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Research on the Relationship between Internal Control and Financial Performance——Social Responsibility as the Intermediary Variable

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***Abstract*—This paper chooses the related data of the listed companies from 2011 to 2015 as the research sample and social responsibility as intermediary variable, and analyzes the relationship between internal control and financial performance. The results shows: there is a significant positive correlation between internal control and financial performance; corporate social responsibility has a positive influence on its financial performance; social responsibility plays a strong intermediary role between internal control and financial performance. These conclusions provide bases for strengthening internal control management and the consciousness of social responsibility, improving the financial performance and promoting sustainable development of enterprises.**

Keywords—Internal control; Social responsibility; Financial performance; Intermediary variable

I. INTRODUCTION

In recent years, the term "social responsibility" has been rooted in the development of enterprises. From the first year of 2006 to the year of 2015, the total number of social responsibility reports increased from 32 to 1703, and the rapid increase. Under the condition of modern market economy, the influence of enterprises on social life is becoming more and more important, and plays an increasingly important role in economic and social development. We see that some enterprises because they do not fulfill their social responsibility and cause serious social consequences, and some companies because of outstanding social responsibility to obtain the recognition of the market, consumers get the favor.

In recent years, from the perspective of internal control, social responsibility to fulfill the perspective of corporate financial performance has become a hot topic of concern to the academic community, but the study did not form a conclusive conclusion. But also has little research on the relationship between internal control, social responsibility and corporate financial performance, and the study of internal control's impact on financial performance with social responsibility as a mediator variable is less. In view of this, this paper, based on the previous research results, improve the research process, social responsibility as the intermediary variable to explore the relationship between internal control and financial performance for enterprises to strengthen internal control management, enhance corporate social responsibility awareness, improve corporate finance Performance, and promote the healthy development of enterprises to provide the basis.

II. RESEARCH DESIGN

A. *Research Assumptions*

In the study of the relationship between internal control and corporate financial performance, most scholars in our country think that the two are positively correlated, that is, internal control has a positive effect on the company's financial performance For example, Zhang Shuangpeng et al (2011) empirical study of China's internal control of enterprises and their business environment adaptability and the adaptability of corporate performance impact. The results show that companies need to improve the internal control system to adapt to their environment, improve this adaptability can increase business performance. Shao Tingting and Wang Jingfang (2013) show that high efficiency internal control has a significant positive effect on financial performance and supports the strengthening and expansion of internal control. For the enterprise, its internal control is reasonable will be directly reflected in the financial performance level, good internal control will promote the business management more stable development, which will to a certain extent, enhance the financial performance of enterprises, Both are relevant. Therefore, this paper presents hypothesis 1:

H1: Internal control is positively related to financial performance.

Domestic and foreign scholars in the empirical study of the relationship between corporate social responsibility and financial performance, most scholars believe that social responsibility in most cases can promote the growth of financial performance. According to the theory of stakeholders, enterprises to fulfill the social responsibility of different stakeholders, is conducive to enhancing its cooperation effect, reduce transaction costs, to get more public trust and support. At the same time, enterprises to actively fulfill their social responsibility is also invisible for its soft advertising, play a promotional role, that is, enterprises to actively fulfill their social responsibility to enhance the soft power of enterprises, making its visibility in the community to improve, and thus promote corporate sustainability Development, improve the level of financial performance. Therefore, this paper presents hypothesis 2:

H2: Corporate social responsibility is positively related to financial performance.

The mediating effect is that the influence relationship between variables (X→Y) is not a direct causal chain relationship but is generated by the indirect effect of one or more variables (M). At this point we call M a mediator variable and X through M Indirect effects are called mediating effects. The fundamental purpose of enterprises to strengthen internal control and actively fulfill their social responsibility is to improve financial performance and maximize the value of enterprises, and the internal control of embedded social responsibility can save the transaction cost of the enterprise and help the enterprise to realize the social role, To improve corporate financial performance, to maximize the value of enterprises. Therefore, this paper presents hypothesis 3:

H3: Corporate social responsibility has some mediating effect between internal control and financial performance.

B. Research Samples and Data

This paper selects the A-share listed companies in Shanghai and Shenzhen as the research object, and uses the relevant data from 2011 to 2015 as the research sample. (1) Remove all ST samples (2) Remove the relevant data anomalies or missing samples. The financial data of this paper are derived from the WIND database, the internal control and social responsibility data are derived from the DIB internal control and risk management database, and the company's social responsibility report, and use EXCEL to complete the data collation.

C. Variable Selection

1) Argument

The independent variable is internal control. There are many ways to evaluate internal control, such as questionnaire survey, and internal control evaluation system based on internal control objectives. This paper chooses the internal control index of Chinese listed companies developed and researched by Dibo Enterprise Risk Management Technology Co., Ltd., which is an internal control index designed by referring to the research results of internal control index at home and abroad and combining with the present situation of internal control system of listed companies in China System, is the first professional, authoritative internal control index, can objectively and truly reflect the level of internal control of listed companies in China.

2) Dependent Variable

The variable for this paper is the financial performance of the firm. In the domestic and foreign related research, the scholars use the total assets return rate, the net assets return rate and the TobinQ value to measure the financial performance of the enterprise. Which is a relatively comprehensive financial index, can cover the business efficiency, profitability, financial leverage and other aspects of financial performance, therefore, this paper uses the total return on assets ROA to measure corporate financial performance.

3) Mediation Variables

The mediation variable is social responsibility. Foreign scholars have used the reputation index method, content analysis method and KLD index to measure the social responsibility. The scholars of our country mainly divide the social responsibility into multiple dimensions based on the stakeholder theory to measure the social responsibility. This paper uses the scores in the corporate social responsibility report of the listed companies to measure corporate social responsibility, and the social responsibility report of listed companies is composed of shareholders' liability, employee responsibility, supplier, customer and consumer rights, environmental responsibility and social responsibility. Study, respectively, the establishment of two and three indicators of social responsibility to conduct a comprehensive evaluation, with a certain degree of reliability.

4) Control Variables

Combined with the relevant literature research found that the scale of enterprises, business growth, asset-liability ratio and so on the financial performance of enterprises have a certain impact. Therefore, this paper chooses enterprise scale, enterprise growth and asset liability ratio as control variables.

TABLE I. VARIABLE DEFINITION

Variable type	Variable name	Variable symbol	Variable description
Dependent variable	Financial Performance	ROA	Return On Total Assets
Independent variable	Internal Control	IC	Dibao China Listed Company Internal Control Index
Mediation variable	Corporate Social Responsibility	CSR	Corporate Social Responsibility Evaluation Results of Listed Companies
Control variable	Enterprise scale	SIZE	The total assets of the logarithm
	Enterprise growth	GROWTH	Main business income growth rate
	Assets and liabilities	LEV	Asset liability ratio = total liabilities / total assets

D. Model building

According to the above assumptions, this paper establishes three regression models:

1) The relationship between internal control and corporate financial performance test model

$$ROA = \beta_0 + \beta_1 IC + \beta_2 SIZE + \beta_3 GROWTH + \beta_4 LEV + \varepsilon$$

2) Social Responsibility and Corporate Financial Performance Test Model

$$ROA = \beta_0 + \beta_1 CSR + \beta_2 SIZE + \beta_3 GROWTH + \beta_4 LEV + \varepsilon$$

3) Social responsibility to the internal control and financial performance intermediary test model

$$ROA = \beta_0 + \beta_1 IC + \beta_2 CSR + \beta_3 SIZE + \beta_4 GROWTH + \beta_5 LEV + \varepsilon$$

III. EMPIRICAL ANALYSIS

A. Descriptive statistical Analysis

In this paper, the data collected using SPSS21.0 descriptive statistics, the results shown in Table 2 below:

TABLE II. VARIABLE DESCRIPTIVE STATISTICS

	average value	Maximum value	Minimum value	Standard deviation
ROA	0.0670	1.6513	-0.7928	0.0796
IC	713.85	995.36	33.52	98.97
CSR	27.25	90.84	-15.17	18.48
SIZE	21.91	28.51	17.39	1.32
GROWTH	0.1449	7.7805	-0.9590	0.4131
LEV	0.4305	2.3940	0.0071	0.2247

The total return on assets ROA is 1.6513, the minimum is -0.7928, the mean is 0.0670, indicating that the overall level of financial performance of listed companies is low. The maximum value of the internal control IC is 995.36, the minimum is 33.52, the standard deviation is 98.97, and the mean is 713.8512. Indicating that the company's internal control level varies, the difference is very large, but its mean is 713.8512, indicating that the whole, most of the listed companies or more emphasis on internal control. Corporate social responsibility CSR is the maximum value of 90.84, the minimum is -15.17, the mean is 27.25, the standard deviation is 18.48, indicating that the listed company's overall level of corporate social responsibility is low, The gap between the level of corporate social responsibility

B. Correlation Analysis

In this paper, the use of SPSS21.0 variables related analysis, the results shown in Table 3 below:

TABLE III. PEARSON CORRELATION ANALYSIS RESULTS

	ROA	IC	CSR	SIZE	GROWTH	LEV
ROA	1					
IC	0.421***	1				
CSR	0.433***	0.232***	1			
SIZE	-0.041	0.519***	0.101***	1		
GROWTH	-0.086*	0.067**	0.058	0.241***	1	
LEV	-0.465***	0.047	-0.198***	0.397***	0.067**	1

Financial performance indicators ROA are related to most of the variables. The correlation coefficients between ROA and independent variable IC and CSR are positive, and the significance level is 0.1%. ROA has a negative correlation with the asset-liability ratio LEV, and the level of 0.1% is significant. ROA was negatively correlated with GROWTH, and the significance level was 5%, while the relationship between ROA and firm size was not significant. In the explanatory variables, we can find that the absolute values of the correlation coefficients between them are not more than 0.5, and Hossain et al. found that the correlation coefficient between the independent variables did not have a significant effect on the multiple linear regression, so we can infer that there is no multiple collinearity between the independent variables.

C. Regression Analysis

1) Internal Control and Corporate Financial Performance Regression Analysis

According to the internal control and corporate financial performance model, the sample data for multiple regression, the results shown in Table 4:

TABLE IV. INTERNAL CONTROL AND CORPORATE FINANCIAL PERFORMANCE RETURN RESULTS

variable	Nonstandard regression coefficient		Standard regression coefficient	T	Significance
	B	Standard error			
β	1.678	0.132		7.789	0.000
IC	0.332	0.042	0.298	6.874	0.000
SIZE	0.723	0.062	0.695	2.413	0.021
GROWTH	0.433	0.003	0.412	3.089	0.003
LEV	-0.457	0.006	-0.409	-1.719	0.045
$F=244.078^{***}$ Sig.=0.000 $R^2=0.734$					

According to the results of the regression analysis in Table 4, the F statistic of the model is 244.078, the significance level is Sig = 0.000, and the explanatory power of the model is better. There was a significant positive correlation between internal control and corporate financial performance at 1% level. The adjusted R2 was 0.734, indicating that internal control explained 73.4% of corporate financial performance. The correlation coefficient is 0.298, the significance level is 0.000, which shows that there is a significant positive correlation between internal control and financial performance. It can be concluded that hypothesis 1 is true. The scale and growth of the enterprises in the control variables are positively correlated with the financial performance of the enterprises, indicating that the size and growth of the listed companies are the main factors of the company's profitability. And the asset-liability ratio is negatively correlated with the financial performance of the enterprise, indicating that the financial expenses are the burden of the development of the company, which reduces the financial performance level.

2) Social Responsibility and Corporate Financial Performance Regression Analysis

According to the corporate social responsibility and corporate financial performance model, the sample data for multiple regression, the results shown in Table 5:

TABLE V. CORPORATE SOCIAL RESPONSIBILITY AND CORPORATE FINANCIAL PERFORMANCE RETURN RESULTS

variable	Nonstandard regression coefficient		Standard regression coefficient	T	Significance
	B	Standard error			
β	-3.235	0.198		-2.336	0.003
CSR	0.112	0.043	0.101	2.989	0.000
SIZE	0.423	0.053	0.341	7.923	0.000
GROWTH	0.386	0.017	0.783	2.978	0.002
LEV	-0.412	0.032	-0.192	-1.986	0.000
$F=10.783^{***}$ Sig.=0.000 $R^2=0.725$					

According to the results of the regression in Table 5, the F statistic of the model is 10.783 and the significance level Sig = 0.047. The model has some explanatory power. There was a significant positive correlation between corporate social responsibility and corporate financial performance at 0.1% level. The adjusted R2 was 0.725, indicating that corporate social responsibility explained 72.5% of corporate financial performance. The correlation coefficient is 0.101, the significance level is 0.000, which shows that social responsibility has a significant positive correlation with financial performance. It can be concluded that hypothesis 2 is established.

3) Internal Control, Social Responsibility and Financial Performance Regression Analysis

According to the social responsibility of the internal control and financial performance intermediary model, the sample data for multiple regression, the results shown in Table 6

TABLE VI. INTERNAL CONTROL, CORPORATE SOCIAL RESPONSIBILITY AND CORPORATE FINANCIAL PERFORMANCE RETURN RESULTS

variable	Nonstandard regression coefficient		Standard regression coefficient	T	Significance
	B	Standard error			
β	2.013	0.996		1.467	0.007
IC	0.287	0.783	0.026	2.891	0.042
CSR	0.017	0.049	0.014	2.851	0.046
SIZE	1.683	0.051	0.012	3.214	0.001
GROWTH	0.804	0.014	0.346	2.013	0.000
LEV	-0.019	0.033	-0.132	-2.904	0.000
$F=9.682^{***}$ Sig.=0.000 $R^2=0.698$					

According to the results of the regression in Table 5, we can see that the F statistic of the model is 9.682 and the significance level Sig = 0.048. The model has some explanatory power. The level of internal control is still significantly positively correlated with the financial performance of the firm, but by comparing Table 4 with Table 6, the regression coefficient is reduced from 0.298 to 0.026 and the significance level is reduced from below 0.1% to below 5%, combined with social responsibility In the analysis of corporate financial performance regression analysis, we can conclude that the increase in the impact of internal controls on corporate financial performance has increased as part of social variables, which suggests that social responsibility plays a part between internal control and corporate financial performance Mediation effect, which can be concluded assuming that the establishment of 3.

IV. CONCLUSION

From the regression analysis of the previous section, we can draw the following conclusions: (1) The level of internal control is positively related to the financial performance of the firm, that is, the higher the internal control level is, the higher the financial performance is. As a result, companies can strengthen their internal control to improve their financial performance. (2) Corporate social responsibility has a positive impact on its financial performance, so the positive performance of corporate social responsibility can also enhance its financial performance. (3) When the social responsibility variables enter the internal control and corporate financial performance model, the impact of internal control on corporate financial performance has declined significantly, indicating that social responsibility has played a mediating effect between internal control and corporate financial performance. Therefore, enterprises in strengthening the construction of internal control should also be actively implement the concept of social responsibility into the internal control system, will help improve the level of corporate financial performance and promote sustainable development of enterprises.

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