

# Performance Shortfalls and Corporate Recidivism: A Contingency Approach

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*Abstract*—This paper examines the phenomenon of recidivism in the Chinese stock market, emphasizing the significance of mitigating repeat offences within the corporate domain. Using a contingency model and data from Chinese publicly listed companies (1999-2018), the study investigates the impact of underperformance, governance factors, and managerial traits on unethical conduct. The research suggests that persistently unmet economic objectives can foster problem-focused exploration, potentially leading to misconduct. Furthermore, the study considers the unique cultural context of China, where “guanxi” and corruption may influence corporate behavior. It concludes that governance mechanisms play a pivotal role in regulating corporate behavior, underscoring the necessity for enhanced oversight and enforcement of corporate governance standards.

*Keywords*—Recidivism, corporate misbehavior, BTOF, aspiration level, corporate governance, individual characteristics.

## I. INTRODUCTION

CORPORATE recidivism, defined as the repeated occurrence of corporate misconduct, poses a significant threat to the well-being of organizations and society at large. A wide range of unethical and illegal activities, such as fraud, corruption, financial misreporting, and antitrust violations, have been observed in numerous instances of corporate recidivism [1]-[3]. Although scholars have made strides in understanding the antecedents and consequences of corporate misconduct [3]-[5], the mechanisms that drive companies to engage in recidivism remain underexplored. In this study, it is aimed to examine the role of performance shortfalls in triggering corporate recidivism, using the contingency approach and the behavioral theory of the firm as guiding frameworks.

The behavioral theory of the firm [6] suggests that organizational performance relative to aspiration levels is a critical determinant of organizational search and decision-making processes. When companies experience performance shortfalls, or when they fail to meet their aspiration levels, they are likely to engage in riskier and more aggressive behaviors to improve their performance [7], [8]. Consequently, they may turn to misconduct, particularly if they have previously engaged in such behavior with positive outcomes. To better understand the link between performance shortfalls and corporate recidivism, this study employs a contingency approach that considers the moderating role of corporate governance structures [9], [10]. The analysis considers the structure and dynamics of the board of directors in influencing this relationship. It is proposed that board size,

ownership, and CEO duality have significant impacts on the likelihood of corporate recidivism during underperformance.

The board, with its diverse expertise and oversight, can play a crucial role in mitigating or exacerbating corporate misbehavior, especially in scenarios where performance falls below aspiration levels. Larger boards, with their wide range of perspectives, can potentially stimulate more comprehensive decision-making, which may reduce the likelihood of corporate misbehavior. However, they may also suffer from coordination and communication issues, slowing the decision-making process and potentially allowing misbehavior to go unchecked. The ownership structure of the board also has implications for corporate behavior. When board members hold substantial equity in the firm, their interests are more closely aligned with those of the shareholders. This alignment motivates them to prevent corporate misbehavior, especially when performance falls below aspiration levels. In addition, CEO duality can have a significant impact on the way a corporation responds to underperformance. When the CEO also serves as the board chair, decision-making can be more streamlined, potentially enabling a swift response to performance shortfalls. However, this power concentration can also lead to unchecked decision-making, potentially increasing the risk of corporate misbehavior.

This study makes several contributions to the existing literature. First, this study expands the understanding of the factors influencing corporate recidivism by examining the role of performance shortfalls and aspiration levels, which have not been extensively explored in the context of corporate misconduct. Second, by employing a contingency approach, this study shed light on the conditions under which performance shortfalls may or may not lead to recidivism, thereby offering a more nuanced understanding of this complex phenomenon. Finally, the findings have practical implications for regulators, policymakers, and corporate leaders, as they underscore the importance of addressing performance shortfalls and strengthening corporate governance mechanisms to curb recidivism and promote ethical business practices.

## II. THEORY AND HYPOTHESES

### A. Corporate Recidivism and the Behavioral Theory of the Firm

The concept of corporate recidivism, or repeat offending, involves various actions that are considered unethical or illegal, committed by individuals within organizations who violate established norms, internal regulations, legal statutes,

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or administrative protocols [2], [11], [12]. The link between aspiration levels and misbehavior has been thoroughly explored by researchers e.g., [13], [14]-[17]. The Behavioral Theory of the Firm (BTOF) suggests that managers use aspiration levels as a benchmark to evaluate performance. The discrepancy between performance and aspiration level, motivates managers to adapt to change and seek alternative solutions to address weak performance. This idea is supported by a multitude of research emphasizing the importance of aspiration levels in shaping and adjusting organizational strategies and changes [18]-[22].

According to the behavioral literature, the historical performance of a firm is considered a key factor in shaping its future aspirations and risk-taking tendencies [7]. Cyert and March's (1963) seminal work [6] posited that managers draw on historical performance data to establish a reference point, which informs their aspirations and guides decision-making processes. When past performance has been strong, managers tend to set the aspiration level higher, which may result in an increased inclination towards risk taking as they attempt to sustain or enhance prior achievements. While a history of poor performance may reduce the aspiration level, leading to a more conservative approach to risk, it is argued that in certain circumstances, firms with a history of underperformance may engage in riskier behavior in an effort to revert the downturn and reach their aspiration level [18]. This is akin to the concept of the "risk shift" [23] or "gambler's fallacy" [24], [25], where a string of losses may provoke increasingly risky decisions in the hope of a dramatic turnaround.

This perspective adheres to the premise that past successes or failures play a pivotal role in defining the trajectory of the firm's goals and risk orientation. Greve's research [7] in 1998 further supported this perspective, suggesting that a firm's current performance relative to its aspirations can lead to changes in its risk behavior. If the firm's performance exceeds its aspirations, it tends to take less risk, considering the success of its current strategy. Conversely, when performance does not meet aspirations, the firm is likely to take more risks, as it seeks novel strategies to improve its performance. More recently, studies have explored how the relationship between historical aspiration levels and risk-taking behavior may be moderated by various factors such as managerial incentives, industry dynamism, and organizational structure [15], [20], [26]-[28]. For instance, Harris and Bromiley [15] found that incentive structures that reward risk-taking can amplify the effect of aspiration levels on misbehavior, particularly when firms are underperforming. Theory and empirical work indicate that a firm's historical performance level influences its inclination towards illicit actions.

Additionally, the firm's objectives may be subject to the comparative performance of its competitors. A company's potential for sales growth may depend on the level of competitiveness within the industry in which it operates. This can be attributed to managerial decision-making that involves the adoption of high-risk or non-traditional approaches in an effort to address their firm's underperformance compared to industry average. Furthermore, the theory posits that corporations are more likely to take higher risks and introduce

novel ideas when they are far behind their rivals.

In this sense, the BTOF provides a motivational explanation for corporate recidivism. The theory comprises two fundamental propositions: the concept of bounded rationality and the notion of satisfying behavior. The concept of bounded rationality posits that managers, due to cognitive limitations and information asymmetry, make decisions based on a simplified model of reality rather than an optimal one [29], [30]. In the context of corporate recidivism, this suggests that managers, when confronted with performance shortfalls, may be inclined to engage in unethical or illegal activities because they perceive these actions as the most accessible or expedient means to improve performance.

The BTOF also highlights the concept of satisfying behavior, which suggests that firms strive for satisfactory rather than maximum performance [6]. When performance falls below this satisfactory level, or the aspiration level, firms are driven to take more risks to reach their goals. In an environment without adequate monitoring and control, these risks may include illicit deeds, setting the stage for corporate recidivism.

Another research stream of the BOTF argues that organizations learn from experience and feedback mechanisms in decision-making [31]. In this context, if firms engage in unethical or illegal practices and face no significant repercussions or are even rewarded with improved performance, they may interpret this as a positive feedback. This might reinforce the perceived effectiveness of such activities, leading to repeat offending.

Building on Greve's work [7], it is posited that the urgency and intensity of seeking solutions amplify when a firm's performance considerably lags behind its aspiration level. On the other hand, as performance begins to converge with aspirations, the search for solutions may lose some of its intensity. Legitimate actions, such as R&D initiatives and strategic divestiture, have been recognized as potential answers to performance deficits, particularly when performance is inching closer to the desired thresholds. Such actions are viewed as legitimate because they align with broadly accepted business norms and practices.

However, when performance shortfall persists, misconduct is often seen as a viable, albeit ethically questionable, strategy to bridge the performance-aspiration gap [32], [33]. While earlier studies have not fully explored the impact of historical and social aspirations on such behavior [17], [21], [34], [35], this study aims to embed both these constructs into the conceptualization of aspiration level. In this research, the historical aspiration level of firms is examined by utilizing their past performance as a benchmark. Concurrently, the broader social aspiration level is also assessed, grounded in the mean performance of all other firms within the same industry. This approach allows for a more comprehensive understanding of the aspirations-performance dynamics within organizations.

Combining aforementioned discussions, this study aims to investigate the potential negative relationship between performance below aspiration and corporate recidivism. It is hypothesized that such a relationship exists, indicating that performance shortfalls might prompt recurrent unethical or

illegal actions within firms. This hypothesis emerges from a rich body of research that has interrogated the nexus between performance outcomes and behavioral responses across diverse contexts. Accordingly, the following hypothesis is put forward:

**Hypothesis 1a:** Performance below historical aspiration level is negatively associated with corporate recidivism, implying that the greater the shortfall in performance from aspiration levels, the higher the likelihood of corporate misconduct.

**Hypothesis 1b:** Performance below social aspiration level is negatively associated with corporate recidivism, implying that the greater the shortfall in performance from aspiration levels, the higher the likelihood of corporate misconduct.

### B. Corporate Governance

The behavioral theory of the firm and the thesis of aspiration level therefore offer a vital framework for comprehending the issue of corporate recidivism or repeat offending. Yet the aspiration-misbehavior model, in and of itself, does not provide a complete understanding of the diverse ways organizations respond when they underperform against set aspirations. Corporate governance, having a profound impact on a firm's tendency to indulge in unethical or illegal activities, contribute an additional dimension to this research gap. Corporate governance refers to the systems and procedures used to direct and control companies. It embodies the relationships between management, the board of directors, controlling and minority shareholders, and other stakeholders [36]-[38]. Effective corporate governance, with robust monitoring and control mechanisms, can serve as a deterrent to corporate misbehavior [39], [40]. Conversely, weak corporate governance can create an environment conducive to corporate misbehavior, especially when performance falls below aspiration levels [41].

Prior research has started to delve into how different elements of corporate governance can impact the relationship between performance shortfalls and corporate recidivism. For instance, executive compensation structures, particularly those heavily incentivized by performance, could potentially push managers towards unethical activities to meet or exceed targets [15]. Similarly, characteristics of the board, such as its size, ownership structure, and independence, may also influence the likelihood of corporate misbehavior.

1) *Board Size:* The size of a corporate board can potentially influence the relationship between underperformance and corporate recidivism. Boards with more members can provide a variety of resources, a wider array of expertise, and potentially more robust monitoring capabilities [34], [42]. However, these potential advantages may be offset by a lack of efficiency in decision-making and oversight due to the coordination and communication challenges that often arise within larger groups [43], [44].

Drawing upon the Behavioral Theory of the Firm (BTOF), managers, motivated by the desire to close the gap between actual performance and aspiration levels, might resort to unethical actions in the face of perceived ineffective board monitoring or delayed board responses to underperformance.

In such circumstances, firms with larger boards may struggle to coordinate prompt and cohesive responses due to complexities in communication and the need for consensus among a larger number of board directors. This potential inefficiency could create opportunities for managers to engage in corporate misconduct, particularly when performance consistently falls short of aspiration levels.

Firms with larger boards may also face challenges in the effective dissemination and utilization of knowledge, further hindering their ability to respond effectively to performance shortfalls. The diffusion of information and the development of shared understanding can be more complex and time-consuming within larger groups, potentially limiting the board's ability to learn from past performance shortfalls, and in turn, lead to the adoption of previous unethical actions as a seemingly quicker and more straightforward solution.

Past research has suggested the benefits of larger boards, particularly for companies in need of extensive advice and monitoring e.g., [45], [46]. However, these benefits may be compromised if the board becomes cumbersome and slow to respond to urgent performance challenges. Thus, as the size of the board increases, the likelihood of corporate recidivism may also increase, particularly when performance falls significantly below aspiration levels. Consequently, the following hypothesis is proposed:

**Hypothesis 2a(b):** Board size strengthens the negative relationship between performance below historical(social) aspiration level and corporate recidivism, such that the relationship is more negative in firms with larger boards.

2) *Board Ownership:* The impact of equity ownership on organizational responses to performance shortfalls has been noted in previous research [42], [45]. According to [47], director ownership is the most crucial factor in ensuring that a board will vigorously protect shareholders' interests. In the face of performance shortfalls, boards with substantial equity ownership may exert pressure on management to make decisions aligned with shareholders' interests. Boards with high equity ownership are more likely to scrutinize managerial proposals for change so that these proposals address shareholder concerns [48], [49].

The BTOF suggests that managers experiencing performance below aspiration levels may be motivated to engage in corporate misbehavior to close the performance gap. The motivational tendencies of managers may be influenced by the level of board ownership. Higher board ownership can potentially mitigate the occurrence of corporate misbehavior and recidivism. Boards with significant equity ownership are more likely to be vigilant and proactive in monitoring management decisions, thereby reducing the propensity for illicit actions. Moreover, board ownership can also serve as a mechanism to facilitate organizational learning. Boards with high equity ownership may be more invested in the company's long-term success, leading to a stronger emphasis on learning from past performance shortfalls and understanding the long-term implications of misconduct. Therefore, higher board ownership could potentially reduce the occurrence of corporate misbehavior and recidivism. In companies where the board holds a substantial amount



of equity, the relationship between performance below aspiration levels and aggressive strategies, including illegal actions, should be less negative. As performance declines, the likelihood of illegal actions should decrease, with the board acting as a strong deterrent to corporate recidivism. Thus:

**Hypothesis 3a(b):** Board ownership moderates the negative relationship between performance below historical(social) aspiration level and corporate recidivism, such that the relationship is less negative in firms with higher board ownership.

3) *CEO Duality*: The combination of CEO and Chairman roles in one individual, known as CEO duality, has the potential to concentrate power and limit the effectiveness of board oversight. The consolidation of these two pivotal roles within the organization can cause entrenchment issues, leading to a reduced level of checks and balances, hindering the board's ability to execute unbiased oversight [45], [46]. This amalgamation of roles could foster an environment where the CEO, who is also the Chairman, is unlikely to question their own decisions critically.

The lack of independent oversight might lead to diminished accountability and transparency within the corporate structure. Furthermore, the dual role might also facilitate the circumvention of internal controls, creating an environment conducive to unethical or illegal activities. Such a setting becomes particularly problematic when the firm experiences performance shortfalls. In such cases, a CEO might be tempted to resort to illicit actions as a means of improving performance. A dual role CEO may exacerbate this issue, as the concentrated power and lack of oversight could lead to a more significant deviation from ethical norms, especially when performance consistently falls below aspiration levels. Therefore, in the context of CEO duality, it is hypothesized that:

**Hypothesis 4a(b):** The presence of CEO duality strengthens the negative relationship between performance below aspiration levels and corporate recidivism, such that the relationship is more negative in firms where the CEO and Chairman roles are held by the same individual.

### III. DATA AND METHODOLOGY

A sample of A-share listed firms between 1999 and 2018 is obtained from the China Stock Market and Accounting Research (CSMAR) database. This database provides extensive stock market information, including details on corporate governance, analyst forecasts, financial data, stock trading activities, as well as regulatory enforcement actions taken against firms listed on the Shanghai and Shenzhen stock exchanges. The sources of this data are manifold, including public firms' annual reports, both stock exchanges and the Chinese Securities Regulatory Commission (CSRC), ensuring a high degree of accuracy and reliability. This data has been previously employed in a variety of studies focused on topics such as corporate performance and misconduct [33], [50], [51], further validating the credibility of the information contained within the database.

In an effort to capture all incidents of corporate violations and sanctions that were publicly declared as enforcement

actions within the specified period, the CSRC identified 5,852 enforcement actions enacted upon 3,791 firms. It is important to note that the CSRC only makes public the cases that have been decided upon, thereby eliminating the possibility of false detection in this sample. Consequently, the announcements incorporated in the database effectively cover all relevant regulatory violations, including fraudulent activities and misleading statements, within the period under review.

The enforcement actions captured in the data have been demonstrated to have significant implications at the firm level in previous studies [52]. These consequences range from negative stock returns and elevated CEO turnover rates to increased bid-ask spreads, thereby providing a strong indication of the severity of the sanctions imposed.

The primary instrument leveraged by the CSRC to penalize misconduct by listed firms is the administrative penalty. The administration of these penalties is overseen by the CSRC's administrative sanction committee, which is responsible for formulating rules defining violations, adjudicating on cases brought forward by enforcement departments, presiding over hearings, and drafting administrative penalty opinions. The administration and provision of administrative penalties are governed by several sets of rules, including the "Solutions for Prohibiting Securities Fraud," the "Shanghai Stock Exchange Listing Rules," and the "Shenzhen Stock Exchange Listing Rules." The penalties prescribed by these rules encompass a wide range of actions, including internal warnings, public criticisms, monetary fines, confiscation of fraudulently obtained income, among others.

#### *Dependent Variables*

*Corporate recidivism* has been constructed through various measurement approaches in past research. Some studies have opted for a dichotomous variable [17], e.g., [53], [54], [55], wherein others have used the number e.g., [56], [57], [58] and/or the severity e.g., [52], [59]-[62] of misdeeds as an indicator of corporate recidivism. In this study, a dichotomous measure of corporate recidivism has been employed, providing a clear and concise view of conceptual construct for the variable. This decision was informed by the need to capture the essential binary nature of the problem—whether a firm has repeated misconduct or not. By using the comprehensive CSMAR database, the actual year of misconduct was accurately identified through a detailed examination of relevant announcements. Where firms to engage in multiple instances of misconduct within a single year, the first enforcement action was used within a year as the representative misconduct indicator for the firm in that year.

Consequently, the dependent variable, termed as 'corporate recidivism', is operationalized as a dichotomous variable. A 'first-time offender' is coded as 0, which signifies the occurrence of an initial enforcement action on a firm committing misbehavior in year  $t_1$ . A 'repeat offender' is coded as 1 if the CSRC enacted an initial enforcement action on a firm committing misbehavior in year  $t_1$  and any additional enforcement actions against the same misbehaving firm in year  $t_n, n \geq 1$  within the sampling period. A total of 215 repeat offenders that had valid financial and CEO characteristics data

was identified during the period from 1999 to 2018. This robust dataset provides a solid foundation for the subsequent analysis and interpretation of corporate recidivism.

#### Independent Variables

In line with previous research, performance relative to aspirations was established through a spline function, which is based on the disparity between a firm's performance and its aspiration levels [21], [63]. The measure of performance employed in this study is Return on Assets (ROA) [15], [17], e.g., [21], a widely used financial indicator that measures a company's profitability in relation to its total assets.

To assess aspiration levels, two types of aspirations were taken into account—historical and social. A diverse range of aspiration measures has been explored in prior research. Some scholars have amalgamated self and social aspirations into a single measure e.g., [21], [35], while others have incorporated distinct splines for each aspirational referent [19], [22], e.g., [64]. Certain studies have solely focused on social comparisons [65].

By testing these approaches, both performance relative to historical aspirations and social aspirations were significant in the models. The combined measure of social and historical aspirations yielded a similar pattern of results as the measure of performance relative to social aspirations. Given the consistent outcomes regardless of whether the combined measure was included, the analysis thus followed the method suggested by [15] and [21] and chose to use distinct measures of social and self-aspirations instead of merging them into a singular aggregate relative performance measure.

*Performance relative to historical aspiration* is operationalized as a firm's return on assets subtracted by its own past performance. In this context, a firm's historical aspiration level is defined as the firm's ROA prior to the announcement year. Performance below historical aspiration is set to zero whenever performance relative to historical aspiration is positive and equals performance relative to historical aspiration when it's negative.

*Performance relative to social aspiration* is calculated as the firm's return on assets in the year of the CSRC enforcement action announcement minus the social aspiration for the same year. Following prior research [15], [17], [33], the relevant peer group is defined as firms listed on the Shanghai and Shenzhen Stock Exchanges in a given year that share the same three-digit CSRC industry code as the focal firm (excluding the focal firm itself). The social aspirations are computed using a specific formula, where  $t$  represents time,  $i$  denotes the focal firm,  $j$  refers to the listed firms within  $i$ 's three-digit industry code, and  $N$  is the total count of listed firms in  $i$ 's three-digit industry code, including  $i$ .

$$\text{Social aspiration}_{it} = \frac{\sum_{j \neq i} ROA_{jt}}{N - 1}$$

As the theory argues that firms' reactions can differ markedly in response to performance above versus below aspirations, performance above aspiration levels are also included as a control in both historical and social contexts. Consequently, higher values of this variable indicate better performance, which means further above the aspiration.

#### Moderating Variables

*Board size* was the total number of directors on a firm's board. *Managerial ownership* is percentage of shares owned by executives. *CEO duality* was measured as a binary variable coded 1 if a firm's general manager also occupied the position of chairperson, and 0 otherwise.

#### Control Variables

This study incorporates a multitude of control variables to account for potential factors that might affect a firm's propensity to commit corporate misconduct. These variables are categorized into individual, firm, industry and market levels, thereby creating a comprehensive and multi-dimensional analysis.

**Individual level:** Controls for individual level characteristics that may affect managerial decision-making processes were included. *Managerial age* indicates the age of the manager at the time the enforcement action was announced during the sample period, which is directly extracted from the CSMAR database. *Manager gender* is also obtained directly from the database. Additionally, *Education background* was included as a control, given its potential impact on the manager's response to antecedent factors leading to corporate misbehavior. The variable is categorized into five levels ranging from "technical secondary school and below" to "PhD degree", based on the records from the dataset.

**Firm level:** At the firm level, controls include *Firm size*, *Listing age*, and three measures of *Slack resources*. *Firm size* is operationalized as the number of employees, transformed into its natural logarithm to mitigate the influence of extreme values. *Listing age* is equal to  $1 + \text{the natural logarithm of years since IPO}$ . The study also considers three commonly used measures of *Slack resources*: Absorbed slack, Unabsorbed slack, and Potential slack. *Absorbed slack* was measured as the ratio of selling, general, and administrative expenses to sales; *Unabsorbed slack* was measured as the ratio of cash and marketable securities to liabilities; and *Potential slack* was measured as the ratio of debt to equity [21], [66].

Two dichotomous variables indicating changes in leadership positions, *Chairperson change* and *General manager change*, are also included as control variables. *Chairperson change* is defined as a dichotomous variable that indicates board chair change in a specific year (1 = yes, 0 = no) [67]; and *General manager change*, also a dichotomous variable indicating general manager change in a specific year (1 = yes, 0 = no).

Furthermore, the study considers the potential influence of *State ownership* on corporate misconduct, given the political connections it often entails. *State ownership* was included as a control, coded as 1 if a listed firm was majority-owned by the government and zero otherwise.

**Industry and market level:** To account for external influences on corporate behavior, *Market conditions* and *Industrial competition* are included as control variables. The *Market condition* is calculated as the annual return of the Shanghai composite index, whereas *Industrial competition* is measured using the Herfindahl index at the three-digit industry level for each year, based on the sales revenue of each

firm. Additionally, *Year indicators* and *Industry indicators* are constructed to account for systematic differences in the incidence of corporate illegality across different years and industry sectors.

The derivation of all independent and control variables in this study relied on the data sourced from the year when the enforcement action was publicly announced for the focal firm. Table I provides a comprehensive overview of the variables, including their means, standard deviations, and correlation coefficients. A cursory glance at the correlations reveals that their magnitudes are relatively low, indicating a limited degree of interdependence among the variables.

To further ensure the robustness of the models, collinearity diagnostics were performed. This step was vital to inspect for potential multicollinearity, which could distort the findings and compromise the interpretability of the models. The condition indices for all the models fell below the standard benchmark of 10, with Variance Inflation Factors (VIFs) fluctuating within the range of 2.33 to 3.05. This outcome suggests that multicollinearity is unlikely to pose a significant concern for the integrity of the models. To address potential endogeneity and mitigate reverse causality, the dependent variable was lagged by one year. In addition, firm- and industry-level control variables were included in the models to account for potential confounding factors that could influence the relationship between performance relative to aspirations and the propensity for corporate misconduct.

Robust standard errors were specified to control for potential heteroskedasticity, providing a more conservative test of the hypotheses following the methodology proposed by [68]. [69] rules were employed for analyzing the imputed data and combining the parameter estimates, ensuring valid estimates in the process. Given the binary nature of the dependent variable in this study, panel fixed-effect logit regression was used to test the hypotheses. The standard errors were clustered at the industry level to account for within-industry correlation, thereby providing more robust results. This rigorous methodological approach increases the validity of the findings and allows for more confident interpretations and conclusions.

#### IV. RESULTS

Table I reports the descriptive statistics and correlations of all the variables. Table II presents the results of corporate repeated misbehavior pertaining to performance below historical aspiration, and Table III presents the results pertaining to performance below social aspiration. Model 1 in each table includes control variables and the moderators. Model 2 adds the main effect of performance below aspiration as well as the control for performance above aspiration. Models 3-8 step sequentially through each moderator's interaction with the performance measure. Finally, Model 9 includes all variables and the interaction terms.

Hypotheses 1a and 1b predict that there is a negative relationship between performance below historical(social) aspiration and corporate recidivism will be highest for the most negative values of performance below aspiration. Models 2 in

both tables shows that the coefficients of performance below historical(social) aspiration are negative and significant. H1a and H1b is thus supported.

Hypotheses 2a and 2b propose that the relationship between performance below aspiration and corporate recidivism will be more negative in firms with larger boards. The finding provides support for Hypothesis 2a and 2b. As seen in Models 3 and 6, the interaction with board size is negative and significant.

Similarly, hypotheses H3a and H3b predict that the relationship between performance below aspiration and corporate recidivism is less negative in firms with higher board ownership. Given the significance on the interaction with board ownership in Models 4 and 6, support for H3a(b) can be inferred.

Finally, both hypotheses H4a and H4b are supported with the significant results of interaction with CEO duality in Models 5 and 6. The findings suggest that the relationship between performance below historical aspiration and corporate misbehavior is more negative in firms with CEO duality.

#### V. DISCUSSION AND CONCLUSION

The analysis provides valuable insights into the intricate relationship between corporate performance, aspiration levels, board characteristics, and corporate recidivism. Importantly, a link between performance below aspiration levels and corporate recidivism is established, indicating that repeated corporate misbehavior is more likely when firms underperform against their historical or social benchmarks.

The findings also highlight the role of the board of directors in shaping this relationship. We find that larger board size amplifies the negative relationship between performance below aspirations and corporate recidivism, potentially due to the diversity of perspectives and rigorous decision-making processes in larger boards. Additionally, this study reveals that high board ownership can temper the negative impact of underperformance, possibly reflecting the board's vested interest in preventing repeated misbehavior and safeguarding shareholder interests.

Moreover, it is observed in this study that CEO duality further complicates this relationship. While CEO duality can expedite decision-making, the results suggest that it can also intensify the negative relationship between underperformance and corporate misbehavior. These findings underscore the need for checks and balances in situations where the CEO also serves as the board chair.

This study contributes to the existing body of knowledge in several ways. First, it broadens our understanding of the behavioral theory of the firm by incorporating the role of corporate governance, particularly the board of directors, into the framework. While the BTOF has traditionally focused on the role of managers in responding to performance feedback, this study underscores that the board of directors can also play a pivotal role in shaping firm responses to underperformance, specifically in the instance of corporate recidivism. Second, by integrating the concepts of aspiration levels and corporate recidivism, this study provides fresh insights into the consequences of underperformance. It

TABLE I  
CORRELATIONS AND DESCRIPTIVE STATISTICS FOR ANALYSIS OF RECIDIVISM

	mean	sd	1	2	3	4	5	6	7	8	9
1. Corporate recidivism	0.31	0.46	1.00								
2. Performance below historical aspiration	-0.06	0.24	-0.04	1.00							
3. Performance above historical aspiration	0.05	0.26	0.01	0.05	1.00						
4. Performance below social aspiration	-0.09	0.28	-0.06	0.93	0.02	1.00					
5. Performance above social aspiration	0.02	0.16	-0.04	0.03	0.12	0.04	1.00				
6. Board size	8.86	1.89	0.00	0.06	-0.03	0.08	-0.04	1.00			
7. % Shares directors	3.15	17.38	-0.04	0.03	-0.03	0.04	-0.01	-0.03	1.00		
8. CEO duality	0.23	0.42	0.06	-0.04	0.06	-0.04	-0.02	-0.06	0.11	1.00	
9. Manager age	46.11	7.06	0.00	0.03	-0.07	0.04	0.02	0.04	0.00	0.18	1.00
10. Manager gender	0.94	0.23	-0.01	-0.03	0.04	-0.05	0.01	0.10	-0.10	0.06	-0.04
11. Education background	3.23	0.88	-0.08	0.06	0.00	0.06	0.00	-0.11	0.05	-0.09	-0.33
12. Firm size	7.01	1.36	-0.07	0.07	-0.07	0.08	-0.02	0.21	0.06	-0.04	0.08
13. Listing age	2.92	0.31	0.04	-0.01	0.08	-0.02	0.04	-0.10	-0.30	-0.17	-0.06
14. Aslack	4.88	58.73	0.05	0.00	0.02	-0.02	-0.01	0.01	-0.01	0.01	-0.04
15. Uslack	18.71	457.09	-0.03	0.01	-0.01	0.01	0.00	0.00	-0.01	0.07	0.00
16. Pslack	1.54	10.99	0.08	0.03	-0.02	0.04	-0.01	0.01	-0.01	0.02	0.01
17. Chairperson turnover	0.23	0.42	-0.02	-0.16	0.10	-0.20	-0.04	-0.03	-0.08	-0.03	-0.09
18. CEO turnover	0.24	0.43	0.03	-0.09	0.04	-0.12	-0.02	-0.02	-0.05	-0.02	-0.17
19. State ownership	0.18	0.23	-0.01	0.04	0.03	0.04	0.08	0.09	-0.14	-0.16	0.05
20. Market condition	0.00	59.50	-0.02	0.04	0.10	0.01	-0.01	0.02	-0.07	-0.04	-0.07
21. Industrial competition	0.10	0.15	0.09	0.04	0.03	0.04	0.07	0.03	-0.03	-0.11	-0.03
	10	11	12	13	14	15	16	17	18	19	20
1. Corporate recidivism											
2. Performance below historical aspiration											
3. Performance above historical aspiration											
4. Performance below social aspiration											
5. Performance above social aspiration											
6. Board size											
7. % Shares directors											
8. CEO duality											
9. Manager age											
10. Manager gender	1.00										
11. Education background	0.08	1.00									
12. Firm size	0.09	0.03	1.00								
13. Listing age	0.03	0.01	-0.12	1.00							
14. Aslack	0.02	-0.03	-0.13	-0.02	1.00						
15. Uslack	0.01	-0.05	-0.05	0.02	0.00	1.00					
16. Pslack	0.00	0.03	0.01	0.03	-0.01	-0.01	1.00				
17. Chairperson turnover	0.04	-0.03	-0.03	0.13	-0.02	-0.02	-0.01	1.00			
18. CEO turnover	-0.05	0.02	-0.04	0.09	-0.02	-0.02	-0.04	0.36	1.00		
19. State ownership	0.06	0.00	0.18	0.07	0.02	-0.03	-0.02	0.09	0.03	1.00	
20. Market condition	0.04	0.03	-0.04	0.09	0.03	-0.03	0.04	0.03	-0.03	0.01	1.00
21. Industrial competition	-0.06	-0.06	-0.23	0.06	-0.01	-0.02	0.00	0.00	0.03	-0.03	0.01

highlights that falling short of aspiration levels can trigger not just adaptive responses, but also potentially harmful behaviors such as corporate misbehavior. Third, by employing a contingency approach, this study sheds light on the conditions under which performance shortfalls may or may not lead to recidivism, thereby offering a more nuanced understanding of this complex phenomenon. Finally, the findings have practical implications for regulators, policymakers, and corporate leaders, as they underscore the importance of addressing performance shortfalls and strengthening corporate governance mechanisms to curb recidivism and promote ethical business practices.

In conclusion, this study underscores the complex interplay of performance relative to aspiration level, board characteristics, and corporate recidivism. It highlights the critical role of the board of directors in mitigating or

exacerbating corporate recidivism, particularly in the face of underperformance. By shedding light on these relationships, this research aims to encourage more informed corporate governance practices and foster a deeper understanding of the potential consequences of underperformance.

Findings in this study also point to potential avenues for future research. For instance, future studies could explore how other elements of corporate governance, such as board diversity or executive compensation, influence the relationship between performance feedback and corporate misbehavior. Additionally, researchers could investigate how these relationships unfold in different industry or regulatory contexts.

Ultimately, by deepening our understanding of these dynamics, we can better equip corporations to handle performance shortfalls and prevent corporate misbehavior,



TABLE II  
 PERFORMANCE BELOW HISTORICAL ASPIRATION (PBHA) AND RECIDIVISM

DV: First-time offender = 0, Repeat offender = 1						
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Board size	0.14 (0.14)	0.21 (0.16)	0.14 (0.18)	0.24 (0.16)	0.21 (0.16)	0.12 (0.18)
Percent shares directors	-0.01 (0.00)	-0.01 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.01 (0.00)	0.00 (0.00)
CEO duality	0.71 (0.46)	0.81 (0.50)	0.88 <sup>†</sup> (0.51)	0.68 (0.52)	0.67 (0.61)	0.56 (0.61)
Manager age	-0.02 (0.03)	-0.01 (0.04)	-0.01 (0.04)	-0.01 (0.04)	-0.02 (0.04)	-0.01 (0.04)
Manager gender	-2.83** (0.97)	-1.72 <sup>†</sup> (0.99)	-1.64 <sup>†</sup> (0.98)	-1.85 <sup>†</sup> (0.98)	-1.69 <sup>†</sup> (1.01)	-1.67 <sup>†</sup> (0.98)
Education background	0.81** (0.27)	0.82** (0.29)	0.86** (0.30)	0.85** (0.31)	0.76* (0.32)	0.82* (0.34)
Firm size	0.26 (0.19)	0.36 <sup>†</sup> (0.22)	0.38 <sup>†</sup> (0.22)	0.30 (0.23)	0.34 (0.22)	0.31 (0.23)
Listing age	0.26 (0.91)	1.43 (0.99)	1.54 (1.00)	2.98* (1.17)	1.30 (1.03)	3.03* (1.24)
Aslack	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
Uslack	0.32* (0.15)	0.75*** (0.19)	0.77*** (0.20)	0.70*** (0.19)	0.72*** (0.20)	0.71*** (0.21)
Pslack	0.07 (0.06)	0.21* (0.08)	0.21* (0.08)	0.25** (0.09)	0.20* (0.09)	0.24* (0.10)
Chairperson turnover	0.56 (0.45)	-0.17 (0.51)	-0.11 (0.52)	0.06 (0.55)	-0.20 (0.52)	0.10 (0.55)
CEO turnover	2.73*** (0.53)	2.70*** (0.54)	2.73*** (0.55)	2.64*** (0.55)	2.68*** (0.55)	2.61*** (0.56)
State ownership	-0.08 (0.88)	-0.90 (0.94)	-1.15 (0.98)	-1.24 (0.98)	-0.88 (0.94)	-1.60 (1.02)
Market condition	-0.26 (61.17)	-0.26 (64.08)	-0.26 (65.69)	-0.26 (64.02)	-0.26 (62.95)	-0.26 (64.43)
Industrial competition	8.49 (9.29)	3.18 (9.81)	4.24 (9.93)	7.42 (10.15)	2.49 (9.93)	8.30 (10.46)
PBHA		-6.71*** (1.49)	0.10 (8.13)	-7.16*** (1.59)	-6.19** (1.97)	4.94 (8.55)
Performance above historical aspiration		-0.09 (0.61)	-0.09 (0.61)	-0.04 (0.67)	-0.03 (0.64)	0.07 (0.69)
Board size×PBHA			-0.87*** (1.04)			-1.44** (1.07)
Percent shares directors×PBHA				1.56** (1.41)		1.62** (1.44)
CEO duality×PBHA					-1.27* (3.19)	-1.93** (3.25)
Constant	2.62 (5, 898.91)	-4.13 (5, 947.21)	-4.45 (5, 974.79)	106.55 (5, 947.21)	-3.15 (5, 928.19)	111.29 (5, 954.21)
N	482	482	482	482	482	482
Log Likelihood	-153.40	-139.76	-139.36	-132.14	-139.68	-131.22
AIC	458.79	435.52	436.72	422.27	437.35	424.43
Year-Fixed Effect	YES	YES	YES	YES	YES	YES

<sup>†</sup>p < .1; \*p < .05; \*\*p < .01; \*\*\*p < .001  
 Note. Standard errors in parentheses.

TABLE III  
 PERFORMANCE BELOW SOCIAL ASPIRATION (PBSA) AND RECIDIVISM

DV: First-time offender = 0, Repeat offender = 1						
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Board size	0.14 (0.14)	0.30 <sup>†</sup> (0.16)	0.18 (0.17)	0.34* (0.16)	0.32 <sup>†</sup> (0.17)	0.22 (0.18)
Percent shares directors	-0.01 (0.00)	-0.01 (0.00)	-0.01 (0.00)	0.01 (0.01)	-0.01 (0.00)	0.01 (0.01)
CEO duality	0.71 (0.46)	0.59 (0.54)	0.77 (0.54)	0.59 (0.58)	0.31 (0.64)	0.52 (0.68)
Manager age	-0.02 (0.03)	-0.01 (0.04)	-0.01 (0.04)	-0.01 (0.04)	-0.02 (0.04)	-0.01 (0.04)
Manager gender	-2.83** (0.97)	-1.84 <sup>†</sup> (1.05)	-1.93 <sup>†</sup> (1.05)	-2.07* (1.03)	-1.85 <sup>†</sup> (1.07)	-2.03* (1.02)
Education background	0.81** (0.27)	0.70* (0.32)	0.85** (0.32)	0.75* (0.36)	0.62 <sup>†</sup> (0.33)	0.86* (0.38)
Firm size	0.26 (0.19)	0.33 (0.24)	0.39 (0.24)	0.29 (0.26)	0.29 (0.24)	0.32 (0.26)
Listing age	0.26 (0.91)	1.39 (1.04)	1.53 (1.03)	3.21* (1.29)	1.19 (1.06)	3.55** (1.35)
Aslack	-0.00 (0.01)	-0.30 (0.37)	-0.02 (0.15)	-0.29 (0.37)	-0.17 (0.39)	-0.00 (0.03)
Uslack	0.32* (0.15)	0.74*** (0.21)	0.81*** (0.21)	0.69** (0.21)	0.70*** (0.21)	0.76*** (0.22)
Pslack	0.07 (0.06)	0.22* (0.09)	0.22** (0.09)	0.20* (0.10)	0.20* (0.09)	0.28** (0.10)
Chairperson turnover	0.56 (0.45)	-0.47 (0.53)	-0.56 (0.54)	-0.15 (0.57)	-0.53 (0.54)	-0.33 (0.59)
CEO turnover	2.73*** (0.53)	2.58*** (0.56)	2.73*** (0.57)	2.38*** (0.55)	2.59*** (0.55)	2.59*** (0.58)
State ownership	-0.08 (0.88)	-0.74 (0.95)	-1.18 (0.98)	-1.08 (0.99)	-0.77 (0.97)	-1.67 (1.03)
Market condition	-0.26 (61.17)	-0.25 (66.48)	-0.26 (67.67)	-0.27 (107.62)	-0.25 (65.35)	-0.25 (65.66)
Industrial competition	8.49 (9.29)	0.49 (9.81)	-1.51 (10.03)	6.71 (10.45)	-1.70 (10.05)	4.21 (11.02)
PBSA		-5.33** (1.65)	5.29 (3.54)	-6.19** (1.94)	-4.39* (2.08)	5.92 (4.13)
Performance above social aspiration		-5.93 (5.78)	-4.95 (5.21)	-8.30 (7.54)	-6.34 (5.73)	-7.13 (7.00)
Board size×PBSA			-1.40** (0.55)			-1.56** (0.66)
Percent shares directors×PBSA				4.17 <sup>†</sup> (2.40)		4.31* (2.13)
CEO duality×PBSA					-2.80** (3.62)	-2.06** (3.28)
Constant	2.62 (5, 898.91)	-3.29 (5, 988.56)	-3.85 (6, 009.49)	169.63 (9, 839.63)	-2.02 (5, 968.97)	174.38 (5, 975.00)
N	482	482	482	482	482	482
Log Likelihood	-153.40	-134.50	-132.34	-125.44	-134.14	-122.20
AIC	458.79	424.99	422.67	408.88	426.27	406.39
Year-Fixed Effect	YES	YES	YES	YES	YES	YES

<sup>†</sup>p < .1; \*p < .05; \*\*p < .01; \*\*\*p < .001  
 Note. Standard errors in parentheses.



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