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Does Internal Control Promote Corporate Financial Performance?

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Abstract

Taking Chinese A-share listed companies from 2013 to 2018 as research samples, the empirical analysis of the relationship between internal control and corporate financial performance. The research results show that there is a significant positive correlation between the quality of internal control and corporate financial performance, that is, effective internal control can improve corporate performance, with a view to providing strong empirical evidence for the study of factors affecting corporate performance.

Keywords

Internal control; corporate performance; listed companies.

1. Introduction

China's internal control started relatively late compared to foreign countries. In May 2008, five ministries and commissions, including the Ministry of Finance, jointly issued the "Basic Standards for Enterprise Internal Control", requiring listed companies to take effect on July 1, 2009. Subsequently, by April 2010, 18 application guidelines, including the “Guidelines for the Application of Enterprise Internal Control No. 1-Organizational Structure”, the“Guidelines for the Evaluation of Enterprise Internal Control” and the “Guidelines for the Audit of Enterprise Internal Control” were issued. So far, it marks the formation of China's internal control norms. However, China's internal control practice is not effective. As an institutional arrangement, it affects the effectiveness of the company's operations and risk management. With the standardization of the internal control system, the focus of internal control construction has gradually shifted to the effectiveness of implementation. Therefore, it is particularly important to verify the differences in the implementation of internal control between different companies from practical operations. This means that under different levels of internal control construction, whether internal control activities promote corporate performance needs to be further empirically tested. In view of this, this article uses 2013-2018 Chinese A-share listed companies as a research sample to study the relationship between internal control and corporate financial performance, with a view to providing strong empirical evidence for the study of factors affecting corporate performance.

2. Research Hypotheses and Data Sources

2.1. Research Hypotheses

The promulgation and implementation of a series of domestic and foreign laws and regulations on internal control and the research of relevant scholars have led people to believe that, as one of the important organizational systems, its high-quality implementation will inevitably improve the internal governance of the enterprise and affect the level of corporate performance. . Scholars have conducted a lot of empirical research on this from different perspectives and got the same conclusions. Oliver (1991) pointed out that internal control as an organizational system affects the sustainable competitiveness of enterprises from multiple perspectives, and ultimately determines the performance level and value difference between

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enterprises [1]. Yang Qingxiang et al. (2012) found that internal control can effectively cause the stock price to rise, and high-quality internal control can help increase corporate value [2]. Ye Chengang et al. (2016) based on data analysis of A-share listed companies, confirmed that internal control has a significant positive impact on corporate performance [3]. Hu Zemin et al. (2019) used Shenzhen-listed small and medium-sized listed companies from 2012 to 2016 as a sample to empirically test that the higher the quality of internal control, the better the performance of the company, and further prove that manager autonomy positively affects the performance of the company by affecting the quality of internal control [4]. Based on this, this article proposes the hypothesis: effective internal control can improve corporate performance.

2.2. Data Sources

This article takes 2013-2018 A-share listed companies in Shanghai and Shenzhen as research objects, and studies the relationship between internal control and corporate performance. The internal control evaluation index is derived from the Dibo Internal Control and Risk Management Database (DIB) developed by Shenzhen Dibo Company, and other data is derived from the Wind database. This article screens the initial sample according to the following principles, excluding ST, * ST companies, and companies with missing data and outliers. After screening, 7110 sample observations were obtained. In order to eliminate the influence of extreme values on the research results, this paper performed Winsorize on all continuous variables at the levels of 1% and 99%.

3. Research Design

3.1. Variable Definition

3.1.1 Explained Variable—Corporate Performance

In this paper, we chose the method of Wei Wenjun [5] when selecting enterprise performance measurement indicators, that is, to reflect the enterprise performance comprehensively through the selection of multiple indicators to avoid the problem of insufficient representativeness of a single indicator. Therefore, this article uses the principal component analysis method to construct the company's comprehensive performance indicator (CP) for the three indicators of earnings per share (EPS), total return on assets (ROA) and return on equity (ROE) in the sample data. The analysis results in a specific calculation formula: CP = 0.611EPS + 0.645ROA + 0.458ROE, where the larger the CP value, the better the corporate performance.

3.1.2 Explanatory variables—internal control

From the current measurement methods of internal control, domestic and foreign research mainly proposes two methods: one is to comprehensively measure the internal control quality indicators through the internal control defect information disclosed by the enterprise; the other is to comprehensively evaluate the internal control index. Methods. Dibo's internal control index is released by domestic risk management authoritative companies and has a large influence in China to measure the quality of internal control of enterprises. The index can systematically comprehensively score the five major elements of internal control of the enterprise, with a value ranging from 0 to 1000. In order to facilitate the research in this paper, the natural logarithm of the index is selected as an index to measure the quality of the internal control of the enterprise. Large means that the internal control quality of the enterprise is higher.

3.1.3 Control variable

This article selects the enterprise size, asset-liability ratio, operating income, shareholding structure, and corporate nature as the control variables. In addition, in order to eliminate the influence of time, the year is also selected as the control variable. The specific definitions of all variables in this article are shown in Table 1.

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Table 1. Variable definition

Variable type	Variable name	Variable Symbol	Variable Definition
Explained Variable	Comprehensive corporate performance	CP	CP=0.611EPS+0.645ROA+0.458ROE
Explanatory variables	Internal control	IC	Natural logarithm of Dibo database internal control index
Control variable	Enterprise size	SIZE	Natural logarithm of total assets at the end of the period
	Assets and liabilities	LEV	Total liabilities at the end of the period / Total assets at the end of the period
	Operating income	ROI	Logarithm of operating income at the end of the period
	Shareholding structure	TOP1	Shareholding of the largest shareholder
	Business nature	STATE	1 for state-owned enterprises, 0 otherwise
	Year	YEAR	Take 1 for the current year and 0 for other years

3.2. Model Design

In order to verify the rationality of the hypothesis, this paper builds Model 1 to verify the relationship between internal control and the overall performance of the enterprise:

$$CP = \beta_0 + \beta_1 IC + \beta_2 SIZE + \beta_3 LEV + \beta_4 ROI + \beta_5 TOP1 + \beta_6 STATE + \sum YEAR + \varepsilon \quad (1)$$

4. Empirical Analysis

4.1. Descriptive Statistics

Table 2 is descriptive statistics for all variables. It can be seen from Table 2 that the average value of the comprehensive performance CP of the enterprise is 6.793, and the maximum and minimum values are 31.017 and -29.870, respectively, which indicates that there is a large difference in performance among enterprises. The average level of effectiveness of internal control is 6.475, the maximum and minimum are 5.828 and 6.697, respectively, indicating that there is also a difference in the quality of internal control, and the quality of internal control of enterprises needs to be improved. Data support. On the whole, the average size of the company is 22.267, and the average value of the nature of the company is 0.337, indicating that most of the listed companies are private companies in the sample data. The descriptive status of other control variables is shown in Table 2.

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Table 2. Descriptive statistics of variables

Variable	N	Mean	Min	Max	SD
CP	7110	6.793	-29.870	31.017	8.372
IC	7110	6.475	5.828	6.697	0.123
SIZE	7110	22.267	20.090	26.171	1.252
LEV	7110	40.406	5.207	85.854	19.411
ROI	7110	21.582	18.834	25.750	1.430
TOP1	7110	34.420	9.560	72.110	14.231
STATE	7110	0.337	0	1	0.473

4.2. Correlation Analysis and Collinearity Test

Table 3 is the correlation between the main variables using Pearson test. As shown in the table, the correlation coefficient between the comprehensive performance of the enterprise and the internal control index is 0.399, and both of them are significant at the 1% level, which indicates that there is a positive correlation between the performance of the enterprise and the quality of internal control, that is, a higher level Companies with internal quality control have better financial performance. In order to further verify the hypothesis, this article will perform multiple regression analysis. The other variables were significantly significant at the 10% level. See Table 3 for specific coefficients and significance levels. In addition, the VIF value of the variance expansion factor between variables is calculated in this paper. The results show that the VIF values are between 1-2, indicating that there is no serious multicollinearity problem between the variables.

Table 3. Pearson correlation analysis of variables

Variable	CP	IC	SIZE	LEV	ROI	TOP1	STATE
CP	1.000						
IC	0.399***	1.000					
SIZE	0.152**	0.140*	1.000				
LEV	-0.114**	0.018	0.561*	1.000			
ROI	0.229***	0.199**	0.900*	0.573*	1.000		
TOP1	0.076*	0.093*	0.176*	0.102*	0.198*	1.000	
STATE	-0.111*	0.038*	0.368*	0.321*	0.383*	0.284*	1.000

Note: ***, ** and * indicate significant at the 1%, 5% and 10% levels, respectively. The data in parentheses are t values. Same below.

4.3. Multiple Regression Analysis

This paper uses Stata 15.0 to perform multiple regression analysis on the sample data. The regression results are shown in Table 4. Table 4 shows the results of regression tests on the explanatory variables as the comprehensive performance of the enterprise and the explanatory variables as the quality of internal control. The regression coefficient of internal control quality and corporate comprehensive performance is 16.914, which is significant at the level of 1%, indicating that there is a positive correlation between the two, that is, a high level of internal control can improve the financial performance of the enterprise, and the hypothesis is verified.

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Table 4. Multiple regression results of the model

Variable	Explained Variable CP
IC	16.914*** (14.75)
RDS*IC	
SIZE	-0.972*** (-3.04)
LEV	-0.140*** (-13.96)
ROI	3.048*** (10.685)
TOP1	0.033*** (3.11)
STATE	-2.71*** (-8.27)
YEAR	control
_cons	-140.878*** (-18.01)
N	6902
Adj.R2	0.342
F	67.84***

4.4. Robustness Test

In order to further enhance the reliability of the conclusion, this article refers to the existing literature to replace the comprehensive performance of the explained variable, and selects the ROA as the explained variable for robustness test. The results show that with the total return on assets (ROA) as the explanatory variable, the quality of internal control is significantly positively correlated with corporate performance at the 1% level. Therefore, it is concluded that the robustness test results are basically consistent with the previous multiple regression conclusions.

5. Research Conclusions and Recommendations

This article uses 2013-2018 Chinese A-share listed companies as research samples to study the relationship between internal control and corporate financial performance. The results show that the quality of internal control is significantly positively related to corporate financial performance, that is, effective internal control can improve corporate performance Level. As a system arrangement, internal control plays an important role in corporate governance. While effectively alleviating information asymmetry, it also influences stakeholders' evaluation of business decisions. And from the perspective of risk management, internal control can strengthen corporate risk management and accounting information disclosure, and help further promote the improvement of corporate financial performance.

Based on the above conclusions, this article puts forward the following suggestions: A-share listed companies must first strengthen their awareness of internal control construction, improve their internal control mechanisms, effectively reduce information asymmetry problems and risk levels, and then improve their financial performance.

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