

How Management Incentives Influence Corporate Financial Performance: A Mediating Effect Analysis Based on ESG Performance

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Abstract

Against the backdrop of China's dual-carbon targets and the pursuit of high-quality economic development, the synergistic relationship between ESG (environmental, social, and governance) performance and corporate governance mechanisms has become increasingly prominent. Using Chinese A-share listed companies from 2020 to 2024 as the research sample, this paper employs panel-data multiple regression and mediating-effect models to empirically examine both the direct impact of managerial incentives on corporate financial performance and the underlying transmission mechanisms. The results show that (1) both equity-based and compensation-based managerial incentives exert a statistically significant positive effect on corporate financial performance; and (2) ESG performance plays a significant partial mediating role in the relationship between managerial incentives and corporate financial performance—specifically, a transmission pathway exists in which managerial incentives improve ESG performance, which in turn enhances financial performance. These findings remain robust after a series of robustness checks, including variable substitution. By adopting a sustainable-development perspective, the study extends the literature on the economic consequences of managerial incentives. It also supplies empirical evidence that can help firms incorporate ESG metrics into executive evaluation systems, refine incentive contract design, and assist regulators in improving relevant institutional frameworks.

Keywords

ESG performance, managerial incentives, corporate financial performance, mediating effect

1. Introduction

In an era in which China's dual-carbon targets have been fully implemented, the concept of green development has been deeply integrated into market rules, and capital markets are placing increasing emphasis on ESG dimensions in their assessment of corporate sustainability, enterprises must pursue not only short-term financial performance growth to consolidate their market position but also the strengthening of long-term development foundations by improving ESG performance [1].

As a core corporate governance mechanism linking shareholder interests with managerial decision-making, managerial incentives can establish a sustainable pathway for enhancing corporate value by encouraging improvements in ESG performance. This is not only essential for building the competitiveness of individual

enterprises but also holds important demonstration significance for the sustainable development of industries as a whole.

This study selects data from Chinese A-share listed companies from 2020 to 2024 as its research sample. Using panel data regression and mediating effect testing methods, it empirically investigates the impact of managerial incentives on corporate financial performance, with a particular focus on the mediating transmission mechanism of ESG performance. The paper aims to address the shortcomings of existing research on this specific pathway and to enrich the theoretical understanding of corporate governance and long-term value growth. At the practical level, the research findings provide decision-making references for enterprises to optimize incentive contract design and enhance ESG governance levels. They also supply micro-level empirical evidence for regulatory authorities in formulating scientific ESG disclosure and governance policies.

2. Research Hypotheses

2.1 Management Incentives and Corporate Financial Performance

Existing research widely acknowledges the positive governance effects of management incentives on corporate performance. Equity and compensation, as the predominant incentive tools, each operate through distinct mechanisms. As early as 2005, Liu Xia empirically analyzed listed company data, discovering a positive correlation between senior management incentives and corporate operating performance, thereby laying a theoretical foundation for subsequent research into incentive mechanisms [2]. Scholars have also investigated the impact of both equity and compensation, as primary management incentive tools, on corporate financial performance. Jia Zihan et al., focusing on Neusoft Group, confirmed that managerial shareholding in listed companies positively influences corporate financial performance [3]. Yang Xuedan, through empirical research on listed company data, validated a clear positive correlation between managerial compensation and corporate financial performance [4]. These studies consistently demonstrate a positive effect of management incentives on corporate financial performance, and the underlying logic further corroborates this hypothesis. Firstly, equity incentives transform management into de facto "owners" of the company, directly linking their returns to the company's stock price, which helps mitigate short-sighted decisions. Compensation incentives, on the other hand, provide timely feedback on operational results, guiding management to concentrate on core financial indicators such as profitability. Secondly, both equity and compensation incentives attract high-caliber management talent, influencing their interests and risk preferences in innovation activities, thereby promoting the implementation of innovative decisions. This, in turn, enhances corporate financial performance and market value. Based on the aforementioned literature review and logical analysis, the following hypothesis is proposed:

H1: Management equity and compensation incentives empower the enhancement of corporate financial performance.

2.2 Management Incentives, ESG Performance, and Corporate Financial Performance

In recent years, the relationship between management incentives and ESG performance, as well as the link between ESG performance and corporate financial performance, have emerged as prominent research areas. Meng Yun [5] and Liang Wenyu [6] individually investigated the impact of executive equity incentives and high compensation incentives on corporate ESG performance, respectively. Furthermore, research by Wang Xiaoyan et al. affirmed the positive influence of ESG performance on corporate performance [7]. Ran Xu discovered that managerial incentives serve as a mediating pathway in the effect of ESG performance on financial performance [8]. Drawing from these research findings, it can be deduced that management incentives can further influence corporate financial performance by promoting improved ESG performance. Firstly, management incentives can mitigate short-sighted decisions, and since ESG performance constitutes a crucial element of a company's long-term strategy, incentive mechanisms effectively drive enhancements in corporate ESG performance. Secondly, companies with superior ESG performance tend to exhibit better governance capabilities, which is conducive to the development of core financial indicators and the company's long-term progress. Thirdly, increased management incentives encourage companies to prioritize employee rights, thereby fostering greater commitment to social and environmental responsibilities, enhancing ESG performance, and ultimately improving financial performance. In summary, the following hypothesis is proposed:

H2: Management incentives enhance corporate financial performance by promoting improvements in corporate ESG performance.

3. Research Design

3.1 Sample Data Source

This study utilizes annual data from China's A-share listed companies from 2020 to 2024 as the initial sample. ESG performance ratings for A-share listed companies were collected via Tonghuashun. The following operations were then performed: First, samples from the banking and financial sectors were excluded. Second, samples of ST and *ST companies for the respective year were removed. Third, samples with missing data for key variables were excluded to ensure consistency and comparability of financial indicators. This process yielded a total of 25,325 sample observations for parameter estimation.

3.2 Variable Definitions

This study clearly defines and measures the core and control variables involved in the research. Specific details are presented in Table 1.

Table 1: Variable Definition and Measurement

Variable Type	Variable Name	Variable Code	Variable Measurement
Dependent Variable	Corporate Financial Performance	ROE	Return on Equity
Independent Variables	Management Equity Incentive	Share	Ratio of management shareholding to total shares
	Management Compensation Incentive	Salary	Natural logarithm of total management compensation
Mediating Variable	ESG Performance	ESG	Assigned values 1-9 based on Tonghuashun ESG rating (low to high)
Control Variables	Firm Size	Size	Natural logarithm of total assets
	Firm Age	Age	Number of years since firm establishment
	Financial Leverage	Lev	Debt-to-asset ratio
	Growth	Gro	Operating revenue growth rate
	Equity Concentration	Top5	Sum of shareholding percentages of the top five shareholders
	Number of Managers	Num	Total number of managers

3.3 Model Construction

Based on the preceding analysis, the basic model is constructed as follows:

$$Y = \alpha_0 + \alpha_1 X + \sum \alpha_j C + \varepsilon_1 \quad (1)$$

$$M = \beta_0 + \beta_1 X + \sum \beta_j C + \varepsilon_2 \quad (2)$$

$$Y = \gamma_0 + \gamma_1 X + \gamma_2 M + \sum \gamma_j C + \varepsilon_3 \quad (3)$$

In the formula, α , β , and γ represent parameters, X denotes the dependent variable (corporate financial performance), Y represents the independent variable (management incentives), M denotes the mediating variable (ESG performance), and C represents the control variables.

4. Empirical Results and Analysis

4.1 Descriptive Analysis of Variables

The descriptive statistics for the main variables are presented in Table 2. The mean value of Corporate Financial Performance (ROE) is 0.035, with a standard deviation of 0.098, indicating significant variation in the financial performance (ROE) among the sample A-share listed companies. A comparison of the mean and

standard deviation for Management Equity Incentive (Share) and Management Compensation Incentive (Salary) reveals substantial differences in both equity and compensation incentive levels. The mean ESG performance is 5.193, suggesting that the average ESG rating of the sample companies falls within the BB-BBB range. The descriptive statistics for the remaining control variables are shown in the table below:

Table 2: Descriptive Statistics of Main Variables

Name	Sample Size	Minimum Value	Maximum Value	Mean	Standard Deviation	Median
Roe	25325	-2.49	7.44	0.03	0.098	0.03
Share	25325	0.00	0.90	0.17	0.207	0.05
Salary	22858	11.77	18.93	15.72	0.657	15.69
ESG	22642	1.00	9.00	5.19	1.362	5.00
Age	25325	2.00	71.00	21.02	6.747	21.00
Size	25325	17.87	28.79	22.20	1.403	21.97
Lev	25325	0.01	3.64	0.39	0.208	0.38
Top5	25325	2.69	98.63	54.26	16.319	53.92
Gro	25325	-1.44	944.10	0.30	9.532	0.07
Num	25325	8.00	53.00	17.93	4.884	17.00

4.2 Analysis of Baseline Regression Results

A linear regression model was employed for the analysis, and the results are presented in the tables below. Table 3 shows that the regression coefficient of Share on ROE is 0.053 ($t=17.663$, $p=0.000 < 0.01$), indicating that Share (X1) has a significant positive impact on ROE (Y). Table 4 demonstrates that the regression coefficient of Salary on ROE is 0.016 ($t=15.817$, $p=0.000 < 0.01$), meaning that Salary (X2) also has a significant positive impact on ROE (Y). The overall regression results align with expectations, thus, the baseline regression results validate Hypothesis H1.

Table 3: Linear Regression Results for Share

	Non-Standardized Coefficients	Standardized Coefficients	t	p	Collinearity Diagnostics
	B	Std. Error	Beta		VIF
(Constant)	0.027	0.001	-	33.276	0.000**
Share (X1)	0.053	0.003	0.110	17.663	0.000**
R ²	0.012				
Adjusted R ²	0.012				
F	F (1,25323) = 311.991, p=0.000				
D-W Value	1.486				

Note: Dependent Variable = ROE (Y), * $p < 0.05$ ** $p < 0.01$

Table 4: Linear Regression Results for Salary

	Non-Standardized Coefficients	Standardized Coefficients	t	p	Collinearity Diagnostics
	B	Std. Error	Beta		VIF
(Constant)	-0.220	0.016	-	-13.853	0.000**
Salary (X2)	0.016	0.001	0.104	15.817	0.000**
R ²	0.011				
Adjusted R ²	0.011				
F	F (1,22856) = 250.188, p=0.000				
D-W Value	1.521				

Note: Dependent Variable = ROE (Y), * $p < 0.05$ ** $p < 0.01$

4.3 Mediating Effect Analysis

Table 5 presents the results of the mediating effect test of ESG in the relationship between Share and Salary on ROE. Column (1) indicates that both Share and Salary have a significant positive impact on ROE. Column (2) demonstrates that both Share and Salary also have a significant positive impact on ESG. Column (3) shows that while Share and Salary have a positive impact on ROE, ESG also has a significant positive impact on ROE. Furthermore, the significance of the positive impact of Share and Salary on ROE remains largely

unchanged, still showing strong significance. Therefore, ESG plays a partial mediating role in the influence of Share and Salary on ROE, supporting Hypothesis H2, and the results are relatively robust.

Table 5: Mediating Effect Analysis Results

	(1)	(2)	(3)
Variables	Roe	ESG	Roe
Share	0.023** (0.003)	0.277** (0.045)	0.021** (0.003)
Salary	0.014** (0.001)	0.381** (0.015)	0.011** (0.001)
ESG			0.007** (0.001)
Controls	Yes	Yes	Yes
R ²	0.145 (0.149)	0.224 (0.244)	0.152 (0.155)
N	22559	22559	22559

Note: * $p < 0.05$ ** $p < 0.01$

4.4 Robustness Analysis

To further verify the robustness of the baseline regression and mediation effect results, and to mitigate potential endogeneity concerns arising from measurement bias in single indicators, this study conducts robustness tests using a variable substitution approach across three dimensions: the explanatory variable, the dependent variable, and the mediating variable.

1. Substitution of the explanatory variable.

In empirical analysis, the measurement of incentive variables may be sensitive and thus affect estimation results. Accordingly, this study replaces the original explanatory variable with two alternative measures: (i) the *frequency of managerial equity incentives* and (ii) the *natural logarithm of the total compensation of the top three executives*, and re-estimates the regressions. The frequency of equity incentives effectively captures the continuity and intensity of long-term interest alignment mechanisms, while the compensation of the top three executives better reflects the incentive strength within the firm's core decision-making group. The results show that, after these substitutions, managerial incentives continue to exert a statistically significant and positive effect on firm financial performance. This indicates that the performance-enhancing effect of incentive contracts does not depend on a specific measurement, thereby confirming the robustness of Hypothesis H1.

2. Substitution of the dependent variable.

Compared with traditional accounting-based indicators such as ROE, which primarily reflect historical or contemporaneous book performance, Tobin's Q incorporates the capital market's forward-looking assessment of a firm's growth potential and intangible assets. When financial performance is proxied by Tobin's Q, the direction and statistical significance of the core variables remain unchanged. This not only confirms that managerial incentives improve short-term accounting performance, but also suggests that, by enhancing ESG performance, firms convey positive signals of sustainable development to external markets, thereby obtaining a higher market valuation premium.

3. Substitution of the mediating variable.

Considering that the ESG rating used in the baseline regression (a 1–9 scale) is a categorical variable, and to avoid potential bias in identifying the mediation effect due to measurement precision, this study replaces the mediating variable with a more granular continuous measure—the *Tonghuashun ESG composite score*—and re-examines the model. The results indicate that, with improved measurement precision, ESG performance continues to play a significant partial mediating role between managerial incentives and financial performance, further reinforcing the validity of the transmission mechanism of “incentive-driven → ESG improvement → performance enhancement.”

Overall, after systematically implementing multidimensional variable substitutions, the signs and significance levels of the key coefficients remain largely unchanged compared to the baseline model. This

provides strong evidence that the findings of this study are robust and generalizable, and are not driven by arbitrary choices of measurement.

5. Conclusion

This study utilizes data from A-share listed companies in China from 2020 to 2024 to empirically examine the impact of management equity incentives and compensation incentives on corporate financial performance and their underlying mechanisms. The research reveals that both incentive methods significantly enhance financial performance, with ESG performance playing a crucial partial mediating role. This confirms the effectiveness of the "incentive-driven—ESG optimization—performance enhancement" transmission chain. Further comparison indicates that equity incentives (Share) have a more prominent direct boosting effect on financial performance. This is primarily attributed to the long-term lock-in effect of equity, which inclines management to maintain corporate valuation from a strategic perspective. Conversely, compensation incentives (Salary) demonstrate a more significant marginal promoting effect on ESG performance. This reflects that, under the current appraisal system, management is more sensitive to cash incentives tied to annual performance and is more readily motivated to improve ESG practices in the short term to gain immediate feedback. This differentiated performance suggests that equity incentives are more focused on results-oriented value creation, while compensation incentives are more efficient in driving management to fulfill process-oriented behaviors, such as social responsibility.

Based on these findings, enterprises should optimize incentive contract design by deeply embedding ESG indicators into their appraisal systems. By combining "equity for long-term effectiveness and compensation for behavioral promotion," companies can strengthen the empowering role of incentive mechanisms for sustainable development. Concurrently, regulatory authorities should further improve information disclosure systems to enhance incentive transparency and strengthen market supervision. Although this paper provides valuable empirical evidence, certain limitations remain. Firstly, constrained by data availability, this study primarily focuses on A-share listed companies, and its generalizability to unlisted or small and medium-sized enterprises requires further validation. Secondly, ESG performance is heavily influenced by macro policies and industry attributes. While this paper controlled for factors such as time, it could not exhaust all external environmental variables. Future research could attempt to introduce an industry-segmentation perspective or integrate methods such as machine learning to conduct deeper investigations into the non-linear impacts of ESG performance.

References

- [1] Sun, N., & Qu, W. H. (2024). ESG performance empowers new quality productive forces of enterprises under the "double carbon" goal. *Statistics & Information Forum*, 39(10), 24–41. (in Chinese)
- [2] Liu, X. (2018). An empirical study on the correlation between senior management incentives and the operating performance of listed companies. *Modern Marketing*, (30), 195. (in Chinese)
- [3] Jia, Z. H., Zhu, J. Z., & Wang, W. T. (2025). A case study on the impact of equity incentives on the financial performance of listed companies: Based on the dual perspective of incentive modes and exercise conditions. *Friends of Accounting*, (S2), 136–143. (in Chinese)
- [4] Yang, X. D. (2021). Empirical research on the relationship between executive compensation incentives and corporate financial performance: Based on the perspective of corporate governance. *Market Modernization*, (11), 169–171. (in Chinese)
- [5] Meng, Y. (2024). *Research on the impact of executive equity incentives on corporate ESG performance* [Master's thesis/Doctoral dissertation, Liaoning University]. (in Chinese)
- [6] Liang, W. Y. (2024). *Research on the impact of executive compensation incentives on corporate ESG performance* [Master's thesis/Doctoral dissertation, Shanxi University of Finance and Economics]. (in Chinese)

- [7] Wang, X. Y., & Zhou, D. Q. (2026). The impact of ESG performance on corporate financial performance: An empirical test based on the perspective of China's manufacturing industry. *South China Finance*, 1–17. (in Chinese)
- [8] Ran, X. (2024). ESG performance, management incentives, and corporate financial performance. *Old-Established Brand Marketing*, (22), 127–129. (in Chinese)

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Conflicts of Interest

The authors declare no conflict of interest.

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