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Procedia Engineering 174 (2017) 449 - 455

Procedia Engineering

www.elsevier.com/locate/procedia

13th Global Congress on Manufacturing and Management, GCMM 2016

The impact of coupling interaction of internal control and CSR on corporate performance—Based on the perspective of stakeholder

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Abstract

This paper based on the perspective of stakeholder and makes empirical research on the impact of coupling interaction of internal control and CSR on corporate performance by using the data of Shenzhen's A-share market listed manufacturing companies from 2010 to 2014. The results of the research show that internal control contributes to corporate performance improvement but inclines to be swayed by CSR. Corporate to shareholders, the government's responsibility significantly play a positive role in internal control, and have a positive impact on corporate performance. Corporate to creditors' responsibility has a negative effect on the internal control. Corporate to suppliers, employees, customers' responsibility and internal control is not noticeable. © 2017 Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license

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Peer-review under responsibility of the organizing committee of the 13th Global Congress on Manufacturing and Management

Keywords: internal control; CSR; corporate performance; coupling interaction; stakeholder;

Introduction

China Securities Regulatory Commission and the Ministry of Finance jointly issued the "the general provisions of annual internal control evaluation report" in January 2014 marks the capital market to fully implement the corporate internal control system has a step forward. However, there are many shortcomings in the construction of internal control system currently, such as: imperfect internal control environmental management, internal audit function is difficult to play, the corporate staff capacity is low and so on. Studies have shown that the introduction of social responsibility in the internal control system will reduce the corporate "insider control" situation, the enterprise's internal control system can become more complete and effective^[11]. The concept of internal control has gradually penetrated into the "social person" from the perspective of "economic man"^[21]. Some scholars think there is a zero-sum game between CSR and firm performance, CSR has a strong intermediary effect in the process of internal control acting on financial performance^[##! *#2,###.]. So how does CSR affect internal control, and how does

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it affect performance? At present, the path of the two concrete effects on corporate performance is still fuzzy. Therefore, based on the stakeholder theory, this paper attempts to discuss the impact of the interaction between internal control and corporate social responsibility on corporate performance from six aspects: shareholders, government, creditors, suppliers, employees and customers, thus opening the internal control and CSR The "Black Box" of Corporate Performance.

1. Theoretical Analysis and Research Hypothesis

1.1. The impact of internal control on corporate performance

For the relationship between internal control and performance, there are many researches abroad, but there are few studies on the direct relationship between internal control and performance. The main research is the deficiency of enterprise management caused by low level internal control. Ge Weili. And Sarah Mcvay. (2005) conducted an empirical study of 261 firms with deficiencies in internal control submitted by the Securities and Exchange Commission and found that control points that were prone to major problems often had more complex business processes and profitability also will be reduced^[3]. Yongtae Kim (2009) and other scholars also confirmed the results^[4]. Recently, more and more studies have been conducted on the positive effects of internal control on enterprises. Brown (2014) argues that good internal controls can improve the accuracy of internal management reporting or internal data information by reducing unintentional accounting errors or deliberate accounting manipulation^[5]. In addition, there are some empirical analysis of the results show that internal control and business performance are not related^[6].

1.2. The impact of corporate social responsibility on corporate performance

This paper mainly analyzes the impact of CSR on business performance from the perspective of stakeholders. According to the stakeholder theory, this paper defines CSR as the responsibility of the corporate to the shareholders, the government, the creditor, the supplier, the employee and the customers.

Frederick (1983) argues that managers should follow the basic tenets of maximizing shareholder value and continue to promote socially responsible activities that enhance business performance^[7]. However, because the different objectives of managers and owners, managers often pursue their own interests and ignore the owner^[8].

In the contemporary market economy, the relationship between government and enterprise is gradually changed from management control to mutual coordination. Enterprises through the law to pay taxes, comply with laws and regulations and other acts to fulfill the responsibility of the Government, establish a good relationship with the Government, and will receive government support.

Enterprises timely repayment and safeguard the interests of creditors will enable enterprises to a higher level of credit. The responsibilities to the creditors can reduce the shortage of funds, turnover and other risks^[12]. However, some scholars have pointed out that corporate social responsibility of creditors will have a negative impact on financial performance.

Enterprises and suppliers should on an equal and mutually beneficial attitude, take the initiative to bear the responsibility of suppliers, which can reduce the cost of inventory^[9]. Building good relationships with suppliers can not only shortens the time to market for new products to gain competitive advantage, but also allows them to obtain higher quality products at lower prices.

Bowen (1953) argues that the strategic objectives closely related to corporate team. Those who are actively concerned about social responsibility will establish a better relationship between enterprises and employees^[10]. Responsibility for employees not only enables employees to perform their tasks better, but also incentive them complete their own work outside of the enterprise effectively^[3].

At present, consumers not only pay attention to the quality of products, but also concerned about its after-sales services. Enterprises should actively safeguard the interests of consumers, providing consumers with quality products and services, which can increase consumer satisfaction and loyalty, thereby enhancing the economic efficiency of enterprises.

1.3. From the perspective of the interaction between internal control and corporate social responsibility

(1) Responsibility to Shareholders, Internal Control and Corporate Performance. The most fundamental goal of enterprises is to create value for shareholders, people who holding more shares in the company play an important role in establishing internal management mechanism. The main way to influence performance is to establish a fair competition mechanism, supervisory mechanism, risk management mechanism and so on^[2]. When companies create more values for shareholders, the shareholders will make a return on the enterprise. It follows that:

H1: The more responsible for the shareholders, the higher the quality of internal control, the more can promote corporate performance.

(2) Responsibility to Government, Internal Control and Corporate Performance.Enterprises should pay attention to the implementation of responsibility to the government, which to a certain extent, to prevent political risks. Identify and analyze the advantages and disadvantages of the law on the enterprise, can play the role of risk prevention, so the internal control construction can be more perfect. Enterprises take the responsibility to the Government can provide policy support for sustained and stable development. It follows that:

H2: The more responsible for government, the higher the quality of internal control, the more can promote corporate performance.

(3) Responsibility to Creditors, Internal Control and Corporate Performance. When the enterprise's internal control level is high, the creditors will perceive more protection signal, then relax the debt contract condition to the enterprise feedback^[11]. When the enterprise's credit rating is high, it is relatively easy to borrow from the creditor. It follows that:

H3: The more responsible for creditors, the higher the quality of internal control, the more can promote corporate performance.

(4) Responsibility to Suppliers, Internal Control and Corporate Performance.Generally believed that through internal control activities, using corporate assets rationally, suppliers can be timely repayment. The faster the repayment of the enterprise, the more favorable the interests of the supplier. Often, the information between enterprises and suppliers is often asymmetric, it is easy to lead to unreasonable allocation of market resources, good internal control can play a role in signal transmission ^[18]. It follows that:

H4: The more responsible for suppliers, the higher the quality of internal control, the more can promote corporate performance.

(5) Responsibility to Employees, Internal Control and Corporate Performance. Internal control affects decision-making, at the same time, will also affect the implementation of decision-making^[12]. Good internal control not only enables enterprises to rationally allocate resources, but also makes the staff perform their duties better. It follows that:

H5: The more responsible for employees, the higher the quality of internal control, the more can promote corporate performance.

(6) Responsibility to Customers, Internal Control and Corporate Performance.One of the functions of Internal control is to supervise and feedback of organization activities^[2]. The level of internal control of enterprises can be reflected from the products or services of enterprises, the more effective implementation of enterprise internal control, the more satisfied customers will be.It follows that:

H6: The more responsible for customers, the higher the quality of internal control, the more can promote corporate performance.

2. Research Design

2.1 .Sample selection and data sources

Samples of A-share manufacturing companies listed in Shenzhen Stock Exchange from 2010 to 2014 were selected as the research objects, and the data were screened according to the following principles: (1) All ST companies were excluded. (2) Excluding financial and insurance companies sample. (3) Remove the data anomalies and missing indicator values observed samples.

2.2. Index system and variable definition

(1) Corporate Performance. Indicators to measure corporate performance typically include ROA, ROE, Tobin Q and so on. In the measurement of enterprise performance, different scholars will choose different indicators, this article chooses ROA that can reflect the overall profitability of the company as a substitute for corporate performance variables.

(2) Internal Control. In this paper, "Dibo Chinese listed companies internal control index" to measure the level of internal control. Based on the combination of the internal control with the domestic listed companies, the index of internal control is used as a modified variable to design and modify the basic index of internal control, which can reflect the internal control level and risk of listed companies.

(3) Corporate Social Responsibility. KLD index, reputation index, pollution control and environmental protection related indicators are the main methods to measure CSR abroad. This paper is based on the stakeholder theory to measure CSR. This article mainly from the shareholder, the government, the creditor, the supplier, the staff, the customer 6 aspects to measure CSR of manufacturing companies.

(4) Control variables. The results show that the debt-to-asset ratio, the firm size and the nature of the ownership of the firm affect the profitability of the firm. Larger enterprises to fulfill more social responsibility, the profits will be more. Compared with non-state-owned enterprises, state-owned enterprises have more social resources and are more likely to obtain excess profits, but the internal control and social responsibility of state-owned enterprises are also subject to more stringent requirements. A reasonable ratio of assets and liabilities will be a positive effect on corporate performance, but if debt is higher, it will have an adverse effect on enterprise development. The expression of each study variable is shown in Table 1.

Table 1.List of variable definitions

The type of the variable	Variable name	Variable code	Variable definition		
Explained variable	Corporate Performance	ROA	Net Profit / Average Total Assets		
	Internal Control	DIB	DIB		
	Shareholder	\mathbf{X}_1	Net profit / total number of shares		
	Government	X ₂	Main business tax and surcharges / operating income		
	Indicator	X ₃	(Current assets - inventories) / current liabilities		
Explanatory variables	Supplier	X ₄	(Cost of principal operations ending inventory cost - open inventory cost) / average accou payable		
	Employee	X5	Cash paid to employees and employees for cash / business income		
	Customer	X ₆	(Revenue for the current year Amount for the current period - Revenue for the same period of the previous year) / (Revenue for the same period of last year)		
	Asset-liability ratio	LEV	Total liabilities at the end of the period / total assets at the end of the period		
Control variables	Corporate Size	SIZE	The natural logarithm of total assets at the end of the period		
	Nature of enterprise	OWNER	Dummy variables, state-owned enterprises take 1, or take 0		

3 .Model setting and result analysis

3.1 .Model setting

Based on the above assumptions, this paper constructs the following multiple linear regression model to study the impact of internal control quality on performance.

$$ROA = \beta_{0} + \beta_{1}DIB + \beta_{2}X_{1} + \beta_{3}X_{2} + \beta_{4}X_{3} + \beta_{5}X_{4} + \beta_{6}X_{5} + \beta_{7}X_{6} + \beta_{8}LEV + \beta_{9}SIZE + \beta_{10}OWNER + \varepsilon$$
(1)

In order to further study the impact of coupling interaction of internal control and CSR on corporate performance, this paper adds the interaction of internal control and CSR.

$$ROA = \beta_0 + \beta_1 DIB + \beta_2 X_1 + \beta_3 X_2 + \beta_4 X_3 + \beta_5 X_4 + \beta_6 X_5 + \beta_7 X_6 + \gamma DIB * X + \varepsilon$$
(2)

Among them, X = (X1, X2, X3, X4, X5, X6) to reflect the corporate social responsibility vector.

3.2. Result analysis

Table 2 shows the results of regression. Model I examines the effects of internal control and CSR on performance when the interaction items are not added to. Models II-VII examine the interaction of CSR's variables and internal control on the performance. In order to avoid the multicollinearity of the interaction items, we first centralize the internal control and CSR variables, and then calculate the interaction terms and substitute them into the model.

Table 2.Impact of Internal control and CSR on performance

Variables	Model I	Mode II	Mode III	Mode IV	Mode V	Mode VI	Mode VII
LEV	-0.037*** (-14.137)	-0.039*** (-14.59)	-0.038 ^{****} (-14.18)	-0.04*** (-14.13)	-0.038 ^{****} (-14.18)	-0.038 ^{****} (-14.10)	-0.38 ^{***} (-14.15)
SIZE	-0.005 ^{***} (-9.423)	-0.005*** (-9.40)	-0.005**** (-9.40)	-0.005**** (-9.44)	-0.005**** (-9.42)	-0.005**** (-9.33)	-0.005 ^{***} (-9.46)
OWNER	0.001 (0.785)	0.0005 (0.50)	0.0008 (0.80)	0.0008 (0.78)	0.0008 (0.79)	0.0007 (0.70)	0.0007 (0.77)
DIB	0.000042 ^{***} (7.248)	0.000009 (1.45)	0.00004 ^{***} (7.04)	0.00004^{***} (7.40)	0.00004 ^{***} (7.11)	0.00004 ^{***} (7.37)	0.00004 ^{***} (7.16)
X_1	0.108 ^{***} (66.546)		0.108 ^{***} (66.53)	0.108 ^{***} (66.54)	0.108 ^{***} (66.54)	0.108 ^{***} (66.61)	0.108 ^{***} (66.58)
X_2	0.1 ^{***} (4.049)	0.103 ^{***} (4.07)		0.1 ^{***} (4.05)	0.1^{***} (4.04)	0.098^{***} (4.00)	0.102 ^{***} (4.18)
X ₃	0.00026 ^{***} (-2.806)	-0.0002** (-2.52)	-0.0003*** (-2.8)		-0.0003*** (-2.79)	-0.0003*** (-2.83)	-0.0003**** (-2.8)
X_4	0.000043 (0.638)	0.00004 (0.60)	0.00004 (0.61)	0.00004 (0.63)		0.00005 (0.75)	0.00004 (0.65)
X5	-0.008 (-1.035)	-0.012 (-1.54)	-0.007 (-0.98)	-0.008 (-1.04)	-0.008 (-1.08)		-0.008 (-1.05)
X_6	0.001 [*] (1.822)	0.0006^{*} (1.72)	0.0007 ^{**} (2.1)	0.0006^{*} (1.83)	0.0006^{*} (1.82)	0.0006^{*} (1.84)	
DIB*X1		0.0002 ^{***} (63.74)					

DIB*X ₂			0.0001 ^{***} (3.59)				
DIB*X ₃				-0.0000004*** (-2.74)			
DIB*X4					0.00000005 (0.49)		
DIB*X5						-0.000007 (-0.63)	
DIB*X ₆							0.0000008 (1.59)
Ν	2899	2899	2899	2899	2899	2899	2899
Constant	0.096 ^{***} (9.207)	0.123 ^{***} (11.30)	0.097 ^{***} (9.26)	0.096 ^{***} (9.17)	0.097 ^{***} (9.25)	0.095 ^{***} (9.19)	0.097 ^{***} (9.27)
R^2	0.704	0.688	0.703	0.704	0.704	0.704	0.704
Adj R ²	0.703	0.687	0.702	0.703	0.703	0.703	0.703
F Value	685.374	636.77	684.19	685.25	685.32	685.15	685.11
Sig	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Note:(1)***, **, * respectively indicate that the respective coefficients are significant at the levels of 1%, 5%, and 10%.(2) In parentheses is t

value .

From the regression results in Model I, it's found that internal control (DIB) is positively correlated with performance and passed the significance test. From the perspective of CSR, the effect of corporate on shareholders (X1), government (X2), creditors (X3) and customers (X6)'responsibilities is significantly positive; firm-to-supplier (X4) 'responsibility on performance did not pass the significance test. In the control variables, the debt-to-asset ratio (LEV) and the firm size (SIZE) all adversely affect the firm's performance, which seems to be inconsistent with the usual perception. And the negative correlation happens among model II-VII which shows that under the relative level, the large-scale manufacturing enterprises may suffer from the performance degradation due to the lack of internal management.

Model II takes into account the interaction of corporate responsibility to shareholders and internal control. The correlation between earnings per share and internal control is positive, and pass the significance test which shows that corporate responsibility to shareholders is conducive to the improvement of internal control quality which is consistent with the hypothesis 1.

Model III is the result of the interaction between corporate responsibility to government and internal control. The interaction between business tax and surcharges and internal control is positive, and the significance test is adopted, which indicates that the enterprises' positive performance to the government can have a positive effect on the internal control. Hypothesis 2 is consistent.

Model IV is the result of the interaction between the responsibility to the creditor and internal control. There is a negative correlation between the quick ratio and internal control, which indicates that the responsibility of the enterprise to the creditor has an adverse effect on the internal control. When the enterprise repays the creditor's interest in time, the liquidity of the creditor will decrease accordingly. The speed of capital turnover will be slowed down, which will adversely affect the enterprise in the short term. However, from a long-term perspective, enterprises actively for the interests of creditors, creditors will give enterprises more conveniences, and will have a positive impact on corporate performance.

Model V is the result of the interaction between supplier's responsibility and internal control. The interaction between payables turnover and internal control did not pass the significant test, which indicates that the influence of the responsibility to suppliers to the internal control is not clear. The manufacturing industry as a whole for the

technical and quality requirements is higher, requiring lean business, the general manufacturing enterprises are usually not up to this level, thereby weakening the impact of responsibility to suppliers on the internal control.

Model VI is the regression result of the interaction between internal control and employee profit level. The interaction between the responsibility to employees and the internal control did not pass the significant test, indicating that the responsibility of the enterprise to the internal control is not clear. Due to the growth of labor cost in China, China's manufacturing industry is becoming intelligent. The traditional manufacturing industry, which is dominated by labor, is shifting to emerging manufacturing industries represented by industrial robots, artificial reduction, weakening the contribution of enterprises to employees to internal control quality.

Model VII is the regression result of enterprise's responsibility to customer and internal control. The interaction between the growth rate of operating income and internal control did not pass the significant test, indicating that the responsibility of the enterprise to the customer is not clear to the internal control. In general, consumers and internal management of enterprises are not directly related, and most of the manufacturing enterprises operating mode is more rigid, management model is single, and less affected by the outside world, to a certain extent, weakened the positive impact of enterprise's responsibility on customers to the quality of Internal control.

4. Conclusions

This paper use the stakeholder theory to discuss the impact of coupling interaction of internal control and CSR on corporate performance. The results of this study show that the interaction between shareholders, government and internal control is positive respectively, and it has positive effect on corporate performance. The coefficient of interaction between creditor's responsibility and internal control is negative, which has negative effect on the performance. The interaction between the responsibility to the supplier, the employees, the customers and the internal control is not obvious, and the effect on the performance is not clear.

At present, China's economy is in a critical period of transition, the future listed companies will rely more on high-quality management level to obtain competitive advantage, and corporate internal control and CSR are closely related ,and is significant to improve corporate performance. The results of this study indicate that manufacturing listed companies should pay more attention to the social responsibility of their stakeholders, especially shareholders, governments and creditors, and change the tendency of pursuing their own interests on the basis of improving the quality of internal control. While strengthening the construction of internal control, people should pay more attention to the efficiency of internal control shift to enterprise performance, and integrate CSR into the construction of internal control, so as to avoid the phenomenon of "insider control".

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