



Managerial Overconfidence, Risk-Taking and Corporate ESG Performance

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ABSTRACT. Accelerating socio-economic transitions have magnified the vital role of corporate ESG performance. This study examines the behavioral consequences of executive hubris using a sample of Chinese A-share listed firms from 2009 to 2022. Our empirical findings demonstrate that managerial overconfidence significantly suppresses corporate ESG outcomes by inflating strategic risk-taking. Heterogeneity analyses reveal that state ownership and high analyst coverage amplify this negative behavioral shock, whereas superior corporate governance acts as a strategic buffer to attenuate the inhibitory effect.

Keywords: Managerial Overconfidence; Corporate ESG Performance; Risk-Taking

1 Introduction

Driven by global low-carbon transitions and China's green mandates—such as the 2024 sustainability disclosure guidelines—corporate Environmental, Social, and Governance (ESG) performance has become a critical benchmark for high-quality development and capital allocation. While traditional literature emphasizes macro-level institutional drivers, the micro-behavioral determinants of ESG remain under-explored. Drawing upon Upper Echelons Theory and behavioral finance, this paper bridges this gap by investigating the impact of managerial overconfidence—a bounded rationality bias characterized by self-serving optimism and risk underestimation—on corporate ESG implementation.

Utilizing a sample of Chinese A-share listed companies from 2012 to 2022, we empirically examine this relationship and unpack the underlying "black box" by establishing corporate risk-taking as a key mediating pathway. Furthermore, we map the institutional boundary conditions of this behavioral transmission by conducting multi-dimensional heterogeneity analyses across variations in ownership structures, external analyst coverage, and internal corporate governance quality. This study enriches the interdisciplinary literature intersecting behavioral finance, cognitive psychology, and strategic management, while providing diagnostic insights for firms optimizing internal governance to achieve long-term sustainability goals.

2 Theoretical Framework and Hypotheses Development

Prior literature on the strategic ramifications of managerial overconfidence spans a tripartite framework across ESG dimensions, yielding highly nuanced and mixed consensus. For instance Dick et al find that Overconfident managers actively engage in social responsibility initiatives to cultivate moral capital (Dick, Wagner, and Pernsteiner 2020), which subsequently promotes the voluntary disclosure of corporate social responsibility intelligence (Hu, Ye, Yu, Piao, Huang, and Li 2024). Some Scholars argue that appointing overconfident executives during aggressive business expansion eras (Reyes, Vassolo, Kausel, Peña Torres, and Zhang 2020) or macroeconomic recessions (Kowalick, Ahrens, Lauterbach, and Tang 2023) can enhance the operational enforceability of board decisions, enabling firms to execute high-yield, high-risk strategic outlays that risk-averse managers would otherwise avoid (Burkhard, Sirén, Essen, Grichnik, and Shepherd 2022).

Synthesizing prior literature, we argue that managerial overconfidence suppresses corporate ESG performance through dual cognitive distortions. Specifically, overconfident executives systematically overestimate internal financial capabilities which weakens their incentives to leverage strategic ESG practices for external stakeholder alignment while underestimating regulatory exposure risks (Rijsenbilt and Commandeur 2013). This hubristic illusion of control forms a psychological defense mechanism that routinely dismisses institutional scrutiny, ultimately causing firms to miss critical windows for strategic sustainability remediation.

In summary, driven by inflated self-efficacy and under-estimated operational hazards, overconfident managers prioritize immediate personal utility at the expense of external stakeholder welfare. This behavioral distortion undermines their motivation to commit sustainable capital to non-financial initiatives, eroding corporate sustainability configurations. Consequently, we propose our primary baseline hypothesis:

Hypothesis 1 : Managerial overconfidence significantly suppresses corporate ESG performance.

As primary strategic architects, executives' psychological traits directly shape capital allocation routines. Driven by inflated self-efficacy, overconfident managers exhibit an expanded risk appetite that structurally escalates firm-level risk-taking. This amplified risk-taking, in turn, catalyzes a severe resource crowding-out effect within the corporate budgeting framework. By diverting finite organizational capital away from sustainability layouts to fund high-risk, speculative projects, managerial hubris induces a critical resource deficit for long-term sustainability initiatives, impeding corporate ESG goals. Consequently, we propose the following mediation hypothesis:

H2: Managerial overconfidence reduces corporate ESG performance by increasing firm-level risk-taking.

3 Empirical Results

We execute ordinary least squares (OLS) estimations based on our defined baseline regression model, rigorously integrating both industry and year fixed effects alongside

a comprehensive suite of corporate covariates. The systematic empirical outcomes are delineated in Table 1. Column (1) and column (2) presents the coefficient on OC for ESG scores are all significantly negative at the 1% level ($p<0.01$), offering compelling empirical validation for Hypothesis H1.

In Column (3), OC exerts a positive and highly significant impact on corporate risk-taking. In Column (4), the coefficient on ESG is robustly negative. This trajectory demonstrates that an overconfident mindset prompts executives to amplify strategic risk profiles, which subsequently crowds out finite organizational resources dedicated to sustainability fulfillment, providing robust validation for Hypothesis H2.

Table 1. Regression Results

	(1)	(2)	(3)	(4)
	ESG	ESG	Risk	ESG
OC	-0.861*** (-27.39)	-0.536*** (-17.60)	0.015*** (13.40)	-0.491*** (-16.19)
Risk				-2.948*** (-19.40)
Controls	NO	YES	YES	YES
_cons	4.660*** (224.21)	-1.330*** (-10.85)	0.125*** (27.72)	-0.960*** (-7.78)
<i>Year FE</i>	YES	YES	YES	YES
<i>Ind FE</i>	YES	YES	YES	YES
<i>N</i>	31461	31461	31461	31461
<i>Adj. R²</i>	0.056	0.179	0.218	0.189

T statistics in parentheses
* $p<0.1$, ** $p<0.05$, *** $p<0.01$

4 Heterogeneity Analysis

We hypothesize that the negative shock of OC on ESG performance is more pronounced in state-owned enterprises (SOEs), where concentrated ownership and rigid hierarchies inherently foster managerial hubris. The regression coefficient on the interaction term OC*SOE is negative and statistically significant demonstrating that state-owned institutional environments amplify the inhibitory effect of managerial overconfidence on corporate ESG performance.

We hypothesize that financial analyst coverage exacerbates the negative impact of OC on ESG performance. Analyst-induced market pressure accelerates managerial short-termism, thereby exacerbating the detrimental shock of executive biases on ESG outcomes. The regression coefficient on the interaction term OC*Analyst is -0.194, which is significantly negative at the 1% risk level ($p < 0.01$), demonstrating that the inhibitory effect of managerial overconfidence on corporate ESG performance is incrementally magnified in firms facing high analyst scrutiny

We argue that high-quality corporate governance attenuates the negative impact of OC on ESG performance. A robust governance framework establishes effective internal checks and balances that constrain and rectify executive cognitive biases. The regression coefficient on the interaction term OC*Governance is 0.114, which is significantly positive at the 10% risk level ($p < 0.10$), confirming that strong internal monitoring serve as an effective strategic stabilizer to hedge executive cognitive biases.

5 Robustness Checks

To ensure the validity of our baseline findings, we conduct three stringent identification tests. Alternative Variables: We re-estimate the baseline model by sequentially substituting alternative measures for both the independent and dependent variables to control for potential measurement biases. Endogeneity Mitigation (2SLS): To mitigate potential reverse causality, we execute a Two-Stage Least Squares (2SLS) estimation. We employ the contemporary industry-year average of managerial overconfidence across peer firms (excluding the focal firm) as the instrumental variable (IV). Policy Interference Control: To rule out potential structural breaks induced by the 2018 CSRC and AMAC ESG disclosure frameworks, we truncate our sample to focus exclusively on the standardized post-policy era from 2019 to 2022.

6 Conclusion

This study examines the impact of managerial overconfidence on corporate ESG performance using Chinese listed firms from 2009 to 2022. Based on a systematic literature review, our empirical baseline reveals that managerial overconfidence significantly suppresses corporate ESG outcomes by inflating strategic risk-taking. Heterogeneity analyses demonstrate that state ownership and high analyst coverage further amplify

this negative behavioral shock, whereas superior corporate governance acts as an effective stabilizer to attenuate the inhibitory effect.

Based on our findings, we propose three recommendations: (1) Optimize executive selection systems and monitor psychological overconfidence. (2) Improve governance infrastructures and fortify risk management mechanisms. (3) Internalize ESG philosophies and foster sustainable corporate cultures.

References

1. Burkhard, B., C. Sirén, M. Essen, D. Grichnik, and D. Shepherd. 2022. Nothing ventured, nothing gained: a meta-analysis of CEO overconfidence, strategic risk taking, and performance. *Journal of Management* 49.
2. Dick, M., E. S. Wagner, and H. Pernsteiner. 2020. Founder-controlled family firms, overconfidence, and corporate social responsibility engagement: evidence from survey data. *Family Business Review* 34: 71-92.
3. Hu, Y., Y. Ye, X. Yu, X. Piao, L. Huang, and B. Li. 2024. Managerial overconfidence and corporate information disclosure. *Borsa Istanbul Review* 24(2): 263-279.
4. Kowalzik, M., J. P. Ahrens, J. G. Lauterbach, and Y. Tang. 2023. Overconfident CEOs in dire straits: how incumbent and successor CEOs' overconfidence affects firm turnaround performance. *Journal of Management Studies*.
5. Reyes, T., R. Vassolo, E. Kausel, D. Peña Torres, and S. Zhang. 2020. Does overconfidence pay off when things go well? CEO overconfidence, firm performance, and the business cycle. *Strategic Organization* 20: 147612702093065.
6. Rijsenbilt, A., and H. Commandeur. 2013. Narcissus enters the courtroom: CEO narcissism and fraud. *Journal of Business Ethics* 117.

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