# Driving Corporate Value through ESG Performance: Empirical Evidence from Listed Companies

Yuci Hong

College of Management, Zhejiang Gongshang University, Qiantang, Hangzhou, 31000, China

E-mail: hongyuci@yeah.net

**Abstract.** This study examines the impact of environmental, social, and corporate governance (ESG) performance on firm value and explores the associated mechanisms. The research is based on a sample comprising all A-share listed companies from 2010 to 2022. Using annual data, regression analysis with a fixed effects model is employed. The findings demonstrate a positive relationship between ESG performance and firm value. These results hold significant implications for the establishment of a mandatory ESG disclosure system in China, the standardization and enhancement of ESG evaluation and rating criteria, as well as the promotion of high-quality development and value maximization among listed companies.

**Keywords:** ESG Performance; Corporate Value; Listed Companies

## 1    INTRODUCTION

ESG (Environmental, Social, and Governance) is now a critical aspect of global corporate sustainability efforts as businesses increasingly prioritize long-term value creation and meeting social responsibilities amidst challenges like climate change, resource scarcity, and social inequality. The ESG framework offers a comprehensive approach to support companies in achieving sustainability across environmental, social, and governance domains. This study aims to investigate the impact of corporate ESG performance on firm value and uncover the underlying mechanisms, drawing from the ESG theoretical framework and social capital hypothesis.

In China, the significance of corporate ESG performance is increasingly apparent as the country aims to achieve carbon neutrality and peak carbon emissions under the "dual carbon goals" policy in response to global climate change challenges. Aligning with societal expectations for environmental protection, social responsibility, and governance, companies must prioritize ESG performance to bolster their reputation, manage risks, and optimize long-term value. Despite the global acknowledgment of ESG principles, challenges persist in China due to inconsistent ESG disclosure standards and evaluation systems, as well as opportunities for improvement in environmental sustainability, social responsibility, and governance practices among companies.

The ESG theoretical framework emphasizes the significant impact of corporate performance in the areas of environmental, social, and governance on long-term value creation. According to the ESG framework, companies should take sustainable actions in environmental protection, including reducing carbon emissions, conserving energy, and optimizing resource utilization. In terms of social responsibility, companies should focus on employee welfare, consumer rights, community development, and actively contribute to society. Additionally, good corporate governance practices are a core element of the ESG framework, including transparency, independence, and accountability.

Corporate value theory emphasizes the importance of long-term value creation and provides a range of methods and indicators to assess corporate value. Traditionally, corporate value has been primarily based on financial performance indicators such as profits, market capitalization, and shareholder returns. However, with the rise of ESG principles, more and more research has focused on the relationship between ESG performance and corporate value. Studies have shown that strong ESG performance can enhance a company's financial performance, reduce operational risks, and strengthen its reputation and brand image.

Previous studies have empirically examined the correlation between ESG performance and corporate value using statistical models like regression analysis, event studies, and panel data analysis. The research indicates a positive link between high ESG performance and improved financial outcomes, market performance, and reputation for companies.

Despite progress in this field on a global scale, research examining the correlation between ESG and corporate value in China is still relatively limited. This study seeks to address this gap by empirically assessing how ESG performance influences corporate value within Chinese listed firms. Leveraging data from all companies in the Chinese A-share market, we will conduct a thorough analysis using annual data to explore this connection through quantitative methods and statistical models, aiming to uncover the underlying mechanisms.

The findings of this study make several key contributions and highlight the main research endeavors:

1. Contribution to ESG Regulations and Standards: The study's insights will be valuable in establishing and improving ESG-related regulations and standards in China. By examining the relationship between corporate ESG performance and corporate value, the research can offer guidance to government entities, regulatory bodies, and companies in formulating more effective policies and norms.
2. Guidance for Policymaking: The research outcomes provide useful guidance for policymakers in addressing environmental, social, and governance challenges. The study offers a deeper understanding of how ESG factors impact corporate value, enabling policymakers to design policies that encourage sustainable practices and responsible behavior.
3. Enhanced Evaluation for Investors: The research findings have significance for investors as they seek to evaluate a company's sustainability and long-term value. By

understanding the link between ESG performance and firm value, investors can incorporate ESG considerations into their decision-making processes, leading to more informed investment choices.

4. Improved Corporate Performance: The study's insights can assist companies in enhancing their overall performance in environmental, social, and governance aspects. By recognizing the positive influence of ESG performance on firm value, organizations can prioritize sustainable practices and responsible corporate governance, resulting in improved operational efficiency and long-term value creation.

This research contributes to enhancing ESG practices by offering insights for regulators, companies, investors, and policymakers to advance sustainable development and optimize corporate value.

The paper's structure is as follows: Part 2 reviews literature on ESG performance and corporate value, highlighting existing research findings and gaps. Part 3 introduces the research methodology and data sample selection. Part 4 presents research results and analysis with explanations and discussions. Finally, Part 5 summarizes the main study findings, offers recommendations, and suggests directions for future research.

## 2    LITERATURE REVIEW

### 2.1    ESG Concept and Evaluation of Corporate ESG Performance

ESG (Environmental, Social, and Governance) integrates environmental, social, and governance factors into corporate decisions, urging companies to evaluate their worth not solely by financial metrics but also through environmental, social, and governance lenses. This approach allows firms to enhance practices, fulfill societal obligations, with the UN Environment Programme Finance Initiative introducing ESG in 2004 and the Principles for Responsible Investment in 2006 (An et al., 2022)[12]. The Asset Management Association of China (AMAC) has promoted ESG research since 2017, particularly accentuated post-COVID-19 outbreak (Zheng et al., 2023)[14], underscoring the rising importance of ESG considerations.

ESG performance evaluation is the process of assessing and measuring a company's performance in the areas of environment, social, and governance. Over the past few decades, with the rise of the ESG concept and the increasing importance of sustainable development, more and more research has focused on how to evaluate and quantify a company's ESG performance. Currently, there are over 600 ESG rating agencies worldwide, with approximately 20 in China. Furthermore, due to different evaluation systems focusing on different scopes and underlying indicators, each evaluation system has its own characteristics in identifying controversial events and risk exposures (Wang et al., 2022)[9].

This study employs the comprehensive and frequently updated Huazheng ESG rating data, widely recognized in domestic ratings, covering all A-share listed companies in China from 2010 to 2022. Utilizing annual data, the research empirically explores how ESG performance affects corporate value mechanisms.

## 2.2    Related Research on the Relationship between ESG Performance and Corporate Value

With the increasing impact of sustainable development on economic activities, the significance of ESG's value relevance has emerged as a prominent subject in both practical applications and academic research (Zheng et al., 2023)[14]. Prior research has predominantly focused on empirically investigating the impact of holistic ESG indicators on value creation, drawing from stakeholder theory, sustainable development theory, and the natural resource-based view theory. Nevertheless, there remains a lack of consensus among these studies.

Most scholars concur that ESG performance positively influences corporate value. ESG can enhance a company's operational performance and contribute to increasing market valuation (Cajias, 2014)[2]. Good corporate social responsibility performance can effectively attract investors' attention (Wang, 2017)[3] because positive ESG performance not only helps accumulate social capital through maintaining friendly relationships with stakeholders (Lins, 2017)[5] but also enhances a company's competitive advantage (Wang et al., 2023)[1], thereby increasing corporate value.

However, some scholars argue that ESG performance may have a negative impact on corporate value (Friedman, 2007)[6]. One viewpoint suggests that a company's primary responsibility is to maximize shareholder interests. According to this perspective, investing in external factors such as environmental and social responsibilities may increase additional expenses, waste company resources, weaken competitiveness, harm shareholder interests, and reduce corporate value.

Furthermore, some scholars contend that ESG performance does not exert a significant influence on corporate value (Atan, 2018)[7]. In ESG portfolios, the level of ESG performance does not affect investment returns (Halbritter & Dorfleitner, 2015)[15]. The analysis of socially responsible investments across the Asia-Pacific region, the United States, and Europe revealed that actively selecting stocks based on ESG ratings did not lead to superior risk-adjusted returns compared to passive stock market investments. This finding suggests that regardless of geographic region, industry focus, or ESG standards, actively managed SRI portfolios did not outperform passive market investments in terms of risk-adjusted returns (Auer et al., 2016)[16].

# 3    DATA AND MODEL

## 3.1    Sample Selection

This study utilized the entire population of A-share listed companies from 2010 to 2022 as the initial research sample and employed annual data for analysis. To ensure scientific validity and accuracy, the initial sample underwent further screening based on the following criteria:

1. Exclusion of financial industry samples. Given the extensive governmental regulations and substantial accounting differences between financial companies and firms

in other industries, it is common practice in previous literature to exclude such companies from the initial research sample. Consequently, this study also excluded samples from the financial industry.

2. The study excluded samples labeled as ST, SST, *ST, and PT by the stock exchange due to the operational challenges typically associated with these designations, which may lead to financial statement manipulation to prevent delisting. This exclusion was implemented to reduce potential biases in the research findings.

3. Exclusion of samples with missing or abnormal values for relevant variables.

Following the application of these criteria, the final dataset comprised a non-balanced panel with 36,173 "firm-year" observations. The substantial sample size ensures the credibility of the research conclusions.

## 3.2 Data Sources

The data for this research were sourced from the CSMAR database. Before starting the empirical analysis, all continuous firm-level variables underwent winsorization, truncating values below the 1st percentile and above the 99th percentile. This procedure was implemented to mitigate the potential influence of outliers on the regression results. Furthermore, to address the potential presence of clustering effects, heteroscedasticity, and autocorrelation in the sample data, the standard errors of the regression coefficients were adjusted at the firm level using clustering techniques. The data analysis and processing procedures were predominantly conducted using Stata 17.0 software.

## 3.3 Model

Generally, there are three analytical models for panel data: the mixed-effects model, fixed-effects model, and random-effects model. Therefore, it is necessary to determine the appropriate model before conducting empirical regressions. In this study, the model selection process was as follows:

Firstly, the sample data underwent an F-test, and the results are presented in Table 1, Panel A. The F-test returned a p-value below 0.05, prompting rejection of the null hypothesis. As a result, the fixed-effects model was deemed more appropriate for this study than the mixed-effects model.

Following this, the selection between the fixed-effects model and the random-effects model underwent additional scrutiny through the Hausman test, as detailed in Table 1, Panel B. The obtained p-value from the Hausman test was below 0.05, signifying that the random-effects model ought to be dismissed in favor of the fixed-effects model for the regression analysis.

**Table 1.** Test Results for Regression Model Selection

| Table A: Test Results for Choosing Between Fixed Effects Model and Mixed Effects Model |
| --- |
| H0: all $u\_i$=0: |

F(4604,31473)=4.26
Prob>F=0.0000

Table B: Test Results for Choosing Between Fixed Effects Model and Random Effects Model

H0: difference in coefficients not systematic
chi2(91)=1090.85
Prob>chi2=0.0000

Source: Table created by author

The double fixed effects model, which accounts for both firm-specific and year-specific fixed effects, can address endogeneity issues arising from omitted variables and control for the impact of varying macroeconomic conditions across different years. The test results presented earlier have confirmed the suitability of this model for analysis. The specific formulation of the model is as follows:

$$TQ_{i,t}= \beta_0 + \beta_1 ESG_{i,t} + \Sigma\phi_i Controls_{i,t} + \mu_i + \mu_{year} + \varepsilon_{i,t} \qquad (1)$$

In the above model, the subscripts i and t represent individual firms and years, respectively. $\beta_0$ represents the intercept term, and $\beta_1$ represents the regression coefficient of the core explanatory variable. $\phi_i$ represents the regression coefficients of the control variables. $\mu_i$ and $\mu_{year}$ represent the fixed effects at the firm and year levels, respectively. $\varepsilon_{i,t}$ represents the error term.

## 4      RESULT

### 4.1      Descriptive Statistics

In this section, a detailed explanation of the sample size, mean, standard deviation, minimum value, median, and maximum value for each variable is provided to establish an initial understanding of their attributes. To improve clarity and precision, the following part is dedicated to outlining the variables' characteristics using fundamental statistical descriptors.

**Table 2.** Descriptive Statistics of Key Variables

|        | N     | MEAN  | SD   | MIN   | MEDIAN | MAX   |
|--------|-------|-------|------|-------|--------|-------|
| ROA    | 36173 | 0.04  | 0.07 | -0.38 | 0.04   | 0.25  |
| ESG    | 36173 | 4.10  | 1.07 | 1.00  | 4.00   | 7.00  |
| Size   | 36173 | 22.23 | 1.30 | 19.53 | 22.04  | 26.50 |
| Lev    | 36173 | 0.43  | 0.21 | 0.04  | 0.42   | 0.93  |
| Age    | 36173 | 2.91  | 0.34 | 1.10  | 2.94   | 3.61  |
| Growth | 36173 | 0.17  | 0.42 | -0.66 | 0.11   | 4.33  |
| Top1   | 36173 | 0.34  | 0.15 | 0.08  | 0.32   | 0.76  |

Source: Table created by author

From the descriptive statistics, it can be observed that all variables exhibit reasonable ranges for their statistical characteristics. Please refer to Table 1 for detailed information. Further elaboration is not necessary here.

## 4.2    Correlation Analysis

The prior section conducted descriptive statistical analysis on the sample data, indicating a level of rigor and validity in the study's dataset. In the subsequent section, correlation analysis is executed to evaluate the relationships between variables and detect any notable multicollinearity concerns. Pearson's correlation coefficient and Spearman's correlation coefficient are employed for this purpose. The outcomes of the correlation tests are depicted in Table 2, with Pearson's correlation coefficient results in the lower-left section and Spearman's correlation coefficient results in the upper-right section.

**Table 3.** Results of Correlation Analysis between Variables

|        | ROA | ESG | Size | Lev | Age | Growth | Top1 |
|--------|-----|-----|------|-----|-----|--------|------|
| ROA | 1.00 | 0.22*** | -0.04*** | -0.40*** | -0.12*** | 0.36*** | 0.13*** |
| ESG | 0.22*** | 1.00 | 0.18*** | -0.06*** | -0.02*** | 0.07*** | 0.09*** |
| Size | 0.02*** | 0.21*** | 1.00 | 0.50*** | 0.21*** | 0.04*** | 0.15*** |
| Lev | -0.35*** | -0.08*** | 0.49*** | 1.00 | 0.15*** | 0.01* | 0.04*** |
| Age | -0.11*** | -0.03*** | 0.18*** | 0.16*** | 1.00 | -0.12*** | -0.10*** |
| Growth | 0.26*** | 0.00 | 0.04*** | 0.03*** | -0.07*** | 1.00 | 0.01** |
| Top1 | 0.14*** | 0.10*** | 0.20*** | 0.05*** | -0.11*** | 0.01 | 1.00 |

Note: *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively (two-tailed test)

Source: Table created by author

In general, when the absolute value of the correlation coefficient between variables is greater than 0.75, it indicates a high degree of correlation and a potentially severe issue of multicollinearity, which can lead to biased empirical results. When the absolute value of the correlation coefficient is between 0.5 and 0.75, it indicates a moderate level of correlation. When the absolute value of the correlation coefficient is between 0.25 and 0.5, it indicates a low level of correlation. When the absolute value of the correlation coefficient is less than 0.25, it indicates very weak or no correlation between variables.

The correlation analysis results reveal that the variables in this study do not exhibit correlation coefficients exceeding 0.75 in absolute value. This absence of high correlation values indicates the absence of multicollinearity problems among the variables, affirming the reliability of the empirical regression model utilized in this study. As show in table 4.

**Table 4.** VIF (Variance Inflation Factor) Test

|     | VIF | 1/VIF |
|-----|-----|-------|
| ESG | 1.1 | 0.906103 |

| | | |
|---|---|---|
| Size | 1.52 | 0.659882 |
| Lev | 1.38 | 0.722735 |
| Age | 1.07 | 0.931398 |
| Growth | 1.01 | 0.991400 |
| Top1 | 1.07 | 0.936426 |
| Mean VIF | 1.19 | |

Source: Table created by author

Based on the VIF test results displayed in Table 3, it is evident that all variable's VIFs are below 10. The highest VIF obtained is 1.52, which remains below the threshold of 10. Therefore, it can be inferred that this regression model is free from multicollinearity problems.

## 4.3    Regression Analysis and Hypothesis Testing

**Table 5.** Regression Results

| | ROA | | | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| ESG | 0.0142*** | 0.0092*** | 0.0087*** | 0.0030*** |
| | (44.28) | (29.68) | (29.54) | (6.77) |
| Size | | 0.009*** | 0.0098*** | 0.0169*** |
| | | (31.36) | (34.04) | (14.29) |
| Lev | | -0.1410*** | -0.1470*** | -0.1795*** |
| | | (-82.33) | (-84.91) | (-37.26) |
| Age | | -0.0070*** | 0.0019 | 0.0116* |
| | | (-7.21) | (1.86) | (1.91) |
| Growth | | 0.0420*** | 0.0413*** | 0.0359*** |
| | | (58.81) | (57.00) | (32.21) |
| Top1 | | 0.0493*** | 0.0456*** | 0.0628*** |
| | | (23.53) | (21.86) | (8.56) |
| _cons | | -0.1391*** | -0.1577*** | -0.2873*** |
| | | (-23.67) | (-25.62) | (-9.56) |
| Firm | No | No | No | Yes |
| Year | No | No | Yes | Yes |
| $N$ | 36173 | 36173 | 36173 | 36173 |
| $R^2$ | 0.0605 | 0.275 | 0.284 | 0.259 |
| adj. $R^2$ | 0.0601 | 0.275 | 0.283 | 0.257 |

Note: *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively (two-tailed test); the values in parentheses represent the clustered-adjusted t-test at the firm level.

Source: Table created by author.

As show in table 5. The regression results from the two-way fixed effects model, incorporating firm-level and year fixed effects and controlling for other variables, consistently demonstrate a positive impact of the explanatory variable ESG on the depend-

ent variable ROA. This reinforces the notion that strong ESG performance can positively influence a firm's Return on Assets. This effect is statistically significant at the 1% level. In other words, holding all other conditions constant, better ESG performance by a firm leads to higher ROA, indicating higher firm value.

## 4.4    Robustness Test

### 4.4.1 Changing Regression Methods

The regression equation in this study includes the lagged one-period explanatory variable, and the estimation is performed using both Difference Generalized Method of Moments (Diff-GMM) and System Generalized Method of Moments (Sys-GMM) techniques. Additionally, a regression analysis is executed utilizing the lagged first-order explanatory variable as an instrumental variable.

The results are presented in Table 6, and based on the findings, it can be observed that both methods exhibit good consistency in the regression results, with a high level of statistical significance. This indicates the robustness of the conclusions drawn in this study.

**Table 6.** Robustness Test - Difference GMM and System GMM

|  | Difference GMM | System GMM |
|---|---|---|
|  | ROA | ROA |
|  | (1) | (2) |
| Lagged Terms | 0.0890*** | 0.0914*** |
|  | (6.71) | (10.02) |
| ESG | 0.0083*** | 0.0109*** |
|  | (12.19) | (11.78) |
| Size | 0.0110*** | 0.0113*** |
|  | (13.90) | (16.26) |
| Lev | -0.1547*** | -0.1544*** |
|  | (-13.74) | (-14.18) |
| Age | 0.0082** | 0.0079** |
|  | (2.09) | (2.22) |
| Growth | 0.0519*** | 0.0568** |
|  | (5.93) | (2.71) |
| Top1 | 0.0417*** | 0.0530*** |
|  | (5.12) | (6.07) |
| _cons | -0.2193*** | -0.3110*** |
|  | (-8.09) | (12.85) |
| *N* | 36173 | 36173 |
| *AR(1)* | 0.317 | 0.188 |
| *AR(2)* | 0.591 | 0.412 |
| *Hansen* | 0.998 | 1.000 |
| *Wald* | 0.000*** | 0.0000*** |

Source: Table created by author

**4.4.2 Data Cleaning**

To counteract the possible influence of extreme outliers on the test outcomes, a two-sided winsorization process was applied to all variables at the 1% significance level in this study. The outcomes of this data cleansing procedure are documented in Table 7.

The study's findings suggest a statistically significant positive relationship between a firm's ESG performance and its Return on Assets (ROA) level. This underscores the potential benefits of strong ESG practices on financial performance metrics like ROA. This further strengthens the validity of the conclusions drawn in this study.

The application of the winsorization method effectively handled outlier values that could distort the analysis, resulting in more precise and trustworthy estimations regarding the link between ESG performance and firm financial performance. This approach strengthens the reliability and validity of the results, thereby enhancing the overall credibility of the research findings.

**Table 7.** Robustness Test - Data Cleaning

|  | Dependent variable winsorization | Winsorization of both the independent and dependent variables |
|---|---|---|
|  | ROA | ROA |
|  | (1) | (2) |
| ESG | 0.0082*** | 0.00829*** |
|  | (30.00) | (30.02) |
| Size | 0.0092*** | 0.00919*** |
|  | (34.28) | (34.32) |
| Lev | -0.1420*** | -0.142*** |
|  | (-87.87) | (-87.85) |
| Age | 0.0013 | 0.00131 |
|  | (1.39) | (1.39) |
| Growth | 0.0396*** | 0.0396*** |
|  | (58.50) | (58.50) |
| Top1 | 0.0430*** | 0.0430*** |
|  | (22.05) | (22.06) |
| _cons | -0.1430*** | -0.143*** |
|  | (-24.84) | (-24.90) |
| Firm | Yes | Yes |
| Year | Yes | Yes |
| $N$ | 36173 | 36173 |
| $R^2$ | 0.295 | 0.297 |
| adj. $R^2$ | 0.290 | 0.293 |

Source: Table created by author

# 5    CONCLUSION

It is essential for companies to consider ESG (Environmental, Social, and Governance) factors in their business strategies as they have been found to have a significant correlation with firm value. This study focusing on A-share listed companies in China from 2010 to 2022 highlights the importance of integrating ESG performance into decision-making processes for sustainable growth and long-term success.

The research results demonstrate that companies with good ESG performance exhibit superior financial performance and market valuation, aligning with the growing recognition of the value of sustainable and responsible business practices by investors and stakeholders. By actively managing environmental risks, promoting social impact, and maintaining good corporate governance, companies can enhance long-term competitiveness and attract more investor attention. These findings provide important guidance for practitioners and policymakers, encouraging companies to integrate ESG into core business strategies and develop relevant policies to promote sustainable development.

However, this study also has some limitations. Firstly, the measurement and comparison of ESG performance still face challenges, and future research can explore more accurate and comprehensive assessment methods. Secondly, this study focuses on listed company samples, and future research can consider expanding the sample scope to include non-listed companies and companies from different industries to obtain more comprehensive results.

For future research directions, delving deeper into the causal link between ESG performance and firm value, conducting detailed assessments on various company types, and exploring correlations between ESG performance and factors like innovation capability and brand value can provide a more comprehensive understanding of the subject.

# REFERENCE

1. Wang, H. J., Chen, B., & He, Y. (2023). Has ESG 's fulfillment of its responsibilities improved corporate valuations? — Quasi-natural experiment from MSCI rating. *The Bimonthly Journal of Economic Studies*, 10(02):62-90. https://doi.org/10.16513/j.cnki.cje.20220921.001
2. Cajias, M., Fuerst, F., McAllister, P., & Nanda, A. (2014). Do responsible real estate companies outperform their peers? *International Journal of Strategic Property Management*, 18(1), 11-27. https://doi.org/10.3846/1648715X.2013.866601
3. Wang, M., & Chen, Y. (2017). Does voluntary corporate social performance attract institutional investment? Evidence from China. *Corporate Governance: An International Review*, 25(5), 338-357. https://doi.org/10.1111/corg.12205
4. Kramer, M. R., & Porter, M. E. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard business review*, 84(12), 78-92. https://doi.org/10.1108/sd.2007.05623ead.006
5. Lins, K. V., Servaes, H., & Tamayo, A. (2017). Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *the Journal of Finance*, 72(4), 1785-1824. https://doi.org/10.1111/jofi.12505

6. Friedman, M. (2007). The social responsibility of business is to increase its profits. *New York Times Magazine*, 13(33), 173-178. https://doi.org/10.1007/978-3-540-70818-6_14

7. Atan, R., Alam, M. M., Said, J., & Zamri, M. (2018). The impacts of environmental, social, and governance factors on firm performance: Panel study of Malaysian companies. *Management of Environmental Quality: An International Journal*, 29(2), 182-194. https://doi.org/10.1108/meq-03-2017-0033

8. Ghoul, S. E., Guedhami, O., & Kim, Y. (2017). Country-level institutions, firm value, and the role of corporate social responsibility initiatives. *Journal of International Business Studies*, 48(3), 360-385. https://doi.org/10.1057/jibs.2016.4

9. Wang, B., & Yang, M. J. (2022). Research on the influence mechanism of ESG performance on enterprise value: empirical evidence from A-share listed companies in China. *Soft Science*, 36(6), 78-84. https://doi.org/10.13956/j.ss.1001-8409.2022.06.11

10. Mei, R. L. (2021). Analysis of the impact of ESG investment on the stock returns of listed companies. *Jiangsu Shanglun*, (12),118-121. 10.13395/j.cnki.issn.1009-0061.2021.12.032

11. Zhou, J. Y., Guo, J., & Li, Q. (2023). Can ESG rating create stock investment value? — Based on the perspective of business performance and investor attention. *China Securities Futures*, (03),53-66. https://doi.org/10.19766/j.cnki.zgzqqh.2023.3.005

12. An, G. J., Hua, C., Zhang, F. X., Guo, P. Y., Wang, J. X., & Gou, M. Y. (2022). Research on the impact of ESG system on capital market under carbon neutrality target: comparative analysis based on different industries. *Financial theory and practice*, (03),48-61.

13. Wang, K., & Zhang, Z. W. (2022). Current situation, comparison and prospect of ESG rating at home and abroad. *Accounting Monthly*, (2),137-143. https://doi.org/10.19641/j.cnki.42-1290/f.2022.02.019

14. Zheng, M. J. (2023). Literature review on the correlation between ESG performance and enterprise value. *Finance*, 13(3),461-467. https://doi.org/10.12677/FIN.2023.133044

15. Halbritter, G., & Dorfleitner, G. (2015). The wages of social responsibility—where are they? A critical review of ESG investing. *Review of Financial Economics*, 26, 25-35. https://doi.org/10.1016/j.rfe.2015.03.004

16. Auer, B. R., & Schuhmacher, F. (2016). Do socially (ir) responsible investments pay? New evidence from international ESG data. *The Quarterly Review of Economics and Finance*, 59, 51-62. https://doi.org/10.1016/j.qref.2015.07.002