competition, may increase the likelihood of a firm facing liquidation, especially if it operates with high product costs. This cost structure could potentially diminish sales, leading to reduced profitability (Zhang & Chen, 2016). Given that establishing robust internal control systems requires financial investment, diminished profitability may impede a firm's ability to enhance its IC framework. However, heightened competition may prompt managers to reduce discretionary expenses, improve inventory management, and enhance customer satisfaction through improved IC quality, thereby gaining competitive advantages. In a U.S. context, Kim and Kim (2015) examine the influence of product market competition on IC quality and find that companies operating in fiercely competitive environments tend to exhibit lower IC quality, as indicated by disclosures of IC weaknesses

under SOX 404. Conversely, Zhang and Chen (2016), focusing on a Chinese context, reveal that intense product market competition correlates with increased levels of IC disclosures.

In conclusion, external determinants such as financial analysts serve as vital intermediaries in bridging firms and investors (Hope, 2003). The publication of earnings estimates by financial analysts adds an extra layer of external oversight, potentially imposing stricter disciplinary measures on a firm's management to enhance internal control (IC) quality (Mao & Yu, 2015). Mao and Yu's (2015) examination of the US context reveal that following analysts' cash flow forecasts significantly correlates with a reduction in the number of reported IC weaknesses under SOX 404, indicating that analyst attention directs managerial focus towards improving IC quality.

Chapter 3. Hypothesis Development

The impact of business misconduct on a firm is multifaceted, encompassing reputational damage (Davies, G., & Olmedo-Cifuentes, I. 2016), financial losses, operational disruption (Leighton, P. 2016), legal and regulatory consequences (Greve, H. R., Palmer, D., & Pozner, J. (2010), and employee morale (Raghunandan, A. 2021). Those critical consequences highlight the importance of robust corporate governance, ethical leadership, and proactive risk management to mitigate the risks associated with misconduct and safeguard the long-term viability of the organization. When confronted with such challenges, organizations often face the daunting task of rebuilding their tarnished image and restoring credibility in the eyes of customers, investors, and the public. In response to instances of misconduct, companies deploy various strategies aimed at rectifying past wrongs, implementing corrective measures, and fostering a culture of integrity and transparency. The most widely used theory is signaling theory which was largely used by researchers. Arthaud-Day et al., (2006) contend that the removal of a top-level executive from the company communicates to stakeholders the firm's commitment to rehabilitation, thereby potentially alleviating uncertainty among stakeholders regarding the firm's future. Product recall research has applied signaling theory to demonstrate how stakeholders perceive firms' strategic actions as an indication of their ability to rectify defective products in a safe and efficient manner (Wowak & Boone, 2015). Ni et al. (2014) utilize signaling theory to explain why stock market consequences were more severe for companies offering consumers monetary refunds compared to those offering product replacements or repairs. Some researchers utilize signaling theory to investigate the informational signals that managers aim to convey to stakeholders through their implementation of policy alterations. Collectively, signaling theory offers a comprehensive framework that assists in interpreting why investors may harbor varying preferences regarding the extent of proactivity exhibited by firms in their strategic responses (Zhao et al., 2013).

Besides signaling theory, recent research explores significant viewpoints that enhance the comprehension of the intricate dynamics surrounding succession occurrences. For example, drawing from implicit leadership theory and trust repair theory, boards may opt for successors perceived to possess favorable personality attributes that enhance the

ethical culture within the organization and elicit positive responses from stakeholders (Gomulya, Wong, Ormiston, & Boeker, 2017).

However, there is limited research exploring this topic from an accounting standpoint, specifically examining whether firms would implement measures to improve their business reputation following misconduct by utilizing and strengthening internal controls. Understanding how firms respond to reputational threats through internal control improvements can contribute to development of effective risk management framework and promote greater transparency and accountability in corporate operations. We state our main hypothesis as follows:

H1: In the aftermath of corporate misconduct, firms will improve internal control as the reputation response strategy.

This hypothesis will be tested using a comprehensive dataset that includes instances of corporate misconduct, internal control metrics, and relevant control variables, allowing for a robust analysis of the relationship between misconduct and the subsequent enhancements in internal control systems.

Chapter 4. Data and Measurement

4.1 Internal Control Measurement

We develop both the input and output measurements for the internal control proxy. The first proxy we use is the output measurement to proxy internal control. Numerous studies gauge the effectiveness of internal control via the disclosure of material weaknesses (MWs) of companies in compliance with Sarbanes-Oxley Section 404 (SOX 404). Material weaknesses denote significant shortcomings in the internal control over financial reporting (Bardhan, I., Lin, S., & Wu, 2015), with the potential to signify substantial inaccuracies in financial statements. Following Lin, Wang, Chiou, & Huang (2014) and Krishnan (2005) employed a binary variable, we use *ICW*, coded one if a firm reports the presence of material weaknesses in internal control, and zero otherwise.

Empirical evidence concerning the association between corporate governance and audit committee characteristics and internal control quality generally supports a positive and significant association between audit committee characteristics (such as financial expertise and number of meetings) and internal control quality (Chalmers, K., Hay, D., & Khlif, H. ,2019). Thus, our second measure of internal control is via the investment in audit committee effectiveness and the internal audit function to proxy for the input measure of internal control. In the 2000s, following notable accounting frauds at companies like Enron and WorldCom, the U.S. Congress enacted the Sarbanes-Oxley Act of 2002 (SOX), implementing corporate governance changes that impacted audit committees and external auditors. The application of the requirements impacts the internal control quality can help external auditors and investors to evaluate the firm's internal controls. Those requirements include the number of independent members, the disclosure of financial expertise in the audit committee. In addition, a couple of changes in the governance will impact the internal control quality such as strengthen the audit committee requirements and requiring majority of the board to be compromised of independent directors. In addition, the New York Stock Exchange added the requirement to have an internal audit function and that the audit committee periodically meets privately with management, internal auditors, and external auditors (SEC 2003c). So, all above changes and improvements in both audit committee and corporate governance lead to improvement in the firms' internal control. *Audit*

committee is coded one if the focal firm has invested in improving audit committee effectiveness via either change/ increase the financial expertise or independent audit committee, and zero otherwise. Finally, *DirectorRisk* is coded one if the focal firm has a change of board of directors who oversight risk management following the years of misconduct, and zero otherwise.

4.2 Misconduct Measurement

We employ various data outlets for corporate misconduct measurements including both financial and non-financial misconduct, which helps us address the shortcomings of each dataset pointed out by prior literature. The sources encompass a range of cases, such as criminal prosecutions initiated by authorities like the Department of Justice (DOJ), civil penalties imposed by regulatory bodies like the Securities and Exchange Commission (SEC), legal actions pursued by private plaintiffs, and allegations by various federal agencies.

Department of Justice criminal prosecutions of organizations:

The Department of Justice (DOJ) carries out criminal prosecutions against organizations. While firms, as entities, cannot receive prison sentences like individuals, they can face significant penalties such as hefty fines, operational constraints, and monitorships. The Corporate Prosecution Registry, initially established by Brandon Garrett and now managed by the Legal Data Lab at the University of Virginia School of Law and Duke University School of Law, offers a comprehensive database of criminal organizational prosecutions, covering various categories such as fraud, workplace safety, environmental violations, and bribery. Criminal enforcement, the most severe sanction for organizations, is reserved for those engaging in the most egregious conduct where prosecutors can gather sufficient evidence (Arlen and Kahan, 2017; Arlen, 2016; Garrett, 2014). Even after considering deferred and non-prosecution agreements, which have been scrutinized extensively, criminal prosecution of publicly traded firms remains infrequent. The likelihood that a publicly traded firm will face criminal sanctions in a given year is less than 0.5 percent based on the number of publicly traded firms.

Securities and Exchange Commission accounting and auditing enforcement actions:

The SEC penalizes companies involved in financial misreporting, with these penalties documented in Accounting and Auditing Enforcement Releases (AAERs). As a regulatory authority, the SEC has the authority to impose civil sanctions on companies, including fines and operational limitations, as outlined in these enforcement releases. Dechow et al. (2012) compiled all AAERs, and this dataset has been maintained and updated by the University of California, Berkeley Center for Financial Reporting and Management.

Stanford securities class action clearinghouse database

The Stanford Securities Class Action Clearinghouse Database serves as a resource for investors who perceive themselves as victims of inaccuracies conveyed by publicly traded companies, enabling them to pursue legal action against these firms to seek redress. In contrast to the data provided by governmental entities such as the DOJ and SEC, which hinge on purported violations identified by these entities, private lawsuits are not bound by the same institutional limitations or resources (Kedia and Rajgopal, 2011; Nguyen, 2018). Nonetheless, private litigants are driven by their individual objectives, often centered on financial compensation, which imposes a distinct set of constraints on the types of lawsuits that can be filed. Consequently, class action lawsuits offer an alternative avenue for gauging the extent of alleged corporate misconduct. The Stanford Securities Class Action Clearinghouse Database aggregates information on securities class actions filed in federal courts.

Regulatory violations:

The Department of Justice (DOJ) and Securities and Exchange Commission (SEC) are two federal agencies empowered to penalize companies for wrongdoing. Nevertheless, numerous other agencies also possess the authority to penalize firms, both criminally and civilly, for violations of laws and regulations. For instance, the Environmental Protection Agency has the jurisdiction to impose both civil and criminal penalties on firms for breaches of environmental regulations. Unlike the DOJ and SEC, which typically penalize firms for particularly severe misconduct resulting in substantial fines amounting to hundreds of millions or even billions of dollars, other regulatory agencies sanction firms for more commonplace infractions. Many of these fines are notably smaller.

There is no centralized government-hosted database that consolidates violations across all agencies. However, an independent organization, Good Jobs First, developed Violation Tracker, which compiles data from 42 agencies. The complete list of agencies is provided at https://www.goodjobsfirst.org/violation-tracker-datasources. Moreover, the violation Tracker typically includes only violations that include at least $5,000 or more in final penalties. The database also included a limited number of cases from state courts. By utilizing the Violation Tracker database matched to publicly traded firms, researchers can ascertain the frequency at which firms encounter sanctions from any regulatory and enforcement body.

The limitations of the Securities and Exchange Commission (SEC), Department of Justice (DOJ), and Stanford Securities Class Action Clearinghouse databases encompass selection bias, incomplete coverage, data accuracy concerns, focus on specific cases, limited context, and access restrictions (Ege, M. S., 2015). The SEC database suffers from selective reporting, potentially biasing the sample and not fully representing management misconduct. Similarly, the DOJ database may not capture all instances of misconduct, potentially biased towards publicly disclosed or severe cases, compromising generalizability. The Clearinghouse may exhibit bias towards settled securities class-action lawsuits with significant public attention, potentially affecting the generalizability of findings. Additionally, all three databases may have incomplete coverage and issues with data accuracy, impacting the validity of analyses (Karpoff, Lee and Martin, 2008). Their focus on specific cases or violations may limit the scope of analyses by overlooking other forms of misconduct. Furthermore, limited contextual information provided by these databases hinders a comprehensive understanding of alleged misconduct. Access restrictions imposed by DOJ may also impede independent verification and in-depth analysis. In our research to overcome the limitations of each database, we utilized all three alongside some regulatory violation databases to ensure a comprehensive analysis.

In conclusion, the comprehensive analysis of misconduct data from diverse sources, including the Department of Justice (DOJ), Securities and Exchange Commission (SEC), Stanford Securities Class Action Clearinghouse Database, and regulatory violations, provides a multifaceted understanding of corporate wrongdoing. While the DOJ and SEC focus on criminal and civil sanctions against firms, respectively, private lawsuits

documented in the Stanford Securities Class Action Clearinghouse Database offer insights into investor lawsuits. Moreover, regulatory violations across various agencies shed light on a broader spectrum of misconduct, ranging from environmental breaches to financial irregularities. Each of these resources contributes uniquely to the identification and assessment of corporate misconduct, facilitating informed decision-making and promoting accountability within the corporate landscape. Through the integration of these diverse datasets, stakeholders can gain a comprehensive perspective on the prevalence, nature, and consequences of corporate misconduct, fostering a more transparent and ethical business environment.

Thus, our main independent variable of interest, *misconduct*, is coded one if the focal firm has one of the above misconducts in year t, and zero otherwise.

4.3 Control Variables

To examine the incremental effect of corporate misconduct on internal control, we employ three groups of control variables. The first group of control variables includes the factors that influence the internal control performance which are documented in the prior literature.

Multiple studies have shown significant association between firm size and internal control quality (Kinney and McDaniel, 1989; Mazza and Azzali, 2015). Thus, we control for firm size which is measured by the natural logarithm of total assets (*LASSET*). Kinney and McDaniel (1989) acknowledge this association, with varying results, some indicating a negative correlation (e.g., Wright and Wright 1996), while others find no significant difference, as noted by Jiambalvo (1991). Doyle (2007) states several reasons behind the association between internal control and the size of the business. Specifically, large firms usually have greater financial resources to invest in robust control systems, including hiring internal auditors and implementing sophisticated mechanisms. Additionally, the complexity of operations increases with firm size, necessitating more extensive internal controls to ensure accurate reporting and regulatory compliance.

We also include the age of the firm (AGE) since Doyle et al. (2007a) suggest that older firms have better internal controls. Prior literature suggests that firm age can influence internal control in various ways. Older firms, having developed and refined

procedures over time, are likely to possess greater experience and maturity, enabling them to identify weaknesses and implement best practices. Their stability fosters consistent application of control measures ingrained in their organizational culture (Ibrahim, S., Diibuzie, G., & Abubakari, M., 2017)

The presence of financial distress can hinder an organization's ability to invest in the upkeep of effective internal control measures. Poor financial performance may be associated with more severe and persistent internal control deficiencies. Distress is measured through two variables: Reynolds and Francis (2001) measure the financial distress using the Altman Z-Score (*ZSCORE*) where a lower Z-Score indicate a greater distress risk, and a binary variable (*LOSS*) indicating the occurrence of a loss in the current period. Loss as a type of financial distress was considered by Mazza and Azzali (2015) as an indicator variable that captures whether a company had negative earnings before extraordinary items.

Prior research shows evidence that several CEO characteristics influence internal control efficiency, such as CEO ownership percentage, CEO tenure, and CEO gender. CEOs with higher ownership stakes in the firm are significantly associated with the presence of material weaknesses. CEO ownership (*CEOOwnership*) is measure as the percentage of CEO stock shares holding within the company. Moreover, longer CEO tenure is linked to an increased likelihood of material weaknesses in internal control being reported. CEO tenure (*CEOTenure*) is measured as the number of years since CEO works for the company. Research suggests that women tend to exhibit greater financial reporting conservatism and make more neutral moral judgments, which may result in reduced instances of corporate failure and aggressive earnings management. Female CEOs may exert a positive influence on internal control quality due to their potentially more ethical, cautious, and risk-averse nature compared to male counterparts. Therefore, having female CEOs could potentially lead to stronger internal control systems, contributing to better internal control quality and reducing the likelihood of material weaknesses being reported under Sarbanes-Oxley Section 404 (Lin, Y.-C., Wang, Y.-C., Chiou, J.-R., & Huang, H.-W., 2014). CEO gender (*CEOGender*) is measured as a dummy variable that equals one if a focal firm has a female CEO, and zero otherwise.

Audit quality is of importance to internal control effectiveness (Mazza and Azzali, 2015; Lin, Wang, Chiou, & Huang, 2014). We use the presence of Big 4 as a proxy to measure audit quality (*BIG4*), which is a dummy variable if a company undergoes an audit by a Big 4 audit firm. This variable is coded one if the focal firm audited by Big4 firm, and zero otherwise. Furthermore, Stephens (2011) highlights that companies audited by industry-leading auditors demonstrate a greater propensity to disclose internal control deficiencies under SOX Section 302. This inclination arises from the specialized knowledge possessed by auditors familiar with specific industries, enabling them to more effectively pinpoint weaknesses in internal controls. Consequently, we incorporate an auditor specialist variable (*SPECIALIST)* to consider the impact of auditor characteristics on internal control problem detection. This variable is coded one if the external auditor holds the highest market share within the industry for year t, and zero otherwise. Industry market share is computed based on the annual sales revenue audited in year t for a specific industry.

Studies by Krishnan and Visvanathan (2007) and Hoitash et al. (2009) indicate that a higher concentration of financial experts on the audit committee is associated with a reduced likelihood of material weaknesses (MWs). Hence, we control for audit committee members with accounting expertise in year t (*ACExpertise*). Data for this variable are sourced from BoardEx, with accounting expertise defined as work experience as a public auditor at one of the 25 audit firms listed in Compustat as CPA or chartered accountant, or in an accounting-specific position such as CFO, treasurer, controller, or head of accounting.

Controlling for board independence is paramount in research exploring the link between internal control and management misconduct. Recent studies underscore the necessity of considering the influence of board independence on this relationship. For example, Chen et al. (2017) reveal a negative correlation between board independence and the disclosure of internal control weaknesses, suggesting that higher board independence may lead to fewer weaknesses being disclosed. Similarly, Michelon, Bozzolan, and Beretta (2015) observe a similar association in the European market, with Agyei-Mensah (2016) corroborating this finding in firms in Ghana. Therefore, we include the percentage of independent directors in year t as a control variable (*BoardIndependence*). Additionally,

we also consider if the CEO serves as the chair of the board of directors (*CEODual*). CEODual equals 1 if CEO is the chairman of the board in year t, and 0 otherwise. Data for all board variables are sourced from BoardEx.

The second set of control variables includes essential firm characteristics that would influence firms' internal control effectiveness. Leverage (*LEV*) the ratio of total debts to total assets, return on assets (*ROA*) the income before extraordinary items divided by average total assets, sales growth (*SGrowth*) is sales growth ratio from year t-1 to year t. These variables are vital firm essential firm characteristics and have been found to link to high incidence of SEC enforcement actions, lawsuits, and upward earnings management in prior research (e.g., Erickson and Wang 1999; Kim and Skinner 2012; Louis 2004).

The third set of control variables includes the alternative actions that focal firms take in the aftermath of corporate misconduct. Different strategies and approaches are taken by firms to rebuild their reputation based on the types of misconduct. We control CEO succession and CSR performance as alternative actions to repair the damaged corporate image. Following the prior literature, specifically, CEO succession (*CEOSuccession*) is a dummy variable that equals one if a focal firm has a CEO succession in the aftermath of corporate misconduct, and zero otherwise. CSR performance (*CSR)* is measured as the CSR corporate rating in the aftermath of corporate misconduct.

4.4 Empirical Model

To empirically analyze the relationship between corporate misconduct and internal control effectiveness, we employ a regression model that captures various influencing factors and measures the extent of internal control improvements in response to misconduct events

$$\text{Internal control effectiveness}_{t+1} = \text{Misconduct}_t + \text{LASSET}_t + \text{AGE}_t + \text{Z-Score}_t + \text{LOSS}_t + \text{CEOOwnership}_t + \text{CEOTenure}_t + \text{CEOGender}_t + \text{BIG4}_t + \text{SPECIALIST}_t + \text{ACExpertise}_t + \text{BoardIndependance}_t + \text{CEODual}_t + \text{LEV}_t + \text{SGrowth}_t + \text{ROA}_t + \text{CEOSuccession}_{t+1} + \text{CSR}_{t+1} \quad (1)$$

Chapter 5. Empirical Results

5.1 Sample Selection

We combine the datasets from DOJ, AAER, Stanford Securities Class Action Clearinghouse Database, and GoodJobFirst together as described in section 3.2. It comprises both financial and non-financial misconducts, and private and public lawsuits. Starting from 14,425 firm-years misconduct, we merge the observations with available Compustat and CRSP data, Audit Analytics, and Boardex data that were used to construct control variables. After merging, it ends up with 10,536 observations. We remove financial firms as they are in different life cycles, and our final sample comprises 8,740 firm-year observations.

5.2 Research Design

Our hypothesis predicts that corporate misconduct incentivizes firms to take actions to repair their damaged reputation via internal control enhancement, i.e., our treatment group. To support our causality claims, we use propensity score matching (PSM) to construct a control group of matched firms not associated with any misconduct throughout our study period. In selecting variables in our first stage regression to predict the occurrence of misconduct, we use all the variables presented in Table 1 except the dependent variables to ensure the pre-treatment trend similarity: ASSET, LOSS, LEV, ROA, SGrowth, Z-Score, AGE, CEO Gender, CEO Ownership, Independent Director%, CEO Dual, CEO Tenure, ACExpertise, CEO Succession, LEADER, and BIG4. We use one-to-one matching (no placement) to construct the control group with similar firm characteristics, thus the difference between the two groups will likely be attributed to the treatment effect. After matching, covariates for the treatment and control groups were not significantly different. To ensure matching accuracy and quality, we use caliper-matching in which all comparison observations falling within a defined radius of the relevant observations are selected as matches. The PSM matching p-score for treated and control firms were 0.235 and 0.234, respectively; t-test for the two groups' p-score is 0.08, indicating no significant differences. In total, we obtain a final test sample of 2,104 firm-year observations in the event year.

Table 1: Firm characteristics of the sample after PSM (N=2,104)

	Unmatched sample			Matched sample		
	Treatment	Control	t-statistic	Treatment	Control	t-statistic
ASSET	8.433	7.190	27.17	8.376	8.372	0.07
LOSS	0.057	0.152	-8.54	0.056	0.051	0.48
LEV	0.346	0.246	13.40	0.346	0.354	-0.76
ROA	0.054	0.025	6.40	0.053	0.060	-1.55
SGrowth	0.048	0.060	-1.62	0.050	0.056	-0.60
ZSCORE	1.050	1.019	1.47	1.054	1.035	0.63
AGE	20.955	16.489	14.91	20.571	19.934	1.29
CEO Gender	0.070	0.047	3.32	0.068	0.069	-0.09
CEO Ownership	0.013	0.024	-6.74	0.014	0.012	0.84
Independent Director%	0.853	0.838	6.19	0.854	0.851	0.74
CEO Dual	0.408	0.376	2.08	0.408	0.402	0.27
CEOTenure	7.744	7.86	-0.56	7.695	7.503	0.71
ACExpertise	0.160	0.158	0.36	0.163	0.158	0.59
CEO Succession	0.771	0.005	19.79	0.029	0.028	0.13
LEADER	0.30	0.225	5.46	0.296	0.294	0.10
BIG4	0.949	0.764	14.29	0.946	0.958	-1.33
CSR Score	0.417	0.349	10.41	0.414	0.406	0.90

5.3 Descriptive Statistics

In our unmatched misconduct sample, around 5% of firms have more than one misdoing in a single year. 18% of these firms are involved in financial misconduct, and the remaining 82% are involved in nonfinancial misconduct such as environmental law violations, corruption, workplace safety violations, labor law violations, etc. 11.3% of firms are involved in private lawsuits while the remaining are involved by public lawsuits from government agencies.

Table 2 provided the yearly misconduct distribution. We observed a slight increase (1.5%) in misconduct announcements after the year 2008, likely due to increased public scrutiny in the aftermath of a financial crisis. We control for year fixed effect to mitigate the confounding effect of macro events. We also provided the misconduct industrial distribution.

Table 2: The Corporate Misconduct Distribution within matched Sample by year and industry

	Year distribution			Industry distribution		
No.	Year	Year sample	Year % of total	Industry name	Industry sample	Industry % of total
1				Agriculture, Forestry, &	3	0.29
	2005	22	2.09	Fishing		
2	2006	19	1.81	Construction	51	4.85
3	2007	35	3.33	Manufacturing	487	46.29
4	2008	28	2.66	Mining	54	5.13
5	2009	44	4.18	Retail Trade	145	13.78
6	2010	54	5.13	Services	186	17.68
7				Transportation &		
	2011	58	5.51	Public Utilities	90	8.56
8	2012	67	6.37	Wholesale Trade	36	3.42
9	2013	76	7.22			
10	2014	56	5.32			
11	2015	60	5.70			
12	2016	87	8.27			
13	2017	67	6.37			
14	2018	78	7.41			
15	2019	74	7.03			
16	2020	59	5.61			
17	2021	69	6.56			
18	2022	58	5.51			
19	2023	41	3.90			
Total		**1,052**	**100**		**1,052**	**100**

In the matched sample, as shown in table 3, we observe firms operating at the greater size of assets (matched=8.37 vs. unmatched=7.34), longer operating history (matched=20.22 vs. unmatched=17.05), less concentrated CEO ownerships (matched=0.01 vs. unmatched=0.02), a higher percentage of BIG4 audit firm appointments (matched=0.95 vs. unmatched=0.78), less likely to have financial loss (matched=0.05 vs. unmatched=0.11), and more likely to engage in CSR activity (matched=0.41 vs unmatched=0.35). It mitigates the endogenous concern that our financially vulnerable matched sample drives the change in internal control.

Table 3: Descriptive Statistics

Panel A: Matched sample

Variable	Mean	Median	SD	P25	P75
ASSET	8.3740	8.3741	1.2407	7.5005	9.2226
LOSS	0.0537	0.0000	0.2255	0.0000	0.0000
LEV	0.3505	0.3312	0.2309	0.1964	0.4661
ROA	0.0574	0.0537	0.0817	0.0258	0.0919
SGrowth	0.0528	0.0657	0.2094	-0.0056	0.1381
Z-SCORE	1.0445	0.8736	0.6885	0.5570	1.3668
AGE	20.2254	19.7685	10.3972	12.9247	25.9548
CEO Gender	0.0689	0.0000	0.2534	0.0000	0.0000
CEO Ownership	0.0130	0.0027	0.0340	0.0010	0.0076
Independent Director%	0.8525	0.8889	0.0738	0.8182	0.9069
CEO Dual	0.4049	0.0000	0.4910	0.0000	1.0000
CEOTenure	7.5988	5.8426	6.2323	2.9979	9.9986
ACExpertise	0.1603	0.1667	0.1746	0.0000	0.2500
CEO Succession t+1	0.0290	0.0000	0.1678	0.0000	0.0000
LEADER	0.2947	0.0000	0.4560	0.0000	1.0000
BIG4	0.9520	1.0000	0.2138	1.0000	1.0000
Misonduct	0.5000	0.5000	0.5001	0.0000	1.0000
ACExpertise_increase t+1	0.0299	0.0000	0.1705	0.0000	0.0000
RiskOversight_change t+1	0.0029	0.0000	0.0533	0.0000	0.0000
ICWt+1	0.0067	0.0000	0.0813	0.0000	0.0000
CSR score	0.4101	0.4258	0.2030	0.2855	0.5441

Panel B: Unmatched sample

VarName	Mean	Median	SD	P25	P75
ASSET	7.3482	7.3041	1.4863	6.3277	8.3516
LOSS	0.1137	0.0000	0.3175	0.0000	0.0000
LEV	0.2592	0.2304	0.2345	0.0428	0.3976
ROA	0.0290	0.0474	0.1388	0.0069	0.0884
SGrowth	0.0584	0.0714	0.2262	-0.0092	0.1566
ZSCORE	1.0228	0.8619	0.6550	0.5619	1.3295
AGE	17.0587	16.5562	9.4621	10.0452	23.0973
CEO Gender	0.0498	0.0000	0.2175	0.0000	0.0000
CEO Ownership	0.0230	0.0043	0.0523	0.0014	0.0148
Independent Director%	0.8399	0.8750	0.0782	0.8000	0.9000
CEO Dual	0.3799	0.0000	0.4854	0.0000	1.0000
CEOTenure	7.8453	5.9795	6.4315	2.9979	10.6804
ACExpertise	0.1586	0.1667	0.1760	0.0000	0.2500
CEO Succession	0.0307	0.0000	0.1724	0.0000	0.0000
LEADER	0.2349	0.0000	0.4240	0.0000	0.0000
BIG4	0.7872	1.0000	0.4093	1.0000	1.0000
Misonduct	0.1276	0.0000	0.3336	0.0000	0.0000
ICW	0.0478	0.0000	0.2134	0.0000	0.0000
ACExpertise_increase	0.0272	0.0000	0.1628	0.0000	0.0000
RiskOversight_change	0.0019	0.0000	0.0441	0.0000	0.0000
CSR Score	0.3581	0.3973	0.2046	0.2351	0.4968

5.4 Regression Analysis

Table 4 reports findings from the PSM analysis of the hypothesis on change of internal control. In Panel A, the dependent variable in Model (1) is ACExpertise_increase (t+1), which is a dummy variable coded one if the focal firm has invested in improving audit committee effectiveness in year t+1 via increase the financial expertise or independent audit committee in the aftermath of misconduct in year t, and zero otherwise. Dependent variable in model (2) is Riskoversight_change which is coded one if the focal firm has a change of board of directors who oversight risk management in year t+1 following the years of misconduct, and zero otherwise. Dependent variable in model (3) is ICW which is coded as one if a firm reports the presence of material weakness in internal control, and zero otherwise. In Panel B, we extend the dependent variable from year t+1 to year t+2 and observe if the firms take action in internal control two years after the corporate misconduct. The results show that compared to control firms without misconduct occurrence, firms having corporate misconduct choose to enhance the audit committee effectiveness via investment in its human capital immediately after corporate misconduct (b=0.037, t=5.36), and its effect continuously be significant even in year t+2 (b=0.051, t=5.46). On the other side, affected firms do not immediately invest in the board of directors who oversight risk but in year t+2 (b=0.005, t=1.72).

Table 4: Analysis of Corporate Misconduct and Outcomes (Matched Sample)

Panel A: Analysis of Corporate Misconduct and Outcomes t+1 (Matched sample)

	(1) *ACExpertise_increase t+1*	(2) *RiskOversight_change t+1*	(3) *ICW t+1*
Misconduct	0.037***	0.003	0.006
	(5.36)	(1.50)	(1.47)
ASSET	0.002	-0.000	-0.002
	(0.82)	(-0.52)	(-1.18)
LOSS	0.005	0.010	0.004
	(0.31)	(1.12)	(0.49)
LEV	-0.021	0.010	0.013*
	(-1.48)	(1.38)	(1.80)
ROA	-0.015	0.021	-0.019
	(-0.41)	(0.91)	(-1.08)
SGrowth	-0.002	-0.004	-0.003

	(-0.11)	(-0.63)	(-0.25)
Z-SCORE	0.001	0.003	0.003
	(0.16)	(1.20)	(0.78)
AGE	0.000	-0.000	0.000
	(1.25)	(-0.39)	(0.20)
CEO Gender	-0.006	-0.004	0.006
	(-0.56)	(-1.06)	(0.40)
CEO Ownership	0.106	0.015	-0.058
	(1.30)	(0.87)	(-1.16)
Independent Director%	0.070	0.017	0.029
	(1.61)	(1.47)	(1.62)
CEO Dual	0.001	-0.002	-0.002
	(0.16)	(-0.97)	(-0.49)
CEOTenure	-0.001*	-0.000	0.000
	(-1.92)	(-1.16)	(0.54)
ACExpertise	0.115***	-0.010	0.000
	(4.97)	(-1.34)	(0.01)
CEO Succession t+1	0.157***	-0.003	0.009
	(3.67)	(-1.10)	(0.52)
LEADER	-0.008	-0.003	0.001
	(-1.21)	(-0.75)	(0.42)
BIG4	0.002	0.000	-0.010
	(0.14)	(0.14)	(-0.86)
CSR score	-0.005	0.017	0.004
	(-0.26)	(1.29)	(0.32)
_cons	-0.083*	-0.020	-0.008
	(-1.67)	(-1.63)	(-0.42)
N	2104	2104	2104
Adj. R^2	0.039	0.009	0.006

*, **, *** Denote significant level at the 0.1, 0.05, and .01 levels, respectively, using two-tailed p-values.

Panel B: Analysis of Corporate Misconduct and Outcomes t+2 (Matched sample)

	(1) *ACExpertise_increase t+2*	(2) *RiskOversight_change t+2*	(3) *ICW t+2*
Misconduct	0.051***	0.005*	0.006
	(5.46)	(1.72)	(1.45)
ASSET	0.006*	-0.000	-0.001
	(1.70)	(-0.47)	(-0.77)
LOSS	0.013	0.009	0.010
	(0.60)	(1.05)	(0.72)
LEV	-0.042**	0.013	0.016*

	(-2.18)	(1.42)	(1.84)
ROA	-0.072	0.020	-0.021
	(-1.48)	(0.84)	(-1.05)
SGrowth	-0.007	-0.003	0.001
	(-0.30)	(-0.38)	(0.07)
Z-SCORE	0.001	0.004	0.003
	(0.16)	(1.00)	(0.90)
AGE	0.000	-0.000	0.000
	(0.95)	(-0.37)	(0.17)
CEO Gender	-0.003	-0.004	0.003
	(-0.16)	(-1.10)	(0.23)
CEO Ownership	-0.011	0.016	-0.087
	(-0.12)	(0.90)	(-1.34)
Independent Director%	0.056	0.015	0.013
	(1.02)	(1.17)	(0.53)
CEO Dual	-0.008	-0.002	-0.003
	(-0.71)	(-0.95)	(-0.70)
CEOTenure	0.001	-0.000	0.001
	(0.80)	(-1.31)	(0.95)
ACExpertise	0.192***	-0.015	0.011
	(5.90)	(-1.59)	(0.84)
CEO Succession t+1	0.132***	-0.003	0.004
	(2.98)	(-1.15)	(0.20)
LEADER	-0.006	-0.004	0.002
	(-0.73)	(-1.00)	(0.49)
BIG4	0.020	0.001	-0.018
	(1.24)	(0.31)	(-1.04)
CSR score	0.029	0.012	0.007
	(1.26)	(0.91)	(0.57)
_cons	-0.133**	-0.016	0.005
	(-2.44)	(-1.28)	(0.21)
N	2100	2100	2100
Adj. R^2	0.048	0.023	0.021

*, **, *** Denote significant level at the 0.1, 0.05, and .01 levels, respectively, using two-tailed p-values.

In Table 5, we also conduct the regression analysis using unmatched sample, and we find that the result is generally consistent with the PSM result. In the unmatched sample, affected firms enhance internal control via accounting expertise investment (b=0.09, t=8.34) and board members who oversight the corporate risk (b=0.008, t=2.13).

Table 5: Analysis of misconduct and outcomes (unmatched sample)

	(1) ACExpertise_increase	(2) ICW	(3) RiskOversight_change
Misconduct	0.090***	-0.006	0.008**
	(8.34)	(-0.80)	(2.13)
ASSET	0.004**	-0.010***	-0.000
	(2.04)	(-3.78)	(-0.56)
LOSS	0.001	-0.018*	0.001
	(0.21)	(-1.88)	(0.59)
LEV	-0.000	0.059***	0.005*
	(-0.01)	(3.42)	(1.77)
ROA	-0.016	-0.073***	0.000
	(-1.31)	(-2.82)	(0.09)
SGrowth	0.003	-0.014	0.002
	(0.47)	(-1.08)	(0.93)
ZSCORE	0.004	-0.003	0.002
	(0.90)	(-0.49)	(1.35)
AGE	0.001***	-0.000	0.000
	(2.59)	(-0.33)	(0.08)
CEO Gender	0.007	-0.015	-0.002
	(0.62)	(-1.63)	(-1.58)
CEO Ownership	-0.051*	0.254***	0.008
	(-1.88)	(3.36)	(1.36)
Independent Director%	0.053***	-0.034	0.014*
	(2.85)	(-0.78)	(1.70)
CEO Dual	0.001	0.002	-0.002
	(0.19)	(0.39)	(-1.29)
CEOTenure	0.000	-0.001***	-0.000
	(0.40)	(-2.63)	(-0.97)
ACExpertise	0.103***	-0.022	-0.005
	(7.43)	(-1.54)	(-1.02)
CEO Succession	0.057***	-0.009	-0.007**
	(2.67)	(-0.93)	(-2.14)
LEADER	-0.001	0.001	-0.001
	(-0.18)	(0.22)	(-0.81)
BIG4	0.009**	-0.033***	-0.000
	(2.32)	(-3.53)	(-0.26)
CSR Score	0.004	-0.032**	0.002
	(0.42)	(-2.09)	(0.53)
_cons	-0.098***	0.187***	-0.011*
	(-4.26)	(4.47)	(-1.79)
Industry FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
N	8740	8740	8740
Adj. R^2	0.072	0.036	0.036

Chapter 6. Conclusion

Our research presents an in-depth analysis of how firms address corporate misconduct by strengthening internal control systems. We observed that firms tend to promptly enhance the effectiveness of their audit committees following incidents of misconduct, while improvements in the board of directors' oversight of risk management typically emerge after at least two years. This pattern suggests a phased approach, reflecting firms' strategies to restore their reputations and rebuild stakeholder trust.

Our findings support the hypothesis that firms are likely to make internal control adjustments as a strategic response to reputational risks, emphasizing the critical role of sound corporate governance and ethical practices. Furthermore, by applying signaling theory, this study expands current corporate governance theories, illustrating how firms use concrete actions to communicate their commitment to ethical rectification.

The empirical insights we provide not only contribute to academic discourse on corporate misconduct but also offer practical guidance for practitioners and regulators aiming to improve corporate governance and risk management frameworks. Ultimately, we underscore the importance of resilience, integrity, and trustworthiness within the corporate sector.

As firms continue to navigate the complexities of misconduct and its aftermath, our findings lay the groundwork for future research on the long-term impact of internal control enhancements on stakeholder trust and organizational performance. By prioritizing ethical standards and transparency, firms can strengthen their long-term sustainability and cultivate a culture of accountability that benefits all stakeholders.

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Appendix

Definition of variables

Variable of interest	**Definitions**	**Notes and data source**
Misconduct	*Misconduct* is coded as "1" if the focal firm has one of the above misconducts in year t, and "0" otherwise.	
Dependent variable		
ICWt+1	Material weaknesses in internal control. This variable is coded '1' indicated a firm reporting the presence of material weaknesses in internal control (ICW), and '0' indicated otherwise,	Audit Analytics - SOX 404 Internal Controls
InternalAuditor_change t+1	It is coded as "1" if the focal firm has a change of internal auditor following the years of misconduct, and "0" otherwise.	Audit Analytics - Director and Officer Changes
ACExpertise_increase t+1	It is coded as "1" if the focal firm has invested in improving audit committee effectiveness via increase the financial expertise or independent audit committee, and "0" otherwise	Boardex-Board and Director Committees; BoardEx - qualifications
Riskoversight_change t+1	It is coded as "1" if the focal firm has a change of board of directors who oversight risk management following the years of misconduct, and "0" otherwise	Audit Analytics - Director and Officer Changes
Control variables		
ASSET	The natural logarithm of total assets	(Compustat)
AGE	The number of years the firm has been public, measured by the number of years the firm has price information on CRSP.	CRSP's initial listing date (first trading date).

Z-SCORE	Z-SCORE= 0.012*((act-lct)/at)+0.014*(re/at)+0.033*(ebit/at)+0.006*((prcc_f*csho)/lt)+0.999*(sale/at)	(Compustat)
LOSS	LOSS is 1 if the company has a loss in the current and previous years, 0 otherwise	(Compustat)
LEV	The ratio of total debts to total assets.	(Compustat)
ROA	The income before extraordinary items divided by average total assets.	(Compustat)
SGrowth	Sales growth ratio from year t-1 to year t.	Compustat
CEO Ownership	CEO ownership (*CEOOwnership*) is measure as the percentage of CEO stock shares holding within the company.	Execucomp
CEOTenure	CEO tenure (*CEOTenure*) is measured as the number of years since CEO works for the company.	Boardex=>employment history=>using role name identify CEO
CEOGender	CEO gender (*CEOGender*) is measured as a dummy variable d that equals 1 if a focal firm has a female CEO, and 0 otherwise.	Execucomp
BIG4	This variable is indicated by 1 if the focal firm audited by Big4 firm, and 0 otherwise.	Audit Analytics - Accelerated Filer
LEADER	This variable is indicated by 1 if the external auditor holds the highest market share within the industry for year t, and 0 otherwise. Industry market share is computed based on the annual sales revenue audited in year t for a specific industry.	Audit Analytics - Accelerated Filer
ACExpertise	Audit committee members with accounting expertise in year t (ACExpertise).	**Boardex**- Board and Director Committees; BoardEx - qualifications
Independent Director%		(BoardEx). BoardEx - Organization

		Summary – Analytics
CEO Dual	It equals 1 if CEO is the chairman of the board in year t, and 0 otherwise. (BoardEx).	BoardEx - Organization Summary – Analytics Individual Role (rolename)
CEO Succession t+1	It is a dummy variable that equals 1 if a focal firm has a CEO succession in the aftermath of corporate misconduct, and 0 otherwise	BoardEx - Organization Summary – Analytics BoardEx- employment history
CSR score	CSR performance is measured as the CSR corporate rating.	Refinitive and KLD

Vita

Shatha Ali Sarhan was born in 1980, in Dubai, United Arab Emirates. She studiedher bachelor's at the UAE University in Al Ain, from which she graduated cum laude, in 2002. Her degree was a Bachelor of Business Administration in Accounting.

Mrs. Sarhan has been running a family business of providing service security in Dubai since 2005 where she is responsible for overseeing financial management, budgeting, and auditing functions. Her role involves managing the company's financial operations, ensuring compliance with regulatory requirements, and conducting internal audits to maintain the integrity of the business's financial records.

Mrs. Sarhan obtained her UAE VAT Diploma in 2018, further enhancing her expertise in tax compliance and financial management. Mrs. Sarhan is currently pursuing her Master's Degree.