

Managers' Overconfidence and ESG Performance: a Study on the Effects of Corporate Internal Governance

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Abstract. From the perspective of behavioral finance, this paper takes China's A-share listed companies from 2013 to 2021 as the research object to explore the impact of the psychological trait of managers' overconfidence on the ESG performance of enterprises, and explores the improvement path of ESG performance from the perspective of corporate internal governance. It is found that there is a significant negative correlation between manager overconfidence and enterprise ESG performance, but internal control can effectively play the role of internal governance and significantly promote the improvement of enterprise ESG performance, and play a negative moderating role in the relationship between manager overconfidence and enterprise ESG performance. This paper enriches and expands the relevant research on the economic consequences of managers' overconfidence and the drivers of firm ESG performance, which has important theoretical significance.

Keywords: Managers overconfidence; Enterprise ESG performance; Internal and external governance

1 Introduction

The concept of ESG was first proposed by Who Cares Wins, a report made by the United Nations Global Compact in 2004. Since then, the connotation of ESG has been gradually enriched, and it has attracted wide attention from all walks of life and become a global hot research topic. ESG is an acronym of the three English words "Environmental", "Social" and "Governance", and its core connotation means that enterprises should not only focus on economic benefits and financial indicators. A series of impacts brought by corporate activities on the environment, society and other stakeholders should also be included in the scope of assessment, so as to realize the sharing of benefits. As the core of enterprise leadership, managers are important strategy makers of enterprises, and their behaviors and decisions are the key to the overall development of enterprises. However, managers are not completely rational, and their thoughts and behaviors will be affected by their personal characteristics. One typical trait is overconfidence. Managers with this psychological trait tend to overestimate their own ability and cognition, ignore the objective reality, and make decisions that are not in line with the maximization of interests. At present, there is no systematic discussion on the influence of managers' irrational overconfidence on ESG performance. Given this, Will it promote enterprise ESG performance or inhibit enterprise ESG performance?

2 Literature review and research hypothesis

2.1 Literature review

The study on the relationship between managers' overconfidence and ESG performance is still in its infancy. Some scholars believe that overconfident managers tend to be constantly looking for opportunities to attract attention, admiration and applause, the expansion of the purpose is to satisfy their positive self concept, corporate social responsibility activities is full of value, the initiative provides managers with many opportunities to meet the strong demand of their positive social image (Bogart, Benotsch & Pavlovic, 2004)^[1]. Liu Yanxia et al. (2020) found that there was a correlation between the level of managers' self-confidence and the level of CSR fulfillment in the whole sample^[2]. It can be seen that current scholars have not reached a unified conclusion.

2.2 Theoretical analysis and research hypothesis

2.2.1 Manager overconfidence and enterprise ESG performance

The motivation for managers to actively participate in enterprise ESG construction, including strategic motivation, risk resistance motivation and self-interest motivation^[3]. From the perspective of strategic motivation, overconfident managers often have self-attribution bias. Overestimate their own capabilities and resources, ignore the importance of bringing resources with external stakeholders, and think that it is not necessary to strengthen ESG input to obtain recognition from external stakeholders; From the perspective of risk resistance motivation, overconfident managers have the illusion of control and over-optimism, will ignore those activities that are obviously beyond their ability, and suffer unnecessary failure^[4]. Therefore, the risk resistance effect of ESG will not arouse the attention of overconfident managers, and will not increase their investment out of ESG's "umbrella" role. From the perspective of self-interest motivation, although overconfident managers are eager to get applause and praise from others, and can get fame and reputation, they are more eager to achieve achievements and reputation in performance. Based on this, the hypothesis is proposed:

H1: Overconfidence of managers will inhibit the improvement of ESG performance of enterprises.

2.2.2 Internal governance effect of internal control

The internal control centered on the idea of promoting the circular development of enterprises is an effective internal governance mechanism, which is consistent with the core idea of ESG. The design and operation of effective internal control can reasonably ensure the coordinated and orderly operation of internal work of enterprises, and ensure the smooth progress of plans and strategies through a series of standardized and orderly measures, procedures and guidelines. Therefore, internal control creates a good internal environment and provides important support for enterprises to practice ESG activities. Furthermore, Well designed internal controls can effectively play the role of internal supervision and governance, and effectively restrain managers' irrational behaviors. Luo Jinhui (2017) found that high-level internal control can effectively restrain overconfident managers, thus alleviating their adverse effects on stock price crashes^[5]. Through strict decision-making mechanism and supervision

mechanism, the internal control with effective design and good operation can restrict the behavior of managers and avoid the phenomenon of subjective assumptions based on their own will. It is proposed that:

H2: Internal control can promote the improvement of enterprise ESG performance,

H3: Internal control plays a negative moderating role in the relationship between manager overconfidence and enterprise ESG performance,

3 Research design

3.1 Sample selection and data sources

China's A-share listed companies from 2013 to 2021 are taken as the initial research samples, and on this basis, the following screening are done: (1) The samples of enterprises marked as ST are excluded; (2) Remove missing values and abnormal samples. Finally, 14,592 observational data samples were obtained. The ESG performance of this paper is taken from the ESG rating index of China Securities in the WIND database, and other relevant data are from the CSMAR database of Guotai 'an.

3.2 Study variables

3.2.1 Enterprise ESG Performance (ESG)

In this paper, the ESG rating of China Securities is selected as a measure of ESG performance. The ESG rating is divided into nine grades: AAA, AA, A, BBB, BB, B, CCC, CC and C. The comprehensive score of ESG ranging from 0 to 100.

3.2.2 Management overconfidence (OC)

Based on Wei Zhehai's(2018) method of measuring managers' overconfidence, this paper constructs an indicator of managers' overconfidence by scoring managers' gender, age, educational level and the combination of the two positions. The specific process is as follows: male score is 1, female score is 0; Age score = (maximum age in sample - age in sample)/(maximum age in sample - minimum age in sample); Educational score, bachelor degree or above set as 1 point, bachelor degree or below set as 0 points; The two-job integration score is 1 point if there is a two-job integration, and 0 points if there is not. Finally, the average of the four characteristics is used as the self-confidence score of the sample manager. The higher the score, The higher the self-confidence of the manager^[6].

3.2.3 Internal Control (IC)

Internal controls are taken from the Dubois database and the data are processed logarithmically.

3.2.4 Control variables

The control variables include asset-liability ratio (Lev), board independence (Inde), Cash level (Cash), ownership concentration (Top1).

3.3 Research model design

In this article, we construct and validate the following linear regression model. First, in order to verify the impact of managers' overconfidence on the company's ESG performance, we constructed a model (1) with ESG performance as the explained variable, and the explanatory variable is the manager's overconfidence level (OC). The model is as follows:

$$ESG = \beta_0 + \beta_1 OC + \beta_2 Lev + \beta_3 Inde + \beta_4 Cash + \beta_5 Top1 + \sum Ind + \sum Year + \varepsilon \quad (1)$$

Next, in order to verify the impact of internal control on a company's ESG performance, we construct a model (2) with a company's ESG performance as a dependent variable and the internal control level (IC) as an explanatory variable. The model is as follows.:

$$ESG = \beta_0 + \beta_1 IC + \beta_2 Lev + \beta_3 Inde + \beta_4 Cash + \beta_5 Top1 + \sum Ind + \sum Year + \varepsilon \quad (2)$$

Third, in order to verify the moderating effect of internal control on manager overconfidence and enterprise ESG performance, the interaction term (OC×IC) between manager overconfidence and internal control is added to model (1) and (2), and model (3) is proposed, which is as follows:

$$ESG = \beta_0 + \beta_1 OC + \beta_2 IC + \beta_3 OC * IC + \beta_4 Lev + \beta_5 Inde + \beta_6 Cash + \beta_7 Top1 + \sum Ind + \sum Year + \varepsilon \quad (3)$$

4 Empirical test and analysis

4.1 Descriptive statistics

Table 1 shows the descriptive statistical results of the main variables in this paper. From the ESG performance of the selected sample enterprises, the minimum value is 41.19 and the maximum value is 90.93, indicating that there are large differences in ESG performance among enterprises. The minimum value of managers' overconfidence level (OC) is 0.016, the maximum value is 1. The minimum value of internal control (IC) is 4.749, the maximum value is 6.847.

Table 1. Descriptive statistics of main variables

variable	N	mean	sd	min	p50	max
ESG	14592	73.17	5.614	41.19	73.50	90.93
OC	14592	0.663	0.156	0.0160	0.639	1
IC	14592	6.470	0.153	4.749	6.496	6.847
Lev	14592	0.419	0.193	0.0600	0.413	0.867
Inde	14592	37.76	5.430	33.33	36.36	57.14
Cash	14592	0.0510	0.0640	-0.132	0.0490	0.239
Top1	14592	33.10	14.65	8.260	30.75	73.82

4.2 Regression analysis

Table2 shows the relationship between manager overconfidence and enterprise ESG performance is shown in column (1) of the Table 2. Regression results show that manager

overconfidence (OC) is negatively correlated with enterprise ESG performance, and it is significant at the 1% statistical level, manifest that the above hypothesis is well verified, and manager overconfidence will prominent inhibit the improvement of enterprise ESG performance. The governance effect of internal control on enterprise ESG performance and the moderating effect on negative relationship between manager overconfidence and enterprise ESG performance are shown in column (2) and (3) of Table 2. The coefficient between internal control (IC) and enterprise ESG performance in column (2) is 10.025, which is positive and prominent at the statistical level of 1%. This minifests that internal control can prominently promote the improvement of enterprise ESG performance. And the coefficient of OC×IC of the cross between manager overconfidence (OC) and internal control (IC) in column (3) is 5.1051, and the coefficient is positive. It is prominent at the statistical level of 1%, indicating that internal control can effectively exert internal governance mechanism and play negative regulating role in the relationship between manager overconfidence and enterprise ESG performance, that is, internal control can effectively inhibit the passive effect of manager overconfidence on enterprise ESG performance.

Table 2. Basic regression results

	(1) ESG	(2) ESG	(3) ESG
OC	-1.1624*** (-4.0134)		-34.2223*** (-2.7573)
IC		10.0250*** (35.4358)	6.6683*** (5.1538)
OC×IC			5.1051*** (2.6617)
Lev	-3.3135*** (-12.4533)	-2.9930*** (-11.7106)	-3.0045*** (-11.7646)
Inde	0.1353*** (13.8135)	0.1241*** (13.1951)	0.1256*** (13.3593)
Cash	8.9859*** (12.3951)	6.3165*** (9.0261)	6.1925*** (8.8484)
Top1	0.0293*** (9.2084)	0.0184*** (5.9954)	0.0183*** (5.9788)
_cons	62.4279*** (79.2300)	-1.8165 (-0.9367)	20.6052** (2.4551)
Year	Control	Control	Control
Ind	Control	Control	Control
N	14592	14592	14592
adj. R ²	0.094	0.165	0.166

5 Conclusions

The findings are as follows: (1) There is a passive correlation between manager overconfidence and ESG performance. In other words, the manager's overconfidence hinders the improvement of ESG g performance. (2) Using internal control and internal control mechanism can greatly promote the improvement of enterprise ESG performance and play a

negative early warning role in the relationship between operator overconfidence and enterprise ESG performance. That is, internal control efficaciously inhibits the negative effect of manager overconfidence on enterprise ESG performance.

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