



Innovation and Development Policy

Available online at <http://idp-journal.casid.cn/>



Managerial Myopia and Corporate Zombification: Evidence from Chinese A-listed Firms

Xiaohong Wang ^a, Jiyang Zhao ^{a,*}, Huajun Liu ^a

^a School of Business, Harbin Institute of Technology, Harbin 150000, China

Abstract

Zombie firms pose a direct obstacle to China's efforts to achieve high-quality economic development, as they drain resources, perpetuate inefficiency, and exacerbate overcapacity. Understanding the factors that drive corporate zombification is therefore critical for policymakers and managers alike. From a perspective of internal governance, this study employs a dataset comprising 24,905 observations from 2009 to 2023 to investigate the relationship between managerial myopia and corporate zombification, as well as the corresponding influence mechanism. The results indicate that managerial myopia significantly and positively influences the corporate zombification. Furthermore, the results of the influence mechanism indicate that strategic aggressiveness mediates the relationship between managerial myopia and corporate zombification. The effects of managerial myopia on corporate zombification and strategic aggressiveness are significantly more pronounced in corporations operating under conditions of higher environmental uncertainty. The findings can provide some insights into preventing firms from becoming the "walking dead" from an internal governance perspective, thereby helping promote the high-quality economic development.

Keywords

Corporate zombification; Environmental uncertainty; Managerial myopia; Strategic aggressiveness

* Corresponding author. E-mail address: 23B910042@stu.hit.edu.cn

1. Introduction

In the past decades, accompanied by significant economic growth, China has also been subject to the detrimental influences of zombie firms (He *et al.*, 2025; Jiang *et al.*, 2024; Jin *et al.*, 2022). Zombie firms pertain to unprofitable firms that survive through external support such as government subsidies or bank loans. The firms are characterized by prolonged inefficiency and low productivity, and can impede economic dynamism by misallocating resources that could otherwise be used for firms that operate normally (Hoshi *et al.*, 2023). The existing literature has demonstrated the significantly negative influences of zombie firms such as exacerbating financial risks, straining resources, and distorting market competition (Hoshi, 2006; Shen and Chen, 2017). Furthermore, the zombie firms contribute to overcapacity in industries, which lead to the reduced profitability among different sectors (Wang and Zhu, 2021). In this scenario, it corroborates the utmost importance of revealing the antecedents of corporate zombification.

There are a voluminous body of studies that have attempted to reveal the factors that lead to corporate zombification from the perspective of the external environment. For example, He *et al.* (2023) conduct an empirical analysis and demonstrate that local government debt can exert significantly positive influences on promoting firms to go zombification. Similarly, Zhu *et al.* (2024) demonstrate that government intervention on firms can contribute to enhancing the likelihood of firms becoming “the walking dead”, and reduction on the intervention of government can help to reduce the corporate zombification. In addition, there is also compelling evidence showing that the government and bank providing financial subsidies can lead to the accumulation of debt, which eventually results in the proliferation of zombie firms, especially for the firms with political connections (Li *et al.*, 2024).

While the previously discussed external factors may increase the likelihood of corporate zombification, it is important to note that if the management actively engages with their environment rather than adopting a passive stance, there is a potential for reduced likelihood of becoming zombie firms. In this context, we wonder whether the strategic vision of management plays a significant role in the way of becoming zombie firms. Based on the strategic visions, managerial myopia can be acknowledged as a paramount factor to consider. Managerial myopia refers to a management approach that prioritizes short-term objectives due to the influence exerted by shareholders, according to Zhang *et al.* (2023a). In other words, firms with a high level of managerial myopia may tend to exhibit more preferences towards passively accepting the environment, instead of taking proactive measures to adapt (Liu and Zhang, 2023; Zhang *et al.*, 2025). The passivity is closely consistent with the characteristics of zombie firms, which tend to depend on external support such as subsidies or loans to sustain operations instead of addressing underlying inefficiencies. The lack of proactive engagement further entrenches the firms in a cycle of low productivity. Therefore, it indicates the potential positive nexus between managerial myopia and corporate zombification.

Apart from directly enhancing the likelihood of becoming zombie firms, we also argue that managerial myopia may weaken the strategic aggressiveness, in turn enhancing the aforementioned risk. Strategic aggressiveness can manifest the bold decision-making and proactive resource allocation of firms to strengthen competitive positions (Zhao *et al.*, 2024). Managerial myopia has been characterized by prioritizing short-term gains, and therefore it may negatively impact strategic aggressiveness by discouraging innovation and long-term investments (Antia *et al.*, 2021; Chen *et al.*, 2022). Firms with diminished strategic aggressiveness are less likely to adopt proactive strategies such as developing

dynamic capabilities, which are paramount for long-term growth and resilience. Consequently, managerial myopia may indirectly enhance corporate zombification through reduced strategic aggressiveness.

In addition to exploring the antecedent of corporate zombification from a perspective of internal governance, this study also pays due attention to the external environment. Environmental uncertainty, which is characterized by volatility and unpredictability, significantly influences managerial decision-making and resource allocation (Magerakis and Habib, 2022). High environmental uncertainty exacerbates information asymmetry, thereby prompting managers to prioritize short-term results over long-term strategic goals to ensure immediate survival (Liang and Li, 2024). This leads to risk-averse behaviors such as avoiding investment in innovation and focusing on low-risk activities, which stagnates adaptability (Lin and Zhang, 2023). Consequently, environmental uncertainty further amplifies the impacts of managerial myopia, and therefore increases corporate zombification by discouraging the proactive actions necessary for sustainable growth. Furthermore, managers under uncertain environment become more risk-averse, avoiding bold strategies like market expansion or mergers due to their risks (Bin-Feng *et al.*, 2024). The reduced strategic aggressiveness further entrenches firms in stagnation, as the consequence of which, it can be conducive to compounding the zombification (Parnell *et al.*, 2012).

This paper makes several contributions to the existing literature. First, it investigates the antecedents of corporate zombification within the Chinese context, where zombie firms pose significant threats to economic dynamism. Historically, the reliance on a unidimensional performance evaluation metric centered on GDP has fostered excessive competition among local governments, leading to indiscriminate capacity expansion (Hu *et al.*, 2023). This approach has resulted in inaccuracies in the implementation of industrial policies and a pronounced prevalence of overcapacity (Wang and Zhu, 2021). Chinese local governments have perpetuated the existence of zombie firms by providing them with financial support, driven by motivations such as employment preservation and stability maintenance, which severely undermine healthy economic development in China (Wang *et al.*, 2025). Thus, investigating the determinants of corporate zombification in China is of paramount importance, as this research domain remains underexplored.

Second, previous studies have primarily examined the antecedents of corporate zombification from an external environmental perspective, focusing on factors such as local government debt (He *et al.*, 2023) and government intervention (Zhu *et al.*, 2024). In contrast, this study emphasizes the role of managerial myopia from an internal governance standpoint. Drawing upon Upper Echelons Theory, we propose that managerial myopia, driven by short-termism, can lead to organizational rigidity and risk aversion (Liu and Zhang, 2023; Zhang *et al.*, 2025). In turn, managerial myopia may prompt firms to rely more heavily on support from the government and banks, diminishing their willingness to adapt and increasing the likelihood of the firms becoming “walking dead.” By incorporating this new internal governance perspective, this study contributes to understanding the reasons behind high corporate zombification, offering valuable insights into addressing the issue.

Third, this study further explores why managerial myopia leads to enhanced corporate zombification by integrating the strategies employed by zombie firms. Based on previous research (Chen *et al.*, 2022; Guizani, 2024), we propose that managerial myopia constrains bold decision-making and long-term investments, offering a novel perspective on the negative impact of myopia on strategic aggressiveness. Reduced strategic aggressiveness, in turn, weakens a firm’s adaptability, further exacerbating corporate zombification. Additionally, we introduce environmental uncertainty and demonstrate its significant

moderating role in the relationship between managerial myopia, strategic aggressiveness, and corporate zombification. This dual perspective of combining internal governance and external environmental factors provides a comprehensive understanding of the underlying causes of corporate zombification, offering a framework that highlights potential strategies to mitigate the issues associated with zombie firms.

The structure of the rest of the paper is presented as follows. Section 2 undertakes a comprehensive literature review and presents the development of hypotheses. Subsequently, Section 3 outlines the dataset utilized in this investigation, along with the methodological framework employed for conducting empirical analyses. Section 4 documents the results of the benchmark regression and robustness tests. Section 5 conducts further analyses, including heterogeneity tests and influence mechanism testing. Finally, Section 6 concludes and discusses of the findings in this study.

2. Literature Review and Hypotheses Development

2.1. *Zombie firms and determinants of corporate zombification*

Zombie firms are defined as those that have either entirely halted production, partially ceased operations, or have sustained financial losses over an extended period, which will eventually lead to insolvency (Hoshi, 2006; Shen and Chen, 2017). It has been widely acknowledged that the corporations are significantly dependent on government subsidies and bank loans for their continued operation (Tuuli, 2024). Different from the distressed corporations which encounter challenges due to problematic assets and possess the potential for rapid recovery, zombie corporations are characterized by their prolonged dependency on external financial support, often described metaphorically as blood-sucking (Hoshi *et al.*, 2023; Shiraishi and Yano 2021). The abandonment of efforts to rescue these zombie corporations could exacerbate social conditions. For example, Zhu *et al.* (2019) observed a countercyclical pattern of zombie firms and indicate the positive correlation between zombie firms and the accumulation of debt, contributing to the increasingly escalating levels of corporate debt in China. More seriously, according to Wang and Zhu (2021), zombie firms can also exert significant crowd-out effect on the operation of non-zombie firms, exacerbate the misallocation of financial capital, and contribute to market distortions, thereby hindering the development of robust industries. Similarly, Wu and Pan (2024) corroborate that the presence of zombie firms intensifies the corporate financialization of non-zombie firms by indicating a greater proportion of zombie firms within an industry correlates with an increased level of financialization among non-zombie firms.

The aforementioned analysis can demonstrate the utmost importance of mitigating the significantly negative influences of zombie firms, highlighting the utmost importance of preventing firms from zombification. The existing literature on the determinants of corporate zombification is mainly focused on a perspective of external environment. For example, He *et al.* (2020) conduct an empirical analysis and demonstrate the nexus between political connection and corporate zombification, indicating that the political connections of firms exert a positive influence on their propensity to become zombie firms. Zhu *et al.* (2024) investigate the influences of the opening of high-speed rail on corporate zombification, revealing a potential path of mitigating the negative influences of zombie firms. There are also some studies that reveal the antecedents of corporate zombification from a corporate internal perspective, such as applications of FinTech (Jiang *et al.*, 2024; Jin *et al.*, 2022) and corporate digital transformation (Wang *et al.*, 2025). However, it is important to note that the existing literature has paid insufficient attention to the

role of the management of firms in affecting corporate zombification. The research gap is supposed to be addressed, as the management plays a paramount role in the strategic decision-making of corporations, which may exert influences on the corporate zombification.

2.2. *Managerial myopia and corporate zombification*

Managerial myopia pertains to the management that is characterized by an emphasis on short-term goals, generally ascribed to the pressures from shareholders (Zhang *et al.*, 2023a). In this scenario, the managerial myopia can induce firms to give more priority to the gains in the short term, instead of attaching sufficient importance to the long-term development (Liu and Zhang, 2023; Zhang *et al.*, 2025).

Pertaining to the nexus between managerial myopia and corporate zombification, grounded upon Upper Echelons Theory, we propose that managerial myopia can contribute to enhancing corporate zombification. To be specific, the Upper Echelons Theory contends that the outcomes of corporations can be partially forecasted based on the background characteristics of their management teams (Ren *et al.*, 2021; Zhang *et al.*, 2023b). In this scenario, when the corporations are subject to high level of managerial myopia, the corporations will attempt to prioritize prompt results over value creation in the long term (Guo *et al.*, 2023). Managers may focus on boosting quarterly earnings to enhance personal gains, instead of investing in innovative projects that require a great deal of time to payoff. As a result, indispensable investments in R&D and infrastructure may be neglected (Seo *et al.*, 2020), trapping the firm in a stagnant state and increasing zombification. In addition, according to Guizani (2024), the short-term biases of the managers can exert influences on the corporate culture as well as the corresponding strategy, under which circumstance, it can be conducive to creating a risk-averse environment that limits exploration of new opportunities. More importantly, the cognitive biases of upper management derived from managerial myopia can further elicit the decision-making processes that limit the adaptability of corporations, lead to organizational rigidity and diminished resilience. In the context of China, the one-sided performance evaluation standards only for GDP led to excessive competition among local governments, blind project and capacity expansion, inaccurate implementation of industrial policies, and prominent overcapacity, which have led to corporate zombification to a large extent (Chao *et al.*, 2022). Therefore, enhancing corporate resilience and adaptability is indispensable for mitigating the issue of corporate zombification. However, considering the enhanced organizational rigidity and diminished resilience derived from myopic managers, the managerial myopia can therefore enhance the likelihood of corporate zombification. The hypothesis is proposed as follows:

H1: Managerial myopia can exert positive influences on corporate zombification.

2.3. *Mediating role of strategic aggressiveness*

Strategic aggressiveness is conceptualized as the degree to which a firm makes bold decision-making and proactively allocates resources to compete against rivals in a highly competitive market (Zhao *et al.*, 2024). In this framework, firms exhibiting a higher level of strategic aggressiveness are motivated to adopt proactive strategies that reinforce their competitive positions (Li *et al.*, 2025). Such strategies may encompass entering new markets, engaging in innovative practices, and making substantial investments in areas conducive to long-term development and growth (Weinzimmer *et al.*, 2023; Zhang *et al.*, 2024). Regarding the influence of strategic aggressiveness in the nexus between managerial myopia

and corporate zombification, on the one hand, managerial myopia can significantly negatively affect strategic aggressiveness of firms. Specifically, firms experiencing high levels of managerial myopia tend to prioritize short-term gains over long-term objectives (Antia *et al.*, 2021). For example, the managerial myopia may hinder a firm's capacity to allocate resources for future growth, as they are generally overly focused on immediate financial returns, often neglecting future growth (Seo *et al.*, 2020). Furthermore, managerial myopia may deter firms from pursuing innovation and environmentally sustainable practices, given that such endeavors are often perceived as high-risk. The risk-averse tendencies of managerial myopia can lead to a reluctance to invest in these areas (Chen *et al.*, 2022). Consequently, the managerial myopia imposes a series of constraints that inhibit firms from making bold and aggressive decisions, thereby negatively impacting the strategic aggressiveness of firms.

On the other hand, pertaining to the nexus between strategic aggressiveness and corporate zombification, firms that embrace strategic aggressiveness are more likely to invest in innovation and environmental engagement, all of which contribute to the vitality in the long term (Zhao *et al.*, 2024). For example, aggressive strategies such as expansion into new markets and engagement in innovations can help firms diversify their revenue sources, thereby enhancing their adaptability (Weinzimmer *et al.*, 2023; Zeng *et al.*, 2024). Moreover, strategic aggressiveness can promote firms to enhance dynamic capabilities, the ability to reconfigure resources, which further enhances their ability to survive market disruptions. Such firms are more likely to achieve sustainable competitive advantage and profitability in the long term (Wang *et al.*, 2025). In contrast, the reduced strategic aggressiveness can demotivate firms to partake in proactive activities that can be conducive to driving growth in the long term (Chang *et al.*, 2024), thereby enhancing the corporate zombification. Therefore, the reduced strategic aggressiveness derived from managerial myopia can enhance corporate zombification, and the following hypothesis is proposed as follows.

H2: Managerial myopia can exert negative influences on strategic aggressiveness, which in turn enhances corporate zombification.

2.4. Moderating role of environmental uncertainty

Environmental uncertainty pertains to a concept in organizational design, which can indicate the degree of volatility and unpredictability, influencing financial practices. In such environments, managers often use accrual accounting flexibility to manage earnings variability, especially in order to stabilize financial results amidst external unpredictability (Magerakis and Habib, 2022; Wang *et al.*, 2020). The significant challenge posed by environmental uncertainty is its potential to exacerbate information asymmetry, which influences management control systems and resource allocation (Zhao *et al.*, 2024).

A clearer theoretical rationale for the moderating effect of environmental uncertainty lies in how this external instability influences managerial behavior. When uncertainty is high, it tends to intensify managers' focus on short-term results due to the unpredictability of future outcomes. This leads to more myopic decision-making, where strategic long-term goals are compromised in favor of immediate survival tactics. The increased uncertainty heightens the perceived risk of long-term investments, making managers more reluctant to engage in activities like innovation or strategic diversification, which are perceived as uncertain or difficult to predict. As a result, managers prioritize actions that offer more immediate, less risky returns (Liang and Li, 2024; Sheng *et al.*, 2022). In such circumstances, managers may avoid investments in innovation or adaptation because of the risks associated with uncertainty, and

instead, focus on preserving current operations (Lin and Zhang, 2023). Over time, this focus on short-term stability can lead to corporate stagnation, where firms fail to adapt to changing market dynamics and remain in a weakened state, unable to compete effectively in the long run (Du *et al.*, 2025). This phenomenon, known as corporate zombification, can be significantly exacerbated by the lack of long-term investments and adaptations required to remain competitive. Therefore, environmental uncertainty can play a role in reinforcing the positive influence of managerial myopia on corporate zombification. Based on this, the hypothesis is proposed as follows:

H3.1: Environmental uncertainty can reinforce the positive influences of managerial myopia on corporate zombification.

Moreover, environmental uncertainty also affects strategic aggressiveness. As noted earlier, uncertainty leads managers to focus on short-term gains and become more risk-averse, avoiding high-risk activities such as innovation, entering new markets, or pursuing mergers and acquisitions (Bin-Feng *et al.*, 2024). This cautious approach, combined with managerial myopia, results in reduced strategic aggressiveness, as firms become reluctant to pursue long-term, high-risk opportunities that could offer significant returns but also involve greater uncertainty (Parnell *et al.*, 2012). The key theoretical rationale here is that environmental uncertainty reinforces managerial myopia by making managers more risk-averse. As the uncertainty surrounding future outcomes grows, managers are less willing to pursue strategies that involve higher risks, which are often associated with proactive actions such as market expansion or significant innovation. This reinforces the negative influence of managerial myopia on strategic aggressiveness, as firms become less inclined to engage in aggressive, forward-looking strategies. Based on this, the hypothesis is proposed as follows:

H3.2: Environmental uncertainty can reinforce the negative influences of managerial myopia on strategic aggressiveness

3. Data and Methodology

3.1. Data

The data employed in this study were collected from a variety of sources, including the China Stock Market, the Accounting Research Database (CSMAR), the Chinese Research Data Services Platform (CNRDS), and the annual reports of firms. The comprehensive data collection resulted in a total of 24,905 annual observations of A-share listed companies in China, spanning the period from 2009 to 2023. Specifically, the data on corporate zombification were obtained from CSMART. The variable for managerial myopia was derived from the content of the firms' annual reports. Additionally, data regarding strategic aggressiveness, environmental uncertainty and other control variables were sourced from CSMAR and CNRDS. It is important to highlight that this research aims to enhance accuracy by excluding samples with incomplete data.

3.2. Measures

3.2.1. Dependent variable

Dependent variable of this study pertains to corporate zombification, as presented in Table 1. According to Caballero *et al.* (2008), if the actual interest payment of a corporation for a given fiscal year

is below the minimum interest obligation, it is classified as having received preferential bank credit, which indicates that the corporation is supposed to be categorized as a zombie company. Fukuda and Nakamura (2011) further refined the methodology of Caballero *et al.* (2008) by incorporating additional criteria pertaining to profitability and perpetuity. Under the revised framework, a company must satisfy both of the following conditions concurrently to be deemed a zombie company. Specifically, the earnings before interest and taxes must fall below the minimum interest payable and the leverage ratio from the previous period (t-1) must exceed 50%, accompanied by a continuous growth in its loan portfolio during the current period (t). Considering the conditions that zombie corporations in China are inclined to be dependent on the intervention of the Chinese government, Zhu *et al.* (2024) further integrated government subsidies into the model, which contributes to a comprehensive consideration of the three critical determinants contributing to the emergence of zombie companies, i.e., profitability, preferential credit resources, and inefficient government subsidies. Therefore, referring to the study of Zhu *et al.* (2024), we categorize the corporations whose real profits remain negative for three consecutive years after accounting for all subsidies as corporate zombification. The following equations can more comprehensively indicate the dependent variable.

$$RealProfit = Profit - Subsidy_{Gov} - Subsidy_{Bank} \quad (1)$$

$$Corporate\ zombification = \begin{cases} 0, & \text{If } \sum_{j=0}^2 Realprofit_{i,j} \geq 0 \\ 1, & \text{If } \sum_{j=0}^2 Realprofit_{i,j} < 0 \end{cases} \quad (2)$$

Specifically, as presented in Equation (1), real profit of corporations equal to profit minus subsidy of government and preferential credit received. When real profits are smaller than 0 for three consecutive years after accounting for all subsidies, the firms will be categorized as corporate zombification.

Table 1
Measurement of variables.

Variable	Variable name	Variable symbols	Definition
Dependent variable	Corporate zombification	CZ	Dummy variable: If $\sum_{j=0}^2 Realprofit_{i,j} \geq 0$ CZ=0, otherwise, CZ=1
Independent variable	Managerial myopia	MM	Calculated based on MDandA
Mediating variable	Strategic aggressiveness	SA	Comprehensive metric, referring to Zhao <i>et al.</i> (2024)
Moderating variable	Environmental uncertainty	EU	Comprehensive metric, referring to Bin-Feng <i>et al.</i> (2024)
Control variables	Corporate size	Size	The natural logarithm of a firm's total assets+1
	Corporate age	FirmAge	The natural logarithm of the number of years a business has been listed+1
	Debt repayment ability	Lev	Total liabilities/total assets
	Cash flow	Cashflow	Net cash flow from operating activities/total assets

Table 1. (continued)

Variable	Variable name	Variable symbols	Definition
Control variables	Board	BO	The natural logarithm of the number of board member+1
	The Top10 shareholder	Top10	Proportion of shares held by the Top10 shareholders
	Tobin Q	TobinQ	Proportion of market value by replacement cost
	Big four accounting firms	Big4	Dummy variable: If the company is audited by the Big four accounting firms PWC, Ernst and Young, Deloitte and KPMG, Big4=1, otherwise Big4=0

3.2.2. Independent variable

Managerial myopia pertains to the independent variable in this study. Drawing from the framework established by Zhang *et al.* (2025), we developed a tailored lexicon of 43 terms and phrases specifically linked to myopic thinking, such as “within a short period of time,” “within several months,” and “promptly.” These terms were chosen to capture the essence of short-term focus prevalent in managerial decision-making. To analyze the presence of these myopic indicators, we conducted a textual analysis of annual reports, utilizing the Python programming language. This allowed us to systematically extract and quantify keyword frequencies, providing insights into the extent of managerial myopia in corporate communications. Then, this study utilizes the Management Discussion and Analysis (MDandA) section of annual financial reports as a basis for assessing managerial myopia, with the specific methodological approach presented in Equation (3).

$$\text{Managerial Myopia}_{i,t} = \frac{\text{Frequency of short-term words}_{i,t}}{\text{Frequency of total words}_{i,t}} \quad (3)$$

3.2.3. Mediating variable

Strategic aggressiveness pertains to the mediating variable in this study. Based on the study of Zhao *et al.* (2024), a discrete strategy scoring model is developed to quantify strategic aggressiveness. This model encompasses six dimensions: the ratio of research and development expenditure to operating revenue, the ratio of the number of employees to operating revenue, selling and administrative expenses as a percentage of operating revenue, the growth rate of sales revenue, employee turnover, and capital intensity. To ascertain the strategic aggressiveness of firms, rolling averages for each of these variables are calculated over a five-year period. Subsequently, the first five variables are categorized into five groups based on their rolling average values for each year-industry sample. The group with the lowest average is assigned one point, while the group with the highest average receives five points, maintaining a one-point differential between groups. Conversely, the sixth variable is classified in reverse; the group with the lowest average is assigned five points, and the group with the highest average is awarded one point, again with a one-point difference between categories. The scores for these six variables are then aggregated for each firm-year sample, resulting in a discrete variable that quantifies strategic aggressiveness. A higher value of this discrete strategy scoring model indicates a greater level of strategic aggressiveness among the focal firms.

3.2.4. Moderating variable

Environmental uncertainty pertains to the moderating variable of this study. In reference to Bin-Feng *et al.* (2024), the construct of environmental uncertainty encountered by firms is operationalized through the industry-adjusted coefficient of variation of firm sales revenue, as presented in Equation (4). Specifically, Sales indicates the revenue accrued from business transactions, while Year can be acknowledged as the annual variable, with the residual representing atypical sales revenue. Data points are categorized based on a four-year historical framework, with Year = 1 assigned to data from the preceding four years, Year = 2 for data from the prior three years, and Year = 5 for data corresponding to the current year. Consequently, the environmental uncertainty (EU) is calculated by taking the ratio of the standard deviation to the mean of abnormal sales revenue over a five-year period, which serves as an indicator of corporate performance. Finally, it is important to highlight that the ratio is subsequently normalized against the median of firms within the same industry for the corresponding fiscal year, thereby yielding an industry-adjusted measure of EU.

$$Sale_i = \beta_0 + \beta_1 Year_i + \varepsilon \quad (4)$$

3.2.5. Control variables

Referring to previous study (He *et al.*, 2020), we also control for corporate financial variables and governance variables to isolate their potential impact on corporate zombification. The financial variables include corporate size (Size), measured as the natural logarithm of total assets plus one, corporate age (FirmAge), as the natural logarithm of the years listed plus one, debt repayment ability (Lev), calculated as total liabilities divided by total assets, cash flow (Cashflow), measured by net cash flow from operating activities relative to total assets, and Tobin's Q (TobinQ), which captures growth potential through market valuation over replacement cost. Additionally, governance variables are included to account for structural and oversight-related factors within firms. These include board size (BO), as the natural logarithm of board members plus one, ownership concentration (Top10), represented by the proportion of shares held by the top 10 shareholders, and audit quality (Big4), a dummy variable indicating whether the firm is audited by a Big Four accounting firm including PWC, Ernst and Young, Deloitte, and KPMG.

3.3. Model construction

The study constructed the following equations to investigate whether managerial myopia can lead to corporate zombification:

$$CZ_{it} = \alpha_0 + \alpha_1 MM_{it} + \alpha_2 X_{it} + Year_t + Firm_i + \varepsilon_{it} \quad (5)$$

Where CZ_{it} pertains to corporate zombification of firm i in year t . MM_{it} refers to managerial myopia of firm i in year t ; X_{it} is the control variable matrix; $Year_t$ and $Firm_i$ is year fixed effect and firm fixed effect, respectively. ε_{it} refers to residual term. We are interested in α_1 in Equation (5). If α_1 is statistically significantly, it indicates that managerial myopia can statistically lead to corporate zombification.

This study also introduces strategic aggressiveness to investigate the influence mechanism by which managerial myopia can lead to corporate zombification, which is tested by the following equations.

$$SA_{it} = \beta_0 + \beta_1 MM_{it} + \beta_2 X_{it} + Year_t + Firm_i + \gamma_{it} \quad (6)$$

$$CZ_{it} = \lambda_0 + \lambda_1 MM_{it} + \lambda_2 SA_{it} + \lambda_3 X_{it} + Year_t + Firm_i + \nu_{it} \quad (7)$$

Where SA_{it} pertains to strategic aggressiveness of firm i in year t . We are mainly interested in coefficients β_1 and λ_2 in Equations (6) and (7), respectively. Specifically, A statistically significant coefficient of β_1 indicates that managerial myopia can exert significant influences on the strategic aggressiveness. In this scenario, if λ_2 in Equation (7) is also statistically significant, it can corroborate the mediating role of strategic aggressiveness.

This study also introduces environmental uncertainty to investigate the boundary conditions of the influence of managerial myopia on corporate zombification as well as strategic aggressiveness, which is tested by the following equations.

$$CZ_{it} = \theta_0 + \theta_1 MM_{it} + \theta_2 EU_{it} + \theta_3 MM_{it} * EU_{it} + \theta_4 X_{it} + Year_t + Firm_i + \zeta_{it} \tag{8}$$

$$SA_{it} = \sigma_0 + \sigma_1 MM_{it} + \sigma_2 EU_{it} + \sigma_3 MM_{it} * EU_{it} + \sigma_4 X_{it} + Year_t + Firm_i + \chi_{it} \tag{9}$$

Where EU_{it} pertains to environmental uncertainty of firm i in year t . We are mainly interested in coefficients θ_3 and σ_3 in Equations (8) and (9), respectively. Specifically, θ_3 and σ_3 are the coefficients of the interaction term of managerial myopia and environmental uncertainty. If the coefficients are statistically significant, it can demonstrate the moderating roles of environmental uncertainty in the influences of managerial myopia on corporate zombification as well as strategic aggressiveness. We plotted Figure 1 to present the specific research framework of this study.

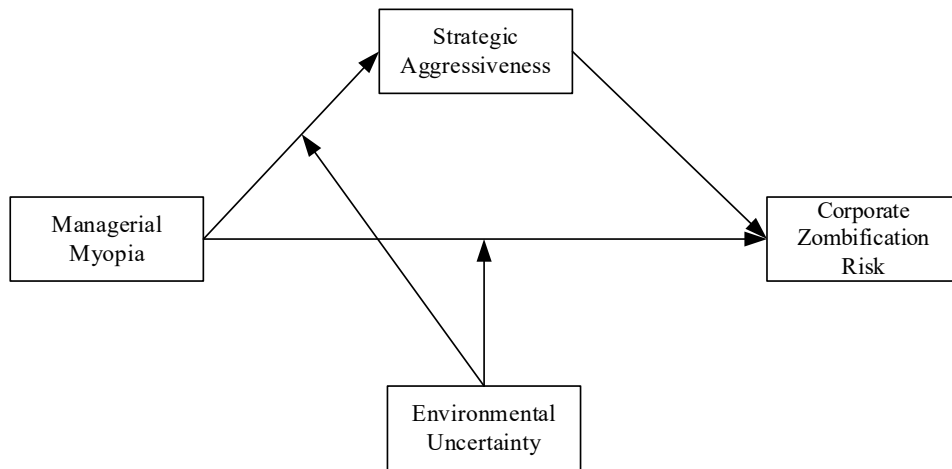


Fig. 1. Research framework.

4. Results

4.1. Descriptive statistics, correlation analysis, and variance inflation factor tests

The results of the descriptive statistics, correlation analysis, and variance inflation factor (VIF) tests are shown in Table 2. The findings indicate that the mean value of corporate zombification is approximately 0.153, accompanied by a standard error of approximately 0.360. Furthermore, the independent variable, managerial myopia, displays a range from 0 to 0.197, with a corresponding standard error of approximately 0.039. The mean value for strategic aggressiveness is approximately 11.136, which is associated with a relatively high standard error of 3.422. Additionally, environmental uncertainty spans a range from 0.009 to 23.440, with a standard error of 1.156. Moreover, Table 2 includes the results of the correlation analysis and VIF tests. The analysis reveals a positive correlation between managerial myopia and corporate zombification, suggesting

that managerial myopia may play a contributory role in the phenomenon of corporate zombification. Conversely, strategic aggressiveness demonstrates a distinct correlation pattern with corporate zombification. The VIF tests indicate that all values are below 2, which is significantly lower than the threshold of 10, thereby confirming the absence of substantial multicollinearity among the examined variables.

Table 2

Descriptive statistics, correlation analysis, and variance inflation factor tests.

Variable	N	Mean	Standard deviation	Min	Max	Correlation	VIF
CZ	24,905	0.153	0.360	0	1	1	/
MM	24,905	0.045	0.039	0	0.197	0.078***	1.03
SA	24,905	11.136	3.422	0	24	-0.015**	1.07
EU	24,905	1.228	1.156	0.009	23.440	0.078***	1.03
Size	24,905	22.525	1.334	17.641	28.670	-0.034***	1.78
FirmAge	24,905	2.981	0.296	1.609	4.190	0.025***	1.04
Lev	24,905	0.464	0.202	0.007	1.957	0.239***	1.35
Cashflow	24,905	0.050	0.0734	-0.704	0.839	-0.142***	1.10
BO	24,905	2.138	0.201	1.099	2.890	-0.015**	1.07
Top10	24,905	0.548	0.151	0.036	1.000	-0.123***	1.17
TobinQ	24,905	2.057	1.870	0.641	122.190	-0.045***	1.17
Big4	24,905	0.070	0.255	0	1	-0.025***	1.18

Note: *, ** and *** represent the significance levels of 10, 5 and 1%, respectively.

4.2. Baseline regression

The results of the baseline regression are illustrated in Table 3. The findings presented in Column (1) of Table 3 confirm that managerial myopia has a statistically significant positive effect on corporate zombification at a confidence level of 1%. Then, Column (2) of Table 3 indicates the results that take into account control variables, corroborating that managerial myopia can still exert significantly positive influences on corporate zombification at a confidence level of 1%. Subsequently, Columns (3) and (4) display results that account for year-fixed and firm-fixed effects, revealing that an increase in managerial myopia can lead to heightened probability of corporate zombification, regardless of adding control variables. Consequently, the hypothesis H1 is supported by these findings.

Table 3

Results of benchmark regression.

Variable	CZ (1)	CZ (2)	CZ (3)	CZ (4)
MM	0.6764*** (0.0607)	0.4681*** (0.0588)	0.6709*** (0.0666)	0.4991*** (0.0648)
Constant	0.1263*** (0.0048)	0.7968*** (0.0653)	0.1015*** (0.0113)	1.4986*** (0.1635)
Control	NO	YES	NO	YES

Table 3. (continued)

Variable	CZ (1)	CZ (2)	CZ (3)	CZ (4)
Year FE	NO	NO	YES	YES
Firm FE	NO	NO	YES	YES
N	24,905	24,905	24,905	24,905

Note: *, ** and *** represent the significance levels of 10, 5 and 1%, respectively.

4.3. Robustness tests

4.3.1. Mitigation of the endogeneity problem

In analyzing the relationship between managerial myopia and zombification, it is paramount to consider the potential endogeneity issues. The issue of reverse causality could arise if zombification itself leads to managerial myopia, as firms experiencing financial distress or survival crises may prioritize short-term actions. In this case, it is not just that myopic behavior causes zombification, but that the process of becoming a zombie enterprise could trigger decisions that exacerbate myopic behavior.

To validate the findings of this study, we employed a two-stage least squares instrumental variables approach to address concerns regarding endogeneity. We used local gambling behavior as an instrumental variable for managerial myopia. The district's propensity for gambling mirrors the behavior of local firms, suggesting that attitudes towards gambling may serve as a proxy for managerial opportunism. We measured gambling preferences using total welfare lottery spending at the provincial level, and then applied a two-stage least squares (2SLS) technique to estimate the impact of managerial myopia on corporate zombification. The corresponding results are presented in Table 4. As indicated in Column (1) of Table 4, the instrumental variable exhibits significant and positive effects on managerial myopia at a confidence level of 1% with a coefficient of 0.0041. Moreover, the F-statistic value of 135.81 surpasses the threshold of 10, thereby alleviating concerns pertaining to weak instrumental variables. Consequently, based on the rationale for the selection of the instrumental variable, it can be concluded that the chosen instrument satisfies the criteria of relevance and exogeneity. Furthermore, as demonstrated in Column (2) of Table 4, after addressing the issue of endogeneity, managerial myopia can have significant and positive effects on corporate zombification at a confidence level of 1% with a coefficient of 5.1280. Thus, the robustness of this study is affirmed.

Table 4

Instrumental variable.

For the purpose of further mitigating the endogeneity problem, referring to the study of Koh *et al.*

Variable	MM (1)	CZ (2)
IV_Gambling	0.0041*** (0.000)	
MM		5.1280*** (0.0563)
Control	YES	YES
Year-fixed	YES	YES

Table 4. (continued)

Variable	MM (1)	CZ (2)
Firm-fixed	YES	YES
Cragg-Donald Wald F statistic	135.81	
N	24,905	24,905

Note: *, ** and *** represent the significance levels of 10, 5 and 1%, respectively.

(2013), this study conducts a time-lagged analysis by making the independent variable lag one stage, with the results presented in Table 5. Column (1) of Table 5 shows that after making managerial myopia lag one stage, there is still a significantly positive relationship between managerial myopia and corporate zombification. Then, Column (2) of Table 5 documents the results that add control variables, with the findings corroborating that managerial myopia can still explain the corporate zombification, and therefore, the robustness of the findings can be further ensured.

Table 5

Time-lagged analysis.

4.3.2. Replacement of managerial myopia

Variable	CZ (1)	CZ (2)
L.MM	0.5263*** (0.0737)	0.4049*** (0.0717)
Constant	0.0691*** (0.0119)	1.8379*** (0.2107)
Control	NO	YES
Year-fixed effects	YES	YES
Firm-fixed effects	YES	YES
N	19,774	19,774

Note: *, ** and *** represent the significance levels of 10, 5 and 1%, respectively.

In order to ensure the robustness of the findings of this study, we further replace the measurement of managerial myopia by referring to the study of Chen *et al.* (2024). The alternative of managerial myopia is measured by the ratio of the current short-term investments of the enterprise to the initial total assets. In the specific calculation, short-term investments are calculated based on the enterprise accounting standards, by combining the data of trading financial assets, net amount of available-for-sale financial assets and net amount of held-to-maturity investments. The larger this ratio is, the stronger the short-sighted tendency of the management is. The details of the results are shown in Table 6. The results show that regardless of control variables, managerial myopia can still exert a significantly positive influence on corporate zombification. Therefore, the robustness of this study can be further supported.

Table 6

Replacement of managerial myopia.

4.3.3. Logit and Probit regression

Variable	CZ (1)	CZ (2)
L.MM	0.4739*** (0.0004)	0.5714*** (0.0002)
Constant	0.1745*** (0.0074)	2.4521*** (0.1074)
Control	NO	YES
Year-fixed effects	YES	YES
Firm-fixed effects	YES	YES
N	24,905	24,905

Note: *, ** and *** represent the significance levels of 10, 5 and 1%, respectively.

Considering that the dependent variable of this study, corporate zombification, is a dummy variable, employing the empirical methods of Logit and Probit regression can further ensure the robustness of the findings. Therefore, this study further conducts Logit and Probit regression, respectively, with the results shown in Table 7. Columns (1) and (2) of Table 7 show that regardless of control variables, the findings of the Logit regression demonstrates that managerial myopia can still exert significantly positive influences on corporate zombification. Then, Columns (3) and (4) of Table 7 document the results of Probit regression, with same findings that managerial myopia can contribute to corporate zombification.

Table 7

Logit and Probit regressions.

4.3.4. Standard error for clustering

Variable	CZ Logit regression	CZ Logit regression	CZ Probit regression	CZ Probit regression
MM	5.0834*** (0.4147)	2.8796*** (0.4498)	2.8516*** (0.2356)	1.7099*** (0.2524)
Constant	-1.9510*** (0.0273)	4.7508*** (0.4741)	-1.1567*** (0.0149)	2.5830*** (0.2564)
Control	NO	YES	NO	YES
N	24,905	24,905	24,905	24,905

Note: *, ** and *** represent the significance levels of 10, 5 and 1%, respectively.

Moreover, to further validity of our findings, we employ clustering of standard errors within our regression analysis to mitigate potential biases. Recognizing the likelihood of correlation between firm-level corporate zombification and industry-specific characteristics, we re-cluster our dataset at the industry level to account for any intra-industry disturbances, in accordance with the methodology proposed by Zhou *et al.* (2023). The results, as presented in Table 8, demonstrate that, irrespective of the control variables, a positive impact of managerial myopia on corporate zombification. Consequently, the robustness of our findings is further substantiated.

Table 8

Standard errors for clustering.

5. Further Analysis

Variable	CZ (1)	CZ (2)
MM	0.6706*** (0.0872)	0.4991*** (0.0824)
Constant	0.1016*** (0.0131)	1.4988*** (0.2828)
Control	NO	YES
Year-fixed effects	YES	YES
Firm-fixed effects	YES	YES
N	24,905	24,905

Note: *, ** and *** represent the significance levels of 10, 5 and 1%, respectively.

5.1. Heterogeneity analysis

5.1.1. Heterogeneity analysis in industry

The existing literature on the zombie firms indicate that the Chinese manufacturing firms are the ones who are likely to become zombie firms, due to the significant support from the local government to promote economic growth (Shen and Chen, 2017). In this scenario, we also wonder whether heterogeneity in industry could affect the nexus between managerial myopia and corporate zombification. Therefore, referring to Gao *et al.* (2022), we divide firms into manufacturing firms and non-manufacturing firms. The manufacturing industry encompasses 43 categories, ranging from agricultural and food processing to advanced technological equipment. Firms that operate within the categories are classified as manufacturing firms; conversely, those that do not fall within these classifications are categorized as non-manufacturing firms. The results of heterogeneity analysis in industry are presented in Table 9, indicating while the nexuses between managerial myopia and corporate zombification are all statistically significant, the influences are more pronounced among manufacturing firms, which can provide further support for the study of Shen and Chen (2017).

Table 9

Heterogeneity analysis in industry.

5.1.2. Heterogeneity analysis in pollution level

This study further attempts to ascertain whether the level of pollution will also impact the relationship

Variable	CZ Non-manufacturing firms	CZ Manufacturing firms	CZ Non-manufacturing firms	CZ Manufacturing firms
MM	0.5387*** (0.1090)	0.6807*** (0.0840)	0.3821*** (0.1069)	0.5499*** (0.0814)
Constant	0.0965*** (0.0190)	0.0934*** (0.0142)	2.6227*** (0.2997)	0.5544*** (0.2049)
Control	NO	NO	YES	YES
Year-fixed effects	YES	YES	YES	YES
Firm-fixed effects	YES	YES	YES	YES
N	8,849	16,056	8,849	16,056

Note: *, ** and *** represent the significance levels of 10, 5 and 1%, respectively.

between managerial myopia and corporate zombification. Referring to the research conducted by Zhang *et al.* (2023b), we categorize our focal firms into two distinct groups including heavy-polluters and non-heavy-polluters, adhering to the industry classification guidelines established by the China Securities Regulatory Commission (CSRC). The findings are presented in Table 10, which illustrates that, irrespective of the control variables, an increase in the degree of managerial myopia significantly enhances the probability of heavy polluters becoming zombie firms. The underlying reasons can be attributed to the fact that for heavy polluting firms, managerial myopia may result in neglecting necessary investments in innovation and environmental compliance. Consequently, the firms face more financial strain as well as regulatory pressures, increasing their likelihood of becoming zombie firms.

Table 10

Heterogeneity analysis in pollution level.

5.2. Mediating role of strategic aggressiveness

Variable	CZ Non-heavy polluters	CZ Heavy polluters	CZ Non-heavy polluters	CZ Heavy polluters
MM	0.4841*** (0.0767)	0.9632*** (0.1333)	0.3327*** (0.0751)	0.8212*** (0.1276)
Constant	0.0673*** (0.0131)	0.1618*** (0.0228)	1.8949*** (0.1880)	0.1013 (0.3628)
Control	NO	NO	YES	YES
Year-fixed effects	YES	YES	YES	YES
Firm-fixed effects	YES	YES	YES	YES
N	19,012	5,893	19,012	5,893

Note: *, ** and *** represent the significance levels of 10, 5 and 1%, respectively.

In order to reveal the potential influence path through which managerial myopia leads to corporate zombification, we further introduce the variable strategic aggressiveness, and the results are presented in Table 11. At first, Columns (1) and (2) of Table 11 documents the regression that does not include control variables, and the findings demonstrate a significantly negative influences of managerial myopia on strategic aggressiveness at a confidence level of 1%. In addition, the results further indicate that the strategic aggressiveness can also negatively affect corporate zombification at a confidence level of 1%. Columns (3) and (4) of Table 11 indicate the results with control variables, with the findings remain to be same, indicating that the reduced strategic aggressiveness derived from managerial myopia can contribute to corporate zombification. Therefore, H2 can be supported.

Table 11

Mediating role of strategic aggressiveness.

5.3. Moderating role of environmental uncertainty

Variable	SA (1)	CZ (2)	SA (3)	CZ (4)
MM	-1.8162*** (0.4963)	0.6655*** (0.0667)	-1.3827*** (0.4943)	0.4955*** (0.0649)

Table 11. (continued)

Variable	SA (1)	CZ (2)	SA (3)	CZ (4)
SA		-0.0028*** (0.0009)		-0.0026*** (0.0009)
Constant	11.6133*** (0.0841)	0.1336*** (0.0155)	13.0590*** (1.2453)	1.5325*** (0.1639)
Control	NO	YES	NO	YES
Year FE	YES	YES	YES	YES
Firm FE	YES	YES	YES	YES
N	24,905	24,905	24,905	24,905

Note: *, ** and *** represent the significance levels of 10, 5 and 1%, respectively.

This study further introduces environmental uncertainty to reveal the boundary conditions of the influence of managerial myopia on corporate zombification. Specifically, as presented in Table 12, it can be seen that the interaction term of managerial myopia and environmental uncertainty is statistically significant with a positive coefficient, regardless of control variables at a confidence level of 1%. In this scenario, it can demonstrate that environmental uncertainty can reinforce the positive influences of managerial myopia on corporate zombification. Therefore, H3.1 can be supported.

Table 12

Moderating role of environmental uncertainty in the nexus between managerial myopia and corporate zombification.

This study further tests the role of environmental uncertainty in the nexus between managerial myopia and strategic aggressiveness, with the results documented in Table 13. Specifically, as shown in

Variable	CZ (1)	CZ (2)
MM	0.4466*** (0.0916)	0.2934*** (0.0889)
EU	-0.0064** (0.0032)	-0.0024 (0.0031)
MM*EU	0.1851*** (0.0516)	0.1698*** (0.0500)
Constant	0.1095*** (0.0119)	1.5230*** (0.1638)
Control	NO	YES
Year-fixed effects	YES	YES
Firm-fixed effects	YES	YES
N	24,905	24,905

Note: *, ** and *** represent the significance levels of 10, 5 and 1%, respectively.

Table 13, the interaction term of managerial myopia and environmental uncertainty can exert significantly positive influences on strategic aggressiveness at a confidence level of 1%. The findings demonstrate that the negative influences of managerial myopia on strategic aggressiveness are more pronounced among

firms with more environmental uncertainty. Therefore, H3.2 can be supported.

Table 13

Moderating role of environmental uncertainty in the nexus between managerial myopia and strategic aggressiveness.

6. Conclusion and Discussion

Variable	SA (1)	SA (2)
MM	-2.7963*** (0.6749)	-2.4668*** (0.6715)
EU	0.3082*** (0.0234)	0.2773*** (0.0234)
MM*EU	0.9973*** (0.3804)	0.9913*** (0.3781)
Constant	11.2355*** (0.0879)	14.5838*** (1.2375)
Control	NO	YES
Year-fixed effects	YES	YES
Firm-fixed effects	YES	YES
N	24,905	24,905

Note: *, ** and *** represent the significance levels of 10, 5 and 1%, respectively.

6.1. Conclusion

This study utilizes a comprehensive dataset comprising 24,905 observations spanning from 2009 to 2023 to examine the nexus between managerial myopia and corporate zombification. The findings reveal that managerial myopia can exert significantly positive influences on corporate zombification, thereby indicating that managerial myopia can explain the zombification of corporations. To validate the robustness of these findings, the study employs several robustness tests, including the construction of instrumental variables, implementation of time-lagged analyses, utilization of Logit and Probit regression, and adjustments for clustering in standard errors. The findings from the heterogeneity analysis suggest that within the context of manufacturing and heavy-polluting firms, an increase in managerial myopia is associated with an enhanced likelihood of these firms becoming zombie firms. The results of influence mechanism by which managerial myopia leads to corporate zombification demonstrate the mediating role of strategic aggressiveness. Lastly, the study also corroborates that the influences of managerial myopia on corporate zombification and strategic aggressiveness are more pronounced among corporations faced higher level of environmental uncertainty.

6.2. Theoretical implications

This study has some theoretical implications. At first, previous studies have corroborated the significantly negative influences of zombie firms, and call for more attention to investigating the determinants of corporations becoming “the walking dead” (Wang and Zhu, 2021; Shen and Chen, 2017). The existing literature has been mainly focused on revealing the factors that enhance corporate

zombification from a perspective of external environment such as government intervention (He *et al.*, 2020; Zhu *et al.*, 2024) and local government debt (He *et al.*, 2023). Whereas they can make significant contributions to mitigating the corporate zombification, it should be noted that we go a step further from a perspective of internal governance. We propose that if the management actively engages with their external environment, there is a chance to mitigate the likelihood associated with the emergence of zombie firms. In this scenario, we introduce managerial myopia and draw upon the Upper Echelons Theory to contend that the short-termism and risk-averse nature of the myopic managers can demotivate firms to take proactive measures to adapt to the changing environment (Zhang *et al.*, 2023a). Instead, they would resort to the passive actions such as relying on government and bank support. As a result, it can significantly contribute to increasing the risks of them becoming zombies. The findings extend the existing literature on the antecedents of enhanced corporate zombification, and more importantly, it can provide some novel theoretical insights to learn the deeper reasons why the management is correlated with the very risk.

Secondly, to date, little is known about the influence mechanism by which managerial myopia contributes to enhanced likelihood of corporate zombification. Based on the aforementioned the short-termism and risk-averse nature of the myopic managers, we further extend the studies on the antecedents of firms becoming zombies by considering the influences of managerial myopia on strategic choices. Specifically, the existing literature has corroborated that the managerial myopia can exert negative influences on the intention of the firms to partake in the activities that can be risks such as innovation (Antia *et al.*, 2021; Chen *et al.*, 2022). In this scenario, we introduce strategic aggressiveness, and theoretically and empirically demonstrate the negative nexus between managerial myopia and strategic aggressiveness. In return, combining previous studies (Wang *et al.*, 2025), we innovatively consider the mediating role of strategic aggressiveness in the influences of managerial myopia on corporate zombification. This can comprehensively explain why some firms would eventually become “the walking dead,” thereby further providing some theoretical insights.

Thirdly, this study adopts a dual perspective encompassing internal governance and the external environment to provide a comprehensive analysis of the factors that augment the likelihood of firms becoming zombies. Specifically, we further introduce the environmental uncertainty to further reveal the influence mechanism, indicating that environmental uncertainty can reinforce the influences of managerial myopia on corporate zombification and strategic aggressiveness. Based on the study of Lin and Zhang (2023), we ascribe this scenario to the reasons that environmental uncertainty compels managers to prioritize immediate outcomes due to the unpredictability. In such circumstances, the tendency may exacerbate the short-term orientation prevalent among myopic managers, thereby directly increasing the likelihood of corporate zombification. Furthermore, this phenomenon can also diminish strategic aggressiveness, which subsequently intensifies the likelihood of corporate zombification. Therefore, this study can further provide some lens into the underlying reasons of firms becoming the “walking dead.”

6.3. *Practical implications*

This study offers important implications for both industry practitioners and policymakers. For industry practitioners, the findings emphasize the need to mitigate managerial myopia so as to reduce the risk of corporate zombification. Managers should balance short-term financial pressures with long-term strategic objectives to avoid overemphasizing immediate returns, which can undermine sustainable

growth and competitiveness. Firms should prioritize long-term strategic planning and forward-looking decision-making. Specifically, since strategic aggressiveness significantly mediates the impact of managerial myopia on corporate zombification, firms should foster risk-taking, innovation, and proactive market positioning. However, strategic aggressiveness is a “double-edged sword.” While it can drive innovation and competitive advantages, overly aggressive strategies—especially when distorted by managerial myopia—may lead to reckless decisions, unsustainable risks, or harmful investments. For instance, pursuing high-risk markets or aggressive acquisitions without considering long-term sustainability can exacerbate corporate zombification. Therefore, encouraging strategic aggressiveness must be balanced with a clear vision of long-term goals, ensuring that short-term pressures do not distort strategic decision-making. Moreover, considering the moderating role of environmental uncertainty, firms in uncertain environments should adopt flexible strategies rather than merely conforming to external pressures. Cultivating a culture that values long-term growth and resilience allows firms to better withstand external shocks and avoid the pitfalls of corporate zombification.

For policymakers, the findings suggest implementing targeted measures to align managerial behavior with long-term objectives and reduce the risk of corporate zombification. Governments can refine executive incentives by introducing long-term equity-based compensation, performance shares, or deferred bonuses tied to multi-year performance metrics, ensuring that managers are rewarded for sustainable growth rather than short-term gains. They can encourage strategic investments by offering tax incentives, subsidies, or grants for R&D, digital transformation, or sustainable technologies, which promote innovation and long-term competitiveness. During periods of high environmental uncertainty, policymakers can facilitate access to long-term capital through government-backed loans, low-interest financing, or venture funding, enabling firms to pursue strategic projects without succumbing to short-term pressures. At the same time, regulatory frameworks can be designed to promote responsible risk-taking, encouraging innovation and strategic experimentation while limiting exposure to reckless or unsustainable ventures. By combining these measures, governments can help firms align managerial decisions with sustainable growth, mitigate corporate zombification, and ensure that companies remain agile and resilient in the face of evolving market conditions.

6.4. Limitations and research directions

Whereas this study may make some contributions to better revealing the nexus between managerial myopia and corporate zombification, there are still some limitations. A significant limitation is its static approach to examining zombie firms, focusing primarily on their characteristics at a given point in time. A dynamic perspective such as considering the persistence of zombification or the potential exit from this state could provide a more comprehensive understanding of zombie firms' behavior over time. This study does not account for the factors that might drive a firm's transition from zombification or its continued persistence in that state. Future research could address this limitation by adopting a longitudinal approach to track the evolution of zombie firms, exploring the conditions under which they persist or successfully exit zombification. This would not only enrich the analysis but also offer valuable insights into the strategies and external factors that influence the lifecycle of zombie firms.

The other limitation of this study is its focus on Chinese firms, which may limit the generalizability of the findings to other countries or regions. While the study provides valuable insights into the relationship between managerial myopia and corporate zombification within the Chinese context, the results may not

fully apply to firms operating in different economic, cultural, or regulatory environments. Future research could address this limitation by exploring similar relationships in firms from other countries or regions, thus enhancing the external validity of the findings. Additionally, examining cross-country comparisons or the impact of different institutional frameworks could provide a deeper understanding of how managerial myopia influences corporate zombification in diverse settings.

Acknowledgments

This study is supported by the Humanities and Social Science Research Project of the Ministry of Education of China (23YJA630088), Humanities and Social Science Research Project of the Ministry of Education of China (24YJA630091), and Heilongjiang Provincial Philosophy and Social Science Research Planning Project of China (23ZKT005)

Conflicts of Interest

The authors declare no conflict of interest.

References

- Antia, M., Pantzalis, C., & Park, J. C., 2021. Does CEO myopia impede growth opportunities? *Review of Quantitative Finance and Accounting*, 56, 1503-1535.
- Bin-Feng, C., Mirza, S. S., & Ahsan, T., et al., 2024. How uncertainty can determine corporate ESG performance? *Corporate Social Responsibility and Environmental Management*, 31(3), 2290-2310.
- Caballero, R. J., Hoshi, T., & Kashyap, A. K., 2008. Zombie lending and depressed restructuring in Japan. *American Economic Review*, 98(5), 1943-1977.
- Chang, C. Y., Lu, W. M., & Ting, I. W. K., et al. 2024. Sustainable wins: Exploring the nexus of Environmental, Social and Governance investment and firm efficiency in the gambling industry moderated by business strategy type. *Corporate Social Responsibility and Environmental Management*.
- Chao, S. L., Guo, L., & Sun, S. J., 2022. Zombie problem: Normal firms' wastewater pollution. *Journal of Cleaner Production*, 330: 129893.
- Chen, C., He, Y. S., & Wang, K., et al. 2022. The impact of early-life natural disaster experiences on the corporate innovation by CEOs. *Emerging Markets Finance and Trade*, 58(14), 3953-3975.
- Chen, W., Li, X., & Wu, H. B., et al. 2024. The impact of managerial myopia on cybersecurity: Evidence from data breaches. *Journal of Banking and Finance*, 166, 107254.
- Du, K., Jia, F., & Chen, L. J., 2025. Better safe than sorry? The effect of asymmetric cost management on firm resilience in manufacturing firms. *Industrial Management and Data Systems*, 125 (1): 143-167.
- Fukuda, S., & Nakamura, J., 2011. Why did 'zombie' firms recover in Japan? *World Economy*, 34 (7), 1124-1137.
- Gao, K., Wang, L., & Liu, T. T., et al. 2022. Management executive power and corporate green innovation – Empirical evidence from China's state-owned manufacturing sector. *Technology in Society*, 70: 102043.
- Guizani, M., 2024. Does managerial myopia exacerbate firms' excessive financialization? Evidence from Malaysia. *Management Research Review*, 47 (10), 1606-1625.
- Guo, X. C., Li, M. M., & Wang, Y. L., et al. 2023. Does digital transformation improve the firm's performance? From the perspective of digitalization paradox and managerial myopia. *Journal of Business Research*, 163: 113868.
- He, Q., Li, X. Y., & Zhu, W. Y., 2020. Political connection and the walking dead: Evidence from China's privately owned firms. *International Review of Economics and Finance*, 69, 1056-1070.
- He, Q., Jiang, D., & Liu, E., 2025. The benefits and costs of employee stock ownership plans in China. *Corporate Governance: An International Review*, 33 (1): 21-54.
- He, Y., Ma, Y., & Tang, M., et al. 2023. Local government debt and firm zombification: Evidence from China. *Asian Economic Papers*, 22 (2), 68-95.

- Hoshi, T., 2006. Economics of the living dead. *Japanese Economic Review*, 57 (1), 30-49.
- Hoshi, T., Kawaguchi, D., & Ueda, K., 2023. Zombies, again? The COVID-19 business support programs in Japan. *Journal of Banking and Finance*, 147: 106421.
- Hu, Y. M., Li, W., & Zhang, A. P., 2023. Political promotion incentives and firm risk: Evidence from state-owned enterprises in China. *Emerging Markets Finance and Trade*, 59 (1), 156-169.
- Jiang, J. T., Lu, Y., & Yin, Z. T., 2024. FinTech can prevent the formation of zombie firms: Evidence from China. *Social Sciences in China*, 45 (1), 111-133.
- Jin, L., Pan, C. C., & Li, Y., et al. 2022. How can FinTech reduce corporate zombification risk? *Emerging Markets Finance and Trade*, 58 (15), 4350-4360.
- Koh, H. J., Riedel, N., & Böhm, T., 2013. Do governments tax agglomeration rents? *Journal of Urban Economics*, 75, 92-106.
- Li, H. J., Huang, H., & Zhao, Y. F., et al. 2025. Core-technology competence in perspective of supplier concentration: The mechanism of strategic aggressiveness and the influence of environmental uncertainty. *Technology Analysis and Strategic Management*, 37(12), 2505-2519.
- Li, J., Guo, X. W., & Huang, B. H., et al. 2024. Political connections and zombie firms: The role of the 2008 stimulus plan in China. *Journal of Financial Stability*, 72: 101260.
- Liang, L., & Li, Y., 2024. How does organizational resilience promote firm growth? The mediating role of strategic change and managerial myopia. *Journal of Business Research*, 177: 114636.
- Lin, Y., & Zhang, X. J., 2023. Can investor attention defuse the likelihood of corporate zombification? – Empirical evidence from listed companies in China. *Journal of Business Economics and Management*, 24, 336-353.
- Liu, H. X., & Zhang, Z. H., 2023. The impact of managerial myopia on environmental, social and governance (ESG) engagement: Evidence from Chinese firms. *Energy Economics*, 122: 106705.
- Magerakis, E., & Habib, A., 2022. Environmental uncertainty and corporate cash holdings: The moderating role of CEO ability. *International Review of Finance*, 22 (3), 402-432.
- Parnell, J. A., Lester, D. L., & Long, Z., et al. 2012. How environmental uncertainty affects the link between business strategy and performance in SMEs: Evidence from China, Turkey, and the USA. *Management Decision*, 50 (4), 546-568.
- Ren, S. G., Wang, Y., & Hu, Y. C., et al. 2021. CEO hometown identity and firm green innovation. *Business Strategy and The Environment*, 30 (2), 756-774.
- Seo, H. J., Kang, S. J., & Baek, Y. J., 2020. Managerial myopia and short-termism of innovation strategy: Financialisation of Korean firms. *Cambridge Journal of Economics*, 44 (2), 1197-1220.
- Shen, G. J., & Chen, B. K., 2017. Zombie firms and over-capacity in Chinese manufacturing. *China Economic Review*, 44, 327-342.
- Sheng, X., Guo, S. L., & Chang, X. C., 2022. Managerial myopia and firm productivity: Evidence from China. *Finance Research Letters*, 49: 103083.
- Shiraishi, M., & Yano, G., 2021. Do 'zombie firms' emerge among private firms in China? A survival analysis approach that pays attention to the reception of trade credit. *Journal of Chinese Economic and Business Studies*, 19(1), 1-34.
- Tuuli, S., 2024. Who funds zombie firms: Banks or non-banks? *International Review of Financial Analysis*, 95: 103420.
- Wang, K., Pellegrini, M. M., & Xue, J. A., et al. 2020. Environment uncertainty and a firm's strategic change: The moderating role of political connection and family ownership. *Journal of Family Business Management*, 10 (4), 313-327.
- Wang, M. Y., Yu, Y. L., & Liu, F., 2025. Does digital transformation curb the formation of zombie firms? A machine learning approach. *Technology Analysis and Strategic Management*, 37(7), 810-826.
- Wang, Y. Q., & Zhu, Y. Y., 2021. The financing and investment crowding-out effect of zombie firms on non-zombie firms: Evidence from China. *Emerging Markets Finance and Trade*, 57 (7), 1959-1985.
- Weinzimmer, L., Esken, C. A., & Michel, E. J., et al. 2023. The differential impact of strategic aggressiveness on firm performance: The role of firm size. *Journal of Business Research*, 158: 113623.
- Wu, Y. M., & Pan, H. Y., 2024. Zombie firms and corporate financialization: Evidence from China. *Review of Managerial Science*, 18, 1077-1099.
- Zeng, X. F., Zhang, T., & Zu, Y. F., 2024. Management control matching pattern and company strategic aggressiveness: Empirical test based on annual report text information. *Chinese Management Studies*, 18 (2), 146-173.
- Zhang, C., Liu, C., & Ma, Y. Y., et al. 2025. Managerial myopia and corporate financialization: Evidence from China. *Journal of International Financial Management and Accounting*, 36 (1): 184-214.
- Zhang, J. W., Li, Y., & Xu, H. W., et al. 2023a. Can ESG ratings mitigate managerial myopia? Evidence from Chinese listed companies. *International Review of Financial Analysis*, 90: 102878.
- Zhang, W., Qin, C., & Zhang, W. Y., 2023b. Top management team characteristics, technological innovation and firm's

- greenwashing: Evidence from China's heavy-polluting industries. *Technological Forecasting and Social Change*, 191: 122522.
- Zhang, X. Y., Wu, J. Q., & Nor, M. N. B., et al. 2024. Corporate strategic aggression and environmental investment decisions: Evidence from A-share listed firms. *International Review of Financial Analysis*, 95: 103528.
- Zhao, M. L., Wang, X. H., & Zhang, S. P., et al. 2024. Business strategy and environmental information disclosure from a Confucian cultural perspective: Evidence from China. *Business Strategy and the Environment*, 33 (3), 1557-1577.
- Zhou, K., Qu, Z., & Wei, Z., et al. 2023. Does government fiscal pressure matter for firm environmental performance? The role of environmental regulation and tax competition. *Economic Analysis and Policy*, 80, 1187-1204.
- Zhu, H., He, F., & Wang, S. N., et al. 2019. Zombie firms and debt accumulation: A theoretical framework and Chinese experience. *China and World Economy*, 27 (6), 104-126.
- Zhu, R. Y., Tan, K. H., & Xin, X. H., et al. 2024. Does the opening of high-speed rail inhibit corporate zombification? *International Review of Economics and Finance*, 93, 372-389.