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The Dynamic Relationship Between Corporate ESG Performance and Stock Returns

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Abstract. Corporate environmental, social, and governance (ESG) performance is increasingly becoming a crucial consideration when making investment decisions as the worldwide movement toward sustainable development picks up speed. In order to test the dynamic relationship between corporate ESG performance and stock returns, as well as the moderating effect of industry differences, this study employs multiple linear regression analysis on research samples of listed companies in China's Shanghai and Shenzhen A-share market from 2012 to 2018. The findings indicate a positive correlation between stock returns and business ESG performance. A company's competitiveness and risk-taking capacity can be improved by good ESG performance, which will increase long-term stock returns. Corporate ESG performance not only affects current - period stock returns but also future - period returns, with a sustained positive effect. The sensitivity of different industries to ESG performance varies. Firms in environmentally sensitive and dependent industries need to focus on environmental management to raise stock returns, while those in environmentally neutral industries should make progress in social and governance aspects to meet investor and social expectations. This study offers a basis for long - term investment decisions based on ESG factors and theoretical support for companies to enhance ESG performance and increase shareholder value. Additionally, it enhances the body of knowledge regarding the connection between financial success and ESG.

Keywords: Corporate ESG Performance, Stock Returns, Dynamic Relationship, Industry Differences

1. Introduction

1.1. Research background

As the global trend towards sustainability accelerates, ESG performance has become a key factor in investor decision-making. Issues including social injustice, climate change, and bad governance have gained prominence recently, which has caused investors to reevaluate the long-term worth of businesses. Research shows that corporates with good ESG performance have lower volatility and higher profitability in the stock market [1]. For instance, green logistic stocks were less volatile during the COVID-19 pandemic in 2020 and the Great Recession in 2007–2009. As a result, they were more lucrative and less hazardous than non-green logistic stocks [1]. This prove that ESG

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performance can not only improve the corporate's social image, but also enhance their financial performance. What's more, certain industries, such as tobacco, alcohol, and weapons production, are often seen as "sin stocks" that face greater challenges and higher risks in ESG performance [2].

1.2. The study's objective

The purpose of this study is to investigate the dynamic relationship between stock returns and corporate ESG performance, taking a long-term investment perspective to analyze its impact mechanisms under different economic cycles and market environments. Specifically, this research will empirically analyze the short-term and long-term effects of ESG performance on stock returns. In addition to giving investors a foundation for long-term ESG-based investment choices, this will theoretically assist businesses in improving their ESG performance in order to boost shareholder value.

1.3. Significance of the research

The study's conclusions will assist investors in comprehending the significance of ESG components in their investment portfolios. Additionally, this study will provide theoretical backing for businesses looking to improve their ESG performance in order to boost shareholder value, thereby encouraging proactive corporate involvement in sustainable development. This study will also contribute to the body of knowledge on the relationship between ESG and financial performance by offering new perspectives and methods of investigation.

2. Literature review

2.1. The dimensions of ESG

ESG is a comprehensive metric system, which has garnered widespread attention in both academic and practical domains in recent years. The ESG metric system encompasses various aspects of corporate operations, specifically including Environmental Dimension, Social Dimension and Governance Dimension.

The company's environmental performance, including waste disposal, water management, energy efficiency, carbon emission intensity, and overall greenhouse gas emissions, is the main focus of the environmental dimension. Among these, carbon emission intensity is a crucial metric for assessing how much greenhouse gas an organization emits. Lower carbon intensity means that companies are better able to meet the challenges of climate change by performing well in energy conservation and emission reduction [3]. In addition, energy efficiency is also one of the important indicators of the environmental dimension. Efficient energy use not only reduces the operating costs of a business, but also reduces the negative impact on the environment. In recent years, with the increasing global attention to climate change and environmental protection, the environmental dimension has become more and more important in ESG evaluation.

The social dimension mainly measures the performance of enterprises in fulfilling social responsibilities which covered employee welfare, supply chain management, community relations, product safety and quality, customer satisfaction and other aspects. For example, employee satisfaction and employee turnover rates are important indicators of how well a company cares for its employees. Often, higher employee satisfaction is accompanied by lower employee turnover indicating that companies are doing well in employee training and the work environment. What's more, supply chain management is likewise a key component of the social dimension for the reason

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that companies need to ensure that their suppliers in their supply chain comply with social responsibility standards. It is their duty to prohibit child labor and protect workers' rights. In addition, the company's performance in the community like participating in public welfare activities and supporting local economic development is also an important consideration in the social dimension. A company's brand image and the public's and customers' faith in it are both improved by good social performance.

The governance dimension mainly focuses on the internal governance mechanism and management level of the enterprise. Board composition, executive pay, safeguarding the rights and interests of shareholders, information disclosure openness, and so forth are some examples of the indicators. For instance, a key determinant of the board's supervision capacity is its independence. Increased board independence can enhance the effectiveness and openness of company decision-making while lowering conflicts of interest between shareholders and management. Executive compensation structure is also one of the important indicators of corporate governance. The right executive compensation structure can motivate management to achieve the company's long-term development goals while avoiding the over-pursuit of short-term profits and ignoring the company's long-term risks. In addition, the transparency of information disclosure is also an important consideration in the dimension of corporate governance since good information disclosure can enhance investors' confidence in the company.

All things considered, the ESG indicator system gives businesses a framework for thoroughly evaluating their sustainability capabilities. In addition to increasing their competitiveness and risk resilience, corporations can improve their ability to cultivate positive connections with stakeholders and accomplish long-term sustainable development by enhancing their ESG performance.

2.2. Connection between financial performance and ESG

There was much discussion on the relationship between ESG and financial performance. On the one hand, studies have demonstrated a positive correlation between ESG and financial success, with the former often influencing the latter. Friede et al. conducted a statistical analysis of nearly 2200 ESG-related literatures and the results showed that about 90% of the studies support that ESG ratings have a positive impact on a company's financial performance and that the positive impact tends to stabilize over the long term [4]. Furthermore, it has been noted that ESG performance plays a major part in boosting an organization's market value and book value, investment efficiency, and degree of green innovation [5-7]. However, some researches have not discovered any meaningful connection between these two factors. The study by Brammer and Pavelin shows that there is a statistically significant negative correlation between ESG ratings and financial performance [8].

In general, mainstream research generally holds that business performance and ESG ratings are positively correlated, and that strong ESG performance can help companies perform better. Nonetheless, some academics think that company performance and ESG ratings are not positively correlated.

2.3. The dynamic relationship between ESG and stock yield

The risk premium theory states that when investors invest in high-risk assets, they often ask for additional expected returns to compensate for the risk they face [9]. ESG risk premium is the additional return required by investors to bear ESG-related risks in their investment decisions. Theoretically, if a company actively practices ESG, it can reduce ESG risks which not only increases the value of the company, but also reduces the expected return on return for investors.

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However, in the actual market, due to the insufficient validity of ESG information and the bias of investor behavior, the market may misassess ESG signals. It's like blindly chasing high ESG stocks which leads to a continuous rise in their stock prices, which in turn leads to a positive ESG premium.

Additionally, the dynamic relationship between ESG performance and stock returns is also significant. Through an empirical analysis of more than 2,200 companies around the world, Friede found that companies with good ESG performance have higher equity returns over the long term that the effect is persistent over time series [4]. This suggests ESG performance not only affects stock returns in the current period, but may also have an impact on future stock returns.

To sum up, scholarly research indicates that opinions on how ESG affects stock returns are divided. More thorough investigation and debate are required because the relationship between ESG elements and company stock returns is still unclear and complicated.

2.4. The role of industry differences

Industries can be divided into three categories included environmentally sensitive, environmentally-dependent, and environmentally-neutral. Environmentally sensitive industries refer to those industries that have a greater impact on the environment, like energy, chemicals, manufacturing, etc. These industries produce large amounts of pollutants during their production processes and face high environmental regulatory pressures. PORTER points out that Companies in the energy sector that can effectively reduce carbon emissions can not only reduce environmental costs, but also improve their competitiveness in the market [10]. Environmentally-dependent industries are those that are highly dependent on natural resources, such as mining. Companies in these industries need to effectively manage not only their environmental impacts, but also the risks posed by resource scarcity and environmental change. Research by McWilliams and Siegel shows that companies in environmentally-dependent industries that perform well in resource management tend to have significantly higher stock returns than their peers over the long term [11]. Environmentally-neutral industries refer to those industries that have a low degree of environmental impact and dependence. These companies may face less pressure on environmental stewardship, but they still need to focus on ESG performance to meet the expectations of investors and society. Friede et al. found that firms in the financial sector that perform well in corporate governance tend to have significantly higher equity returns than their peers over the long term [4]. In conclusion, the relationship between ESG performance and stock returns is significantly influenced by market conditions and industry variances. Companies in environmentally sensitive and environmentally-dependent industries need to pay more attention to environmental stewardship to boost their stock returns; Companies in environmentally-neutral industries need to make progress in social and corporate governance to meet the expectations of investors and society.

3. Theoretical framework and assumptions

3.1. Theoretical basis

This paper develops the study's theoretical framework based on agency theory and stakeholder theory. According to stakeholder theory, a company's decisions impact not just its shareholders but also its suppliers, consumers, workers, and communities [9]. By improving ESG performance, companies can build closer relationships with these stakeholders which in turn indirectly enhances shareholder value. For example, providing good employee benefits can increase employee

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productivity and loyalty which will ultimately be reflected in the operational efficiency and financial performance of the business.

3.2. Research hypotheses

Hypothesis 1: The return on investment increases with a stock's ESG grade. (positive ESG premium).

Hypothesis 2: A company's ESG performance affects not only the current stock returns, but also the future stock returns.

Hypothesis 3: Different industries have varying levels of sensitivity to ESG performance, and this has an impact on stock returns.

4. Research design

4.1. Sample selection and data source

This study selects China's Shanghai and Shenzhen A-share listed companies from 2012 to 2018 as the research sample, covering a period of 7 years which aims to cover data from different economic cycles and market environments to enhance the robustness of the research conclusions. The information is sourced from the CSMAR, Wind, and Sino-Securities databases; the Sino-Securities database provides the ESG rating data, while the CSMAR and Wind databases provide the stock return and other financial data. The sample data was thoroughly inspected and processed to guarantee the data's quality and the study's dependability. Companies with missing values and imbalances, delisted stocks, ST, and *ST stocks were not included.

4.2. Variable definition

4.2.1. Dependent variable

Stock return: The performance of stocks is evaluated in this study using their yearly return. The annual stock return of the company in the first year of t is determined by multiplying the monthly stock return from May of the first year of t by April of the second year of t. This yields the annual stock return of the company in the first year of t, which corresponds to the financial information of the t year, because the financial statement data of Chinese listed firms is usually made public in April of the first year of t.

4.2.2. Explanatory variable

ESG Comprehensive Score: Based on the ESG score of the Sino-Securities Database as the raw data and is measured by the average of the four ratings per year. By assigning a value of 9 to 1 from high to low in the nine grades of AAA, AA, A, BBB, BB, B, CCC, CC, and C. The score covers three dimensions which comprehensively reflect the sustainable development ability of enterprises.

ESG comprehensive score for the lag period: To investigate the effect of the lag effect of ESG performance on the annualized return, the ESG score data is behind by one year.

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4.2.3. Control variables

To make the empirical results more relevant to the assumptions, this paper also sets up six important control variables which are set and calculated as follows: Return on total assets (ROA), measured by corporate net profit divides total assets; Debt-to-asset ratio (LEV), measured as total liabilities divides total assets; Total Asset Turnover (TAT), measured as operating income divides average total assets; Size of the enterprise, measured as the natural logarithm of total assets; Age of the enterprise, measured by the year of study minus the year of establishment; Equity concentration (TOP), measured by the proportion of shares held by the largest shareholder.

4.3. Model construction

4.3.1. Main regression model

The following primary regression model is built to increase the empirical results' relevance to the annualized return:

$$\begin{aligned} Stock_{it} = \alpha + \beta_1 ESG_{it} + \beta_2 ROA_{it} + \beta_3 LEV_{it} \\ + \beta_4 TAT_{it} + \beta_5 SIZE_{it} + \beta_6 AGE_{it} + \beta_7 TOP_{it} + \epsilon_{it} \end{aligned} \tag{1}$$

4.3.2. Lagged variable regression model

This following lag term regression model was created to examine the dynamic influence of ESG performance on annualized return:

$$Stock_{it} = \alpha + \beta_1 ESG_{i,t-1} + \beta_2 ROA_{it} + \beta_3 LEV_{it} + \beta_4 TAT_{it} + \beta_5 SIZE_{it} + \beta_6 AGE_{it} + \beta_7 TOP_{it} + \epsilon_{it} \tag{2}$$

4.3.3. Sector-specific regression models

The following sub-industry regression model was created to examine how sensitive certain industries are to ESG performance and how it affects annualized returns:

$$\begin{aligned} Stock_{it} = \alpha + \beta_1 ESG_{it} + \beta_2 ROA_{it} + \beta_3 LEV_{it} + \beta_4 TAT_{it} + \beta_5 SIZE_{it} + \beta_6 AGE_{it} + \\ \beta_7 TOP_{it} + \Sigma \gamma_j INDUSTRY_{jit} + \epsilon_{it} \end{aligned} \tag{3}$$

Where $\Sigma \gamma_j INDUSTRY_{jit}$ represents the industry dummy variable which is used to regulate the influence of various industries on the annualized rate of return.

4.4. Methods of empirical analysis

This study use multiple linear regression analysis to test the main effect, dynamic effect and industry difference effect of ESG performance on annualized return by constructing a main regression model, a lagged term regression model and a sub-industry regression model, respectively. To estimate the process of model, robust standard error method is used to control the influence of heteroskedasticity and autocorrelation problems on the estimation results.

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5. Empirical analysis

5.1. Variables descriptive statistics

Table 1: Variables' names and calculation methods

Type	Symbol	Name	Definition
Dependent variable	Stock	Stock return	Annual return rate calculated by monthly compounding.
Explanatory variable	ESG	ESG comprehensive score	Assign the ESG rating from AAA to CCC from high to low (9 to 1)
	ESG_Lag1	ESG comprehensive score for the lag period	Leave ESG composite score data behind by one year
Control Variables	ROA	Return on total assets	Corporate net profit divides total assets
	LEV	Debt-to-asset ratio	Total liabilities divides total assets
	TAT	Total Asset Turnover	Operating income divides average total assets
	SIZE	Size of the enterprise	The natural logarithm of total assets
	AGE	Age of the enterprise	The year of study minus the year of establishment
	TOP	Equity concentration	The percentage of shares that the biggest shareholder owns

Table 1 shows the definitions and calculations of all the variables used in the empirical analysis, and Table 2 shows the descriptive statistical results of the variable.

The sample includes a total of 17,900 observations with the mean of the annualized return of stock (Stock) being 0.1296, the median being 0.0847, the maximum being 1.7144, the minimum being -0.8897, and the standard deviation being 0.6887. The data shows that the stock returns of the companies in the sample vary greatly. Second, a very even distribution of enterprises participating in the ESG assessment is indicated by the ESG composite score, which displays a full range from 1 to 9 with a median of 4. The standard deviation of 1.0784, on the other hand, shows that the score outcomes differ significantly, demonstrating the degree of differentiation in the ESG rating. At the same time, the average ESG score of the latter period is 4.0388, which is a slight decrease compared with the ESG score of the current period (4.0593), indicating the dynamic change of ESG performance. The data of the rest of the control variables are shown below and they are all within a reasonable distribution range.

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Table 2: Descriptive statistics of variables

	N	Mean	Std. Dev.	Min	Median	Max
Stock	1.79e+04	0.1296	0.6887	-0.8897	0.0847	1.7144
ESG	1.79e+04	4.0593	1.0784	1.0000	4.0000	9.0000
ESG_Lag1	1.47e+04	4.0388	1.0563	1.0000	4.0000	8.0000
ROA	1.79e+04	0.0407	0.8244	-2.7760	0.0357	10.3657
LEV	1.79e+04	0.4247	0.2496	-0.1947	0.4079	11.5097
TAT	1.79e+04	0.6164	0.5195	0.0001	0.5099	11.6019
SIZE	1.79e+04	22.1146	1.3336	16.1613	21.9246	28.5200
AGE	1.79e+04	20.1412	5.4892	6.0000	20.0000	68.0000
TOP	1.79e+04	34.6716	15.0263	0.2900	32.7200	89.9900

5.2. Main regression analysis

Table 3: Correlation analysis between ESG and stock rate returns

VARIABLES	Stock
ESG	0.0152***
ROA	0.0038
LEV	0.1282***
TAT	-0.0013
SIZE	-0.0804***
AGE	0.0021**
TOP	0.0028***
Constant	1.5929***

Note: *, **, and *** denote significance levels of 10%, 5%, and 1% respectively.

There is a positive association between ESG performance and annualized return, as seen by the regression results in Table 3, where the coefficient of the ESG composite score is 0.0152, significant at the 1% level. This further demonstrates that investors may be able to increase their investment returns by purchasing stocks of businesses that perform better in terms of environmental, social, and governance. The results support the paper's hypothesis 1, which holds that stock returns and business ESG performance are positively correlated.

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5.3. Lagged variable regression analysis

Table 4: Correlation analysis between ESG lagging item and stock rate returns

VARIABLES	stock
ESG_Lag1	0.0062***
ROA	0.1660***
LEV	0.1945***
TAT	-0.0006
SIZE	-0.0440***
AGE	0.0076***
TOP	0.0017***
Constant	0.6665***

Note: *, **, and *** denote significance levels of 10%, 5%, and 1% respectively.

Table 4 shows that the coefficient of the ESG composite score lag period is positive and significant at the 1% level, suggesting that ESG has a favorable impact on annualized return not only now but also in the future. This demonstrates that investors will forecast future profitability based on the company's historical ESG performance, demonstrating the sustainability of the positive impact of ESG. Therefore, the ESG performance of businesses and their lagged impacts must be properly considered when making long-term investment decisions. The empirical results verify the validity of hypothesis 2 of this paper. ESG performance of enterprises not only affects the stock return in the current period, but also may affect the stock return in the future period.

5.4. Sector-specific regression analysis

Table 5: Analysis results for different industries

Industry	Stock
Manufacturing	0.082**
Mining industry	0.126***
Water conservancy, environment and public facilities management	0.859**
Finance	0.002
Accommodation and catering	0.013*
Information transmission, software and information technology services	0.038*

Note: *, **, and *** denote significance levels of 10%, 5%, and 1% respectively.

This paper uses the CSRC's 2012 industry classification standard to divide the listed companies in the study sample into 18 different industries. Here we select three industries that have a large impact on the environment and three industries that have little impact on the environment for comparative analysis.

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6. Conclusions

6.1. The dynamic link between ESG and equity returns

From a long-term perspective, companies with strong ESG performance can continue to improve their financial performance by reducing operational risk, enhancing brand image and enhancing stakeholder trust, thereby driving higher equity returns. This dynamic relationship is not only reflected in the present, but also transmitted to the future through market expectations, forming a continuous positive impact.

When making long-term investment decisions, investors should consider a company's past success and development trends in addition to its current ESG performance, according to the lagged effect of ESG performance. Businesses that consistently invest in and enhance their ESG practices can boost market trust in their long-term viability, which will raise stock prices.

6.2. Impact of industry differences

The market pays more attention to the ESG performance of environmentally sensitive and dependent industries due to the high pressure of environmental regulation and resource constraints and their ESG performance is directly related to the survival and development of enterprises. As a result, the market is more interested in these industries' ESG performance, and stock returns will be greatly impacted by the caliber of ESG performance.

Although environmentally-neutral industries are less stressed in terms of environmental management, ESG performance in the social and corporate governance dimensions will also affect the competitiveness and market image of enterprises.

6.3. Policy suggestions

6.3.1. Investor suggestions

Investors should integrate ESG considerations into their framework for making investing decisions and thoroughly understand the long-term effects of ESG performance on stock returns. They should focus on ESG ratings and performance while focusing on the company's financial metrics when building a portfolio.

As different industries are sensitive to ESG performance, investors should adjust their investment strategies according to the characteristics of the industry. Adopt corresponding strategies for enterprises with different levels of environmental dependence. Simultaneously, it is imperative to monitor how changes in industry policies affect ESG performance and promptly modify the portfolio.

ESG performance includes a plethora of risk data in addition to reflecting a company's capacity for sustainability. Investors can analyze companies' ESG ratings and performance to assess their exposure to environmental, social and governance risks and predict future earnings trends.

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6.3.2. Business operations

Enterprises should integrate ESG concepts into strategic planning and daily operations. They should establish and improve ESG management systems. Strengthen environmental management, reduce carbon emissions and resource consumption, and promote green production and innovation; Pay attention to employee welfare and community development, and enhance social responsibility; Improve the corporate governance structure and improve the transparency of information disclosure and enhance investor confidence. By improving ESG performance, companies can not only gain recognition from the capital market, but also enhance their competitiveness and risk resistance to achieve long-term sustainable development.

Businesses should promptly reveal their sustainability and ESG performance plans and enhance the caliber and transparency of their ESG information sharing. Stock prices can benefit from clear and accurate ESG disclosures, which can also assist investors better understand a company's ESG performance and value generation capabilities. As the concept of ESG gradually takes root in the hearts of the people, the good ESG performance of enterprises will also attract the public's attention to the company's products and brand recognition and ultimately improve the company's operating profits.

6.4. Future prospects

In terms of practice, future research can expand the sample scope to select listed companies in different countries and regions for comparative analysis. What’s more, research can explore the international differences in the relationship between ESG performance and stock returns. Through cross-country comparison, we can better understand the effectiveness and characteristics of ESG investment in different cultures and market environments. Therefore, provide global investors with a more valuable basis for investment decision-making.

This study mainly focuses on the relationship between ESG performance and stock returns. Future research can examine the relationship between risk-adjusted returns and ESG performance, such as the Sharpe ratio. In addition to giving investors a more scientific reference for investment decisions, examining the effect of ESG performance on risk-adjusted returns allows for a more thorough evaluation of the worth and efficacy of ESG investments.

In terms of theory, although the current research on ESG covers the three aspects of "E", "S" and "G", the depth of the research is far from enough. There is no clear definition in the breadth to organically combine the three. Therefore, in the future, scholars can combine various regions and countries in the world, as well as their different ecosystems, different national conditions and different development paths, and then conduct research on the concept of ESG at multiple levels, form ESG concepts that are in line with local characteristics. In the end, provide reference for enterprises and investors to respond to policy changes.

References

[1] Lee, W., Park, H. J., Lee, H. J., Song, K. B., Hwang, D. W., Lee, J. H., Lim, K., Ko, Y., Kim, H. J., Kim, K. W., & Kim, S. C. (2024). Deep learning-based prediction of post-pancreaticoduodenectomy pancreatic fistula. Scientific Reports, 14, 5089. https: //doi.org/10.1038/s41598-024-51777-2

[2] Paradis, G., & Schiehll, E. (2021). ESG Outcasts: Study of the ESG Performance of Sin Stocks. Sustainability, 13, 9556. https: //doi.org/10.3390/su13179556

[3] Zumente, I., & L¯ace, N. (2021). ESG Rating—Necessity for the Investor or the Company? Sustainability, 13, 8940. https: //doi.org/10.3390/su13168940

DOI: 10.54254/2754-1169/2025.LH25207

[4] Friede, G., Busch, T., & Bassen, A. (2015). ESG and Financial Performance: Aggregated Evidence from More than 2000 Empirical Studies. Journal of Sustainable Finance & Investment, 5, 210-233.https: //doi.org/10.1080/20430795.2015.1118917
[5] Wang Bo & Yang Maojia. (2022). Research on the Influence Mechanism of ESG Performance on Enterprise Value: Empirical Evidence from China's A-share Listed Companies. Soft Science, 36(06), 78-84.doi: 10.13956/j.ss.1001-8409.2022.06.11.
[6] Gao Jieying, Chu Dongxiao, Lian Yonghui & Zheng Jun. (2021). Can ESG Performance Improve Corporate Investment Efficiency?.Securities Market Herald, (11), 24-34 72.
[7] Liu Bai, Lu Jiarui & Ju Tao. (2023). Formalism or Substantialism: A Study on Green Innovation under the Soft Supervision of ESG Ratings. Nankai Management Review, 26(05), 16-28.
[8] Brammer, S., & Pavelin, S. (2008). Factors influencing the quality of corporate environmental disclosure. Business Strategy and the Environment, 17(2), 120-136. https: //doi.org/10.1002/bse.506
[9] Petrakis, P. E. (2004). Entrepreneurship and Risk Premium. Small Business Economics, 23(2), 85–98. http: //www.jstor.org/stable/40229347
[10] Porter, Michael E. van der Linde, Claas.(1995).Toward a New Conception of the Environment-Competitiveness Relationship. Journal of Economic Perspectives, 9(4), 97–118.
[11] McWilliams, A., & Siegel, D. (2001). Corporate Social Responsibility: A Theory of the Firm Perspective. The Academy of Management Review, 26(1), 117–127. https: //doi.org/10.2307/259398