

# Impacts of Environmental Disclosure Information on Corporate Debt Financing

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## Abstract

With the development of society, human beings rethink the sustainable development of economy and environment. As the main body of social economy, enterprises, in most cases, sacrifice some environmental resources while creating wealth for the society, which directly or indirectly causes increasingly severe pollution to the environment. So how to effectively curb corporate environmental pollution? The green credit mechanism, which urges enterprises to voluntarily improve the quality of environmental information disclosure through bank loans, is a major measure formulated by the government to increase the disclosure of enterprise environmental information. Therefore, based on the institutional background of green credit, this paper empirically tests the correlation between the quality of enterprise environmental information disclosure and debt financing ability. On the one hand, it can verify the implementation effect of the green credit policy; on the other hand, it can provide suggestions for further improving the environmental information disclosure system. This paper took eight listed companies in heavy pollution industries in Shanghai stock market as samples. The "content analysis method" was used to quantitatively analyze the environmental information disclosed in its social responsibility report (or environmental report and sustainable development report) from 2016 to 2018, and measured the environmental information disclosure level of the sample companies. Then it selected the short-term loan increment, long-term loan increment and total loan increment as the explanatory variables to explore the correlation between the level of environmental information disclosure and debt financing. It is found that there is a significant positive correlation between the level of environmental information disclosure and corporate debt financing. Finally, this paper put forward some suggestions to improve the environmental information disclosure system from the two aspects of government and enterprises in order to achieve green and sustainable development.

**Keywords:** Environmental Information Disclosure, Debt Financing, Heavy pollution industry, Green credit policy

## 1. Introduction

Starting in the 18<sup>th</sup> century with the industrial revolution, large-scale machine-based production has since rapidly developed on the back of exponential scientific and technological achievements that have greatly improved labor productivity and created wealth on a large scale (Sorooshian & Panigrahi, 2020; Nurdiana & Landing, 2021). These developments, however, have not taken place without cost to the environment. Indeed, by almost all accounts, the world is witnessing a continuous deterioration of the ecological environment due to the extensive mode of production and search for ever-faster economic growth. While everybody is in one degree or another responsible for the deterioration of the environment and should be concerned,

enterprises, it is believed should bear the main responsibility for the current environmental problems. always claim in the environmental information they disclose to their stakeholders, that they fulfill the entrusted responsibility of environmental resources and implement effective environmental management. Whether this is a valid claim or not depends in part on the efficacy of the environmental information disclosure system. According to the signal transmission theory, enterprises that actively and comprehensively disclose environmental information are transmitting a positive image of actively fulfilling social responsibilities to the society and stakeholders. In financing activities, enterprises with a positive image are more likely to obtain financing opportunities (Dong ,2018). Therefore, in order to attract more support from external funds, enterprises will transmit positive signals to the outside world through environmental information disclosure to attract the attention of external investors

Take for example China, the country considered in this study. The Chinese environmental information disclosure system is still imperfect, which means, among other consequences, that many enterprises in China continue to provide weak awareness of environmental protection. have not realized the great significance of green financing for the development of enterprises. At present, there are few studies on the correlation between the quality of environmental information disclosure and corporate debt financing ability, and scholars have not formed a systematic theoretical analysis framework or unified conclusions at home and abroad. Therefore, this paper focuses on testing the impact of the detail level of environmental information disclosed by enterprises on their debt financing. This paper seeks to explore the relationship between environmental information disclosure and debt financing.

## 2. Literature Review

Before discussing the relevant prior literature, it is necessary first to briefly consider the variables used in this paper, starting with the independent variables. The independent variable is then considered and the control variables next.

### - *Dependent, Independent, and Control Variables*

*Long-Term and Short-Term Borrowing Debt* – Bank loan financing is a common form of debt funding for all kinds of enterprises (Pang et al., 2020). Since the focus of the present study is on green credit, funding in this study mainly comes from banks. A standard measurement method for corporate debt financing capacity is the ratio of the total loan balance to the total assets at the beginning of the period (Ni, 2016). However, while this ratio reflects the financing ability of enterprises as a whole, from a debt-maturity perspective, it cannot clearly explain whether the long-term or short-term debt financing ability of a firm will be affected by the quality of its environmental information disclosure. Therefore, based on the debt maturity structure, this paper also selects the long-term loan balance to beginning total assets ratio to measure a firm's long-term loan financing ability. The ratio of the balance of short-term borrowings to the total assets at the beginning of the period ratio will be used to measure the financing ability of short-term borrowings.

*Environmental Disclosure Information Score* – At present, there is no unified index system at home and abroad to measure the level of environmental information disclosure (Gao et al.,2013). Due to the late start of environmental information disclosure in China, there is no database for listed companies to publicly disclose environmental information, so it is necessary to manually collect and sort out environmental information disclosure information. Therefore,

referring to the method used by Shu and Zhang (2014) in their study, the paper utilizes "content analysis" to analyze the reports publicly disclosed by enterprises, with the contents of the reports divided into hard disclosure items and soft disclosure items to determine the score of each item and sum them up to get the overall score. This score is used to measure the environmental information level of enterprises.

*Company Size* – Due to the support of strong capital, large-scale listed companies usually have strong debt financing ability. In addition, larger listed companies have higher popularity, they will be supervised by more government agencies and the public, and they are more inclined to disclose environmental information actively and establish a good social image. In this paper, the company size is expressed by the natural logarithm of the average total assets of the enterprise. Wu and Wang (2016).

*Profitability* – Profitability is an important indicator to measure the financial situation of a firm. It is among other consequences the guarantee that it can repay loans in full and on time. Unsurprisingly, Xiang and Chi (2020) determined that in China, banks are more inclined to provide preferential financing to enterprises with strong profitability. In this paper, profitability is expressed by the rate of return on net assets.

*Financial Leverage* – As when the debt financing ratio of an organization is too high, its solvency is weak (Wang, Wang, & Su, 2019). It is then easy for the firm to fall into financial difficulties. If the enterprise goes bankrupt, the interests of the bank will be infringed, so the bank will be more cautious in lending to enterprises with high financial leverage. At the same time, when the enterprise has too much debt, the enterprise will give more consideration to production, operation and financial performance, and pay less attention to environmental protection. Therefore, this paper uses the average asset liability ratio to represent the financial leverage (Li, 2020)

*Operational Capacity* – The operational capacity of an enterprise reflects operation risk. The higher the operation and management level of the enterprise, the smaller the operation risk it faces and the better its operation performance (Cui et al., 2014). Therefore, when assessing credit risk, banks are more willing to provide financial support to firms with strong operational ability. This paper uses the total asset turnover rate to express the operational capacity of an enterprise. .... refer to method of Sheng and Zhao (2020).

**Table 1:** Summary of Variables

	Name	Symbol	Definition
<b>Dependent Variables</b>	Total Borrowing Debt	$\Delta$ TBD	Increment of total lending debt in t+1 period divided by the total assets at the beginning of the period (Ni, 2016).
	Long-Term Borrowing Debt	$\Delta$ LBD	Increment of long-term borrowing debt in t+1 period divided by the total assets at the beginning of the period (total assets at the beginning of the period (Ni, 2016).
	Short-Term Borrowing Debt	$\Delta$ SBD	Increment of short-term borrowing debt in t+1 period divided by the total assets at the beginning of the period (Ni, 2016)
<b>Independent Variable</b>	Environmental Disclosure Information Score	EDI	The sum of the total scores of environmental disclosure information (Shu & Zhang, 2014)

<b>Control Variables</b>	Company Size	SIZE	Natural logarithm of the average total assets of the year (Ni, 2016).
	Profitability	ROE	Corporate net profit for the year divided by average owner's equity in the current year (Wu & Wang, 2016).
	Financial Leverage	LEV	The average total liabilities of an enterprise divided by the average total assets in the current year (Li, 2020).
	Operational Capacity	Turnover	Operating income divided by the average total assets in the current year (Sheng, Zhao, & Chen, 2020).
	Term Structure of Assets	AT	Non-current assets divided by average total assets in current year (Liu, 2015).
	Net Profit Cash Flow	CFPS	Cash flow per share from operating activities divided by net profit (Liu, 2013; Li, 2019).

### - *Related Literature*

Zhu and Cai (2017) comprehensively analyzed the impact of environmental information disclosure on debt financing amount, debt financing term structure and debt financing cost in the context of the Chinese green credit policy. Their findings indicate that the environmental information disclosure behavior of enterprises (i) improve the degree of information asymmetry between banks and enterprises, (ii) reduce the credit risk of banks, and (iii) therefore help enterprises obtain more debt financing and long-term financing. *The research results are similar to those of Cheng (2019) and Zhang (2021).*

Sun and Wang (2020) studied the factors influencing the debt financing of enterprises. They found that the difficulties of corporate debt financing essentially lie in the lack of financing channels, insufficient bank credit support, imperfect guarantee mechanism, high debt financing cost and unreasonable proportion of debt financing. The research finding is basically consistent with the research results of He and Hou (2010), LIGO (2010) and Li and Bin (2012).

Hu and Ma (2020) investigated the relationship between corporate social responsibility, social trust and debt financing efficiency. They concluded that when studying how to improve the efficiency of debt financing and solve the problem of corporate capital, the performance of corporate social responsibility can significantly improve the efficiency of debt financing. They also determined that, in this relationship, social trust (including reputation trust, institutional trust and relationship trust) can play a partial intermediary role, but the action period is different.

Guo (2020) selected 197 enterprises in 14 heavily-polluting industries on the Shanghai Stock Market for the period 2010-2017 as samples and computed the Enterprise Environmental Information Disclosure Index using the content analysis scoring method and investigating changes in environmental information disclosure level at key time nodes. This paper explores the influencing factors of corporate governance of enterprise environmental information disclosure by the method of multiple regression analysis, as well as explores the impact and mechanism of enterprise environmental information disclosure on financing constraints, and reveals that enterprise environmental information disclosure does have many positive effects on enterprises.

Aiming to show that corporate environmental information disclosure is an important way for enterprises to convey corporate environmental performance to stakeholders, Zhou and Liu (2021) selected listed companies in A-share heavily-polluting industries in Shenzhen as research samples and studied whether the environmental information Shanghai and disclosure carrier and environmental information disclosure level had an impact on the environmental performance in the following year. Their research shows that the carrier of environmental information disclosure will affect the environmental performance of enterprises in the next year. The more carriers selected for disclosure, the better the environmental performance of enterprises in the following years; There is a correlation between the level of enterprise environmental information disclosure and enterprise environmental performance. The improvement of enterprise environmental information disclosure can improve the environmental performance of enterprises in the next year.

Shen and Li (2010) proposed that the method for disclosing enterprise environmental information should be adapted to the scale of the enterprise. Large-scale listed companies should embrace independent reports. Medium-sized enterprises can adopt the method of adding items in the financial statements or disclosing in the notes to the statements, while small enterprises can use the method of narrative disclosure.

Zhao, Zhang, and Zheng (2015) studied a large sample data consisting of 4712 listed companies in heavy-polluting industries over the period 2006-2013 and established a performance evaluation system based on the environmental information disclosure system of these companies and statistically analyze the performance status of China's environmental information disclosure system. Through empirical tests, it was found that company size, profitability, environmental responsibility information disclosure system, marketization process, the nature of state-owned equity, the proportion of independent directors, the size of the supervisory board, the education background of senior executives and the proportion of senior executives over the average age were all significantly positively correlated with the performance of environmental information disclosure system. Based on the theory of voluntary disclosure,

Yao and Wang (2016) argues that firms with high level of environmental information disclosure should be distinguished from enterprises with poor environmental performance and finance at a lower debt cost, and the negative correlation between the two has been significantly enhanced under the influence of green credit policy.

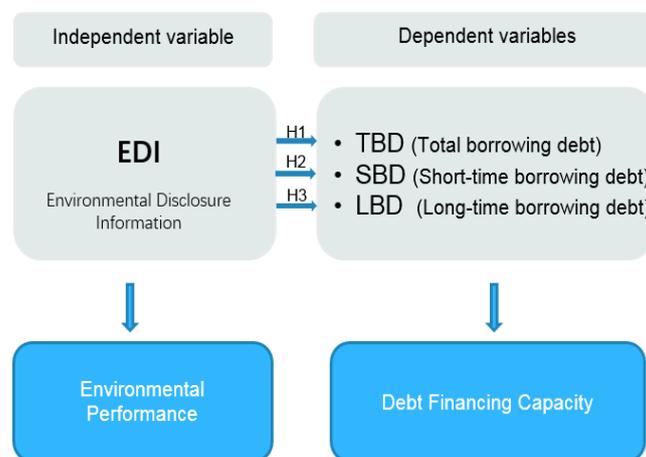
Shen and Liu (2021) studied the relationship between corporate social responsibility reporting and public debt financing in relation to the A-share listed companies in Shanghai and Shenzhen stock exchanges(except for the financial industry). They determined that the disclosure of corporate social responsibility report significantly improves the success rate and scale of public debt financing. Voluntary disclosure has a significant positive impact on public debt financing. Compared with listed companies that did not issue a social responsibility report, companies that actively disclosed their corporate social responsibility reports had a higher success rate in public debt financing and higher financing amounts. The higher the quality of corporate social responsibility reports, the greater the positive impact on the choice and scale of corporate public debt financing. This phenomenon is particularly

significant in areas with a high level of marketization. In areas with high marketization level, the disclosure of corporate social responsibility report can significantly promote public debt financing, while in areas with low marketization level, it has no significant impact.

### 3. Research Framework and Hypothesis

#### - Conceptual Framework

As discussed above and as emphasized by Zhu and Cai (2017), environmental disclosure information is a reflection of the environmental performance of enterprises, and the total borrowing debt, short time borrowing debt as well as long time borrowing debt are reflections of debt financing capacity of enterprises. Thus, the following conceptual framework can be developed



**Figure 1:** Conceptual Framework

(Source; Created by author for this study)

#### - Research Hypothesis

In China, bank loans are the most important debt financing channel for listed companies. Enterprises with a sound environmental performance and a high level of environmental disclosure will pay more attention to the scientific development of enterprises and have sufficient motivation for their own sustainable growth. Such enterprises are preferred by banks and other financial institutions, and their financing capacity will be improved accordingly. Based on the above analysis, this paper puts forward the following assumption:

**H1:** *The level of environmental information disclosure is positively correlated with an enterprise's total debt financing capacity.*

When commercial banks make loan decisions, they not only consider the debt scale, but also the length of debt maturity. If long-term borrowing debt and short-term borrowing debt are not reasonably coordinated in advance, enterprises may face excessive debt repayment pressure at some time, and even fall into financial difficulties. Therefore, it is of significant importance to plan debt maturity rationally. Hypotheses 2 and 3 can thus be proposed as follows:

**H2:** *There is a positive correlation between the level of enterprise environmental information disclosure and long-term debt financing ability*

**H3:** *There is a positive correlation between the level of enterprise environmental information disclosure and short-term debt financing ability*

#### 4. Research Methodology

The green credit policy aims to strengthen financial institutions' awareness of environmental risks. From the perspective of financing, bank lending is still the main way of enterprise financing in China, so the credit decision of commercial banks can be based on the environmental performance of enterprises. In order to explore whether the environmental information actively disclosed by enterprises affects debt financing, this paper takes the A-share listed companies in the heavy pollution industry in Shanghai stock market as the sample. Taking the level of enterprise environmental information disclosure as an independent variable and the increment of enterprise debt financing as the dependent variable. This paper conducts an empirical study through the statistical method of regression analysis.

This paper is based on the guidelines for Industry Classification of listed companies issued by the China Securities Regulatory Commission (CSRC) in 2001 and uses the practices of Shen and Li (2010) for references. As indicated by the Classified Management Directory of Environmental Protection Verification Industries of Listed Companies, published by the Ministry of Environmental Protection in 2008, highly-polluting industries have been merged into eight categories according to Liu (2013). The author selected all the companies listed on the Shanghai Stock Market under these eight categories for the period 2017-2019 as the research sample, eliminated the missing data, and finally collected 405 groups financial data of 143 listed companies in heavy pollution industries in Shanghai stock market from 2017 to 2019 in CSMAR(China Stock Market Accounting Research) solution database.

This study used the content analysis method as expounded by Shu & Zhang (2014). This method is employed to refine the content related to environmental information in GRI (Global Reporting Initiative) guidelines into 46 indicators, which are mainly about enterprise management system and environmental protection measures. Analyze the reports publicly disclosed by enterprises, find out the corresponding indicators, analyze and assign values (0 or 1), that is, digitize the nonquantitative data in the report, determine the score of each item, and synthesize the overall score, the score range of environmental information disclosure of each sample company is 0 ~ 96 points, so as to measure the level of environmental information disclosure. According to the theory of information asymmetry, the process of information transmission needs a certain time and space, and the time and space for individuals to obtain information are different.

Therefore, information is always asymmetric. The impact of environmental information disclosure of enterprises on their financial financing is the same. After the environmental information disclosure of enterprises, the process of information transmission is gradually promoted, and the financial financing result of a certain year may be the impact of early environmental information disclosure, so the author manually collected the environmental information disclosure data of the sample companies from 2016 to 2018 through the corporate social responsibility report and independent report. The content disclosed were scored according to the scoring rules of content analysis. The scores of various indicators were

summed up to obtain the score of environmental information disclosure of the enterprise. Empirically, this paper used multiple linear regressions to identify the relationship between the environmental information disclosure score and debt financing ability, and further verify the implementation effect of green credit policy.

*- Model Specification*

On the basis of the corresponding hypotheses and research variables, the regression models designed in this paper are as follows:

- (1)  $\Delta\text{TBD} = c + \beta_1 * \text{EDI} + \beta_2 * \text{SIZE} + \beta_3 * \text{ROE} + \beta_4 * \text{LEV} + \beta_5 * \text{Turnover} + \beta_6 * \text{AT} + \beta_7 * \text{CFPS} + \varepsilon$
- (2)  $\Delta\text{LBD} = c + \beta_1 * \text{EDI} + \beta_2 * \text{SIZE} + \beta_3 * \text{ROE} + \beta_4 * \text{LEV} + \beta_5 * \text{Turnover} + \beta_6 * \text{AT} + \beta_7 * \text{CFPS} + \varepsilon$
- (3)  $\Delta\text{SBD} = c + \beta_1 * \text{EDI} + \beta_2 * \text{SIZE} + \beta_3 * \text{ROE} + \beta_4 * \text{LEV} + \beta_5 * \text{Turnover} + \beta_6 * \text{AT} + \beta_7 * \text{CFPS} + \varepsilon$

Where:

$\beta$  is the regression coefficient of each variable; C the constant term;  $\varepsilon$  a random error te

**4. Data Analysis and Results**

*- Descriptive Statistics*

As Table 2 shows, according to the score of environmental disclosure of heavy pollution industry companies listed in Shanghai A-share market, the maximum value is 76, the minimum value is 2, and the standard deviation is 16.944, indicating that the level of environmental information disclosure is very different and has high volatility. From the perspective of debt maturity, in the total debt financing obtained, the proportion of long-term debt is about 60%, and the proportion of short-term debt is about 40%, which means that in the long-term and short-term debt portfolio, the sample companies prefer long-term financing and obtain more long-term loans. According to the environmental information disclosure standard in the paper, the highest score of each sample company is 96 and the lowest score is 0, while the average score of this sample is 21.467 and the median is 17, indicating that the environmental information disclosure level of Listed Companies in heavy pollution industry is generally low.

**Table 2:** Descriptive Statistical Analysis

Variable	N	Mean	Median	Std. Deviation	Variance	Minimum	Maximum
$\Delta\text{TBD}$	405	0.010	0.000	0.107	0.012	-0.514	0.742
$\Delta\text{LBD}$	405	0.006	0.000	0.075	0.006	-0.296	0.694
$\Delta\text{SBD}$	405	0.004	0.000	0.073	0.005	-0.512	0.272
EDI	405	21.467	17.000	16.944	287.116	2.000	76.000
SIZE	405	23.450	23.321	1.479	2.189	20.729	28.507
ROE	405	0.082	0.067	0.098	0.010	-1.232	0.542
LEV	405	0.495	0.492	0.184	0.034	0.100	1.324
TURNOVER	405	0.662	0.577	0.425	0.181	0.000	3.562
CFPS	405	5.700	1.988	23.469	550.792	-43.876	317.159
AT	405	0.590	0.597	0.202	0.041	0.000	0.968

*- Correlation Analysis*

The results shown in Table 3 indicate that the correlation coefficient of total borrowings, long-term borrowings and short-term borrowings with environmental information disclosure are all significant at the level of 1%. At the same time, the three coefficients are positive, which preliminarily verifies the above three hypotheses. In addition, if the correlation coefficient in

the table is lower than 0.7, it means that there is no serious multicollinearity between the explanatory variables.

**Table 3:** Coefficient Matrix of Pearson Correlation Test

Variable	$\Delta$ TBD	$\Delta$ LBD	$\Delta$ SBD
$\Delta$ TBD	1		
$\Delta$ LBD	0.734**	1	
$\Delta$ SBD	0.717**	0.053	1
SIZE	0.079	0.011	0.105
ROE	0.165**	0.047	0.194**
LEV	0.012	0.038	-0.022
TURNOVER	0.029	0.041	0.000
CFPS	-0.062	-0.026	-0.064
AT	0.004	0.035	-0.031
EDI	0.544**	0.358**	0.432**

\*\* . Correlation is significant at the level of 1% (2-tailed)

#### - Multiple Linear Regression Analysis

The regression results of the three hypotheses of all samples are shown in Table 4. In the first two models, the R-square values basically exceed 20%, indicating that the regression model has passed the goodness of fit test; the p value corresponding to the F-test statistic is approximately 0, indicating that the above regression equation has passed the significance test; the DW statistic is close to 2, which can eliminate the influence of autocorrelation between variables. Therefore, Hypothesis 1 and hypothesis 2 have been verified. In the third model, R-square shows that the goodness of fit is not particularly good. The reason may be that the scores of environmental information disclosure are collected manually, and there are some gaps between the scoring standards and the actual environmental performance of enterprises, thus affecting the data goodness of fit. At the same time, the corresponding p value is approximately 0, indicating that there is a significant positive correlation between them at the significance level of 1%, and hypothesis 3 is true.

In addition, it shows that the significance of regression coefficients in financial leverage model is not strong, with some being positively correlated and some being negatively correlated. The possible reason for the positive correlation is that companies with low financing constraints prefer debt financing. The reason for the negative correlation may be that banks will conduct risk assessment for enterprises with high asset liability ratio, which means that when the enterprise is of higher debt ratio, the bank will control the loan amount to it.

**Table 4:** Regression Analysis Results

Variable	(Model 1) TBD		(Model 2) SBD		(Model 3) LBD	
	Beta	Sig.	Beta	Sig.	Beta	Sig.
Constant	0.161	0.040	0.015	0.799	0.147	0.019
SIZE	-0.009	0.012	-0.001	0.719	-0.008	0.005
ROE	0.158	0.001	0.126	0.000	0.032	0.390
LEV	0.013	0.640	-0.001	0.959	0.014	0.526
TURNOVER	-0.010	0.384	-0.013	0.101	0.004	0.682
CFPS	0.000	0.820	0.000	0.754	0.000	0.566
AT	-0.055	0.037	-0.057	0.003	0.002	0.929
EDI	0.004	0.000	0.002	0.000	0.002	0.000
	R Square=0.344 F=29.079    P(F)=0.000 D-W=2.175		R Square=0.244 F=17.888 P(F)=0.000 D-W=1.878		R Square=0.148 F=9.630    P(F)=0.000 D-W=2.151	

## 5. Discussion, Conclusion, and Recommendations

Based on the background of "green credit" system, this paper analyzes the impact of enterprise environmental information disclosure level on enterprise debt financing ability by taking the data of listed companies in Shanghai stock market in heavy pollution industry from 2017 to 2019 as the research sample. The conclusions are as follows:

- (i)The level of environmental information disclosure of sample enterprises varies greatly.
- (ii)In the decision-making of long-term and short-term debt portfolio, the sample companies prefer long-term financing and obtain more long-term loans.
- (iii)There are large differences in the asset size, profitability and cash flow of the sample companies.
- (iv)The environmental information disclosure level of the sample companies is correlated with the total borrowing debt, long-term borrowing debt and short-term borrowing debt of the enterprises, and the higher the disclosure level is, the stronger the financing ability is.

Based on the background of "green credit" system, this paper analyzes the impact of enterprise environmental information disclosure level on enterprise debt financing ability by taking the data of listed companies in Shanghai stock market in heavy pollution industry from 2017 to 2019 as the research sample. The conclusions are as follows:

Firstly, the enterprises are not active in preparing independent reports to disclose environmental information. Only 143 of the 351 sample companies studied in this paper issued independent reports, because the government has no detailed regulations on environmental information disclosure. Although the Shanghai Stock Exchange and the Environmental Protection Administration provide the framework of the environmental disclosure guidelines, there is no compulsory disclosure requirement. Therefore, companies have great autonomy in their disclosure of environmental information and the content of information disclosure is relatively random, which brings great inconvenience to information users. Enterprises also choose their own environmental information content according to their own preferences, so they are more inclined to disclose favorable content. It leads to the content of environmental disclosure information is selective and arbitrary and there were only a few qualitative descriptions in these social responsibility reports. So the information effectiveness was poor, only a few issued environmental reports or disclosed environmental information in detail in social responsibility reports, and the level of environmental information disclosure was

seriously polarized.

Secondly, it is found that there is a positive correlation between the debt financing ability of listed companies in heavy pollution industries in Shanghai stock market and the level of environmental information disclosure. Compared with enterprises with lower environmental disclosure information score, enterprises with higher environmental disclosure information score can obtain more bank loans. That is to say, the more detailed the environmental information disclosure is, the stronger their debt financing ability is.

In summary: From the test results, it can be found that the green credit policy effectively links the corporate debt financing ability with environmental disclosure information, and encourages enterprises that intend to raise funds to disclose environmental information more actively and better improve their environmental performance. The green credit policy also has sent a positive signal to the market, causing influences on the allocation of credit resources between the environmentally polluting companies and environmentally friendly companies.

*- Recommendations for Governments:*

Environmental issues have strong externalities. It must rely on systems and regulations to link the interests of the company with environmental protection to effectively urge enterprises to fulfill their environmental responsibility. The environmental information disclosure system is an effective way. To improve the level of corporate environmental disclosure information and enhance the impact of environmental disclosure information on the capital market continuously, government departments can start from the following aspects: Firstly, establish a well-developed environmental information disclosure system, and make clear requirements for the content, form and time of disclosure. Secondly, the government should make mandatory requirements for environmental disclosure information from the perspective of laws and regulations. Finally, the government should strengthen the supervision. The government regulatory authorities should check whether the disclosure content is complete and true, at the same time, penalties should be strengthened for companies that intentionally conceal major environmental pollution accidents.

*- Recommendations for Listed Companies:*

Due to the voluntary nature of environmental information disclosure, a large number of enterprises do not have the awareness of self-disclosure of environmental information. With the increasing attention of society to environmental problems, companies must improve their awareness of environmental disclosure information. Managers should have a long-term strategic vision, and fully understand the economic benefits brought about by environmental information disclosure. To achieve a win-win situation for both environmental and economic benefits. Employees should also be strengthened in environmental education and training to enhance their awareness of environmental protection. If environmental protection performance is included in enterprise performance assessment, enterprises can also be urged to improve environmental management and improve the quality of environmental information disclosure.

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