

# Study on the Relationship between Institutional Investors and ESG

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**Abstract:** *Based on shareholder activism and stakeholder theory, this paper studies the relationship between institutional investors' shareholding and ESG performance of listed companies from two aspects of theoretical analysis and empirical analysis.*

**Keywords:** Institutional Investor, Environmental Responsibility, Social Responsibility, Corporate Governance Responsibility, Multiple Linear Regression Methods

## 1. Introduction

In recent years, with the increasing number of issues such as climate, environment, labor conditions and corporate Governance, governments, organizations, enterprises and stakeholders have paid great attention to the Environmental, Social and Governance (ESG) system. Most listed companies have changed from the pursuit of short-term profit maximization to the long-term sustainable development of environmental, social and governance goals, and they have gradually realized that ESG has a certain impact on corporate financial performance, profitability and long-term development. As an important part of the capital market, some medium and small investors invest rationally through the forward-looking information released by institutional investors, which optimizes the capital allocation structure and improves the operating efficiency of the capital market. Based on shareholder activism and stakeholder theory, from the two aspects of the theoretical analysis and empirical analysis, the institutional investor shareholding relationship with the ESG performance of the listed companies, how to analyze the market power to influence the enterprise by institutional investors ESG three responsibilities, for the implementation of the institutional investors holding the ESG performance if there is a moral improvement of enterprise ability.

This paper firstly sorts out the basic concepts and theoretical basis of the research content, and then sorts out the relevant research literature at home and abroad, mainly from the two aspects of the relevant research on institutional investors and ESG concept, and makes a brief literature review of the collected literature. Then, based on sustainable development theory, stakeholder theory and corporate governance theory of institutional investors, this paper proposes three hypotheses. A total of 1774 A-share listed companies from 2015 to 2019 were selected as samples. The financial data and ESG score of the sample companies were obtained through Wind database and HeXun, and multiple linear regression was adopted to build the model.

The results of this paper show that institutional investor ownership can significantly improve the ESG performance of enterprises; However, the influence of heterogeneous

institutional investors on the ESG performance of enterprises is different. Pressure-resistant institutional investors and foreign institutional investors have a positive impact on the ESG performance of enterprises. Pressure-sensitive institutional investors have a inhibiting effect on the ESG performance of enterprises, while the influence of domestic institutional investors on the ESG performance of enterprises is not significant. Finally, according to the experimental results, the following suggestions are put forward: (1)The Chinese government should increase policy support and encourage the balanced development of institutional investors. (2) Relevant departments should strengthen the supervision over the performance of enterprises' environmental responsibility, social responsibility and governance responsibility, and standardize the disclosure of the integrity and accuracy of enterprises' ESG information. (3) Implementing ESG investment philosophy, promoting ESG investment, and making institutional investors actively participate in the improvement of enterprise ESG performance.

## 2. Background and Literature Review

### 2.1 Research background

Environmental, social and corporate governance (ESG) refers to the three dimensions of corporate governance: Environment, social responsibility and corporate governance. Between 2012 and 2014, the number of global ESG investment related companies rose from \$1.7 billion to \$28 trillion. From all kinds of research can be seen that ESG investment concept has become an international hot spot. In recent years, ESG has gradually become the main factor for international market and institutional investors to measure the company sustainable development ability. How to achieve sustainable development while keeping profit has become a problem that must be faced . By examining the ESG performance of listed companies, in addition, institutional investors holding shares has certain incentive and supervisory functions for the managers of listed companies, which helps to enhance the company performance, and get a steady long-term return on your investment.

## 2.2 Literature Review

Compared with individual investors, institutional investors have the characteristics of specialized investment management and standardized investment behavior, and institutional investors will take advantage of their economies of scale to invest in enterprises with good internal environment.

Chan et Al. (2005) it is found that the preference of institutional investors to the domestic market and some foreign markets is due to the influence of net loss cost factors such as holding tax rate, burden cost, economic development, development degree of capital market and capital control. Lin (2013) found that institutional investors prefer larger, faster-growing, profitable and less concentrated companies. Piccioni (2012) used funds from Latin American countries as a sample to study the shareholding behavior of domestic and foreign institutional investors, and found that foreign investors in Latin America prefer companies in emerging industries, the common characteristics of such companies are strong liquidity and large market value, and they have a short listing time and a high coefficient, while local fund investors prefer companies with small market value, good liquidity, small volatility and long listing time, it is the opposite of that for foreign investors. Tang Peihong (2019) studies the effect of institutional investors on environmental performance by using environmental strategy to replace the difference of environmental performance in the business scope of different enterprises, enterprise environmental measures to maintain high-efficiency and high-quality state at all times. Zhang Zhengyong (2018) pointed out that the proportion of institutional investors holding shares is positively related to CSR performance, and that long-term institutional investors pay more attention to CSR performance than short-term speculative institutional investors.

## 2.3 Research Review

To sum up, scholars at home and abroad have done a lot of research on institutional investors; shareholding behavior and the impact of shareholding, most of them study the unilateral effects of institutional investor ownership on corporate environmental performance, social responsibility performance, corporate governance, or include some control variables, there are quite a few studies that classify and discuss the heterogeneity of institutional investors, but there are few studies that directly discuss the relationship between the ownership of institutional investors and the ESG of enterprises. On the other hand, because the domestic ESG evaluation system is not perfect, there is no strictly published evaluation criteria, to a certain extent, can not fully reflect the true ESG level of an enterprise.

## 3. Theoretical Analysis and research hypotheses

With the support of national policies and the strength of institutional investors themselves, the institutional investors, as a special group of shareholders in the capital market, are attracting more and more attention for their development and

decision-making, institutional investors have gone from voting with their feet to Activist shareholder in pursuit of long-term gains. Compared with individual investors, institutional investors, in addition to having the advantage of professional knowledge and capital scale, are more concentrated in holding shares in enterprises, holding a higher proportion of shares, and are more motivated to actively supervise enterprises; behavior for their own interests, thus can urge the enterprise to practice the social responsibility and the environmental protection responsibility, at the same time, the institutional investors shareholding, can also influence the enterprise decision-making and the promotion corporate governance ability to a certain extent, in order to obtain the investment return to promote the enterprise ESG performance. Tao Chen (2019) found that the higher the ownership ratio, the more socially responsible the company managers are. NEUBAUM and Zahra (2006) argue that institutional investors have more power and more voting power when making important corporate decisions than ordinary shareholders, for example, pension funds and other large institutional investors have more powerful financial strength and decision-making power. At present, it is generally believed that the active implementation of ESG is of great help to the long-term development of enterprises and the improvement of their profitability, good ESG performance is also very important to stakeholders, and stakeholders are also concerned about the enterprise ESG evaluation.

**Hypothesis 1:** There is a significant positive correlation between institutional investors ownership and ESG performance, that is, the higher the institutional investors; ownership, the better the performance of ESG.

However, not all institutional investors will actively participate in corporate governance and large shareholder supervision. Different types of institutional holdings have different purposes, so the impact on the performance of ESG will be different. Generally speaking, there are two ways for institutional investors to participate in Corporate Governance: "voting with their feet" and "voting with their hands". When institutional investors buy and sell stocks in order to obtain short-term benefits, they are "voting with their feet", which is a kind of speculative behavior. When institutional investors hold stocks of the enterprise, they only pay attention to the interests of the enterprise and will not participate in corporate governance and improvement, and they are not concerned about the performance of corporate responsibilities. However, "voting by hand" means that in order to obtain long-term profits and safeguard their own interests, institutional investors will participate in the voting of the general meeting of shareholders and important decisions of the company through positive shareholder behavior, affecting the company's operation and internal governance. We divide institutional investors into pressure sensitive institutional investors and pressure resistant institutional investors, and study the differences of different types of institutional investors.

**Hypothesis 2:** pressure resistant institutional investors (funds, QFII, social security funds) have a positive impact on the ESG of enterprises, while pressure sensitive institutional

investors (securities, insurance, trust) have no significant or negative impact.

#### 4. Research Design

##### 4.1 Sample selection and data sources

This paper mainly selects Chinese A-share listed companies from 2015 to 2019 as the research sample, and the ESG score of the enterprises comes from Hexun. Considering the lag problem, the explanatory variables and control variables will be processed as lag data. In order to analyze the data accurately, the initial samples were processed according to the following screening principles.

- 1) This paper selects the data of listed companies with ESG rating results of Hexun and institutional investors in Shanghai and Shenzhen stock markets from 2015 to 2019.
- 2) In the selection of the proportion and number of institutional investors, ESG scores of enterprises and relevant data of enterprises, the initial samples are processed: samples with missing variables are deleted; ST and st \* companies are eliminated; data with abnormal variables are selected and eliminated; Listed Companies in financial industry are eliminated.
- 3) Considering the problem of institutional investors' shareholding ratio, in order to reduce the error, this paper mainly divides institutional investors into securities investment funds, social security funds, QFII, securities companies, insurance companies, trust companies, financial companies, enterprise annuity and so on.

The ESG rating index used in this paper comes from the ESG rating of Hexun. The data of institutional shareholding ratio and other control variables are mainly from wind database and CSMAR database. B after eliminating the samples of abnormal data and missing variables, 1774 listed companies were selected as the research samples, with a total of 8870 effective observations.

##### 4.2 Variable design

The explained variable of this paper is ESG performance score (ESG), including three single indicators of environment score (ESCORE), social responsibility score (SSCORE) and corporate governance score (GSCORE). The data is mainly from the social responsibility report score of Hexun listed companies.

The control variables of this paper are: the size of listed companies (LNTA), return on net assets(ROE), asset liability ratio (LEV), growth rate of operating revenue (GORWTH), shareholding ratio of the largest shareholder (TOP1), form of ownership (ORG), listing time (TIME) and salary of management (SALARY).

#### 4.3 Model design

- 1) In order to study the relationship between institutional investors and ESG performance, the following models are established to test and establish a regression model:

$$ESG_{i,t} = \beta_0 + \beta_1 TIS_{i,t-1} + \beta_2 LnTA_{i,t-1} + \beta_3 LEV_{i,t-1} + \beta_4 ROE_{i,t-1} + \beta_5 Time_{i,t-1} + \beta_6 Growth_{i,t-1} + \beta_7 Top1_{i,t-1} + \beta_8 SALARY_{i,t-1} + \beta_9 Year_{i,t-1} + \epsilon$$

Among them, the explained variables are the scores of ESG, e (environmental responsibility), s (Social Responsibility) and G (corporate governance responsibility), tis is the overall institutional shareholding ratio,  $\beta$  is the coefficient of the control variable, and T represents the number of periods from 2015 to 2019, which is a random constant.

- 2) After considering hypothesis 2, the regression equation is established, that is, the impact of pressure resistant institutional investors on the performance of ESG:

$$ESG_2 = \beta_0 + \beta_1 RI_{i,t-1} + \beta_2 LnTA_{i,t-1} + \beta_3 LEV_{i,t-1} + \beta_4 ROE_{i,t-1} + \beta_5 Time_{i,t-1} + \beta_6 Growth_{i,t-1} + \beta_7 Top1_{i,t-1} + \beta_8 SALARY_{i,t-1} + \beta_9 Year_{i,t-1} + \epsilon$$

- 3) The impact of pressure sensitive institutional investors on ESG performance

$$ESG_3 = \beta_0 + \beta_1 SI_{i,t-1} + \beta_2 LnTA_{i,t-1} + \beta_3 LEV_{i,t-1} + \beta_4 ROE_{i,t-1} + \beta_5 Time_{i,t-1} + \beta_6 Growth_{i,t-1} + \beta_7 Top1_{i,t-1} + \beta_8 SALARY_{i,t-1} + \beta_9 Year_{i,t-1} + \epsilon$$

#### 5. Empirical analysis

##### 5.1 Descriptive statistics

This paper makes statistics on the total shareholding ratio of institutional investors, the average shareholding ratio of pressure resistant and pressure sensitive institutional investors, and the shareholding ratio of domestic and foreign institutional investors of 1774 sample listed companies from 2014 to 2018.

**Table 1:** Descriptive statistics of main variables

Variable	N	Min	Max	Mean	Sd
ESG	8870	-13.19	90.00	25.24	16.77
TIS	8870	0.01	72.65	8.24	9.39
RI	8870	0.00	48.39	4.83	6.46
SI	8870	0.00	34.34	1.05	3.01
LNTA	8870	6.95	18.75	13.46	1.34
LEV	8870	-19.47	98.70	48.95	20.35
ROE	8870	-152.92	92.83	7.39	14.01
Time	8870	0.29	26.98	18.46	3.23
Growth	8870	-92.63	8748.4	28.69	295.37
TOP1	8870	3.62	89.99	34.6	15.31
Salary	8870	3.70	9.33	6.25	0.77

The above is the descriptive statistical analysis of the main variables, in which the mean value and standard deviation of the total ESG score of enterprises are 25.24 and 16.77, indicating that the ESG score of different enterprises varies greatly, but the overall score is low, indicating that the overall corporate social responsibility is at a low level at the present stage.

The average shareholding ratio of institutional investors in the total capital stock is 8.24%, which is a small proportion,

and the highest shareholding ratio is 72.65%, indicating that institutional investors account for a small part of the enterprise composition. Compared with developed countries in Europe and the United States, the development of institutional investors is far behind, with the minimum value of 0.01%. The shareholding ratio of pressure-resistant investors is higher than that of pressure-sensitive investors. The average shareholding ratio of pressure-resistant institutional investors is 4.83%, while the average shareholding ratio of pressure-sensitive institutional investors is 1.05%. There is a big difference between the two.

## 5.2 Correlation analysis

**Table 2:** Correlation analysis

	ESG	TIS	LNTA	ROE
ESG	1			
TIS	0.120**	1		
LNTA	0.330**	0.116**	1	
ROE	0.270**	0.220**	0.166**	1

Prior to the regression analysis, we performed Pearson correlation analysis on all variables. Can be seen from the table to explain variables is institutional investors (TIS) and explained corporate ESG score (ESG) correlation coefficient is positive, and the significance level of 0.120, significantly under the 1% significant level, on the surface of institutional investors holding ESG performance of the enterprise has a significant positive effect, the influence of correlation results also support the hypothesis. The correlation coefficient between the pressure-resistant institutional shareholding ratio and the ESG performance of enterprises is 0.190, which is significant at the 1% significance level, indicating that the pressure-resistant institutional investors can also improve the ESG performance of enterprises. The correlation coefficient between the pressure-sensitive investors and the ESG performance of enterprises is -0.108, indicating that the pressure-sensitive investors are negatively correlated with the ESG performance of enterprises.

## 5.3 Regression analysis

Through correlation analysis, we find that there is no collinear relationship between variables, and there is a significant positive correlation between the shareholding ratio of institutional investors and the ESG performance of enterprises.

**Table 3:** Multiple regression analysis

Variables	ESG	Variables	ESG
TIS	0.082***	RI	0.259***
LNTA	3.528***	SI	-0.235**
LEV	-0.095***	LNTA	3.433***
ROE	0.126***	LEV	-0.091***
TIME	-0, 071	ROE	0.109***
GROWTH	0, 000	TIME	-0.072
TOP1	0, 069*	GROWTH	-0.00
		TOP1	0.077**
R-squared	0.280		0.189
F	30.71		30.10

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

In this part, we use multiple regression method to test our hypothesis I, and mainly analyze the impact of institutional investors' shareholding on ESG scores of enterprises. As can be seen from the regression results, Hypothesis 1 is consistent, and the P-value of the regression result is 0.082, which is significant at the 1% level, that is, the shareholding of institutional investors is positively correlated with the ESG performance of enterprises. The higher the shareholding ratio of institutional investors is, the better the ESG performance of enterprises.

After regression testing, pressure resistance, institutional investors holding ESG performance significantly positive correlation with the enterprise, t test statistic is 4.22, in statistical sense has reached 1% significant level, regression coefficient is 0.259, shows that the higher the pressure resistant shareholding ratio, corporate ESG performance better, but also shows that pressure resistance, institutional investors pay attention to the long-term development of the enterprise and long-term profits, thus promotes the ESG performance of enterprises.

However, there is a significant negative correlation between the holdings of pressure-sensitive institutional investors and the ESG performance of enterprises, indicating that the pressure-sensitive institutional investors have little effect on the improvement of the ESG performance of enterprises, and the correlation is negative at the level of 5%.

## 6. Conclusion and related suggestions

### 6.1 Conclusion

Based on the 2015-2019 a-share listed companies in our country as the main research object, the integrated use of literature analysis, empirical analysis, the analysis of the development of China's institutional investors and ESG, institutional investors and enterprise is studied from the following aspects ESG performance, first of all, from the Angle of the whole to validate the institutional investor to the enterprise overall shareholding ESG performance;

Secondly, the influence of heterogeneous institutional investors' shareholding on the performance of ESG is studied, and the institutional investors are divided into pressure sensitive and pressure resistant institutional investors.

The empirical analysis mainly draws the following conclusions: (1) The overall shareholding of institutional investors has a positive effect on the ESG performance of enterprises, and the overall shareholding of institutional investors helps to improve the ESG performance of enterprises. (2) The heterogeneity of institutional investors has a certain difference in the impact on the ESG performance of enterprises. After the classification of institutional investors, it is found that the pressure-resistant investors have a positive impact on the ESG performance of enterprises, while the pressure-sensitive institutional investors have a negative impact on the ESG performance of enterprises.

## 6.2 Advice

We will increase policy support and encourage the balanced development of institutional investors.

By guiding the development of institutional investors and increasing the proportion of institutional investors' shareholding in listed companies, institutional investors can get better development and promote the supervisory role of institutional investors in the fulfillment of corporate responsibilities.

Implement ESG investment philosophy, promote ESG investment, and make institutional investors actively participate in the improvement of enterprise ESG performance.

Relevant departments will strengthen supervision over the performance of enterprises' environmental responsibility, social responsibility and governance responsibility, and standardize the disclosure of completeness and accuracy of ESG information of enterprises.

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