Non-Punitive Regulation and Corporate Financial Risks——Evidence Based on Annual Report Inquiry Letters

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Abstract: This paper analyzes the impact of annual report inquiry letters on the financial risk of enterprises, using A-share listed companies from 2017-2021 as the research object. It is found that annual report inquiry letters have a significant reduction effect on the financial risk of firms. In addition, the concentration of equity has a moderating effect on the effect of annual report inquiry letters on reducing financial risk, and the lower the concentration of equity, the more significant the effect of annual report inquiry letters on reducing financial risk.
Keywords: Annual Report Inquiry Letter; Financial Risk; Equity Concentration

1. Introduction

Since the implementation of the straight-through system of stock exchange disclosure in 2013, the issuance of inquiry letters has become one of the regulatory measures in China [1]. As a new ex ante and ex post regulatory system, whether the inquiry letter system has a regulatory role has attracted the research of many scholars. Some scholars have found that the higher the degree of accrued surplus management [2], the higher the probability that the exchange will issue letters of inquiry to regulate them; other scholars have studied the positive effects of the system on improving the level of corporate disclosure [1], audit quality [3], the level of earnings forecasts [4], and curbing the risk of stock price collapse [5], starting from the economic consequences of letters of inquiry. Therefore, it is important to continue to study in depth the economic consequences of the inquiry letter system.

The pursuit of high returns by enterprises is often accompanied by high risks, which can lead to operational difficulties or even collapse, bringing losses to shareholders, investors and other stakeholders, and can undermine the healthy operation of the capital market. In order to continue to operate, enterprises must pay attention to the control of financial risks. In view of this, it is meaningful to explore the economic consequences of annual report inquiry letters from the perspective of financial risk.

2. Theoretical analysis and research hypothesis

2.1 Annual report inquiry letter and financial risk

On the one hand, information asymmetry theory suggests that management may take advantage of information asymmetry to carry out behaviors such as tax shifting, surplus manipulation, insider trading, etc. to the detriment of shareholders' interests in order to bring greater benefits to themselves, which causes principal-agent problems. Regulators issue annual report inquiry letters in response to financial statements, and in the process of asking and responding to the letters, companies disclose more information. After the company receives the annual report inquiry letter, shareholders will strengthen internal supervision, and the enhanced supervision makes management's surplus manipulation and insider trading more easily detected, reducing the insider information advantage agency problem [6], thus reducing corporate financial risk.

On the other hand, the issuance of annual report inquiry letters by the exchange and the company's response letters require announcements, which can attract extensive and continuous attention from the media, auditors, investors, etc. [3], and management's opportunistic behavior is more likely to be exposed. In the face of increased external regulatory pressure and the resulting greater shareholder oversight, management will actively avoid aggressive behavior and ensure the stable and sustainable operation of the company to the greatest extent possible.

Based on the above theoretical analysis, this paper proposes Hypothesis 1: Annual report inquiry letters will reduce the financial risk of enterprises.

2.2 Moderating effect of equity concentration

According to the theory of convergence of interests, if the equity of a company is more concentrated, the interests of major shareholders are more in line with the interests of the company, and they will actively participate in the daily management of the company and play a supervisory role over the management [7]. In the case of companies with more dispersed shareholdings, small and medium-sized shareholders are numerous and receive fewer benefits, so they are more willing to ride on the "coattails" of major shareholders than to spend time and energy to govern the company, and it is difficult for shareholders to play the role of supervising management. As an external monitoring tool, annual report inquiry letter can make up for the lack of internal monitoring, and the lower the concentration of equity, the more effective it is in reducing the financial risk of the company.

Based on the above theoretical analysis, this paper proposes hypothesis 2: the lower the concentration of equity, the more significant the effect of annual report inquiry letters in reducing financial risk.

3. Research Design

3.1 Sample and data sources

This paper takes all listed companies in the period of 2017-2021 as the sample and is screened as follows: (1) exclude the financial industry; (2) exclude missing data. Finally, 19424 observations are obtained. The data in this paper are obtained from the database of Cathay United (CSMAR).

3.2 Definition of variables

3.2.1 Explanatory variables

The explanatory variable of this paper is financial risk (z). The Z-Score model is used to measure the financial risk (z), and the smaller the z value, the higher the financial risk.

3.2.2 Explanatory variables

The explanatory variable in this paper is the annual report inquiry letter (Inquiry). If the company receives an annual report inquiry letter in year t, Inquiry is 1, otherwise it is 0.

3.3.3 Control variables (Control)

With reference to most scholars' studies, the following control variables are selected in this paper: logarithm of total assets (Size), growth, age, return on net assets (ROE), board size, loss, and dual position (Dual)

3.3.4 Moderating variables.

The moderating variable in this paper is equity concentration (TOP10), the larger this ratio is, the higher the equity concentration of the company.

3.3 Regression model

The following models are constructed in this paper:

$$z_{i,t} = \beta_0 + \beta_1 Inquiry_{i,t} + Control_{i,t} + Year + Industry + \varepsilon_{i,t} \quad (1)$$

In model (1), zi,t is the explanatory variable of this paper; Inquiryi,t is the explanatory variable, which indicates whether the company receives the annual report inquiry letter in year t; Controli,t is the control variable of the company in year t.

4. Empirical analysis

4.1 Descriptive statistics

The results of descriptive statistics show that there are some differences in the financial risk of different companies in the sample period. The mean value of annual report inquiry (Inquiry) is 0.127, which indicates that the observations of receiving annual report inquiry letters account for 12.7% of the total sample in the sample period.

4.2 Correlation analysis

The results of correlation analysis show that the Pearson and Spearman correlation coefficients of annual report inquiry and financial risk (z) are -0.08 and -0.16, respectively, which are significant at the 1% level. The preliminary judgment is that there is a significant negative correlation between the two variables of annual report inquiry letter (Inquiry) and financial risk (z).

4.3 Analysis of regression results

Table 1(1) reports the regression results of annual report inquiry letter and financial risk of enterprises. The regression coefficient between the independent variable Inquiry and the dependent variable z is -0.722 and significant at the 1% level, indicating that annual report inquiry letters can significantly reduce the financial risk of companies. After receiving the annual report inquiry letter, companies will consciously regulate their financial behavior and disclose their financial statements more strictly and accurately in order to avoid receiving it again. Hypothesis 1 is supported.

Table 1 Regression results and robustness test results

	z	PSM-DID	Alternative measure
	(1)	(2)	(3)
Inquiry	-0.722^{***}		-0.069^{***}
	(0.110)		(0.009)
Inquiry_firm×post		-0.741^{**}	
		(0.301)	
Control	YES	YES	YES
Industry	Yes	Yes	Yes
year	Yes	Yes	Yes
N	19424.000	4081.000	18245.000
r2	0.160	0.180	0.182
r2_a	0.158	0.174	0.181

5. Robustness tests

5.1 PSM-DID-based test

This paper explores the impact of whether or not to receive an annual report inquiry letter on a company's financial risk, but in turn a company's financial risk may affect whether or not a company receives an annual report inquiry letter. To mitigate this endogeneity problem, this paper constructs a double difference model (difference-in-difference, DID) based on the samples paired out by PSM to investigate the net effect of annual report inquiry letters on the financial risk of the firm, and the model is shown in equation (2):

$$\begin{aligned} z_{i,t} = \beta_0 + \beta_1 Inquiry\_firm_i + \beta_2 Inquiry\_firm_i \times Post_i + \\ \beta_3 Post_i + Control_{i,t} + Year + Industry + \varepsilon_{i,t} \end{aligned} \tag{2}$$

Table 1 (2) shows the test results of the PSM-DID model. In this paper, the coefficient of the cross product term Inquiry_firm×post is -0.741 for the year before and after the first time a firm receives an annual report inquiry letter with double difference, and it is significant at the 5% level, and the conclusion provides further support for the previous findings.

5.2 Tests based on different measures of financial risk

In order to avoid the impact on the conclusion due to the errors brought by different measures, this paper replaces the measure of the dependent variable financial risk. The annual Beta coefficient is used to measure financial risk, and Table 1(3) shows the regression results, which still support the previous conclusions.

6. Moderating Effect of Equity Concentration

In order to investigate the existence of the effect of equity concentration on the relationship between annual report inquiry letter and financial risk in the theoretical analysis, this paper constructs model (3) based on model (1):

$$\begin{aligned} z_{i,t} = \beta_0 + \beta_1 Inquiry + \beta_2 Inquiry \times Top\,10_i + \\ \beta_3 Top\,10_i + Control_{i,t} + Year + Industry + \varepsilon_{i,t} \end{aligned} \tag{3}$$

In this paper, the equity concentration (Top10) and the interaction term between annual report inquiry letter and equity concentration (Inquiry×Top10) are added to model (1), and the rest of variables are explained in the same way as model (1). The results are shown in Table 7(1)

The regression results show that the coefficient of the cross product of annual report inquiry letter and equity concentration (Inquiry×Top10) is 0.03 and is significant at the 1% level, indicating that the lower the equity concentration, the more significant the effect of annual report inquiry letter in reducing financial risk. Hypothesis 2 is verified.

Table 2 Moderating effect of equity concentration

	z
	(1)
Inquiry	-2.303***
	(0.383)
TOP10	-0.009***
	(0.003)
Inquiry×Top10	0.030***
	(0.007)
Control	YES
Industry	Yes
year	Yes
N	19424.000
r2	0.161
r2_a	0.159

7. Concluding remarks

This paper examines the impact of companies' receipt of annual report inquiry letters on their financial risk by using A-share listed companies in China from 2017 to 2021 as the research object. It is found that the financial risk of companies receiving annual report inquiry letters is significantly reduced. The results remain robust after performing robustness tests of PSM-DID and replacement financial risk measures. It is also found that the lower the concentration of equity, the more significant the effect of annual report inquiry letters in reducing financial risk.

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