



董事会成员特征与 内部控制缺陷研究

THE INDIVIDUAL CHARACTERISTICS OF BOARD MEMBERS AND INTERNAL CONTROL
WEAKNESSES: EVIDENCE FROM CHINA

鲁 昱◎著



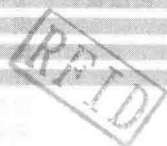
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内 容 简 介

本书以2007年至2013年中国上市公司的数据为研究对象,分析了董事会成员的个人特征与内部控制缺陷之间的关系。本书检验董事会成员的个人特征是否与内部控制缺陷有关。通过研究董事会成员的教育背景、培训、经验、经历和诚信与具体内部控制缺陷和缺陷修正的关系来解决这一问题。结论表明,内部控制质量较好,内部控制薄弱环节减少,而在董事会成员和董事会主席具有较强素质的公司中,内部控制更有可能被应用。然而,董事会的行为和所有权性质不会影响董事会成员与内部控制之间的关系。因此,董事会成员特性和内部控制是有直接联系的。

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A b s t r a c t

This study examines the relationship between individual characteristics of board members and internal control weaknesses using data from Chinese listed firms from 2007 to 2013. China's first internal control regulation (2008) ("China SOX") stipulates that the boards of directors take the primary responsibility for the establishment and implementation of internal control, an approach which is different from US SOX. I examine whether or not individual characteristics of board members are related to internal control weaknesses and, if so, how this happens. I address this issue by examining the influences of education, training, experience, certification, and integrity of board members on specific internal control weaknesses and weakness remediation. In particular, given the vital role of the board chairman in Chinese internal control, I also study the association between individual characteristics of board chairmen and internal control weaknesses. In addition, I expect that the nature of dominant shareholders (state-owned or non-state owned) and the board behavior (independence and diligence) influence the correlation between the board and internal control. I use a sample of firms with internal control problems and, based on size, industry, and ownership, match these firms to a sample of control firms without internal control problems. I also conduct a series of additional tests.

Results indicate that individual characteristics of board members including education, experience, certification, and integrity, are related to internal control deficiencies. However, relevant training has no relationship with internal control. Re-



sults also show that individual characteristics of board chairmen are related to internal control problems. The overall results demonstrate that in firms whose board members and board chairpersons have stronger qualifications, internal control quality is better, internal control weaknesses are reduced more, and weakness remediation is more likely to be applied. However, board behavior and ownership nature do not influence the relationship between board members and internal control. Thus, it is suggested, board characteristics and internal control are directly linked. My findings prove reliable throughout several sensitivity examinations. It is useful for directors to know that some characteristics (education, experience, certification, and integrity) of board members do make a difference.

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CHAPTER ONE

Introduction

1.1 Motivation

This research investigates whether the characteristics of individual board members are associated with internal control problems. The first internal control regulation in China, sometimes called a Chinese version of the Sarbanes – Oxley Act of 2002 (henceforth, “China SOX”), was released in July, 2008. China SOX, a regulation adopted to enhance risk management and to prevent business disasters, became effective on January 1, 2012. This regulation requires Chinese listed firms and their auditors to evaluate the effectiveness of their internal controls and to provide opinions on internal controls in their annual reports (China SOX, p1). In particular, China SOX requires that boards of directors in China take primary responsibility for the establishment and implementation of internal control (China SOX, p1). This requirement differs from the situation covered by



the US SOX, demonstrating that, in China, a board of directors plays an essential role in internal control.

In addition, Chinese corporate governance has unique characteristics, and these have a substantial impact on internal control enforcement. First, the Chinese stock market is characterized by weak legal enforcement and poor corporate governance (Chen & Chan, 2009). As an alternative mechanism, the key personnel in Chinese firms play key roles in the operation of the enterprises. Second, the Chinese government greatly influences corporate governance (Chambers, 2005) and attempts to improve internal control levels (Lin, 2001). State-owned firms and non-state-owned firms may differ in the effectiveness of their internal control. These new Chinese regulations and the country's institutional backgrounds offer an opportunity to conduct research; this research investigates how unique governance mechanisms, mixed with a socialistic market economy and state power, affect the internal control of Chinese firms.

Internal control is "a process, implemented by an entity's board of directors, its board of supervisors, management, and other personnel, with the aim of realizing control goals" (China SOX, p1). Individual characteristics include abilities, knowledge, and skills (Hillman & Dalziel, 2003). This theoretical study supports the premise that particular features of the board of directors are related to internal control (Hoitash et al., 2009) and management advice (Haynes & Hillman, 2010). When an organization's management and ownership are separated, an "agency problem" arises (Jensen & Meckling, 1976), in that, the goals and desires of owners and managers are not in conflict and the shareholders cannot adequately monitor managerial work (Eisenhardt, 1989). The role of the board of directors is to represent the interests of the owners and to protect the interests of the shareholders (Hart, 1993). The board plays a critical role in reducing the loss of proxy access (Dalton et al., 2007). Thus, in the corporate governance and auditing area, the influence of board characteristics is

a vital issue.

However, relevant empirical results are scarce. Existing studies have investigated the influence of corporate governance on internal control problems both before and after SOX Section 302 and SOX Section 404. The characteristics of boards of directors and management are found to be correlated with the disclosure of internal control weaknesses (i. e. , Krishnan, 2005 ; Zhang et al. , 2007 ; Lin et al. , 2011). However, these researches (i. e. , Krishnan, 2005 ; Srinivasan, 2005 ; Johnstone et al. , 2011) only examine some characteristics of boards, for example, their independence, experience, expertise, turnover, and former audit partners. Furthermore, prior studies have not analyzed the mediating and moderating effects of board behavior (independence and diligence) and ownership. Previous studies also have not considered the individual role of the chairman. Thorough investigation employing comprehensive measures for internal control is also necessary.

In sum, given the requirement of new Chinese standards, unique governance characteristics and limitations in prior empirical research, it is beneficial and pertinent to study the relationship between board characteristics and internal control problems.

1.2 Research questions

In China, many enterprises such as China Aviation Oil, CITIC Pacific, Eastern Airlines, Lantian Stock and Yili have recently suffered from internal control failures (Chi et al. , 2010). These extreme cases are correlated with the ineffectiveness of internal control (COSO, 1992), which has focused public at-



tention on the importance of effective internal control. The research question of this study is: do the individual characteristics of board members affect internal control problems and, if so, what effect do they have? The research objective includes firstly that relevant research exists, but the issue of directors and internal control is not covered. Secondly, there are new changes with China SOX. Finally, China's environment is unique so we cannot predict the outcome using existing research. This book aims to investigate the influence of the individual characteristics of board members on particular styles of internal control problems and internal control weakness remediation. Internal control is crucial because it plays a vital role in reducing investment loss and avoiding financial reporting misstatements (Rani et al. 2008). Research on internal control is vital because it may be able to tell us more about how to manage a firm better. I am looking at whether board characteristics influence internal control based on the Chinese setting.

Following Krishnan (2005), Prawitt et al. (2009) and Lin et al. (2011), this study adopts education, training, experience, certification, and integrity as individual characteristics. In order to answer the research question, the study first examines the impact of the education, training, experience, certification, and integrity of board members on internal control quality and weakness remediation. Given the vital role of the board chair in internal control, I have also studied the relationship between the individual characteristics of the board chairmen and the firms with internal control problems. This study also explores the effects of board behaviors and the nature of dominant shareholders on the relationship between board characteristics and internal control problems.

China SOX regulations state that the board of directors is responsible for internal control and discloses the effectiveness of internal control. It emphasizes that the board of directors has the most significant responsibility. In addition, the relationship between the board and internal control has been suggested in pri-

or research. For instance, Ge & McVay (2005) argue that personnel issues cause the deficiencies. The individual characteristics of directors play a vital role in management advice and decision-making. This book attempts to analyze the relationship between the board and internal control from the perspective of individual characteristics.

There are eight hypotheses in this study. Because management with a high level of education tends to support the development of internal control, the first hypothesis is that the educational level of board members has a negative relationship with internal control weaknesses. Second, the experience can serve as a proxy for knowledge of internal control. It is hypothesized that accounting experience can effectively mitigate the incidence of internal control weaknesses. Third, effective monitoring requires expertise. Consequently, the second hypothesis is that the accounting certification of board members has a negative relationship with internal control weaknesses. Fourth, management integrity is also a major determinant of control effectiveness. As such, it is expected that the integrity of board members is negatively related to internal control weaknesses. Fifth, the extent of formal training may influence the incidence of internal control weaknesses. Based on the above analysis, I hypothesize that internal control training of board members leads to fewer internal control problems. Sixth, in China, the chairman is the head of the internal control team and is responsible for the construction of internal control systems (Chen & Wang, 2014). Thus, given the unique role of the Chinese board chairperson in internal control, it has been predicted that individual characteristics of board chairs are associated with internal control weaknesses. Seventh, in terms of the impact of board behaviors, board characteristics influence “tone at the top” and board behaviors. In turn, board attitudes and board behaviors affect internal control effectiveness. This process explains how the board affects internal control, a relationship not direct between the board and internal control. I anticipate that board characteristics influence



internal control by board behaviors. Finally, with regard to the impact of the nature of dominant shareholder, well-dispersed ownership is relatively rare outside America and large block holders control most Asian firms. The dominant shareholder appoints board members. Therefore, the final hypothesis is that the nature of the dominant shareholder influences the relationship between the board and internal control.

1.3 Method

The data concerning internal control was collected from the China Internal Control Database. The data on independent and control variables are available from the China Stock Market & Accounting Research Database, annual reports, and corporate websites. Annual reports were downloaded from the websites of the Shenzhen Stock Exchange and the Shanghai Stock Exchange. I collected the data from 2007 to 2013, years before and after the implementation of China SOX. I did not include financial and insurance industries or cross-listed firms. I employed a matched-pair design. Each problem firm is matched with a non-problem firm according to criteria including industry, size, and ownership. The final sample for my hypotheses contains 3386 firm-year observations (1693 problem firms and 1693 matching firms).

There are three basic models in the book. First, I model the variables that influence internal control weakness. The models include both a logic model and an Ordinary Least Squares regression model because I studied not only whether a firm discloses internal control weaknesses, but also the extent of internal control weaknesses and internal control quality. Second, since I predict that individual

characteristics of board members influence internal control weaknesses by board behaviors, I added board behaviors to the new model. A relationship between board characteristics and internal control problems is expected to be insignificant in the new model. Third, in order to examine whether different dominant shareholder natures influence the relationship between the board and internal control weaknesses, I used the interaction between the board characteristics and the nature of the dominant shareholders to measure the interaction effect between board characteristics and dominant shareholder nature. I expect the coefficient on the interaction variable to be negative and significant.

Internal control is the dependent variable. Regarding the extent of weaknesses, I used the number of internal control weaknesses and an internal control index as a proxy. The disclosure of internal control problems and weakness remediation is a dummy variable. In terms of independent variables, education is the average education level of board members. High school and below, college, undergraduate, postgraduate and doctoral degrees are numbered 1, 2, 3, 4 and 5, respectively. Training is whether board members received internal control training during the course of a particular year. Certification is measured as the percentage of board members with one or more professional certifications, such as CA. Experience is a dummy variable. It is equal to 1 if at least one board member is responsible for financial and accounting issues, 0 otherwise. Board members who are punished by China Securities Regulatory Commission or Stock Exchanges due to violation or irresponsibility (individual reasons rather than company reasons) can proxy for the integrity of board members. I used the percentage of board members with disciplinary actions as a proxy for integrity. In regard to control variables, I included the following internal factors in the model: the characteristics of top management, chairmen's characteristics, corporate governance, ownership structure, financial condition, and firm characteristics. I also controlled for external factors including audit status, year and industry effects.



This study employed various examinations for robustness. First, the results for each year, industry, ownership, Stock Exchanges, locations, and size are presented. Second, endogeneity and the fixed effects at the firm-level were taken into consideration. Next, I examined the influence of internal control teams. Fifth, the effects of the changes in China's SOX Act were tested. Sixth, in regard to the differences between non-financial and financial weaknesses, I provided comparative results. Seventh, I investigated the impact of the expertise of the audit committee and the internal auditors on internal control weaknesses and the relationship between the board and internal control. Next, I studied whether the experience of board members in the Cultural Revolution affected internal control. Ninth, specific types of internal control deficiencies were studied. Finally, alternative measures were incorporated into the model. These procedures were undertaken to ensure the robustness of the results.

1.4 Results

Overall, the results of the main empirical analyses showed that the experience, certification, education, and integrity of board members are significantly related to the likelihood of internal control weaknesses. Thus, Hypotheses 1 to 4 are supported. The results confirm that the individual characteristics of board members have a significant relationship with whether or not this firm disclosed internal control weaknesses. However, I found no correlation between internal control and training, which leads to the rejection of H5. The accounting experience of board members is also related to the internal control index.

In terms of control variables, firms with non-duality, fewer independent di-