Impact of top executive salary incentive on the quality of environmental information disclosure

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Abstract. The influence of top executive salary incentive on the quality of enterprise environmental information disclosure has not yet been given a clear answer. The article chooses Chinese A-share listed companies from 2011 to 2021 as study samples and empirically analyzes the result of top executive salary incentive on environmental disclosure quality. The research results indicate that top executive salary incentive is beneficial for improving the level of environmental information disclosure. Furthermore, the article uses heterogeneity analysis and moderating effect to analyze the research conclusion. Meanwhile, the level of accrued management was also used as a mediating variable for mechanism analysis, revealing its mediating role between top executive salary incentive and the level of enterprise environmental information disclosure. The research conclusion of this paper not only enriches the research on enterprise environmental information disclosure and top executive salary incentive but also provides relevant policy recommendations for relevant departments, assisting the enterprise management in providing support for decision-making on the level of environmental information disclosure.

Keywords: Top Executive Salary Incentive, Quality of Environmental Information Disclosure, Green Long-term Development.

1. Introduction

With the continuous improvement of human society, the natural environment has been severely damaged, and the ideas of protecting the environment, green development, and harmonious symbiosis between humans and nature have gradually become the mainstream trend. As an essential component of corporate environmental information disclosure quality, enterprises should bear the responsibility of environmental information disclosure. However, the "Evaluation Report on Environmental Responsibility Information Disclosure of Chinese Listed Companies (2021)" in December 2022 revealed that the environmental information disclosure quality index of listed companies in China in 2021 was 39.89 points (a total score of 100 points), and environmental information disclosure is still at a low level. In discussing the impact on the quality of environmental information disclosure, relevant scholars have shown that executives have greater autonomy and decision-making power over the environmental information disclosure of enterprises [1], which means that executives may become an important factor affecting the quality of environmental information disclosure. Take this as the basis, it is particularly important to guide executives to play a positive part in improving the quality of environmental information disclosure, and top executive salary incentive happen to be a bridge connecting executives and the quality of environmental information disclosure, that is, salary incentive affect senior management behavior and subsequently affect environmental information disclosure.

The quality of environmental information disclosure has always been an important issue in academic circles. Based on existing academic research, the research on the contributors affecting the quality of corporate environmental information disclosure can be roughly divided into two aspects:

internal parts and external parts. The Internal factors can be divided into executive characteristics [2], corporate characteristics [3], and corporate governance [4]; External factors can be divided into geographical location [5], supply chain relationships [6], and legal level [7]. As an important component of corporate governance [8], top executive salary incentive is mainly explored from the perspectives of board structure, equity structure, and other aspects when scholars explore the impact of corporate governance on the quality of environmental information disclosure. Few scholars study the quality of corporate environmental information disclosure from the perspective of top executive salary incentive. In addition, in existing relevant studies, most of them are limited to a single perspective, and research conclusions may also differ. Therefore, the effect of top executive salary incentive on environmental information disclosure is worth further study.

On the basis of the previous, the article takes Chinese A-share listed companies as samples to study the effect of top executive salary incentive on corporate environmental information disclosure, the moderating effects of internal controls, government subsidies, and legal level, and conducts mechanism analysis, how the management level of accrual basis plays an intermediary role in the result of top executive salary incentive on the quality of corporate environmental information disclosure. At the same time, Heterogeneity analysis is also carried out from the perspectives of the number of senior managers, whether the listed companies disclosed environmental-related information in the social responsibility reports, and whether the companies suffered losses.

Compared to previous studies, the marginal contribution of the article may have the following aspects: Firstly, starting from the perspective of top executive salary incentive, the article not only enriches the factors that affect the quality of environmental information disclosure, but also a beneficial exploration of how to have a beneficial effect in the quality of corporate environmental information disclosure through top executive salary incentive, which has certain theoretical research value and practical significance; Secondly, the article starts from the perspective of salary incentive, Analyzed the internal relationship between top executive salary incentive and enterprise environmental information disclosure, and adopted multiple moderating variables to further demonstrate the scientific and truthful nature of the close relationship between the two; Thirdly, this study has certain practical significance and can be helpful in building a top executive salary incentive system.

2. Theoretical analysis and research hypothesis

The top executive salary incentive is a method of adjusting the salary and benefits of executives to stimulate their work enthusiasm and improve corporate performance. Common salary incentive methods include annual salary, bonuses, stock options, etc. Most savants believe that top executive salary incentive is usually linked to corporate performance. Top executive salary incentive can effectively solve agency problems, stimulate executives' enthusiasm and initiative for technological innovation, and thereby promote the improvement of corporate innovation level[9].

Environmental information disclosure refers to the behavior of a company publicly disclosing its environmental information during a certain period to the public so that the public can fully understand the performance of the enterprise's environmental and social responsibilities. In order to establish a good image, enterprises will use environmental information disclosure for legitimacy management, affecting the public's understanding of the enterprise's environmental performance and improving its environmental legitimacy level.

In the context of the separation of ownership and management rights, there are certain differences in the interests of shareholders and executives. Executives often focus more on the short-term performance of the company, while shareholders are more focused on the long term track record of the company. A study by Dechaw and Sloan [10] found that management's pursuit of short-term performance may harm the company's long-term performance. From the perspective of a high manager, environmental governance means a large amount of capital investment, a short-term inability to achieve significant results, and a decrease in short-term accounting profits, reducing the

quality of management agencies and ultimately affecting their wage levels. Li Yanxi et al. [11] pointed out that executives engage in more earnings management and reduce environmental information disclosure due to self-interest opportunities.

In order to reduce the self-interest motivation of executives, salary incentive can directly bring direct benefits to executives, providing them with immediate satisfaction and compensating for the adverse result of low-quality environmental information disclosure on their short-term performance evaluation. This will enable executives to increase their investment in corporate environmental governance, lay more emphasis on corporate reputation, and actively fulfill their social responsibilities. The level of compensation to a certain extent determines the material living standards and level of desire satisfaction of executives. When the compensation level of executives increases, their material living standards will be met, which will encourage executives to pursue higher-level desires, such as the need for growth and interdependence. The active fulfillment of environmental and social responsibilities by enterprises can reflect the satisfaction level of executives' pursuit of establishing mutual relationships with stakeholders. The research by Liu Xiaoxia and Jiang Yanjun [12] suggests that top executive salary incentive can encourage high managers to pay more attention to corporate reputation and actively fulfill their social responsibilities. Once corporate social responsibility performance is poor, corporate reputation deteriorates, and high managers are at risk of being dismissed.

McGuire [13] pointed out that executives with higher salaries pay particular attention to corporate social responsibility to ensure compliance with laws and regulations, maintain corporate reputation, and ultimately maintain their own high salary levels. Therefore, under salary incentive, senior managements will actively assume corporate environmental and social responsibility, elevate the quality of environmental information disclosure, and maintain their own salary level. Based on this, the article raises the following assumptions:

H1a: Top executive salary incentive have an improving impact on environmental disclosure quality.

3. Research design

3.1. Sample selection and data sources

In this paper, Chinese A-share listed companies from 2011 to 2021 are selected as research samples. To ensure the integrity and scientificity of the data, the sample data is processed as follows in this paper: Firstly, eliminate samples with missing values. Secondly, eliminate samples from ST and * ST. Thirdly, the sample of firms in the financial sector is excluded. In addition, in empirical research, the sample data will be subjected to a 1% and 99% tailing treatment. The final sample consists of a total of 32799 observations from 4571 companies. The environmental information disclosure data, executive compensation data, and company characteristic variables are all sourced from the Guotai An Database (CSMAR).

3.2. Description of variables

(1)Dependent Variable

The dependent variable is the Quality of Environmental Information Disclosure (EID), which is quantitatively analyzed using the Environmental Information Disclosure Index. Due to the differences in environmental information disclosure content among enterprises, the content analysis method is used in this paper to measure the quality of enterprise environmental information disclosure. Based on regulations such as the "Guidelines for Environmental Information Disclosure of Listed Companies" issued by the Shanghai Stock Exchange in 2008, and combined with environmental disclosure data from the Guotai An Database (CSMAR), this paper measures the disclosure carrier, environmental management, environmental supervision and institutional certification Environmental liabilities, environmental performance, and governance are assigned values and scored. For the disclosure carriers, environmental management, environmental supervision, and certification parts,

due to their limited quantitative disclosure content, they are generally qualitative disclosures. Therefore, if there are disclosure situations or related events, the value is assigned as 1, otherwise, it is 0. For the environmental performance and governance and environmental liabilities, based on the information disclosure situation, assign 2 points, 1 point, and 0 point to the quantitative disclosure, qualitative disclosure, and undisclosed situations, and then aggregate the obtained scores to obtain the total environmental information disclosure score (EID_i) of a single company. To reflect the difference in environmental information disclosure of different companies, the ratio of the total environmental information disclosure score of a single company to the maximum possible score of 42 was calculated, and the final ratio was used as the environmental information disclosure indicator. The specific calculation formula is as follows: $EID = EID * (EID_i/42)$. The specific scoring system for environmental information disclosure is shown in Table 1.

Table 1. Environmental Information Disclosure Scoring System

Project	Secondary indicators	Score	Secondary indicators	Project
Disclosure carrier	Annual Report of Listed Companies	No disclosure or occurrence of related events will result in a score of 0; 1 point for disclosure or occurrence of related events	Key pollution monitoring units	Regulatory and Certification
	Social Responsibility Report		Pollutant discharge meets standards	
	Separate disclosure of environmental reports		Sudden environmental accidents	
Environmental management	Environmental protection concept		Environmental violations	
	Environmental goals		Environmental petition cases	
	Environmental management system		ISO14001 certification	
	Environmental education and training		ISO9001 certification	
	Special environmental protection activities			
	Emergency mechanism for environmental events			
	Environmental honors or rewards			
	Implementation of the Three Simultaneous System			
Environmental liabilities	Wastewater discharge amount	0 point for non-disclosure; 1 point for qualitative disclosure; Quantitative disclosure score 2 points	Situation of waste gas emission reduction and control	Performance and Governance
	COD emissions		Wastewater emission reduction and treatment situation	
	SO_2emissions		Dust and smoke control situation	
	CO_2emissions		Solid waste utilization and disposal situation	
	Smoke and dust emissions		Noise, light pollution, radiation control	
	Industrial solid waste generation		Implementation of clean production	

(2)Independent Variable

The independent variable is top executive salary incentive (Wage). This paper refers to the study of Chang Yuan et al.[14]. The top executive salary incentive selected in this paper refer to monetary compensation incentive rather than equity compensation incentive. At the same time, the natural logarithm of the total compensation of the top three directors and supervisors, in this paper, is selected as the proxy variable for top executive salary incentive.

(3)Control variable

This paper refers to the research conducted by Chen Hongtao et al.[15] (2023), selecting Company size(Size), Asset liability ratio(Lev), Total asset net profit margin(Roa), Operating revenue growth rate (Growth), Listing age (List Age), Duality(Dual), and Equity balance(Balance) as control variables. In addition, the article also controls for industry and time-fixed effects. As shown in Table 2.

Table 2. Variable Definition and Description

type	Variable symbol	Meaning of variables
Dependent variable	EID	Quantitative analysis using environmental information disclosure index
Independent variable	Wage	Salary incentive, non-equity incentive
Control variable	Size	Enterprise size, natural logarithm of total assets of listed companies
	Lev	Total liabilities/total assets * 100%
	Roa	Net profit/total assets of listed companies * 100%
	Growth	Operating revenue growth rate
	List Age	The natural logarithm of the year minus the IPO year
	Dual	When the chairman and general manager are held by the same person, the value is 1, otherwise it is 0
	Balance	The sum of 2-10 major shareholders' shareholding ratios/shareholding ratio of the largest shareholder
	Year	Year dummy variables
	Industry	Industry dummy variables

3.3. Model building

So as to study the influence of top executive salary incentive on the quality of corporate environmental disclosure, the article constructs the following benchmark regression model:

$$EID_{it}=\alpha_1+\beta_1 Wage_{it}+\beta_2 Controls_{it}+\sum_t Year_t+\sum_j Ind_j+\varepsilon_{it} \quad (1)$$

In the equation, the dependent variable $\mathrm{EID_{it}}$ represents the quality level of environmental information disclosure, the independent variable $\mathrm{Wage_{it}}$represents top executive salary incentive, $\mathrm{Controls_{it}}$ represents the control variable, and $\mathrm{Year_t}$ and $\mathrm{Ind_j}$ respectively represent time and industry-fixed effects. ε_{it} is the error term. This paper mainly concentrates on the sign and significance of the coefficient β_1 of variable top executive salary incentive ($\mathrm{Wage_{it}}$).

4. Empirical analysis

4.1. Descriptive statistics

Table 3 depicts the descriptive statistics of main variables. The maximum value of the explanatory variable Wage is 16.47, the minimum value is 12.78, the mean value is 14.46, and the median is 14.43, which is relatively close to the mean value, and the standard deviation of 0.705, which indicates that the incentive value of top executive salary is relatively close. The maximum value of the dependent variable EID is 73.81, the minimum value is 11.90, and the standard deviation is 14.71, indicating

that there is a large gap in the environmental information disclosure index, which can reflect the difference in the environmental disclosure quality among enterprises.

Table 3. Descriptive statistics

Variable	N	Mean	SD	Min	p50	Max
EID	32799	25.94	14.71	11.90	19.05	73.81
Wage	32742	14.46	0.705	12.78	14.43	16.47
Roa	32798	0.043	0.064	-0.221	0.041	0.208
Size	32799	22.16	1.286	19.94	21.96	26.00
Lev	32799	0.416	0.207	0.0560	0.406	0.889
Growth	32783	0.167	0.365	-0.520	0.111	1.957
Balance	32798	0.368	0.286	0.0130	0.290	0.995
List Age	32799	2.017	0.950	0	2.197	3.332
Dual	32799	0.296	0.457	0	0	1

4.2. Basic regression analysis

The first column of Table 3 indicates the results after benchmark regression. The regression coefficient of top executive salary incentive with the quality of environmental information disclosure is 0.811, which is significant at the 1% level indicating a positive correlation. Top executive salary incentive can facilitate the upgradation of the quality of environmental information disclosure, confirming the hypothesis.

Table 4. Basic regression analysis and regression analysis

	(1)	(2)	(3)	(4)	(5)
VARIABLES	EID	EID	EID	Y1	Y2
Wage	0.811***	0.881***	0.805***	0.766***	0.684***
	(5.83)	(6.30)	(5.80)	(38.40)	(33.58)
Roa	5.544***	5.317***	4.672***	-3.333***	-3.824***
	(5.07)	(4.85)	(4.18)	(-14.62)	(-15.93)
Size	2.854***	2.835***	2.741***	0.028**	0.036***
	(26.78)	(26.55)	(25.40)	(2.15)	(2.70)
Lev	-1.902***	-1.994***	-1.727***	-0.802***	-0.865***
	(-3.90)	(-4.09)	(-3.51)	(-10.55)	(-11.16)
Growth	-0.647***	-0.638***	-0.653***	-0.417***	-0.279***
	(-4.55)	(-4.48)	(-4.57)	(-12.77)	(-8.48)
Balance	-0.852***	-0.867***	-0.855***	0.203***	0.203***
	(-2.91)	(-2.96)	(-2.92)	(5.06)	(4.96)
ListAge	0.116	0.131	-0.134	0.180***	0.220***
	(1.02)	(1.14)	(-1.12)	(12.04)	(14.28)
Dual	-0.516***	-0.494***	-0.470***	0.206***	0.189***
	(-3.37)	(-3.23)	(-3.06)	(7.99)	(7.17)
Opinion	/	/	0.568*	/	/
	/	/	(1.81)	/	/
SOE	/	/	0.885***	/	/
	/	/	(3.27)	/	/
Occupy	/	/	-3.866	/	/
	/	/	(-1.50)	/	/
INST	/	/	1.802***	/	/
	/	/	(5.41)	/	/
Constant	-58.323***	-59.734***	-57.003***	2,006.164***	2,007.332***
	(-19.62)	(-19.65)	(-19.10)	(6,161.27)	(6,089.81)
Observations	32,724	32,724	32,706	27,856	23,908
Year FE	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES
province FE	NO	YES	NO	NO	NO

4.3. Robustness check

4.3.1 Increase the fixed effect

Based on fixed industry and year effects, this paper further incorporates provincial fixed effects. The specific regression results are shown in column (2) of Table 3. From this regression results, the coefficient of top executive salary incentive with the quality of environmental information disclosure is 0.881, which is significant at the 1% level and consistent with the benchmark regression, further verifying the hypothesis.

4.3.2 Adding control variables

On the basis of the existing control variables ROA, Size, Lev, Growth, Balance, List Age, and Dual, this paper adds control variables INST, Occupy, SOE, Opinion, and re-regresses. The specific regression results are shown in column (3) of the table. From the regression results, it can be seen that the correlation of top executive salary incentive with the quality of enterprise information disclosure is 0.805, which is significant at the 1% level and consistent with the benchmark regression, verifying the robustness of the benchmark regression.

4.3.3 Variable lagged

Considering the lag effect of top executive salary incentive on the environmental disclosure quality, the article uses the quality of environmental information disclosure with a lag of one cycle and two periods as explanatory variables. The regression results with a lag of one cycle are shown in column (4) of the table. The correlation of top executive salary incentive with the quality of corporate information disclosure is 0.766, which is significant at the 1% level. The regression results of the two lagged periods are shown in column (5) of the table. The correlation between top executive salary incentive and the quality of corporate information disclosure is 0.684, which is significant at the 1% level and consistent with the benchmark regression, verifying the robustness of the benchmark regression.

4.3.4 PSM

For further robustness testing, this article used PSM tests with a ratio of 1:3 and 1:5 for matching, followed by kernel matching. The matching variables were all Independent SOE Dual, and the balance test was passed. The matched sample was used for regression analysis. The regression result of a 1:3 match is shown in column (1) of Table 5. The coefficient between top executive salary incentive and the quality of enterprise information disclosure is 0.800, which is significant at the 1% level; 1: The regression results of 5 matches are shown in column (2) of Table 5. The correlation coefficient between top executive salary incentive and the quality of corporate information disclosure is 0.813, which is significant at the 1% level; The regression results of kernel matching are shown in column (3) of Table 5. The correlation between top executive salary incentive and environmental information disclosure quality is 2.150, which is significant at the 1% level, further verifying the robustness of the benchmark regression.

Table 5. PSM and Heckman

VARIABLES	(1) EID	(2) EID	(3) EID	(4) EID
Wage	0.800***	0.813***	2.150***	0.830***
	(5.49)	(5.80)	(16.42)	(5.99)
lambda	/	/	/	35.590***
	/	/	/	(13.20)
Constant	-59.362***	-58.393***	-18.271***	-263.703***
	(-19.38)	(-19.55)	(-6.84)	(-16.66)
Observations	29,775	32,065	32,718	32,724
Controls	YES	YES	YES	YES
Year FE	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES
province FE	NO	NO	NO	YES

4.3.5 Heckman

To address the potential issue of sample self-selection bias, this paper uses the Heckman two-stage model for analysis. Build dummy_Y indicator measures whether the quality of environmental information disclosure is greater than the median. If it is greater than the median, the value is 1, otherwise it is 0. Firstly, the quality of environmental information disclosure is fitted by selecting company size, asset liability ratio (Lev), total asset net profit margin (ROA), revenue growth rate (Growth), listing age (List Age), dual employment, and equity balance. The fitted values are then substituted into the probability density function and cumulative distribution function to obtain the inverse Mills ratio (IMR). Secondly, by adding IMR to the model for regression, it can be seen from column (4) of Table 5 that the coefficients of the inverse Mills ratio IMR are both significant at the 1% level, which may indicate that the benchmark regression model has some endogeneity issues. After joining IMR, the coefficient of top executive salary incentive remains significantly positive, which supports the original hypothesis.

5. Further study

5.1. Heterogeneity analysis

Whether the company has suffered losses reflects its current operating status. This paper divides all sample data into two groups based on whether the company has suffered losses in the current period. Table 6 Panel A reports the impact of whether a company has losses in the current period on the relationship. The data in Non-Loss of the panel refers to companies that have not incurred losses in the current period. According to the regression results in the panel, it can be concluded that the top executive salary incentive of companies with no losses in the current period have a greater influence on the improvement of environmental information disclosure quality, showing a strong positive promoting effect.

Whether the social responsibility report of listed companies discloses environmental-related information can reflect the company's emphasis on environmental protection, which in turn affects the quality of the company's environmental information disclosure. Table 6 Panel B reports on the differential impact of whether listed companies disclose environmental-related information in their social responsibility reports on the quality of executive equity incentive and environmental information disclosure. This paper divides all sample data into two categories based on whether the social responsibility report of listed companies discloses environmental-related information. The column ‘publish’ in the panel shows the regression results of environmental-related information disclosed in their reports of listed companies. The regression results show that top executive salary incentive that disclose environmental-related information in the social responsibility reports of listed companies have a significant effect on improving the quality of environmental information disclosure.

Senior executives are responsible for the operation and management of the company and have the right to important information within the company's management. This paper divides the data into two groups based on the median number of executives in all sample companies. Table 6 Panel C reports the differential impact of the number of company executives on the link between top executive salary incentive and the environmental disclosure quality. The more personnel column in the panel is the group with a higher number of executives. From the regression results, it can be observed that in enterprises with a large number of executives, top executive salary incentive have a stronger promoting effect on the quality of environmental information disclosure.

We also conducted a significance test on the inter-group coefficient differences in Table 6. The results obtained through Bootstrap 1000 times using the Fisher’s Permutation test method are shown in the last column of Table 6, indicating significant differences between the two sets of data for each panel, which strengthens our conclusion.

Table 6. Heterogeneity analysis

	Panel A Operational status		Panel B the social responsibility report publishes environmental-related information		Panel C Number of senior management personnel	
	Loss	Non-Loss	Publish	Non-publish	More	Less
VARIABLES	EID	EID	EID	EID	EID	EID
Wage	-0.297	1.000***	1.275***	0.257*	0.986***	0.489**
	(-0.80)	(6.50)	(4.11)	(1.93)	(5.01)	(2.47)
Constant	-1,343.647***	-1,771.915***	-1,467.119***	-2,063.053***	-1,924.519***	-1,581.896***
	(-9.63)	(-36.88)	(-15.40)	(-46.40)	(-30.74)	(-24.82)
Observations	3,505	29,219	8,155	24,568	18,396	14,328
Controls	YES	YES	YES	YES	YES	YES
Year	YES	YES	YES	YES	YES	YES
Industry	YES	YES	YES	YES	YES	YES
p	0.000***		0.000***		0.000***	

5.2. Moderating effect

This paper selects the quality of internal control (Ci), government subsidies (Subsidy), and the legal level of the place of corporation company registration (In) as the moderating variables. Results are shown in columns (1), (2), and (3) of Table 7, respectively. The explanations of the moderating variables are as follows:

The internal control quality(Ci) is measured by the "DiBo China Listed Company Internal Control Index". The interaction term generated by internal control quality and top executive salary incentive is Wage*Ci, as disclosed in column (1) of Table 7. It can be seen that the regression coefficient of Wage*Ci is 0.003, indicating that companies with higher internal control quality have a more overtly effect on top executive salary incentive on the quality of corporate environmental information disclosure.

Government subsidies(Subsidy) are measured by the natural logarithm of the amount of government subsidies. The interactive term generated by government subsidies and top executive salary incentive is Wage * Subsidy, as shown in column (2) of Table 7. It can be seen, from the result, that the regression coefficient of Wage * Subsidy is 0.655, indicating that companies with higher government subsidies have a more significant effect of top executive salary incentive on the quality of corporate environmental information disclosure.

Legal Level (In) Measured by the development of market intermediary organizations and the legal system environment index, the interaction term between the legal level of the company's registration location and the generation of top executive salary incentive is Wage * In, as shown in column (3) of Table 7. It can be seen that the regression coefficient of Wage * In is 0.104, indicating that the higher the legal level of the company's registration location, the more significant the effect of top executive salary incentive on the quality of corporate environmental information disclosure.

Table 7. Heterogeneity analysis

VARIABLES	(1) EID	(2) EID	(3) EID
Wage	0.642*** (4.01)	0.609*** (3.67)	0.545*** (3.51)
Ci	0.001* (1.78)	/	/
Wave * Ci	0.003*** (4.92)	/	/
Subsidy	/	0.372*** (6.17)	/
Wave * Substidy	/	0.655*** (11.07)	/
In	/	/	0.274*** (5.64)
Wave * In	/	/	0.104*** (3.95)
Constant	-6.486** (-2.14)	-1.293 (-0.38)	-6.868** (-2.35)
Observations	29697	29608	32162
Controls	YES	YES	YES
R-squared	0.740	0.739	0.737
Year FE	YES	YES	YES
Industry FE	YES	YES	YES

5.3. Mechanism analysis

This article uses accrual earnings management as a mediator variable and selects the modified Jones model and the basic Jones model to measure the level of accrual earnings management. Among them, the larger the indicator, the higher the level of accrued earnings management.

The top executive salary incentive can have a certain positive impact on executives, encouraging them to reduce their self-interest motivation and earnings management level, thus decreasing their earnings management behavior and boosting the quality of environmental information disclosure in enterprises.

In Table 8, models (1) and (2) examine the effect of top executive salary incentive on environmental information disclosure, as well as the mediating role of accrued earnings management. In Model (1) and Model (2), the coefficients of top executive salary incentive on the quality of environmental information disclosure are -0.007 and -0.008, indicating that top executive salary incentive can facilitate the quality of environmental information disclosure. Properly utilizing the role of top executive salary incentive can cut down earnings management behavior among executives and improve the quality of environmental information disclosure.

Table 8. Mechanism analysis

VARIABLES	(1) DACC1	(2) DACC2
Wage	-0.010*** (-10.65)	-0.010*** (-11.01)
Constant	0.021 (1.29)	0.047*** (2.99)
Observations	30,322	30,437
Controls	YES	YES
Year FE	YES	YES
Industry FE	YES	YES

6. Conclusions

This paper chooses the data of China's A-share listed enterprises from 2011-2021 as research samples to empirically study the result of top executive salary incentive on the corporate environmental disclosure quality. Through this study, we have gained an overall understanding of the relation between these two variables in Chinese listed companies. Meanwhile, this article also conducted a mechanism analysis, revealing that the level of management plays an intermediary role in the influence of top executive salary incentive on the quality of corporate environmental disclosure. Based on the above conclusions, this paper accordingly puts forward three suggestions as follows. Firstly, enterprises blindly pursue short-term profit maximization, compress environmental costs, and ignore the long-term interests and development of the enterprise. Enterprises should combine their actual situation, fully consider the internal needs and motivations of executives, incorporate factors such as corporate environmental performance and social performance into the scope of high manager performance evaluation, and encourage executives to more concentrate on the long-term interests of the enterprise, Stimulate the enthusiasm of executives to disclose environmental information, thereby promoting the advancement of the level of corporate environmental information disclosure, and achieving the coordinated development of corporate performance, environmental performance, and social performance. Secondly, enterprises should improve their corporate governance mechanisms, and strengthen supervision over the disclosure of environmental information by executives, and the accounting department should budget and account for environmental protection measures reasonably. They should accurately disclose environmental information from a monetary perspective in written texts such as annual reports and social responsibility reports, so that investors can more directly understand the company's development status and governance environment, to reduce the number of enterprises. The degree of information asymmetry between investors and regulators, thereby reducing the related costs of the enterprise. Finally, the government should establish more detailed environmental information disclosure standards, speed up the advancement of the responsibilities, content, reward, and punishment systems, standardize the environmental behavior of enterprises through the advancement of the system, correctly guide enterprises to disclose environmental information, promote the close combination of enterprise environmental information disclosure and social responsibility, so that executive wage can play a greater incentive role, achieving green and high-quality development.

References

[1] Chang Yuan, Rong Chu, Liu Yiqing Research on the Impact of Salary Incentives on the Quality of Environmental Information Disclosure in Enterprises: An Analysis of the Regulatory and Threshold Effects:Based on Environmental Regulations [J].East China Economic Management, 2023, 37 (06): 110-119.

[2] Li Hong, Wang Juan Management Capability, Corporate Culture, and Corporate Social Responsibility Information Disclosure [J].East China Economic Management,2019, 33 (10): 138-146.

[3] Li Hong, Yuan Xiaoqian Corporate agency costs and environmental information disclosure: moderating effects based on management's hometown sentiment and marketization process [J].Journal of Nanjing Audit University, 2019, 16 (06): 72-80.

[4] Yao Haibo, Wang Zhengbin, Lv Ying Research on the Professional Background of Directors and the Quality of Enterprise Environmental Information Disclosure [J] Prediction, 2018, 37 (06): 54-60.

[5] Yao Sheng, Yang Jie, Liang Haotian Geographical Location, Spatial Heterogeneity of Environmental Regulation, and Selective Disclosure of Environmental Information [J] Management Review, 2016, 28 (06): 192-204.

[6] Zhang Zenan, Sun Yi Research on Supply Chain Relations and Quality of Environmental Information Disclosure [J] Friends of Accounting, 2023, (19): 120-128.

[7] Luo Exiang, Huang Zhengmin Executive motivation, institutional environment, and exploratory innovation in high-tech enterprises [J] Operations and Management, 1-12.

[8] Wang Yunchen, Chen Yumei, Luo Huawei The governance mechanism for the quality of information disclosure in small and medium-sized enterprises [J] Financial Science, 2018, (09): 86-94.

[9] Cheng Cuifeng. Executive Incentive, Equity Concentration, and Enterprise R&D Innovation Strategy: An Empirical Study on the moderating effect of panel data of listed manufacturing companies [J]. East China Economic Management, 2018,32 (11):

[10] Dechaw P M, Sloan R G. Executive incentives and the horizon problem: An empirical investment [J] Journal of Accounting and Economics, 1991, 14 (01): 51-89

[11] Li Yanxi, Bao Shize, Gao Rui, et al. Salary incentives, board supervision, and earnings management of listed companies [J]. Nankai Management Review, 2007, (06):

[12] Liu Xiaoxia, Jiang Yanjun. Product Market Competition, Executive Incentives, and Corporate Social Responsibility Level: Based on the Perspective of Corporate Donation [J]. Monthly Journal of Finance and Accounting, 2011, (24):

[13] McGuire, J., El Ghoul, S.,&Guedhami, O. (2003) The impact of corporate governance and ownership structure on the corporate social performance of Islamic banks Journal of Business Ethics, 45 (1), 45-58

[14] Chang Yuan, Xiao Lan, Liu Yiqing. Executive Compensation Incentives, Quality of Environmental Information Disclosure, and Environmental Performance: Based on Mediation Effect and Panel Threshold Model [J]. Resource Development and Market, 2022,38 (11): 1287-1295

[15] Chen Hongtao, He Renxiang, Wang Binlong. Research on the Impact of Enterprise Environmental Information Disclosure on Green Innovation: Evidence from Listed Companies [J]. Ecological Economy, 2023,39 (05): 173-179.