

Research on the Influence of External Audit Characteristics on Selective Disclosure of Internal Control Deficiencies

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Abstract—Based on the A-share listed companies on the main board of Shanghai and Shenzhen during the 2014-2016, which have been restated in the financial reports, this paper selected the sample of listed companies with deficiencies in internal control. According to whether the listed company disclosed the internal control deficiencies in the self-evaluation report or not, this paper analyzes the influence of external audit characteristics on selective disclosure of internal control deficiencies. It is found that companies with large audit scale and longer audit tenure are less inclined to disclose internal control deficiencies selectively, and the change of audit firm and non-standard audit opinion of financial report can restrain the selective disclosure of internal control deficiencies.

Keywords—internal control deficiencies; selective disclosure; external audit characteristics

I. INTRODUCTION

Since “Enterprise Internal Control Basic Standard” and “Enterprise Internal Control Guidelines” were issued in 2008 and 2010, internal control is getting more and more attention in China. However, the performance of listed companies in internal control deficiencies disclosure is unsatisfactory, many listed companies who report no deficiencies in their self-evaluation reports was exposed violations of laws and regulations, punished by CSRC, financial restatements/fraud or other scandals. This means that listed companies disclose internal control deficiencies selectively [1-2]. As an important external supervision, can the accounting firm restrain the selective disclosure of internal control deficiencies? Which audit characteristics will affect selective disclosure of the internal control deficiencies? In order to clarify the above problems, this paper selects companies with financial restatements as the sample of internal control deficiencies, examined the impact of audit characteristics on the selective disclosure of internal control deficiencies based on the dimensions of audit scale, auditor change, audit tenure and audit opinions of financial statements.

II. REVIEW OF LITERATURE AND HYPOTHESIS DEVELOPMENT

A. Audit Scale and Selective Disclosure of Internal Control Deficiencies

Krishnan et al. (2007) believe that large and professional accounting firms are stricter in auditing internal control, so they find deficiencies in internal control easily [3]. Xiaolin Chen et al. (2013) find that large accounting firms can improve

the quality of information disclosure, small-sized accounting firms with limited professional level may not be able to identify internal control deficiencies, or even help companies to cover up internal control deficiencies for the purpose of retaining customer resources [4]. Therefore, the managers of large accounting firms are less likely to take chances and more inclined to disclose internal control deficiencies voluntarily. Based on the above analysis, this research proposes the following hypothesis:

H1: Companies that hire large accounting firms are less likely to disclose internal control deficiencies selectively.

B. Audit Change and Selective Disclosure of Internal Control Deficiencies

The accounting firm will assess the audit risk before accepting the business commission. For clients with higher audit risk, accounting firms will choose to abandon the audit business. According to Astibaugh-Skaife et al. (2007)[5] and Ettredge et al.(2011)[6], listed companies are more likely to disclose internal control deficiencies in the year of audit change. Xiaoke Cheng et al. (2016) find that there is a significant negative correlation between the disclosure of internal control deficiencies and the continued employment of accounting firms, which indicates that the change of accounting firm can improve the possibility of deficiencies disclosure [7]. An audit change is a public signal of internal control deficiencies, and selective disclosure on internal control deficiencies would be easy to arouse suspicion at this point. Therefore, it is more likely that listed companies will disclose internal control deficiencies on its own initiative. Based on the above analysis, this research proposes the following hypothesis:

H2: Companies with audit change are less likely to disclose internal control deficiencies selectively.

C. Audit Tenure and Selective Disclosure of Internal Control Deficiencies

Jenkins and Velury (2008) find that the longer the audit tenure, the deeper the auditor knows about the client, and that can effectively restrain the motivation of earnings management, increase accounting conservatism, and play a more significant role as an independent third party supervision [8]. The research of Xiaoke Cheng et al. (2016) shows that the extension of audit tenure could inhibit the motivation of managers from concealing internal control deficiencies [7]. Based on the above analysis, this research proposes the following hypothesis:

H3: Companies with longer audit tenure are less likely to disclose internal control deficiencies selectively.

D. Audit Opinions of Financial Reports and Selective Disclosure of Internal Control Deficiencies

The non-standard audit opinion on financial reports indicates that the reliability of the financial reports cannot be guaranteed, and it also indirectly indicates that there are deficiencies in the internal control. In the same financial year, it can be unreasonable if the managers disclose internal control without deficiencies in the self-evaluation report. The empirical research of Baixing Li and Ruijing Li (2016) shows that the higher the qualities of financial reports, the less internal control deficiencies the listed companies disclose [9]. Yating Lu (2016) finds that audit opinions of non-standard financial reports can significantly improve the possibility of internal control deficiencies disclosure [10].

H4: Companies with non-standard audit opinion are less likely to disclose internal control deficiencies selectively.

III. STUDY DESIGN

A. Sample selection and data sources

Existing research shows that financial restatements is an important indicator of serious deficiencies in internal control

[11]. In this paper, listed companies with restated financial statements are defined as the sample of serious internal control deficiencies. According to the type of internal control deficiencies disclosed by sample companies, this paper determines the degree of selective disclosure of internal control deficiencies. Considering that the “Enterprise Internal Control Guidelines” were fully implemented in 2014, this paper selects A-share listed companies with restated financial reports from the main boards of Shanghai and Shenzhen during 2014 to 2016, excluding financial companies and companies with incomplete data. The data are from RESSET database and DIB database.

B. Variables Definition

The explained variable in this paper is the selective disclosure of internal control deficiencies, and explanatory variables are audit characteristics such as audit scale, audit change, audit tenure and audit opinions of financial reports. When studying the relationship of explanatory variables and explained variables, some control variables should be held constant: corporate size, current ratio, growth, number of supervisors [12].The definition and description of the above variables are shown in Table 1.

TABLE I VARIABLE DEFINITION AND DESCRIPTION

Type of variable	Name of variable	Symbol of variable	Description of variable
Explained variable	Selective disclosure	SD	If the company disclose no deficiencies in self-evaluation report, the value is 3; disclose general deficiencies, the value is 2; disclose important deficiencies, the value is 1; disclose material deficiencies, the value is 0.
Explanatory variable	Audit scale	AS	If the company employs the top 10 accounting firms in China, the value is 1, otherwise 0.
	Audit change	AC	If the company changes the accounting firm in the study year, the value is 1, otherwise 0.
	Audit tenure	AT	Consecutive years of service of the accounting firm in the company.
	Audit opinion	AO	If the financial statements are issued with non-standard opinions, the value is 1, otherwise 0.
Control variable	Company size	SIZE	Ln of total asset
	Current ratio	CUR	Current assets/Current liabilities
	Growth	GRO	Revenue growth rate
	Supervisor size	SUPSIZE	Number of supervisors

C. Research Model

To verify these assumptions, the following model is established:

$$SD = \alpha + \beta_1 AS + \beta_2 AC + \beta_3 AT + \beta_4 AO + \beta_5 SIZE + \beta_6 CUR + \beta_7 GRO + \beta_8 SUPSIZE + \varepsilon$$

Where: α is a constant value, $\beta_1, \beta_2, \beta_3$ and β_4 are coefficients of each explanatory variable, $\beta_5, \beta_6, \beta_7$ and β_8 are coefficients of each control variable, and ε represent the random error term.

IV. EMPIRICAL ANALYSIS

A. Descriptive Statistics

As can be seen from the descriptive statistics of variables in Table 2, among the 398 sample data, the maximum value of

selective disclosure is 3 and the minimum value is 0, the average value is 2.73, which means that the sample companies have a high degree of selective disclosure in internal control deficiencies. The average value of accounting firms hired by sample companies is 0.46, indicating that about half of sample companies are audited by accounting firms with good qualifications. The proportion of companies with firm change is 13%, which indicates that the sample companies have stable employment in accounting firms. The audit tenure of accounting firms ranges from 1 to 30 years, with an average of 8.93 years, indicating that most accounting firms have long tenure. The average audit opinion is 0.1, which means about 10% of companies' financial reports are issued with non-standard audit opinion.

TABLE II DESCRIPTIVE STATISTICS

	N	Min	Max	Mean	Std. Deviation
SD	398	.00	3.00	2.7387	.62851
AS	398	0	1	.46	.499
AC	398	0	1	.13	.340
AT	398	1	30	8.93	6.568
AO	398	0	1	.10	.304
SIZE	398	17.39	25.68	22.2561	1.40357
CUR	398	.04	68.97	1.9529	4.05472
GRO	398	-90.76	2930.57	24.6725	176.0014
SUPSIZE	398	1	14	5.71	2.384
Valid N	398				

B. Correlation Analysis

Table 3 shows the correlation analysis of the variables. It can be seen that audit scale (AS), audit change(AC) and audit opinion(AO) are significantly negatively correlated with selective disclosure(SD) at the level of 1%, so hypothesis 1, 2, and 4 are tentatively verified. In addition, the company size (SIZE) is positively correlated with selective disclosure (SD) at the level of 5%, while supervisor size (SUPSIZE) is negatively

correlated with selective disclosure (SD) at the level of 1%. The highest correlation coefficient is between audit tenure (AT) and audit change (AC) of -0.474, where the absolute value is still below 0.65. (Generally speaking, if the absolute value of correlation coefficient between variables is less than 0.65, it can be considered that variables are independent.) Thus, it can be concluded that in this research model there is no multicollinearity problem.

TABLE III CORRELATION TEST OF VARIABLES

	SD	AS	AC	AT	AO	SIZE	CUR	GRO	SUPSIZE
SD	1	-.150**	-.155**	-.020	-.149**	.116*	.067	.053	-.134**
AS	-.150**	1	.080	.033	.016	-.074	-.069	.060	-.022
AC	-.155**	.080	1	-.474**	.208**	-.100*	.039	.088	.017
AT	-.020	.033	-.474**	1	-.131**	.062	-.070	-.022	-.024
AO	-.149**	.016	.208**	-.131**	1	-.210**	-.040	-.053	-.104*
SIZE	.116*	-.074	-.100*	.062	-.210**	1	-.073	-.065	.064
CUR	.067	-.069	.039	-.070	-.040	-.073	1	.066	-.035
GRO	.053	.060	.088	-.022	-.053	-.065	.066	1	-.056
SUPSIZE	-.134**	-.022	.017	-.024	-.104*	.064	-.035	-.056	1

Note: ** represents significance of 1 % (2-tailed), * represents significance of 5 % (2-tailed).

C. Regression Analysis

1) Simultaneous Test (F Test). The simultaneous test (F Test) is done to see how significant the influence of all

explanatory variables on the explained variable simultaneously. The results of F test are shown in Table 4 below. F statistical value is 5.540 and P value of significance test of the equation is 0.000, which means that the regression effect was good and the regression model was statistically significant.

TABLE IV SIMULTANEOUS TEST (F TEST)

ANOVA ^a						
	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	16.040	8	2.005	5.540	.000 ^b
	Residual	140.784	389	.362		
	Total	156.824	397			

a. Explained Variable: Selective disclosure

b. Predictors: (Constant), Audit scale, Audit change, Audit tenure, Audit opinion, Company size, Current ratio, Growth, Supervisor size

2) Partial Test (T test). Partial test (T test) is done to see how strong the influence of each explanatory variable on explained variable. The results of T test are shown in Table 5 below:

Audit size (AS) is negatively correlated with selective disclosure (SD) at the level of 1% ($\beta = -0.127$, $P = 0.009$), it indicates that companies with large audit scale are subject to stricter supervision and are more inclined to disclose internal

control deficiencies, so hypothesis 1 is proved.

Audit change (AC) is negatively correlated with selective disclosure (SD) at the level of 1% ($\beta = -0.172, P = 0.002$), it indicates that the change of accounting firm promotes the disclosure of internal control deficiencies, so hypothesis 2 is proved.

Audit change (AC) is negatively correlated with selective disclosure (SD) at the level of 5% ($\beta = -0.117, P = 0.033$), it indicates that the longer the tenure of accounting firms, the more understanding of the real situation of the company's internal control, so as to inhibit the selective disclosure of internal control deficiencies, so hypothesis 3 is proved.

Audit opinion (AO) is negatively correlated with

selective disclosure (SD) at the level of 5% ($\beta = -0.118, P = 0.020$), it indicates that listed companies that are issued with non-standard audit opinions are more active in disclosing internal control deficiencies, so hypothesis 4 is proved.

Company size (SIZE) is positively correlated with selective disclosure (SD) at the level of 10% ($\beta = 0.089, P = 0.075$), and Supervisor size (SUPSIZE) is negatively correlated with selective disclosure (SD) at the level of 1% ($\beta = -0.149, P = 0.002$). That means the larger the size of the enterprise, the fewer the number of the board of supervisors, the higher the possibility of selective disclosure of internal control deficiencies.

TABLE V RESULT OF T-TEST

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.302	.508		4.528	.000
SD	-.160	.061	-.127	-2.617	.009
AS	-.317	.103	-.172	-3.067	.002
AC	-.011	.005	-.117	-2.138	.033
AT	-.244	.105	-.118	-2.329	.020
AO	.040	.022	.089	1.785	.075
SIZE	.008	.008	.049	.999	.318
CUR	.000	.000	.061	1.249	.213
GRO	-.039	.013	-.149	-3.075	.002

a. Explained Variable: Selective Disclosure

Therefore, the regulator should give full play to the role of external audit supervision in improving the disclosure of internal control deficiencies, especially pay attention to the listed companies with small audit scale and short audit tenure.

V. CONCLUSIONS AND RECOMMENDATIONS

Based on the A-share listed companies during the 2014-2016 on the main board of Shanghai and Shenzhen that have been restated in the financial reports, this paper studies the relationship between external audit characteristics and selective disclosure of internal control deficiencies from the perspective of managers' opportunistic behavior. It is found that the external audit characteristics have a significant impact on the selective disclosure of internal control deficiencies. Among them, the larger the size of accounting firm, the more cautious the managers are in the selective disclosure of internal control deficiencies; the replacement of accounting firm can inhibit the selective disclosure of internal control deficiencies; the longer the audit term, the less possibility of selective disclosure. At the same time, the listed companies whose financial reports are issued with non-standard audit opinions have more comprehensive disclosure of internal control deficiencies. In addition, the study also finds that large companies have a higher probability of selective disclosure of internal control deficiencies, and the board of supervisors can effectively suppress the selective disclosure of internal control deficiencies.

The research shows that in the disclosure of internal control deficiencies, external audit can supervise the opportunistic behavior of the manager. The board of supervisors, as an internal governance institution, can suppress the selective disclosure of internal control deficiencies to a certain extent.

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