The Impact of Environmental Accounting Information Disclosure on Commercial Credit: Based on the Analysis of OLS Regression Model

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Abstract—In this study, beyond the data of A-share listed companies in heavy pollution industries from 2010 to 2014, we hand collected the data of environmental accounting information disclosure of listed firms as the research sample. Based on the signal transmission theory, we use the OLS regression model to explore the relationship between the environmental accounting information disclosure and the commercial credit level of listed firms in the market with information asymmetry and the moderating effect of the market environment. Through empirical analysis, we find that disclosing environmental accounting information or not is significantly correlated with the commercial credit level of firms. Furthermore, environmental accounting information disclosure quality is significantly and positively correlated with the commercial credit level of listed firms and the correlation will be significantly stronger in a better market environment. Our findings can on the one hand enrich studies related to environment accounting and commercial credit, and on the other hand, provide policy recommendations for relevant departments to formulate environmental accounting information disclosure standards, regulatory regulations, and guide enterprises to protect the environment.

Keywords-environmental accounting information disclosure; commercial credit; market environment; OLS regression model

1 INTRODUCTION

In 1972, the concept of "sustainable development" was formally put forward at the United Nations Conference on the Human Environment. In 1989, the 11th meeting of the Standing Committee of the National People's Congress passed the Environmental Protection Law of the People's Republic of China, which means environmental protection was officially implemented in legal form. At the end of 2015, China has included the construction of ecological civilization in the "13th Five-Year Plan" goal, which has promoted the progress of environmental-related research to a certain extent (Hua et al., 2017) [1]. In 2017, President Xi emphasized in the report of the 19th National Congress of the Communist Party of China that we must establish the concept "lucid waters and lush mountains are invaluable assets" and

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insist on the harmonious coexistence of man and nature. With the rapid development of the economy, China is paying more and more attention to the environmental protection. Coexisting in harmony with nature and achieving a win-win situation for the economic development and the environmental protection has become an important part of national work. At the same time, as the awareness of environmental protection continues to increase, investors' requirements for corporate environmental accounting information disclosure are becoming stronger and stronger. The work on environmental protection has become a criterion for corporate social responsibility and commercial credit. As a consequence, environmental information disclosure is receiving more and more attention.

For the survival and development of an enterprise, it is necessary to provide a steady stream of funds as a guarantee. Commercial credit is one of the important sources of short-term financing for enterprises as a result of the loan relationship formed by the advance payment or deferred payment when enterprises conduct commodity transactions. Higher levels of commercial credit will have a positive impact on corporate financing (Zhang, 2013 [2]; Wu and Wang, 2016[3]). As the criteria for evaluating corporate social responsibility, a high quality of information disclosure can not only meet the needs of information users, reducing the information asymmetry between enterprises and investors, but also gain the trust of stakeholders, thereby improving the commercial credit level of enterprises and helping obtain more financing.

Meanwhile, the relationship between environmental accounting information disclosure and the commercial credit level of a company may vary depending on the degree of marketization in the area where the firm is located. Regions with a higher degree of marketization have more complete protection mechanisms for investors and a relatively better environment for information dissemination. Correspondingly, investors have more trust in the information disclosed by the company and are more likely to improve the company's credit level based on the information. The situation is exactly the opposite when the firm is located in low-marketization areas. Compared with low-marketization areas, the effect of environmental accounting information disclosure on the commercial credit level of an enterprise is stronger in high-marketization regions.

Based on the existing research, this paper further improves the construction of the environmental accounting information disclosure index. We extracted the environmental protection-related content of the social responsibility report and then selected five indicators of timeliness, completeness, significance, quantification, and continuity and scored considering two aspects of form and substance. The final score was used as the environmental accounting information disclosure index in the research. As well, considering the differences in the degree of marketization in various regions, we further explored whether the degree of marketization moderates the relationship between the environmental accounting information disclosure and the commercial credit.

2 THEORY AND HYPOTHESES

2.1 Environmental Accounting Information Disclosure and Commercial Credit

In 1972, the United Nations Human Environment Symposium formally put forward the concept of "sustainable development", that is, not only meets the needs of contemporary people, but does not harm the ability of future generations to meet their needs [4]. To achieve this goal, the most important thing is to overcome the contradiction between the people's growing living needs and the scarce resources such as water, air, soil, etc. and rationally arrange the use of natural resources. Therefore, it is essential to measure and confirm the costs and expenses of the environmental resources used by enterprises (Zeng, 2015) [5].

Sheldon expounded the concept of CSR (Corporate Social Responsibility) and believed that CSR is a measure superior to corporate profitability. In the corporate social responsibility report disclosed by listed companies, five parts of shareholder responsibility, employee responsibility, customer and consumer responsibility, environmental responsibility, and social responsibility are included. Among them, environmental responsibility is more affected by the public with an increase in the global environmental protection awareness. Yang and Li (2012) [6] found that the social responsibility information disclosure of listed companies is significantly positively correlated with firm value. Hao (2011) [7] believes that a good public image is conducive to the continuous operation and to improving performance in the long run.

According to the theory of sustainable development and social responsibility, the disclosure of corporate environmental accounting information has attracted more and more attention, and it is also crucial to establish a good image for companies. Therefore, companies will actively respond to the information needs of stakeholders and disclose environmental accounting information (Shen and Feng, 2012) [8]. Simultaneously, through environmental accounting information disclosure, an enterprise can establish a good image, which can also bring benefits such as increased investment, preferential government policies and more favored products, thereby enhancing the profitability and solvency of the firm. Correspondingly, commercial credit providers embed more trust in the firm and provide a more relaxed credit policy.

At present, there is still an absence of a complete regulation of environmental information disclosure. Companies voluntarily disclose environmental accounting information and most of the disclosures are only described in words.

Since the disclosure requires companies to invest a lot of costs and resources in improving the environment, it usually sends positive signals of economic strength to stakeholders, proving that the company has sufficient capability and excess funds for environmental protection. As well, the signal will increase the expectations of commercial credit providers on the performance and solvency of an enterprise, and enable them to provide the enterprise with more relaxed credit policies and improve the commercial credit levels. In summary, we propose the following hypothesis:

H1: Environmental accounting information disclosure has a positive impact on the commercial credit level of the enterprise.

2.2 Environmental Accounting Information Disclosure quality and Commercial Credit

In recent years, as the government has paid more and more attention to the environmental protection, companies have become increasingly inclined to actively disclose environmental accounting information. However, due to the lack of a unified environmental accounting information disclosure standard, the quality of corporate environmental accounting information disclosure at this stage is uneven.

In the situation of information asymmetry, an initiative disclosure of environmental accounting information can comprehensively reflect the work done by the company in environmental protection and enhance investors' understanding of the actual situation of the company's operations, thereby reducing information asymmetry and further reducing the risk expectations of investors for the enterprise, urging them to provide a more relaxed credit policy. Meanwhile, according to the signal transmission theory, high-quality environmental accounting information disclosure can also send a signal to the capital market of a good business operation, helps establish a good social responsibility image and win more trust of investors (Yin, 2018[9]; Zhang, 2018[10]). The higher the quality of information disclosure, or the more the timeliness, completeness and quantification of the disclosure, the better the stakeholders' understanding of the company and the more it can reflect strong economic strength and capabilities of the firm, which finally leads to more trust and higher commercial credit level. Therefore, we propose the following hypothesis:

H2: The quality of environmental accounting information disclosure has a positive impact on the commercial credit level of the enterprise.

2.3 The moderating effect of the market environment

Due to the differences in geographical location, economic policies, and system construction, the degree of marketization varies from place to place in China. In high-marketization regions, the investor protection mechanism is relatively complete and can provide a better environment for information dissemination. As well, enterprises located here have a stronger ability to perform contracts. As a result, when companies in high-marketization areas disclose environmental accounting information, investors are more easily to receive the information and are more likely to trust the information disclosed and make economic decisions accordingly. On the contrary, low-marketization regions suffer from poor information dissemination conditions. Correspondingly, investors may have difficulty receiving the information disclosed by the company, and have a lower degree of trust in the signals transmitted therein. Furthermore, they may not reduce the risk expectations of the company or increase the company's commercial credit level based on the disclosure. Therefore, we propose the following hypothesis:

H3: Compared with low-marketization regions, the promotion of environmental accounting information disclosure quality to the commercial credit level of enterprises is stronger in high-marketization regions.

3 RESEARCH DESIGN

3.1 Sample and Data

This paper selects companies in heavy pollution industries as the sample. Due to the serious lack of data related to corporate environmental accounting information in 2009, and the current marketization index data is as of 2014, we finally use the data of A-share listed companies in heavy pollution industries from 2010 to 2014 for research. Data related to environmental accounting information are manually collected from the company's social responsibility report, and other financial data are derived from CSMAR. After excluding ST, companies, ST* companies, and listed companies with abnormal data, we obtained a total of 3335 firm-year observations as the initial sample for the test of H1. We then select companies in the sample interval that have disclosed environmental accounting information as a sub-sample to further test H2. The sub-sample includes 605 observations.

3.2 Variable Measurement

The explained variable is commercial credit, which is measured by the commercial credit model (*CreditMode*). There are three commercial credit models including accounts payables, notes payables and prepaid accounts in the transactions and the transaction costs gradually increase in order. We draw on the method of Chen and Wang (2010) [11] and define the commercial credit model as prepaid accounts/ (accounts payables +notes payables+ prepaid accounts). The lower the value means the lower the transaction costs and thus the higher the commercial credit level.

There are two explanatory variables in this article, namely environmental accounting information disclosure (*EADD*) and environmental accounting information disclosure quality (*EADI)*. Among them, *EADD* is a dummy variable, with 1 point for disclosure and 0 for non-disclosure. We then refer to Feng et al. (2015) [12] to construct *EADI*. Specifically, we subdivide the environmental responsibility content of the sample firm's social responsibility reports disclosed on Juchao Information Network and the company's official website in terms of timeliness, completeness, quantification, significance, and continuity, and score for each dimension. Among them, Table 1 shows the specific score standards.

In order to enhance the objectivity of the scoring, this paper uses the test-retest reliability method to score the same report twice with an interval of 30 days. The Pearson correlation coefficient of the two scoring results is 0.954, which is significant at the 1% level. To test the accuracy of the samples, 10 samples are randomly selected (002001, 000726, 600596, 300110, 000937, 600188, 600116, 600795, 300019, 002155) and the measured consistency coefficients are all greater than 0.912, which is significant at the 5% level. Therefore, we believe that the two scoring results are stable and reliable. In the end, we average the two scores of each dimension and then add to obtain *EADI*. The specific calculation method is shown in formula (1).

$$EADI_{i,t} = \bar{X1}_{i,t} + \bar{X2}_{i,t} + \bar{X3}_{i,t} + \bar{X4}_{i,t} + \bar{X5}_{i,t} \quad (1)$$

TABLE 1. EVALUATION OF ENVIRONMENTAL ACCOUNTING INFORMATION DISCLOSURE QUALITY

Dimension	Variable identification	Evaluation standard
timeliness	X1	Deadline for report disclosure of the year (January 30)/120
completeness	X2	Disclosure is required in the Guidelines for Environmental Information Disclosure of Listed Companies, with 1 point for disclosure and 0 point for non-disclosure
quantification	X3	1 point for pure textualization, 2 points for quantitative non-monetization, and 3 points for monetized information
significance	X4	1 point for general text, 2 points for bold subtitles, 3 points for diagrams
continuity	X5	1 point for disclosure of current information, 2 points for future information, and 3 points for comparison with the past during the reporting period

Table 2 shows the definition of the variables. Among them, the selection and measurement of all control variables are based on existing studies (Chen and Wang ,2010) [11].

TABLE 2. THE DEFINITION OF THE VARIABLES

	Variables	**Variable Identification**	**Definition**
Dependent variable	Commerial credit	*CreditMode*	Prepaid accounts/ (accounts payable + notes payable + prepaid accounts)
Independent variables	environmental accounting information disclosure	*EADD*	1 point for disclosure and 0 for non-disclosure
	environmental accounting information disclosure qualtiy	*EADI*	Environmental Accounting Information Disclosure Index
Moderator variable	Market environment	*MKT*	The natural logarithm of the marketization index of each province
Control variables	Enterprise Size	*SIZE*	Natural logarithm of total assets at the end of the period
	solvency	*LEV*	Total liabilities/Total assets
	Profitability	*ROA*	Net profit/total assets
	Development capability	*GROWTH*	(Sales revenue this year-Sales revenue last year)/Sales revenue last year
	Mortgage capacity	*CAPITAL*	(Fixed assets + inventory)/total assets

Variables	Variable Identification	Definition
short-term loan	*BANK*	Short-term borrowings/total assets
Operating cash flow	*OCF*	Net cash flow from operating activities/total assets at the end of the period
Listing years	*AGE*	Years of listing

3.3 Model Construction

Referring to Matsumura et al. (2014) [13] and Yuan et al. (2017) [14] and considering the lagging impact of environmental accounting information disclosure on the commercial credit, the explanatory variable and control variables will be dealt with a lagging period in this article.

In order to verify the relationship between environmental accounting information disclosure and corporate commercial credit (H1), we construct the empirical model (2).

$$CreditMode_{i,t} = \alpha_0 + \alpha_1 EADD_{i,t-1} + \alpha_2 GROWTH_{i,t} + \alpha_3 SIZE_{i,t} + \alpha_4 LEV_{i,t} + \alpha_5 ROA_{i,t} + \alpha_6 CAPITAL_{i,t} + \alpha_7 BANK_{i,t} + \alpha_8 OCF_{i,t} + \alpha_9 AGE_{i,t} + \varepsilon_{i,t} \quad (2)$$

In order to verify the relationship between environmental accounting information disclosure quality and corporate commercial credit (H2), we construct the empirical model (3).

$$CreditMode_{i,t} = \alpha_0 + \alpha_1 EADI_{i,t-1} + \alpha_2 GROWTH_{i,t} + \alpha_3 SIZE_{i,t} + \alpha_4 LEV_{i,t} + \alpha_5 ROA_{i,t} + \alpha_6 CAPITAL_{i,t} + \alpha_7 BANK_{i,t} + \alpha_8 OCF_{i,t} + \alpha_9 AGE_{i,t} + \varepsilon_{i,t} \quad (3)$$

In order to verify the moderating effect of market environment (H3), based on the model (3), we further add the moderator variable MKT and the interaction term MKT*EADI and construct the following model (4).

$$CreditMode_{i,t} = \alpha_0 + \alpha_1 EADI_{i,t-1} + \alpha_2 MKT_{i,t-1} + \alpha_3 MKT_{i,t-1} * EADI_{i,t-1} + \alpha_4 GROWTH_{i,t} + \alpha_5 SIZE_{i,t} + \alpha_6 LEV_{i,t} + \alpha_7 ROA_{i,t} + \alpha_8 CAPITAL_{i,t} + \alpha_9 BANK_{i,t} + \alpha_{10} OCF_{i,t} + \alpha_{11} AGE_{i,t} + \varepsilon_{i,t} \quad (4)$$

4 Results & Discussion

4.1 Descriptive Statistics

Table 3 and Table 4 report the descriptive statistics of the full sample and sub-sample respectively. Among the full sample, the average, standard deviation, minimum and maximum values of *CreditMode* are 0.2215, 0.1912, 0 and 0.9752 respectively, indicating that the commercial credit levels of different companies are quite different. The average value of *EADD* is 0.1814, that is, a total of 18.14% of the companies in the sample interval have disclosed environmental accounting information, suggesting poor disclosure of environmental accounting information of listed companies in heavy pollution industries.

For the sub-sample, the average, standard deviation, minimum and maximum values of *CreditMode* are 0.1987, 0.1715, 0 and 0.9307 respectively, showing a great difference in the commercial credit levels. The average value of *EADI* is 6.5619, that is, the average score rate

is 65.62%, which also shows the poor quality of disclosure. Moreover, the minimum and maximum values of *EADI* are 2.3417 and 9.8417 respectively, indicating a big difference in the environmental accounting information disclosure quality of companies in heavy pollution industries.

TABLE 3. DESCRIPTIVE STATISTICS OF THE VARIABLES (FULL SAMPLE)

	Variable	Obs	Mean	Std.Dev.	Min	Max
Full sample	*Credit Mode*	3335	0.2215	0.1912	0	0.9752
	EADD	3335	0.1814	0.1619	0	1
	SIZE	3335	22.1889	1.2942	18.2906	28.5087
	LEV	3335	0.4580	0.2371	0.0071	3.2619
	ROA	3335	0.0347	0.0979	-2.5551	2.1635
	AGE	3335	10.3973	5.8942	0	24
	BANK	3335	0.1359	0.1262	0	1.2469

TABLE 3. DESCRIPTIVE STATISTICS OF THE VARIABLES -CONTINUED (FULL SAMPLE)

	Variable	Obs	Mean	Std.Dev.	Min	Max
Full sample	*GROWTH*	3335	0.1105	0.3240	-0.9673	2.9393
	OCF	3335	0.0518	0.0753	-1.0796	0.4065
	CAPITAL	3335	0.4552	0.1696	0.0154	0.9291

TABLE 4. DESCRIPTIVE STATISTICS OF THE VARIABLES (SUB-SAMPLE)

	Variable	obs	mean	Std.Dev.	Min	Max
Sub-sample	*Credit Mode*	605	0.1987	0.1715	0	0.9307
	EADI	605	6.5619	1.9222	2.3417	9.8417
	MKT	605	1.9206	0.4506	-2.8134	2.2976
	SIZE	605	23.0790	1.4689	20.0780	26.4380
	LEV	605	0.4780	0.2043	0.0140	0.9410
	ROA	605	0.0456	0.0603	-0.2650	0.3810
	AGE	605	12.7107	5.2321	1	24
	BANK	605	0.1218	0.1093	0	0.5610
	GROWTH	605	0.1825	0.3510	-0.9165	2.8175
	OCF	605	0.0642	0.0607	-0.1510	0.3180
	CAPITAL	605	0.4768	0.1695	0.1000	0.9290

4.2 Correlation Analysis

As shown in Table 5 and Table 6, *CreditMode* and *EADD* are significantly negatively correlated at the 1% statistical level, and the same for CreditMode and *EADI*. Compared with companies that have not disclosed environmental accounting information, the value of

CreditMode for companies that have disclosed is lower, suggesting a higher commercial credit level.

As well, firms with a higher quality of environmental accounting information disclosure enjoy higher commercial credit. The correlation between control variables and main variables is consistent with the existing research.

4.3 Regression Analysis

We first examined the relationship between environmental accounting information disclosure and commercial credit with a full sample, and then selected the companies that have disclosed environmental accounting information within the sample interval as a sub-sample to further explore the relationship between environmental accounting information disclosure quality and commercial credit.

4.3.1 Environmental accounting information disclosure and commercial credit:

The regression results of the relationship between environmental accounting information disclosure and commercial credit are shown in Table 7-(1) below. The coefficient of *EADD* is -0.0200 and is significant at the statistical level of 5%. It indicates that compared with companies that have not disclosed environmental accounting information, the value of *CreditMode* for companies that have disclosed is lower, suggesting a higher commercial credit level. In other words, environmental accounting information disclosure helps promote commercial credit level, so H1 is verified.

4.3.2 Environmental accounting information disclosure qualtiy and commercial credit:

The regression results of the relationship between environmental accounting information disclosure quality and commercial credit are shown in Table 7-(2) below. The coefficient of *EADI* is -0.0085 and is significant at the statistical level of 5%. This means that the higher the level of environmental accounting information disclosure, the smaller the value of commercial credit model, the lower the transaction costs, and the higher the commercial credit level of the company. In summary, the higher the quality of environmental accounting information disclosure, the higher the commercial credit, so H2 is supported.

TABLE 5. CORRELATION COEFFICIENT BETWEEN THE VARIABLES (FULL SAMPLE)

	Credit Mode	*EADD*	*SIZE*	*LEV*	*ROA*	*AGE*	*BANK*	*GROWTH*	*OCF*	*CAPITAL*
Credit Mode	1.000									
EADD	-0.0581***	1.000								
SIZE	-0.1443***	0.3276***	1.000							
LEV	-0.2139***	0.0620***	0.3434***	1.000						

ROA	0.1267***	0.0428**	0.0108	-0.4246***	1.000						
AGE	-0.1598***	0.0625***	0.2227***	0.3353***	-0.0983***	1.000					
BANK	-0.0099	-0.0322*	0.1088***	0.6219***	-0.3846***	0.0746***	1.000				
GROWTH	0.1211***	0.0141	-0.0245	-0.0820***	0.1654***	-0.1428***	-0.0654***	1.000			
OCF	-0.0702***	0.0724***	0.1543***	-0.1842***	0.2349***	0.0097	-0.2156***	0.0857**	1.000		
CAPITAL	-0.2551***	0.0916***	0.1834***	0.3891***	-0.2082***	0.2427***	0.2804***	-0.0911**	0.0405**	1.000	

Notes: **p<0.01, **p<0.05, *p<0.1

TABLE 6. CORRELATION COEFFICIENT BETWEEN THE VARIABLES (SUB- SAMPLE)

	Credit Mode	*EADI*	*SIZE*	*LEV*	*ROA*	*AGE*	*BANK*	*GROWTH*	*OCF*	*CAPITAL*	*MKT*
Credit Mode	1.000										
EADI	-0.1910***	1.000									
SIZE	-0.1913***	0.3808***	1.000								
LEV	-0.2307***	0.1810***	0.5843***	1.000							
ROA	0.1692***	-0.0765*	-0.1789***	-0.5613***	1.000						
AGE	-0.1669***	0.0418	0.2893***	0.1927***	-0.0370	1.000					
BANK	0.0251	0.0511	0.0802**	0.5026***	-0.4385***	0.0378	1.000				
GROWTH	0.1088***	-0.0446	0.0599	0.1039**	0.1188***	-0.1032**	0.0634	1.000			
OCF	-0.1173***	0.1085***	0.0484	-0.1989***	0.4321***	0.0483	-0.3048***	-0.0143	1.000		
CAPITAL	-0.2652***	0.1217***	0.1455***	0.3722***	-0.3224***	0.0771*	0.2985***	0.0143	0.0666	1.000	
MKT	-0.2744***	-0.0474	0.0466	0.0350	-0.0526	0.1021**	0.0338	-0.0456	0.0485	0.0674*	1.000

Notes: **p<0.01, **p<0.05, *p<0.1

4.3.3 The moderating effect of the market environment:

As shown in Table 7-(3), *MKT*EADI* and *CreditMode* are significantly negatively correlated at the 5% statistical level.

Furthermore, the coefficient of *EADI* is -0.0085 when *MKT*EADI* is not added, and it becomes -0.0149 after the interaction term is added for regression, indicating that the market environment will significantly enhance the positive impact of the corporate environmental accounting information disclosure quality on the commercial credit level. The higher the

degree of marketization, the stronger the environmental accounting information disclosure quality will promote corporate commercial credit. Therefore, H3 is supported.

4.4 Robustness Test

In order to eliminate the impact of the previous year's commercial credit on the current year's commercial credit, we further introduce the previous year's commercial credit level *B_CreditMode* as a control variable into the models (2), (3) and (4) and re-run the regression to test the robustness of the existing results. As shown in Table 8, the results are basically consistent with the original regression results. Therefore, the empirical results of this article are robust and reliable.

5 CONCLUSIONS

We have three important findings. Firstly, the disclosure of environmental accounting information will improve the commercial credit of an enterprise. Secondly, environmental accounting disclosure quality is significantly positively correlated with the commercial credit level of listed firms. Third, the improvement of the market environment will enhance the promotion of the enterprise environmental accounting information disclosure quality to the commercial credit level.

TABLE 7. RELATIONSHIP BETWEEN ENVIRONMENTAL ACCOUNTING INFORMATION DISCLOSURE(QUALITY) AND COMMERCIAL CREDIT &MODERATING EFFECT OF THE MARKET ENVIRONMENT

Variables	*CreditMode*		
	(1)	(2)	(3)
EADD	**-0.0200****		
	(0.010)		
EADI		**-0.0085****	**-0.0149*****
		(0.043)	(0.005)
MKT			**-0.1386*****
			(0.000)
*MKT*EADI*			**-0.0052****
			(0.041)
SIZE	**-0.0285*****	**0.0250**	**0.0189**
	(0.001)	(0.424)	(0.542)
LEV	**-0.2317*****	**-0.3701*****	**-0.3448*****
	(0.000)	(0.000)	(0.000)
ROA	**0.0318**	**0.0305**	**0.0458**
	(0.251)	(0.823)	(0.734)
AGE	**-0.0309*****	**-0.0310*****	**-0.0268*****
	(0.000)	(0.000)	(0.000)
BANK	**0.2273*****	**0.2273****	**0.2254****
	(0.000)	(0.037)	(0.036)
GROWTH	**0.0079**	**-0.0079**	**-0.0081**
	(0.237)	(0.563)	(0.548)
OCF	**-0.1281*****	**-0.2214****	**-0.2110****
	(0.000)	(0.027)	(0.033)

CAPITAL	**-0.2205*** **	**-0.2287*** **	**-0.2357*** **
	(0.000)	(0.000)	(0.000)
Constant	**1.3607*** **	**0.3447**	**0.7964**
	(0.000)	(0.606)	(0.240)
Adjusted R^2	**0.264**	**0.257**	**0.277**
F	**10.33**	**8.37**	**7.74**
Prob > F	**0.0000**	**0.0000**	**0.0000**
N	**3335**	**605**	**605**

Notes: **p<0.01, **p<0.05, *p<0.1

TABLE 8. RESULTS OF ROBUSTNESS TEST

Variables	*CreditMode* (1) Coef.	t	(2) Coef.	t	(3) Coef.	t
EADD	-0.0193 **	-2.47				
EADI			-0.0077 *	-1.86	-0.0139 ***	-2.67
MKT					-0.1333 ***	-3.48
MKT EADI*					-0.0050 **	-1.97
SI	-0.0323 ***	-3.88	0.0173	0.56	0.0118 ***	0.38
LEV	-0.2345 ***	-10.14	-0.3946 ***	-4.23	-0.3690 ***	-3.99
ROA	0.0369	1.34	0.0215	0.16	0.0368	0.28
AGE	-0.0284 ***	-16.19	-0.0279 ***	-6.03	-0.0241 ***	-5.01
BANK	0.2209 ***	5.77	0.2479 **	2.30	0.2450 **	2.30
GROW-TH	0.0097	1.44	-0.0094	-0.69	-0.0095	-0.71
OCF	-0.1300 ***	-3.85	-0.1959 **	-1.98	-0.1871 *	-1.90
CAPI-TAL	-0.2039 ***	-8.19	-0.2162 ***	-3.42	-0.2235 ***	-3.56
B_Credit Mode	-0.0798 ***	-5.20	-0.1114 ***	-3.21	-0.1057 ***	-3.08
Constant	1.4607 ***	8.27	0.5512	0.83	0.9738	1.45
Adjusted R^2	0.271		0.272		0.291	
F	7.65		5.94		5.67	
Prob > F	0.0000		0.0000		0.0000	
N	3335		605		605	

Notes: **p<0.01, **p<0.05, *p<0.1

Our research has certain reference significance for the country to optimize the allocation of market resources, strengthen the relationship between the government and the market, and advocate environmentally-friendly enterprises. At the same time, it provides support for enterprises to formulate environmental-related disclosure plans, and sheds the light to obtain a higher level of commercial credit.

Finally, based on the results, we put forward the following policy recommendations. Firstly, relevant policies on corporate environmental accounting information disclosure should be further improved. Secondly, relevant departments should further strengthen the supervision and management of corporate environmental accounting information disclosure. Thirdly, enterprises should actively engage in environmental protection.

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