



# Study on the Repair Behavior of Internal Control Defect After Financial Report Restatement

Yifang Li<sup>(✉)</sup> and Gaoyuan Shi

College of Economics, Bohai University, Jinzhou, Liaoning, China  
407977897@qq.com

**Abstract.** As an important way of financial information disclosure, financial report restatement can help external stakeholders identify corporate risk and promote managers to improve corporate governance. This paper takes the A-share main board listed companies in Shanghai and Shenzhen from 2012 to 2020 as research samples, and uses Logit model to investigate the influence of financial report restatement on internal control defect repair behavior. The results show that the probability of internal control defect repair behavior increases significantly after financial report restatement. In addition, compared with state-owned enterprises and enterprises with low risk, non-state-owned enterprises and enterprises with high risk are more likely to repair internal control defect after financial report restatement.

**Keywords:** financial report restatement · internal control defect repair · property right · corporate risk

## 1 Introduction

The 20th National Congress of the CPC points out that we should speed up the construction of the capital market with Chinese characteristics, and the effective operation of capital market cannot do without high quality accounting information. As a “barometer” of the quality of accounting information, the occurrence of financial report restatement damages external investors’ trust in enterprise management and financial information, resulting in a series of negative market reactions [1]. Based on the reputation theory, enterprises need to take measures to recover the loss of reputation. Existing literature shows that after the financial report restatement, enterprises may restore the trust of external investors by changing the management and accounting firm and releasing good news [1, 2]. In addition, improving governance ability and environment can also enhance corporate value and investor confidence. Internal control system is an important part of corporate governance. The sound internal control system can standardize the management behavior, reasonably ensure the realization of enterprise business objectives [3], and influence the judgment of potential investors on the value of the enterprise [4]. Can enterprises recover reputational damage from financial report restatement by repairing

internal control defect? Based on the perspective of corporate governance, this paper empirically tests the characteristics of internal control defect repair behavior after financial report restatement of enterprises, enriching the relevant research on reputation repair behavior after financial report restatement.

## **2 Hypotheses**

### **2.1 Financial Report Restatement and Internal Control Defect Repair**

The financial report restatement of enterprises means that the quality of previously disclosed financial report information is poor [5]. As a negative economic event, it may lead to the decline of stock prices and the increase of debt financing cost [6]. The negative reaction in the capital market will force companies to take measures to restore trust, including apology, compensation, self-punishment and regulation. Among them, the repair of internal control defect can play a role in standardizing enterprise operation and management, convey to the outside the signal of management's efforts in operation, help to enhance the confidence of external investors, and reduce the risk of stock price collapse of enterprises [7] and debt financing cost [8]. Therefore, the internal control defect repair behavior can be regarded as a good signal to improve the level of corporate governance, recover the company's reputation, and reduce a series of negative market reactions caused by financial report restatement. Based on this, the following hypothesis is proposed:

H1: After financial report restatement, the enterprises will recover its reputation through the behavior of internal control defect repair.

### **2.2 Property Right, Financial Report Restatement and Internal Control Defect Repair**

Compared with non-state-owned enterprises, the ownership of state-owned enterprises is owned by the state, and the "natural absence" of owners will cause defects in corporate governance of state-owned enterprises and reduce the supervisory role for internal managers in the actual operation and management process [9]. In addition to profits, state-owned enterprises have multiple business objectives, and needs to undertake multiple responsibilities in the economic system of China, so the performance assessment of management is often multi-faceted [5]. Based on the above two points, compared with non-state-owned enterprises, senior managers of state-owned enterprises have less motivation to take measures to recover reputation after financial report restatement due to insufficient supervision and less influence. Based on this, the following hypothesis is proposed:

H2: Compared with state-owned enterprises, non-state-owned enterprises are more active in improving internal control deficiencies to repair reputational damage after financial report restatement.

## 2.3 Corporate Risk, Financial Report Restatement and Internal Control Defect Repair

The negative market reaction caused by the financial report restatement may vary among enterprises with different corporate risk [10]. For enterprises with low corporate risk, they have a strong ability to withstand the negative impact of the market, and such market reactions caused by the restatement of financial statements will not affect the normal operation of the enterprises. However, enterprises with higher corporate risk are more sensitive to changes in the external market, and are prone to fall into financial difficulties and even bankruptcy once events unfavorable to the enterprises' operation occur. Therefore, it is prone for enterprises with higher corporate risk to take measures to reduce the negative impact after financial report restatement. Based on this, the following hypothesis is proposed:

H3: Compared with enterprises with lower corporate risk, enterprises with higher corporate risk are more active in improving internal control deficiencies to repair reputational damage after financial report restatement.

## 3 Research Design

### 3.1 Sample Selection and Data Sources

Since 2012, China has implemented internal control audit and disclosure system for the A-share main board listed companies in Shanghai and Shenzhen. Therefore, the listed companies with internal control defect in the A-share main board of Shanghai and Shenzhen from 2012 to 2020 are selected as research samples. The data used in this paper are all from CSMAR. In the process of data collation, we exclude the financial industry, ST listed companies and main data missing samples, finally obtained 6030 observations, and the continuous variables are winsorized at the 1st and 99th percentiles.

### 3.2 Variable Definition and Model Construction

Following Gong Yifei [7] and Lin Zhonggao et al. [8], explained variable internal control defect repair (ICR) is a dummy variable. If internal control defect is disclosed in the current year and there is no internal control defect in the next year, the value is 1; otherwise, it is 0.

Financial report restatement (Restate) is a dummy variable with a lag of one year. With reference to research in related fields, this paper selected enterprise size (Size), return on total assets (ROA), capital structure (Lev), board size (Board), executive compensation (Salary), equity concentration (Z) and dummy variables of Year and Industry as control variables. All control variables are lagged one year. Primary variables definition is showed in the Table 1.

According to the research content of this paper, with reference to Zhou Fangzhao et al. [5] and other studies in related fields, the benchmark regression model is established as follows:

$$ICR_{it} = \alpha + \beta Restate_{i,t-1} + \gamma Control_{i,t-1} + \varepsilon_{i,t} \quad (1)$$

**Table 1.** Primary variables definition

Variable	Definition
ICR	If internal control defects are repaired, the value takes 1; otherwise, it takes 0
Restate	If the enterprise restates the financial report this year, the value takes 1; otherwise, it takes 0
State	The value takes 1 for state-owned enterprises and 0 for others
ZScore	Altman's Z-score (1968)
Size	The natural logarithm of the firm's total assets at the end of the year
ROA	Net profit divided by average total assets
Lev	Total liabilities divided by total assets at year-end
Board	Number of board members
Salary	The natural logarithm of the top three salaries
Z	The ratio of the largest shareholder to the second largest shareholder
Year	Annual dummy variable
Industry	Industry dummy variable

## 4 Empirical Analysis

### 4.1 Descriptive Statistics and Correlation Analysis

Table 2 reports descriptive statistics for the variables. The mean of the explained variable (ICR) is 0.122, which shows that only 12.2% of the company's internal control defect have been repaired in the sample, and the supervision over the rectification of internal control deficiencies is insufficient in China. The results of explaining variable and control variables are basically consistent with previous studies.

This paper takes both the Person correlation coefficient method and Spearman correlation coefficient method to test the correlation. Among them, the correlation coefficients

**Table 2.** Descriptive statistics for the variables

Variable	N	Mean	P50	Sd	Max	Min
ICR	6030	0.122	0	0.327	1	0
Restate	6030	0.217	0	0.412	1	0
Size	6030	22.520	22.363	1.416	26.326	19.520
Lev	6030	0.489	0.489	0.210	0.960	0.066
ROA	6030	0.031	0.030	0.064	0.224	-0.274
Board	6030	10.602	10	2.778	19	5
Salary	6030	14.497	14.475	0.685	16.595	12.790
Z	6030	10.762	4.311	16.525	102.077	1.010

**Table 3.** Analysis of regression results

	(1)	(2)	(3)	(4)	(5)
	ICR	ICR (State = 1)	ICR (State = 0)	ICR (ZScore_D = 1)	ICR (ZScore_D = 0)
Restate	0.257*** (2.650)	0.027 (0.167)	0.423*** (3.397)	0.153 (1.047)	0.346*** (2.612)
Controls	YES	YES	YES	YES	YES
Year	YES	YES	YES	YES	YES
Ind	YES	YES	YES	YES	YES
N	6030	3249.	2781	2681	3349
Pseudo R <sup>2</sup>	0.069	0.090	0.060	0.062	0.086

Note: *t* statistics in parentheses. \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . The note of Table 4 is same.

between ICR and Restate are significantly positively correlated at the 1% level, preliminarily verifying hypothesis one. In addition, the coefficients between other variables are less than 0.5, and there is no multicollinearity.

## 4.2 Regression Analysis

Table 3 reports the regression results of the financial report restatement for the repair of internal control defect. In column (1), the regression coefficient of Restate is significantly positive at the 1% level, indicating that the enterprises with financial report restatement will significantly strengthen the behavior of internal control defect repair. Subsequently, the sample is divided into the state-owned enterprise group and the non-state-owned enterprise group based on their property right for regression. The results are shown in columns (2) and (3). The regression coefficient of Restate is not significant in the state-owned enterprise group, while the regression coefficient of Restate was significantly positive at the 1% level in the non-state-owned enterprise group. H2 is validated. Finally, the sample was divided into the low corporate risk group and the high corporate risk group based on the median of corporate risk (ZScore). The results of columns (4) and (5) show that the regression coefficient of Restate in the low corporate risk group is not significant, while the regression coefficient of Restate in the high corporate risk group is significantly positive at the 1% level. Hypothesis 3 is validated.

## 4.3 Robustness Test

In order to ensure the reliability of the research results, four methods are used for robustness test. First, by replacing explanatory variables, financial report restatement is defined as the number of that occurring in the current year (Res). Second, incorporate the enterprises' age (Age) control variable that may be related to the repair of internal control deficiencies. Thirdly, PSM is used to match the financial report restatement companies with 1:1 nearest proximity. Fourth, the explanatory variable is lagged by one year. The

**Table 4.** Robustness test

	(1)	(2)	(3)	(4)
	ICR	ICR	ICR	ICR
Restate		0.285*** (2.923)	0.424*** (3.034)	
Res	0.175** (2.313)			
L. Restate				0.229** (1.993)
Age		-0.023*** (-3.893)		
Control	YES	YES	YES	YES
Year	YES	YES	YES	YES
Ind	YES	YES	YES	YES
N	6030	6030	2390	5236
Pseudo R <sup>2</sup>	0.069	0.072	0.084	0.055

results of robustness test are shown in columns (1) to (4) of Table 4, and the conclusion remains valid.

## 5 Conclusion

This paper empirically analyzes the influence of financial report restatement on internal control defect repair behavior. The results show that after financial report restatement, enterprises will repair reputation through internal control defect repair behavior. In the heterogeneity analysis of property right and corporate risk, it is found that non-state-owned enterprises and enterprises with higher corporate risk are more active in improving internal control deficiencies to repair reputational damage after financial report restatement. Based on the above empirical analysis results, this paper suggests that enterprises can recover the negative impact of the financial report restatement through active internal control defect repair behavior; State-owned enterprises can actively and normatively introduce non-state-owned components to improve the corporate governance structure and the coordination of internal and external supervision, that would standardize the behavior of the management for reputation repair after financial report restatement; Enterprises should pay more attention to the financial report restatement, and actively reduce or eliminate negative impacts caused by the financial report restatement.

## References

1. GAO Jinping. Research on Trust Repair Behavior of Firms after Financial Restatement. *J. Journal of Chongqing University (Social Science Edition)*, 2020(3): 66–75. <https://doi.org/10.11835/j.issn.1008-5831.jg.2019.06.005>
2. Desai, H., Hogan, C.E., and Wilkins, M.S., 2006. The Reputational Penalty for Aggressive Accounting: Earnings Restatements and Management Turnover. *J. Accounting Review*, 81(1): 83–112. <https://doi.org/10.2139/ssrn.471842>
3. Ye Bangyin, WANG Xuan. Board Faultlines, Internal Control and the Quality of Accounting Information. *J. Journal of Nanjing Audit University*, 2022, 19(1): 58–68. <https://doi.org/10.3969/j.issn.1672-8750.2022.01.007>
4. ZHANG Yazhou. Effectiveness of Internal Control, Financing Constraints and Corporate Value. *J. Research on Financial and Economic Issues*, 2020(11): 109–117. <https://doi.org/10.19654/j.cnki.cjwtyj.2020.11.012>
5. ZHOU Fangzhao, XIN Rongzhen, SU Yunpeng. The Impacts of Financial Restatement of Listed Companies on CEO's and CFO's Salaries. *J. Finance Forum*, 2017(10): 67–80. <https://doi.org/10.16529/j.cnki.11-4613/f.2017.10.009>
6. TIAN Fenghuan. Study on the influence of financial restatement on debt financing cost of listed companies. *J. Communication of Finance and Accounting*, 2018(14): 37–40. <https://doi.org/10.16144/j.cnki.issn1002-8072.2018.14.009>
7. GONG Yifei. Impacts of Internal Control Deficiencies and its Rectification on Stock Price Crash Risk. *J. Journal of Zhongnan University of Economics and Law*, 2020(01): 37–45. <https://doi.org/10.19639/j.cnki.issn1003-5230.2020.0002>
8. LIN Zhonggao, DING Maohuan. The Effect of Internal Control Defect and its Repair on the Debt Financing Costs -- Based on the Empirical Research on the Change of Internal Control Supervision System. *J. Accounting Research*, 2017(04): 73–96. <https://doi.org/10.3969/j.issn.1003-2886.2017.04.011>
9. LEI Xiao, TANG xuesong, Jiang Xinyi. Can Comparable Accounting Information Suppress Managerial Perk Consumption? *J. Journal of Zhongnan University of Economics and Law*, 2021(07): 71–82. <https://doi.org/10.19681/j.cnki.jcufe.2021.07.006>
10. JI Yafang, LUAN Fugui, DING Yi. Corporate Litigation and Audit Fee: Based on the Mediation Effect of Business Risk. *J. Journal of Management*, 2020, 33(03): 48–60. <https://doi.org/10.19808/j.cnki.41-1408/F.2020.03.005>

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

