

Exploring the Relationship Between Non-Financial Information and Corporate Financial Performance: Evidence from Chinese Listed Companies

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Abstract: With the increasing impact of climate change and resource depletion, society is confronted with significant environmental and social challenges, which have made sustainable development a focal point for the entire community. ESG, as a vital metric for measuring a company's sustainable development capabilities. The development of ESG evaluation system can promote enterprises to pay more attention to ESG, thus contributing to the sustainable development of society and environment. Furthermore, the development of ESG practices has the potential to positively influence a company's financial performance, thereby serving as a driving force for economic advancement. A sample of 342 listed companies is analyzed using descriptive statistics and OLS regression analysis. The results show that ESG performance has no significant impact on the financial performance of enterprises, and it can neither help enterprises obtain more profits nor make enterprises bear more financial pressure. Based on these findings, the paper suggests the following recommendations: (1) Enhance the management and integration of ESG evaluation systems. (2) Foster increased societal attention towards the ESG performance of companies.

Keywords: ESG, financial performance, OLS regression

1. Introduction

Amid rising environmental issues such as pollution, resource depletion, and ecological imbalances, the promotion of sustainable economic and social development has gained global prominence. The ESG concept emerged driven by social values and a vision for sustainability. ESG considers the environmental, social, and governance impact of corporate actions. Through extensive ESG disclosure, stakeholders gain access to comprehensive non-financial information, enhancing their understanding of the company and facilitating better monitoring of CSR implementation to safeguard their interests.

In recent years, Chinese enterprises have witnessed rapid growth alongside economic and technological advancements. However, the awareness of social and environmental protection has not kept pace with this progress. To address this gap, the Chinese government has integrated the construction of ecological civilization into the broader framework of socialism with Chinese characteristics. Embracing the principles of ecological priority and green development, China is

committed to driving an overall transition toward a greener economy and society. The concepts of green development and sustainable development have gained traction and support. It is worth noting that in a major speech at the recent UN General Assembly, the Chinese president pledged that China's carbon dioxide emissions would peak around 2030 and stressed that China would be carbon neutral 30 years after that peak. While China may have started relatively later in understanding ESG, the concept is now widely recognized and efforts to enhance its application and development are actively underway.

ESG, as a new concept, is attracting more and more attention from society and accelerating the transition of companies from short-term selfish goals to maximize their own economic benefits to long-term goals to maximize social value. China's ESG white paper issued in 2022 mentions that ESG investments are closely focused on the theme of promoting high-quality development, committed to promoting sustainable development, and highly compatible with the national strategy and concept of economic development. ESG incorporates a global assessment of the company and can effectively improve the overall management capacity of the company. And those with good overall management capabilities are often able to achieve steady development and growth in long-term performance. Enterprises are the most important actors in economic development. In this context, ESG is particularly important for improving the performance and developing the capacity of enterprises. However, research on this topic is relatively rare. For example, with ESG disclosure, what impact will it have on the financial performance of the company? This remains an unanswered mystery. This is therefore the purpose of this study.

This paper studies the impact of ESG performance on enterprise performance, which can increase the importance of enterprises to ESG and improve the investment and disclosure of enterprises in this aspect. Understanding the influence of ESG on corporate performance can also assist senior managers in optimizing performance and project management. Investors can gain comprehensive insights into companies, including both financial and non-financial information, enabling them to make more informed investment decisions and maximize their profits. Moreover, this research underscores the importance of continuous improvement in the policy and regulatory framework related to ESG, supported by sufficient theoretical backing.

Part of this article selects 2014 Shanghai a-share listed companies as the research object, and will be released these enterprises on CNRDS platform ratings collected, ESG for analysis.

The second part of this paper is literature review. The third and fourth parts are methodology and results and analysis respectively. The last part is the conclusion.

2. Literature Review

After thorough review of relevant literature and conducting comprehensive research, it is evident that the majority of scholars support the notion that a favorable ESG score can positively impact the financial performance of enterprises. Conversely, a minority of scholars hold the belief that ESG scoring alone does not yield significant improvements in corporate financial performance. In addition, some scholars put forward the view that focusing on ESG may have a bad impact on a company's financial performance. Therefore, this article decided on these three aspects are studied.

2.1. ESG Negatively Correlates with Corporate Financial Performance

In the sample analysis of America's "100 Best Corporate Citizens" from 2009 to 2018, Azeem et al. discovered that actively pursuing ESG practices can contribute to excellent financial performance. [1] Similarly, Busco et al. found that listed companies adopting ESG frameworks tend to have better corporate performance compared to those without such frameworks. [2] By exploring the information of about 600 companies in Thompson Reuters Eikon database from 2014 to 2018, Bahadori et al.

found that after controlling the company size and leverage, the higher the ESG score, the higher the profitability. [3] Sang and Li explored the impact of various ESG factors on corporate financial performance and revealed a positive influence on profitability, particularly for large enterprises. [4] Xia Xiufang and Jiang Ziyi conducted research under the background of "dual carbon" and found that although ESG can improve the profitability of enterprises and improve the cash flow of enterprises in the long run, it will increase the financial burden of enterprises in the short run. [5]

2.2. ESG Negatively Correlates with Corporate Financial Performance

In a comprehensive study using a large European dataset from 2002 to 2014, Sassen et al. discovered that improved management and disclosure of non-financial information can enhance corporate value by mitigating corporate risks. [6] Di Tommaso and Thornton focused on European banks and found that higher ESG scores are associated with lower bank value due to the allocation of limited resources away from investments. [7] Duque-Grisales and Aguilera-Caracuel investigate data from 104 multinational companies in various countries, including Brazil, Chile, and Colombia, covering the period from 2011 to 2015. They found that these firms' ESG scores actually reduced their financial performance. [8]

2.3. The Influence of ESG on Financial Performance of Company Is Not Statistically Significant

Zhang et al, through the study on the positive interaction between corporate social responsibility and corporate value, found that disclosure of relevant non-financial information will not lead to improvement or reduction of financial performance. [9] Based on a study by Abdullah Sani et al. on 47 companies listed on FTSE4G Malaysia's stock exchange from 2014 onwards, it was observed that there is no significant link between the ESG factors of companies consistently publishing sustainability reports and the company's value or profitability. [10]

2.4. Hypotheses

In general, a commendable ESG score has the potential to foster a distinguished corporate image, augment the faith of investors and other stakeholders, and cultivate the trust of governmental institutions, thereby securing an enhanced access to abundant resources. Furthermore, the enterprise's internal governance standards will be elevated, thereby optimizing operational efficiency, and elevating the caliber of its endeavors.

However, if there is no corresponding supervision and review, senior managers of enterprises may use the disclosure of ESG information to shift the focus and cover up the operational problems of enterprises. This will cause enterprises to invest too many resources in ESG disclosure, which will reduce the actual operating efficiency of enterprises and damage the financial performance of enterprises.

Considering that there are many factors to test the financial performance of enterprises, this paper cannot cover all of them for the time being. In the following hypothesis, the asset-liability ratio and return on equity are selected to represent the financial performance of enterprises.

Hypotheses: ESG score is positively correlated with Return on Equity (ROE).

3. Methodology

3.1. Sample

This paper takes the listed companies of Shanghai A-share as research samples and selects the data in 2014 for empirical research. Data processing is as follows:

- 1) Remove ST and ST* companies.
- 2) Samples of listed companies with special industry nature in the financial and insurance industry are excluded.
- 3) Eliminate sample enterprises with missing data.

After processing, a total of 2394 data were obtained in this paper, all of which, including ESG score, size, operating revenue growth rate, asset-liability ratio, total asset turnover, and dividend payout ratio, were from the data published by the China Research Data Service Platform (CNRDS).

3.2. Equation

To test the hypothesis, this paper builds the following model (Equation 1):

$$ROE = \alpha_0 + \alpha_1 ESG + \alpha_2 SIZE + \alpha_3 Growth + \alpha_4 TAT + \alpha_5 LEV + \varepsilon_1 \quad (1)$$

Among them, α =regression coefficient, ESG=ESG score, ε =Random disturbance term.

Table 1 is explaining the specific variables.

Table 1: Variable definition table.

Variables	Definition
ROE	Net profit/total assets balance*100%
ESG	Enterprise ESG score published by CNRDS
SIZE	The company's total assets logarithmic
Growth	Operating income growth rate
TAT	Operating income/Total assets
LEV	Total assets/total liabilities

3.3. Method

3.3.1.Independent Variable

Currently, there is no standardized approach to measuring ESG performance across academia and industry. Setting ESG evaluation indicators on our own may lead to inaccuracies due to incomplete data and subjective biases. To address this, this paper utilizes the ESG score provided by the China Research Data Service platform (CNRDS) as a reliable method for measuring the ESG performance of listed companies. The CNRDS assigns an ESG score ranging from 0 to 100 points.

3.3.2.Dependent Variable

Research on corporate performance has reached a relatively stable conclusion. Most scholars choose return on net assets, asset-liability ratio, current ratio, net profit margin and other financial indicators to assess and evaluate financial performance. Return on equity is the core index of enterprise profitability, which shows the income brought by investment. Therefore, this paper chooses Return on Equity as factor to measure enterprise performance.

3.3.3.Control Variable

This study considers several control variables, including enterprise size, growth, operational ability, and asset-liability ratio. A larger enterprise size suggests greater resource control and profit potential. Additionally, larger enterprises tend to prioritize brand image and reputation, leading to increased investment in ESG performance. To measure enterprise size, this study employs the logarithm of total

assets. The growth ability of a company influences its potential for future resources and profits. To represent growth, this study uses the growth rate of operating income. The total assets turnover ratio reflects a company's liquidity and profitability, indicating its ability to withstand risks. Regarding debt level, excessively high levels can increase financing costs and create significant pressure for debt repayment, potentially leading to financial crises. Therefore, this study employs the asset-liability ratio as an indicator of enterprise debt level.

4. Analysis and Results

4.1. Descriptive Statistics

Table 2: Descriptive statistics of variables.

	min	max	mean	Standard deviation	variance
ESG	7.05	56.72	24.45	8.57	73.43
ROE	-9.07	35.38	0.11	2.01	4.03
LEV	0.02	1.65	0.53	0.22	0.5
SIZE	17.76	26.95	22.35	1.44	2.06
Growth	-90.85	180.34	5.65	31.83	1013.33
TAT	0.01	6.71	0.67	0.65	0.42

Table 2 explains the descriptive statistics for various variables. The standard deviation of ROE is 2.01, and its value ranges from -9.07 to 35.38, showing that there is a huge gap in the financial performance of various enterprises, that is, there is a large gap in the resources that can be mobilized among enterprises. The average ROE for the sample is 0.11, indicating a generally moderate financial performance. ESG performance also exhibits substantial diversity, with values ranging from 7.05 to 56.72 and a variance of 8.57. The size of enterprises ranges from 17.76 to 26.95, with an average of 22.35, suggesting a moderate difference in enterprise size. Growth displays a wide disparity, with values ranging from -90.85 to 180.34 and a standard deviation of 31.83. The asset-liability ratio varies between 0.02 and 1.65, with a standard deviation of 0.22, indicating a relatively moderate disparity among enterprises. Total asset turnover ranges from 0.01 to 6.71, with a standard deviation of 0.65, highlighting a moderate variation in this metric. The average value of total asset turnover is 0.67, indicating a generally low performance in this aspect for enterprises.

4.2. OLS Regression

This paper uses linear multiple regression model to investigate ESG performance and corporate financial performance. The regression results can be found in table 3. It should be noted that the maximum value of VIF in this paper is 1.189, far less than 10, and there is no multicollinearity.

The findings suggest that the coefficient of ESG performance lacks significance, indicating no clear connection between ESG performance and firm performance. This lack of significance may be attributed to the relatively short development of the ESG concept in China, resulting in a limited societal importance placed on ESG. Consequently, enterprises fail to receive positive external recognition when they enhance their ESG performance. It is worth noting that the evaluation and supervision systems for ESG are imperfect, and there is no consensus on the selection of evaluation methods, making it challenging for stakeholders to compare and assess ESG performance among different enterprises. Without proper comparison and consistency, the role of ESG performance in achieving long-term organizational goals diminishes. Regarding other control variables, there is no significant relationship observed between SIZE, Growth, and total asset turnover in relation to corporate financial performance. However, a significant positive correlation exists between the asset-

liability ratio and corporate financial performance. This may be attributed to Chinese listed companies effectively generating value and profits by utilizing funds raised through corporate bonds, demonstrating a relatively high level of debt management proficiency.

Table 3: Regression result.

	ROE	VIF
ESG	0.46635	1.054
LEV	0.00014	1.117
SIZE	0.41547	1.189
Growth	0.25623	1.049
TAT	0.93961	1.009

5. Conclusion

5.1. Research Conclusion

The results of this study are different from the former assumption. Improving ESG performance of companies in China is not effective and efficient to achieve the progress of the financial performance of companies. In fact, ESG performance does not seem to affect the financial performance of companies. Several factors contribute to this result. Firstly, the development of ESG in China is relatively nascent, with limited influence on the overall societal environment. Consequently, both enterprises and external stakeholders do not prioritize ESG considerations. Moreover, diverse evaluation methods for ESG within society undermine the comparability and consistency of ESG scores. Stakeholders struggle to differentiate companies with stronger or weaker ESG performance, making it challenging for investors to incorporate ESG criteria into their decision-making process. Furthermore, as a developing country, China's enterprises primarily focus on economic efficiency due to resource and time constraints, leaving limited resources for environmental, sustainability, and social objectives. In addition, ESG performance will help promote the long-term business growth and strategic goals of the enterprise, which will be a long and lasting process, and it is difficult to show in a short time. In other words, an ongoing investigation and review is required to figure out what can ESG really do. This study can not be completed in a short period of time.

5.2. Research Countermeasures and Suggestions

5.2.1. Improve and Unify the ESG Evaluation System

The government should focus on strengthening the management of ESG evaluation system, integrate the ESG evaluation methods of various institutions into the market, strengthen management, and achieve unity and order. At the same time, the government should formally legislate to stipulate the disclosure of relevant information by listed enterprises, and the disclosure of information should be true and fair. Any false information should be punished by law. In addition, due to the early popularity of the ESG concept in foreign markets, the ESG rating system will be more mature. Therefore, the government can learn from the national market and international standards to establish a targeted, operational, and systematic ESG evaluation system.

5.2.2. Enhance the Importance of ESG in Society

Improving the social recognition and understanding of corporate ESG performance is crucial, particularly among investors and other stakeholders. This will enable stakeholders to consider ESG performance when making decisions, ultimately benefiting enterprises with strong ESG track records.

By doing so, these enterprises will have better prospects for future profitability and will avoid being overlooked and deprived of resources due to their ESG efforts.

5.2.3. Research Deficiency

These findings differ from existing mainstream research and raise certain limitations and unresolved questions. Some limitations include limited sample data and the selection of only a few factors to represent corporate financial performance, potentially excluding important variables and influencing study results. In addition, the practice of ESG evaluation systems in China is relatively short, resulting in a lack of available research information. The ESG scoring system has room for improvement in terms of scientific accuracy and recognition.

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