

Research Article

Analysis of the Impact of Ecological Governance Capacity on the Enterprise Capital Configuration Efficiency: Mediating Effects Based on Social Responsibility

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Improving the ecological governance capacity is necessary in order to achieve high-quality economic development. As the main part of the promotion of social and economic development, enterprises' inefficient investment (overinvestment and underinvestment) has impeded the development of the economy chronically and steadily. Therefore, improving the efficiency of enterprises' capital allocation has become a problem that needs to be studied and solved urgently. This article mainly studies the influence of ecological governance capability on the enterprise capital configuration efficiency and mechanism of action by using Shanghai and Shenzhen A-share listed companies data from 2011 to 2017. The study found that ecological governance capability can remarkably strengthen the corporate capital allocation efficiency, and it can do so by improving corporate social responsibility (CSR). This conclusion is supported after the replacement of robustness tests, for example, the enterprise capital configuration efficiency and the measurement indicators of CSR. The heterogeneity test indicates that the ecological governance can obviously forward the enterprise capital configuration efficiency in state-owned enterprises and less-polluting enterprises. These findings can provide some theoretical support to the mechanism of ecological governance capacity effect on corporate capital allocation efficiency from the aspect of corporate social responsibility.

1. Introduction

Economic development is inseparable from enterprises, and the corporate capital allocation efficiency is an important indicator used to measure whether an enterprise uses capital effectively. Efficient capital allocation is an essential basic condition to ensure the stable growth of the economy for enterprises. Therefore, improving the efficiency of enterprise investment is critical in the transformation and upgrading of the economic structure. It is of great theoretical and practical significance to explore the low enterprise capital configuration efficiency [1]. From the internal factors of enterprises, CSR [2], corporate governance [3], OFDI [4], and stock liquidity [5] can all influence the enterprise capital configuration efficiency. From the external environment of enterprises, command-based environmental regulation (the new Environmental Protection Law) [6], institutional

environment [7], and market competition [8] can influence the investment behavior of enterprises. Thus, the efficiency of corporate capital allocation is affected not only by corporate heterogeneity, but also by macrofactors such as ecological and environmental governance.

Ecological governance is an important element of national governance. The improvement of national requirements for ecological governance has promoted Chinese enterprises to fulfill their awareness of CSR actively. Wenwu Xie (2011) analyzed the influencing factors of CSR from the viewpoint of governance environment by using cross-sectional data of listed companies in 2008 and found that CSR not only is determined by internal factors, but also plays an important role [9] in external environmental governance. Chunna GUO et al. (2020) found that the spatial and temporal evolution characteristics of ecological governance are based on the index of China's ecological governance

from 2010 to 2017 [10]. Zheng et al. pointed out some advanced strategies to improve the social responsibility of agribusinesses from the ecological perspective in China [11]. Zhang et al. conducted an empirical study on CSR, environmental governance, and innovation according to the panel data from pollution-related listed companies from 2014 to 2017 and found that environmental governance can regulate the positive influence of CSR on innovation [12].

CSR represents the external behavior of enterprises. Brammer and Millington (2008) proposed that managers intend to invest capital in socially responsible activities to build “business empires” in order to gain personal profits [13]. Matten and Moon (2008) suggested that corporate social responsibility has an active effect on covering up some other aspects of negative behavior, which can be considered compensatory behavior, mitigating the risks and pressures the enterprises faced [14]. Zhao found that CSR disclosure has no obvious significance on the enterprise capital configuration efficiency temporarily, but the disclosure of information of CSR can promote the corporate capital allocation efficiency chronically [15]. Min HONG (2019) investigated the influence of compulsory CSR information disclosure on the enterprise capital configuration efficiency in the circumstance of a compulsory CSR information disclosure system implemented by regulatory authorities using the “propensity score matching–dual differencing” model. The study showed that the mandatory disclosure of CSR can promote the corporate capital allocation efficiency [2]. Liu et al. conducted an empirical study selecting the A-share listed enterprises panel data from 2010 to 2017. It was found that CSR has a mediating effect between share price overvaluation and corporate capital allocation efficiency. This means that the effect of share price overvaluation on social responsibility plays a role in corporate capital allocation efficiency [16].

These reference studies found that ecological governance ability can affect CSR, and CSR can affect the enterprise capital configuration. However, the number of studies exploring the influence factor on the enterprise capital configuration efficiency from the areas of ecological governance level and capacity is small and even less than those considering the path of the ecological governance level’s effect on the listed enterprise capital configuration efficiency in China. In other words, CSR has an effect on the impact of the ecological governance level on the corporate capital allocation efficiency. Therefore, this study focused on the aspect of ecological governance and explored its impact on the corporate capital allocation efficiency and whether CSR played a mediating role.

In this study, the impact of ecological governance capacity on the enterprise capital configuration efficiency and its mechanism of action could be proven and tested by using the data related to China’s ecological governance capacity and the A-share listed enterprises data in Shanghai and Shenzhen. The marginal contributions of this study are the main aspects, shown as follows. Firstly, the system estimates the impact of the ecological governance capacity on enterprise capital allocation efficiency by matching macro- and microdata, which provides macro empirical evidence for the

study of enterprise capital allocation efficiency. Secondly, the national government is facing an important issue concerning how to promote the corporate capital allocation efficiency by providing the national ecological governance capacity. This study examines the mechanism of ecological governance capacity effect on corporate capital allocation efficiency from the aspect of corporate social responsibility. This is supported by several theories.

2. Proposed Hypothesis

2.1. Ecological Governance Capacity and Enterprise Capital Configuration Efficiency. Capital configuration efficiency is the efficient utilization of capital financing for the final profit distribution within the enterprise. Efficient capital allocation means that the total amount of capital remains constant while capital flows between different levels and can be used efficiently for all levels. However, in reality, there are some factors that lead to underinvestment or overinvestment by firms. In addition to internal agency problems, external ecological problems also affect the enterprise capital configuration efficiency. Xiao (2019) found that the government will provide subsidies to a certain extent for enterprises with outstanding results in pollution control. This alleviates the cost pressure faced by enterprises in environmental investment and provides them with financial support. Reducing the investment of enterprises in ecological management leads to the phenomenon of underinvestment [17]. On the contrary, Lianchao Yu [18], Tao LI (2021) [19], and Yuanyuan LIU (2021) [20] argued that although environmental regulation will increase the costs faced by enterprises in the short term, this will not restrain the increase in enterprise capital allocation efficiency. However, this pressure can prompt enterprises to make strategic adjustments to improve their competitiveness in the capital market and change the blind investment to the growth opportunities of investment. It can be seen that ecological governance needs to utilize some resources of enterprises to invest in environmental governance, which can effectively restrain the enterprise’s blind investment and improve the efficiency of investment. Therefore, this study argues that the ecological governance capability has a significant effect upon promoting the corporate capital allocation efficiency. Based on this, hypothesis 1 is proposed:

H1: The level of ecological governance will promote the corporate capital allocation efficiency.

2.2. The Mediating Role of CSR. Eco-governance encourages enterprises to set up a positive corporate image by creating profits while also taking responsibility for consumers, society, and the environment. Nanda and Shin have verified that environmental governance has a positive contribution to CSR [21, 22]. Thus, it can be seen that eco-governance capabilities have a crucial influence on CSR. In addition, Bhandari and Javakhadze’s study (2017), based on unbalanced panel data of US companies from 1992 to 2014, and Samet and Jarbouï’s study verified that CSR has an effect on the efficiency of corporate investment actively by using

European listed companies data from 2009 to 2014 [23, 24]. The relationship between ecological governance capacity, CSR, and corporate capital allocation efficiency can be speculated: improvement of the ecological governance capacity promotes enterprises to improve their CSR. The fulfillment of CSR is an important aspect in creating a good corporate reputation. This directly affects stakeholders' perceptions and evaluations of the enterprise. Moreover, over the long term, the active fulfillment of CSR can promote the corporate capital allocation efficiency. Therefore, this study argues that the eco-governance capability promotes the corporate capital allocation efficiency by promoting the active fulfillment of CSR. CSR acts as a mechanism of the eco-governance capability, having an effect on the enterprise capital configuration efficiency.

H2: The level of ecological governance promotes the corporate capital allocation efficiency through corporate social responsibility.

3. Empirical Design

3.1. Data Selection and Processing. Selecting the listed A-share enterprises in Shanghai and Shenzhen from 2011 to 2017 as the initial sample data, these can be filtered according to the following principles: (i) exclude enterprises in the financial industry in the sample; (ii) propose a sample of ST and ST * enterprises; (iii) exclude enterprises with serious data loss in the sample. In total, we obtained 5950. For the sake of avoiding the influence of numerical anomaly, all the continuous variables in this study were subjected to an upper and lower 1% tail shrinkage. The enterprise data were obtained from the CSMAR (<https://cn.gtadata.com/>) and Hutchison Information Network (<http://www.hexun.com>).

3.2. Model Setting. This study tested the effect of ecological governance capacity on the corporate capital allocation efficiency by a panel data fixed effects model, and we used the reference studies of Wen and Ye [25] to explore the effect of CSR on the mediating effect between these two factors. The construction of the model is shown in equations (1)–(3):

$$INV_{i,t} = \alpha_0 + \alpha_1 SZ_{i,t} + \sum_{j=2}^6 \alpha_j \text{Controls} + \mu_i + \lambda_t + \varepsilon_{i,t}, \quad (1)$$

$$CSR_{i,t} = \beta_0 + \beta_1 SZ_{i,t} + \sum_{j=2}^6 \beta_j \text{Controls} + \mu_i + \lambda_t + \varepsilon_{i,t}, \quad (2)$$

$$INV_{i,t} = \theta_0 + \theta_1 SZ_{i,t} + \theta_2 CSR_{i,t} + \sum_{j=3}^7 \theta_j \text{Controls} + \mu_i + \lambda_t + \varepsilon_{i,t}. \quad (3)$$

In (1)–(3), the explained variable $INV_{i,t}$ denotes the efficiency of capital allocation of corporate i in year t ; SZ_t denotes the ecological governance capacity of corporate i in year t ; $CSR_{i,t}$ denotes the social responsibility of corporate i in year t ; Controls are a set of control variables affecting the corporate capital allocation efficiency; α , β , and θ denote parameters in

which constant coefficients represent a quantitative relationship between variables in models; μ_i and λ_t denote firm's fixed effects and the time fixed utility that are dummy variables (in specific firms and years, variable = 1; in nonspecific firms and years, the variable = 0); $\varepsilon_{i,t}$ is a disturbance that represents the influence of various random factors on the model (mathematical expectation = 0, a normal distribution).

3.3. Main Variable Meaning

3.3.1. Enterprise Capital Allocation Efficiency (INV). The inefficiency of corporate capital allocation is mainly reflected in firms' overinvestment or underinvestment. Thus, this study established a mode to measure the efficiency of the company's investment, referring to Richardson (2006) [26]. This can be seen in the following equation:

$$Inv_{i,t} = \alpha_0 + \alpha_1 \text{Growth}_{i,t-1} + \alpha_2 \text{Cash}_{i,t-1} + \alpha_3 \text{Listim}_{i,t-1} + \alpha_4 \text{lev}_{i,t-1} + \alpha_5 \text{Size}_{i,t-1} + \alpha_6 \text{Ret}_{i,t-1} + \alpha_7 \text{Inv}_{i,t-1} + \sum \text{Year} + \sum \text{Industry} + \varepsilon_{i,t}. \quad (4)$$

The residual term resulting from the regression analysis of (4), $\varepsilon_{i,t}$, means inefficient investment of the firm. When $\varepsilon_{i,t}$ is positive, it indicates overinvestment. On the contrary, when it is negative, it indicates underinvestment. Thus, it can be characterized by its absolute value $|\varepsilon_{i,t}|$. A higher value means a higher degree of inefficient investment. Additionally, it also means lower efficiency of investment. $Inv_{i,t}$ represents the company's actual new investment expenditures in year t ; Growth is the investment opportunity; Cash is the cash holdings; $Listim_{i,t-1}$ is the listing age in the market. $lev_{i,t-1}$ represents the financial leverage ratio in period $t-1$. $Size_{i,t-1}$ is the firm size. $Ret_{i,t-1}$ is the firm's annual stock returns after market adjustment based on the monthly terms from May of the previous year to April of the current year; Year and Industry are annual dumb variables in the industry.

3.3.2. Ecological Governance Capacity (SZ). In this study, we refer to the conclusion of Guo et al. [10], which constructed an evaluation system with 6 indicators and 23 dimensions, including water environment, air environment, pollution treatment, green environment, residential life, and soil environment. These indicators can be used to calculate the ecological governance index in China from 2010 to 2017, as illustrated in Table 1.

3.3.3. Corporate Social Responsibility (CSR). At present, scholars in China generally use the expert scores of R&L Global Ratings or the evaluation system of Hutchison Information Network to measure corporate social responsibility. The evaluation system of R&L Global only provides expert scores to enterprises that disclose their social responsibility, while the evaluation of social responsibility of listed enterprises by Hutchison Information Network has a more comprehensive evaluation of the social responsibility of listed enterprises. Therefore, this study refers to the information from Hutchison Information Network (<http://www.hexun.com>).

TABLE 1: Total index and subindex of nationwide ecological governance by year (unit of measurement: none).

Year	Water environment	Air environment	Contamination treatment	Green environment	Resident life	Soil environment	Total ecological governance index
2011	0.81	0.88	0.76	0.25	0.48	0.69	0.65
2012	0.81	0.89	0.78	0.25	0.48	0.68	0.65
2013	0.82	0.9	0.79	0.29	0.51	0.68	0.67
2014	0.86	0.89	0.8	0.29	0.53	0.67	0.67
2015	0.87	0.9	0.8	0.29	0.56	0.67	0.68
2016	0.87	0.9	0.82	0.29	0.56	0.68	0.69
2017	0.87	0.9	0.83	0.28	0.57	0.68	0.69

3.3.4. *Control Variables.* According to the previous studies of Xiong [27], Zhao [15], Hong [2], and Liu and Liu [28], this study adds a set of control variables into the models (1)–(3), as illustrated in Table 2.

4. Empirical Testing and Analysis of Results

4.1. *Descriptive Statistics.* In order to see the distribution of data more intuitively, Table 3 highlights the statistical results of major variables in the model. It indicates that the minimum value of the enterprises' capital allocation efficiency is $1.20e-05$, and the maximum value is 1.638. This highlights that the capital allocation efficiency of different enterprises has varied widely, and it has a mean value of 0.0397. This indicates that enterprises have the problem of overinvestment or underinvestment. The minimum value of the ecological governance capacity is 0.650, and the maximum value is 0.690. This indicates that there was small level gap on the national governance from 2011 to 2017. The standard deviation of corporate social responsibility is 0.202. This indicates that there is a great discrepancy in social responsibility between different enterprises, and there is room for further improvement. The statistical results of control variables are reasonable.

4.2. *Correlation Analysis.* The correlation results of major variables in the model are illustrated in Table 4. According to the data from the table, it can be seen that enterprise capital configuration efficiency increases with the enhancement of ecological governance capacity. This preliminarily validated hypothesis 1; however, corporate social responsibility is significantly negatively correlated with ecological governance capacity. In addition, there is no direct relation between CSR and enterprise capital configuration efficiency because other variables are not controlled in the correlation analysis. This is further verified in the regression equation. The correlation analysis preliminarily determined that there was no multicollinearity problem in the models.

4.3. Analysis of Empirical Results

4.3.1. *Impact of Ecological Governance Capacity on the Enterprise Capital Configuration Efficiency.* Table 5 highlights regression results of model (1) regarding the ecological governance capacity having an effect on the corporate capital allocation efficiency. Column (1) is the results of adding ecological governance capacity. The figure in columns (2)–

(4) is the estimation of fixed effects controlling for firm and year. The regression coefficients of ecological governance capacity are significant positive correlation at the level of 1% in both forms. This proves that the ecological governance capacity can promote the corporate capital allocation efficiency. Hypothesis 1 is thus supported.

4.3.2. *The Impact of Mediating Effects Based on Corporate Social Responsibility.* Table 6 highlights the empirical results of the CSR mediating variables. The empirical results in the three columns of the table correspond to equations (1)–(3) of the model, respectively. In addition, it can be seen that the total impact of the ecological governance capacity on the enterprise capital configuration efficiency is conspicuous forward correlation at the 1% from column (1) of Table 6. The ecological governance capacity increased by 1%, and the level of corporate capital allocation efficiency increased by 2.510% with it accordingly. The corresponding coefficients in Table 6 are all significant. Thus, there is a mediating effect, the magnitude of which is 0.11025 (by multiplying the coefficient of ecological governance capacity SZ in column (2) with the coefficient of CSR in column (3)). This accounts for 4.39% of the total effect of ecological governance capacity on the efficiency of corporate capital allocation (this can be obtained through the figure of the mediating effects divided by the coefficient of ecological governance capacity SZ in column (1) of Table (6)). This result indicates that improvement to the ecological governance capacity can lead to better efficiency of corporate capital allocation for implementation by promoting CSR. Therefore, hypothesis 2 is tested.

5. Heterogeneity Analysis

The relationship between ecological governance capability and enterprise capital allocation efficiency is analyzed, and the mechanism of actions is studied in Section 4. However, there are some certain differences between enterprise and industry characteristics that need to be discussed further. This section explores the heterogeneity impact of governance capability on the corporate capital allocation efficiency by grouping enterprises based on whether they belong to state-owned enterprise or industries. If the impact of ecological governance capability on enterprise capital allocation efficiency is insignificant among enterprises with different scenarios of property rights and industry characteristics, there is heterogeneity among different enterprises. Otherwise, there is no heterogeneity.

TABLE 2: Definition of control variables.

Variable name	Variable code	Indicator description
Enterprise size	Size	Ending assets of the firm are taken as the natural logarithm; balancing the uncertainty and growth rate of the firm.
Gearing ratio	Lev	Ending liabilities of the enterprise divided by the ending assets of the enterprise measured; uncertainty in controlling interest.
Tobin Q	Q	Measuring business growth indicators; controlling business investment opportunities.
Cash flow	Cash	Net cash flow; controlling the level of free cash flow of the enterprise.
Years on the market	Age	Controls the impact of listing year factors.

TABLE 3: Descriptive statistics.

Variable name	Variables' abbreviation	Number of observations	Avg	Std	Min	Max
Corporate capital allocation efficiency	INV	5,950 (PCS)	0.0397	0.0527	1.20e - 05	1.638
Ecological governance capacity	SZ	5,950 (PCS)	0.671	0.0155	0.650	0.690
Corporate social responsibility	CSR	5,950 (PCS)	0.314	0.202	-0.132	0.909
Tobin Q	Q	5,950 (PCS)	1.670	1.616	0.0893	31.42
Enterprise size	SIZE	5,950 (PCS)	22.67	1.354	19.31	28.51
Cash flow	CASH	5,950 (PCS)	2.338e + 08 (CNY)	5.101e + 09 (CNY)	-8.010e + 10 (CNY)	1.000e + 11 (CNY)
Gearing ratio	LEV	5,950 (PCS)	0.480	0.199	0.00708	0.956
Number of years on the market	AGE	5,950 (PCS)	13.30 (years)	5.390 (years)	2 (years)	27 (years)

INV, SZ, CRS, Q, SIZE, and LEV have no unit of measure.

TABLE 4: Correlation analysis.

	INV	CSR	SZ	Q	SIZE	Cash	LEV	Age
INV	1							
CSR	-0.02	1						
SZ	0.064***	-0.193***	1					
Q	0.220***	-0.043***	0.113***	1				
SIZE	-0.094***	0.257***	0.176***	-0.473***	1			
CASH	-0.037***	0.021*	0.003	-0.0130	0.113***	1		
LEV	-0.095***	-0.0120	-0.028**	-0.550***	0.511***	-0.025*	1	
AGE	-0.044***	-0.082***	0.359***	-0.140***	0.158***	0	0.156***	1

*10%, **5%, and ***1%, observably.

5.1. *Grouping by the Nature of Business Ownership.* In this section, according to the nature of enterprise ownership, the samples are divided into SOEs and non-SOEs. The columns (1) and (2) of Table 7 highlight the subsample empirical results of model (1). In the different subsamples, the impact of ecological governance capacity on the corporate capital allocation efficiency is significant positive correlation; SOEs are at the 1% level, but, non-SOEs are at the level of 10%. Compared with non-SOEs, eco-governance has a greater effect on promoting the corporate capital allocation efficiency in SOEs. The reason is that SOEs have an inevitable connection with the state. The government encourages enterprises to implement the strategy of ecological governance. SOEs are bound to respond positively to the nation's policies due to the pressure of the state and the government. Therefore, the impact on the ecological governance ability of

SOEs' capital allocation efficiency is relatively greater. Additionally, the capital allocation efficiency of SOEs is lower than that of private and foreign enterprises. Therefore, improvement of the state's governance ability regarding the capital allocation efficiency of SOEs will be more remarkable from the perspective of marginal effects.

5.2. *Grouping by Enterprise Industry Characteristics.* In this section, according to the industry characteristics of enterprises, the samples are divided into polluting and nonpolluting industries. The regression results for the subsample of model (1) are shown in columns (3) and (4) of Table 7. Regarding the screening of polluting enterprises, this study refers to the academic operation of Yunguo LIU and Mengning LIU (2015) [29], selecting the listed companies

TABLE 5: Regression results of ecological governance capacity on the enterprise capital configuration efficiency.

	(1) INV	(2) INV	(3) INV	(4) INV
SZ	0.218*** (5.21)	0.196*** (3.27)	0.565*** (3.50)	2.510*** (7.58)
Q			0.009*** (12.07)	0.009*** (11.51)
SIZE			0.018*** (7.27)	0.017*** (7.05)
CASH			-0.000 (-1.07)	-0.000 (-0.88)
LEV			0.001 (0.11)	0.006 (0.61)
AGE			-0.006*** (-4.55)	-0.020*** (-8.46)
Constant	-0.107*** (-3.79)	-0.170*** (4.25)	-0.686*** (-6.58)	-1.782*** (-9.11)
Observations	5,950	5,950	5,950	5,950
Number of NAME	850	850	850	850
R-squared	0.005	0.034	0.043	0.064
Corporate effect	Uncontrolled	Control	Uncontrolled	Control
Time effect	Uncontrolled	Control	Uncontrolled	Control
F Test	2.01e-07	0	0	0
r2_a	-0.161	-0.129	-0.118	-0.0936
F	27.10	29.52	37.83	35.01

*10%, **5%, and ***1%, observably.

TABLE 6: Results of mediating effects.

Variables' abbreviation	(1) INV	(2) CSR	(3) INV
SZ	2.510*** (7.58)	12.250*** (13.35)	2.398*** (7.12)
CSR			0.009* (1.81)
Constant	-1.782*** (-9.11)	-8.184*** (-15.08)	-1.707*** (-8.54)
Control variables	Control	Control	Control
Observations	5,950	5,950	5,950
Number of NAME	850	850	850
R-squared	0.064	0.230	0.065
Corporate effect	Control	Control	Control
Time effect	Control	Control	Control
F test	0	0	0
r2_a	-0.0936	0.1000	-0.0931
F	35.01	152.0	32.14

*10%, **5%, and ***1%, observably.

polluting industries and less-polluting industries. It can be seen that national governance capacity has a significant positive correlation impact on capital allocation efficiency for nonpolluting enterprises at the level of 1%. On the other hand, there is no significant effect on polluting firms. Compared with the polluting firms, the nonpolluting firms are more influenced by state governance. Thus, the state governance capacity has a more significant promotion effect on nonpolluting firms. As for the polluting firms, due to the punishment mechanism of the state, the firms invest more capital in the areas of pollution treatment, resulting in underinvestment for polluting firms, leading to a low efficiency of capital allocation. Thus, there is a negative effect in

the regression results. The national governance capacity has a significant positive effect on nonpolluting firms. However, it has no significant promoting effect on polluting firms.

6. Robustness Test

To test some issues of “systematic errors” in the data or some omitted variables in the model construction of this study, we conducted a robustness test to solve the issues raised above by changing the indicators of the explanatory variable (corporate capital allocation efficiency) and the mediator variable (social responsibility), respectively. Additionally, we performed an endogeneity test of the model. If the final conclusion is consistent with the previous points of this study, this indicates that the model constructed in this study is stable. Otherwise, it is not stable and the model needs to be changed.

6.1. Measures of Capital Allocation Efficiency of Replacement Firms. Tobin’s Q theory of investment can reflect the investment level of a firm. Marginal Q is the only factor used to determine the investment policy of a firm. Moreover, the investment activity of enterprises is only influenced by the single factor of growth opportunity. Therefore, we used Tobin’s Q as a measurement index of capital allocation efficiency of replacement firms to explore whether the replacement variables have a difference in the results of the original models (1), (2), and (3). Table 8 highlights the regression results and it is found that the hypothesis proposed in the previous section of this study is supported. The effect of ecological governance on firms’ capital allocation efficiency is positive impact on the level of 1% in column (1) of

TABLE 7: Heterogeneity analysis.

	(1) State-owned enterprises	(2) Non-state-owned enterprises	(3) Pollution category	(4) Nonpolluting
SZ	0.576*** (3.42)	0.579 * (1.80)	-0.238 (-0.73)	0.729*** (4.01)
Constant	-0.473*** (-4.22)	-0.876*** (-4.21)	-0.194 (-0.90)	-0.808*** (-6.87)
Control variables	Control	Control	Control	Control
Observations	3,650	2,300	990	4,960
Number of companies	534	339	152	723
R-squared	0.045	0.051	0.050	0.045
Corporate effect	Control	Control	Control	Control
Time effect	Control	Control	Control	Control
F Test	0	0	1.18e - 1607	0
r2_a	-0.120	-0.116	-0.129	-0.119
F	24.58	17.64	7.333	33.46

*10%, **5%, and ***1%, observably.

TABLE 8: Regression results of changing the measurement of the enterprise capital configuration efficiency.

	(1) Q	(2) CSR	(3) Q
SZ	27.124*** (8.73)	12.250*** (13.35)	25.610*** (8.16)
CSR			0.306*** (3.25)
Constant	-5.968*** (-2.96)	-8.184*** (-15.08)	-4.820** (-2.35)
Control variables	Control	Control	Control
Observations	5,950	5,950	5,950
Number of NAME	850	850	850
R-squared	0.084	0.230	0.086
Corporate effect	Control	Control	Control
Time effect	Control	Control	Control
F Test	0	0	0
r2_a	-0.0699	0.1000	-0.0679
F	93.02	152.0	79.42

*10%, **5%, and ***1%, observably.

the table. This indicates that ecological governance can promote the corporate capital allocation efficiency. Moreover, according to columns (2) and (3), it can be concluded that CSR has a partial mediating impact on both.

6.2. Replacement of CSR Measurement Indicators. At present, although the number of enterprises that disclose CSR reports is increasing year by year in China, the proportion of disclosure is relatively low compared to all listed companies. Therefore, we used whether the listed enterprises have disclosed a CSR report as a replacement variable. If the enterprise discloses a CSR report, it is recorded as 1; otherwise, it is 0 [30]. Regressions are conducted on models (1), (2), and (3) (the Logit model was used to regress model (2)). The columns (1), (2), and (3) highlight the empirical results in Table 9, where the regression results are at the 1% level despite replacing the measurement of CSR. Therefore, the hypothesis that CSR plays a mediating role between

ecological governance capacity and corporate capital allocation efficiency is established.

6.3. Endogeneity Test. According to the empirical test of H1, this study finds that the eco-governance capability can significantly promote the enterprise capital configuration efficiency. To prevent the influence of potential endogeneity on the empirical results, it is necessary to enhance the reliability of the conclusion. In this study, the explanatory variables were treated for model (1) with one lag, two lags, and three lags, respectively, as shown in columns (1), (2), and (3) in Table 10. Based on Table 10, whether the index of ecological governance capacity is lagged by one period, two periods, or three periods, the effect of ecological governance capacity on the corporate capital allocation efficiency is significantly positive. This avoids the impact of endogeneity to a certain extent, and the results of the study are stable.

TABLE 9: Regression results of changing the measurement of corporate social responsibility.

Variables symbols	(1) INV	(2) CSR report	(3) INV
SZ	2.510*** (7.58)	9.857*** (4.63)	2.398*** (7.12)
CSR report			0.003** (1.98)
Constant	-1.782*** (-9.11)	-15.574*** (-11.02)	-0.104*** (-3.30)
Control variables	Control	Control	Control
Observations	5,950	5,950	5,950
Number of NAME	850	850	850
R-squared	0.064	0.230	0.065
Corporate effect	Control	Control	Control
Time effect	Control	Control	Control

*10%, **5%, and ***1%, observably.

TABLE 10: Lag-period regression results.

	(1) One period behind	(2) Lagging two periods	(3) Lagging three periods
SZ	0.251*** (4.68)	0.335*** (4.56)	0.601*** (5.86)
Constant	-0.148*** (-4.22)	-0.207*** (-4.30)	-0.385*** (-5.55)
Control variables	Control	Control	Control
Observations	5,100	4,250	3,400
R-squared	0.066	0.070	0.076
Corporate effect	Control	Control	Control
Time effect	Control	Control	Control
F Test	0	0	0
r2_a	0.0647	0.0691	0.0749
F	59.74	53.59	46.84

*10%, **5%, and ***1%, observably.

7. Conclusion and Insights

This study analyzes the influence of ecological governance capacity on the corporate capital allocation efficiency based on data from 2011 to 2017. It is found that the eco-governance capability can significantly promote the corporate capital allocation efficiency. This conclusion is supported by several stability tests. After subdividing the sample according to the nature of enterprise ownership and industry characteristics, it is found that the promotion effect of ecological governance capability on the firms' capital allocation efficiency is stronger in state-owned firms and less-polluting firms. Moreover, the influential mechanism found that the ecological governance capability can promote the corporate capital allocation efficiency by enhancing corporate social responsibility.

The conclusions of this study have certain implications for practice. From the national perspective, the ecological governance capacity is a significant part of the national governance capacity. It requires all-round cooperation from the government and enterprises. Therefore, the government should strengthen the supervision obligation of enterprises in the future. It should play a regulatory role as an enterprise stakeholder to enhance the awareness of enterprises' social

responsibility and promote the effective combination of government and enterprises. According to the research conclusions, there is room for improvement regarding the positive effect of ecological governance capacity on nonstate enterprises and polluting enterprises. Therefore, the government needs to consider enterprise characteristics and industry features to promote the corporate capital allocation efficiency. This study also explores the ecological governance capacity from the perspective of the enterprise capital configuration efficiency. Our findings enrich the impact of the enterprise capital configuration efficiency and the development of ecological governance capacity on enterprise capital allocation efficiency. We have proposed new paths for enterprises to promote their enterprise capital configuration efficiency. Therefore, managers of enterprises should develop social responsibility strategies for enterprises according to long-term development plans. The internal supervision pressure should be increased to promote enterprises to actively carry out their CSR. Another important point is that it plays a role in mutual restriction and promotion with stakeholders. This study provides empirical evidence for the effective implementation of improving corporate capital allocation efficiency.

Data Availability

The raw/processed data required to reproduce these findings cannot be shared at this time as the data also forms part of an ongoing study.

Conflicts of Interest

The authors declare no conflicts of interest.

Authors' Contributions

H.L. and H.Y. developed the methodology; H.Y. took charge of the writing—original draft preparation; H.Y. and H.L. performed review and editing; H.Y. provided software; H.L. and Q.S. performed conceptualization; H.L. and Q.S. take charge of the investigation.

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