

The Research on the Influence of the Powerful Executives Serve as the Board Secretary on Earnings Management

Xiaoyu Zheng

School of Management, Shanghai University, Shanghai 201800, China

ABSTRACT. *Because of information asymmetry, capital market creates conditions for enterprise managers to carry out earnings management. How to alleviate the problem of information asymmetry so as to restrain the earnings management behavior is always a problem to be solved. On the basis of contract theory, principal-agent theory and information asymmetry theory, this paper adopts combination of normative research and empirical research to select China's listed non-financial A-share companies in shanghai and shenzhen stock exchange from 2013 to 2018 as samples to empirically test the influence of part-time secretary to earnings management, and in the case of the powerful executive concurrently serving as the secretary of the board, managerial ownership can inhibit accrual earnings management, but it also has no significant effect on real earnings management.*

KEYWORDS: *Earnings management, Board secretary, Equity incentive*

1. Introduction

Earnings management is a widespread phenomenon in modern enterprises, which is caused by contract friction and communication friction [1]. On the one hand, the separation of enterprise ownership and management rights leads to the emergence of the principal-agent problem. A set of management contracts and reporting rules are set up beforehand to mitigate the problem. However, in fact, the economic and corporate conditions will change at any time, but the management contract and reporting rules will not change, they are rigid and fixed, which is in conflict with the needs of reality. So, earnings management came into being. On the other hand, the asymmetry of information hinders the exchange and communication of information, which also contributes to the generation of earnings management. Because of the general existence of information asymmetry, managers of enterprises will carry out earnings management in order to achieve a certain purpose, resulting in problems in the quality of accounting information, which is not conducive to the stability and development of the capital market for a long time. To a certain extent,

reducing the internal agency problem and the information asymmetry between the management and the external investors can reduce the earnings management behavior of listed companies with bad motivation.

Investors, creditors, regulators and other information users obtain important information of enterprises through information disclosure of listed companies. How to improve the quality of information disclosure, increase the transparency of information, reduce the space of earnings management, and restrain the behavior of earnings management is always a problem to be solved. As the external spokesperson of the company, the board secretary is the link between the listed company and the capital market, mainly responsible for the disclosure of information and the management of investor relations. The performance of the duties of secretary to the board of directors is related to the quality and efficiency of information communication among shareholders, the board of directors and managers internally, and the level of information symmetry between the company and investors, regulatory authorities, government and other stakeholders externally.

Then, will the implementation of the corporate governance mechanism of the powerful executives serve concurrently as the board secretary reduce the asymmetry of information, and affect the degree of earnings management by improving the communication efficiency within the enterprise and between internal and external. The separation of ownership and management rights leads to the principal-agent problem, and incentive is one of the means to alleviate the agency conflict. As a real power manager who is also the board secretary, if he holds the shares of the enterprise, he is also the producer, the transmitter and the user of the earnings information, and will it really play a role in alleviating the agency problem to a certain extent.

2. Research hypothesis and design

2.1 Research hypothesis

2.1.1 The powerful executives serve concurrently as the board secretary and earnings management

As the actual managers of a company, senior executives hold the operational and financial information needed by the stakeholders. Previous studies have shown that information asymmetry is a necessary condition for earnings management [2]. And as the degree of information asymmetry increases, so does the degree of earnings management [3]. And information disclosure can improve corporate transparency and reduce information asymmetry, so as to help investors make more informed estimates of the possibility of earnings management [4]. When the two positions of the powerful executive and secretary to the president are combined, they are not only responsible for the daily business activities of the enterprise, thus generating accounting information, but also responsible for the disclosure of external information. It is necessary to release all kinds of information of the enterprise to the

outside world, and timely communicate with investors, potential investors and regulatory authorities.

From the perspective of information transmission, firstly, from information production to disclosure, the powerful executives serve as the secretary of the board of directors simplify the internal communication link, alleviate the information asymmetry between each other, avoid the information error in the communication process, improve the communication efficiency, reduce the communication cost, and then improve the information transmission efficiency. Secondly, as the secretary of the board of directors is responsible for the board of directors, it needs to report to the board of directors. When the manager or executive director holds the concurrent post, it can better realize the information interaction and communication between the board of directors and the manager, and improve the information transparency between the board of directors and the manager [5]. Finally, the secretary is responsible for external information disclosure and timely and effective communication with investors. Based on their responsibilities, the executives serve as the secretary of the board of directors strengthen the direct information communication between the company and external stakeholders, establish an effective channel for communication with investors, alleviate the information asymmetry to a certain extent [6], reduce the operation space of earnings management, and restrain the implementation of earnings management [7].

In conclusion, this paper proposes the following hypothesis:

H1: the degree of earnings management is reduced by the fact that the executive with real power concurrently serves as the board secretary.

2.1.2 The powerful executives serve concurrently as the secretary, equity incentive and earnings management

Due to the separation of ownership and management rights, the interests of shareholders and management are in conflict. Shareholders pay more attention to the maximization of their own interests, while the management pays more attention to the maximization of private interests. The management may damage the interests of shareholders for their own interests, resulting in agency problems. In order to reduce the agency conflict between management and shareholders, management shareholding has gradually become one of the means to alleviate the agency conflict.

Management shareholding can promote the consistency of management and shareholders' objectives, encourage the management to disclose more information to shareholders, reduce agency costs, and make joint efforts to enhance the enterprise value. The combination of the two positions can alleviate the agency problem between the management and the board of directors and strengthen the communication of information, and if hold some stock right at the same time, the agency problem with shareholders can be alleviated to some extent [8]. When executives hold shares in the company, their personal gains are connected with the future profits of the company, which make them more responsible for the long-term development of the company and effectively avoid short-term behavior [9].

In conclusion, this paper proposes the following hypotheses:

H2: All other things being equal, the degree of earnings management will be reduced if the senior executives holding both positions hold shares.

2.2 Research design

2.2.1 Samples and data

This paper selects 2013-2018 as the sample research period, selects the companies listed in Shanghai and Shenzhen A-share as the initial sample, and on this basis, carries on the following data screening: (1) Excluding the listed companies of financial and insurance categories; (2) excluding the companies of ST and * ST; (3) excluding the listed companies with incomplete relevant information and data; (4) Only the samples of executive positions such as the board secretary concurrently serving as deputy general manager (executive vice president, vice president), executive director, chief financial officer (CFO, chief accountant) and full-time board secretary are reserved.

In order to eliminate the influence of outliers, all the continuous financial variable data were tail processed by 1% up and down.

2.2.2 Models and variables

This paper uses the following models to test hypothesis 1 and 2, that is, the relationship between the executive serve as board secretary, management shareholding and earnings management.

$$DA = \beta_0 + \beta_1 JR_{i,t} + \beta_2 Controls_{i,t} + \varepsilon_{i,t} \quad (1)$$

$$REM = \beta_0 + \beta_1 JR_{i,t} + \beta_2 Controls_{i,t} + \varepsilon_{i,t} \quad (2)$$

$$DA = \beta_0 + \beta_1 Dual_{i,t} + \beta_2 Controls_{i,t} + \varepsilon_{i,t} \quad (3)$$

$$REM = \beta_0 + \beta_1 Dual_{i,t} + \beta_2 Controls_{i,t} + \varepsilon_{i,t} \quad (4)$$

1. Explanatory variables:

Powerful executive with additional post as board secretary(JR): Construct dummy variable JR. If the board secretary of a listed company concurrently holds the post of deputy general manager, executive director or CFO of the company, JR shall be assigned with a value of 1; otherwise, it shall be assigned with a value of 0.

Management shareholding (Dual): The concurrent executives hold the shares of the listed company. Build dummy variable, if holding, then assign 1, otherwise assign 0.

2. Explained variables:

Accruals management (AM): This paper uses the modified Jones model to calculate the operational accruals.

Real earnings management (REM): The literature generally uses cash flow from abnormal operating activities, abnormal product costs and controllable expenses to measure real earnings management (Roychowdhury, 2006; Cohen et al., 2008). This paper also uses this method to measure real earnings management.

Because this paper measures the degree of earnings management, so the value of earnings management is absolute.

3. Control variables: Including company size (SIZE), capital structure (LEV), profitability (ROA), shareholding ratio of the largest shareholder (Share1), audit quality (Audit), board size (Board), proportion of independent directors (Indep), and industry (IND) and year (YEAR) dummy variables as control variables.

Table 1 variable definitions

Variable types	Variable names	Symbols	Variable definitions
Explained variables	Accruals management	AM	The modified Jones model, and take the absolute value.
	Real earnings management	REM	$REM = abPROD - abCFO - abDISP$, calculated by using the measurement model of Roychowdhury.
Explanatory variables	Powerful executive with additional post as board secretary	JR	If exist, then assign 1, otherwise assign 0.
	Management shareholding	Dual	if holding, then assign 1, otherwise assign 0.
Control variables	Company size	SIZE	$\ln(\text{total assets at the end of year } t)$
	Capital structure	LEV	$\text{Liabilities at the end of year } t / \text{assets at the end of year } t$
	profitability	ROA	$\text{Net profit at the end of year } t / \text{assets at the end of year } t$
	audit quality	Audit	If it is audited by four major auditors, the value is 1, otherwise it is 0
	board size	Board	Number of directors
	shareholding ratio of the largest shareholder	Share1	Proportion of the shareholders with the largest number of shares in the total number of shares
	proportion of independent directors	Indep	Proportion of independent directors in the board of directors
	year	YEAR	dummy variable
industry	IND	dummy variable	

3. Research results and analysis

3.1 Descriptive statistics

In order to understand the overall distribution of the variables in the collected samples, this paper firstly uses descriptive statistics to analyze the real executives, earnings management, and the control variables of the listed companies in Shanghai and Shenzhen A shares, and observe the basic distribution of the mean, standard deviation, minimum and maximum values of each variable. See Table 2 for details.

Table 2 Descriptive statistics

Variable	Sample size	Mean	Standard	Min	Max	Median
JR	11280	0.71	0.45	0	1	1
AM	11280	0.06	0.13	0	8.28	0.04
RM	11280	0.13	0.13	0	0.73	0.09
SIZE	11280	22.01	1.11	19.89	26.11	21.88
LEV	11280	0.43	0.2	0.06	0.89	0.42
ROA	11280	0.04	0.06	-0.22	0.19	0.04
Share1	11280	0.339	0.147	0.003	0.900	0.319
Board	11280	8.33	1.56	5	14	9
Indep	11280	0.38	0.05	0.33	0.57	0.36
Audit	11280	0.03	0.17	0	1	0

From table 2, we can see that the maximum and minimum values are 1 and 0, and the average is about 0.71, indicating that most companies have concurrent positions. The mean value of the explained variable accrual earnings management (AM) is 0.06, and the maximum value is 8.28. Because the absolute value of earnings management is adopted in this paper, and is affected by rounding, the minimum value is close to 0. Similarly, the maximum value of real earnings management (REM) is 0.73, and the minimum value is close to 0, which indicates that there is a common phenomenon of earnings management in listed companies, and the degree of earnings management varies greatly among different companies.

3.2 Regression analysis

In order to test hypothesis 1, we use multiple regression analysis method to test the impact of senior executives concurrently serving as board secretary on earnings management of listed companies on the basis of models 1 and 2. The results are shown in Table 3 below.

From the first column in the table, we can see that the regression coefficient of part-time secretary to the president and accrual earnings management is -0.00913, which is significant at the level of 5%. It indicates that there is a negative influence on the degree of accrual earnings management of correspondence of part-time secretary to the president, that is, the correspondence of part-time secretary to the president has an inhibitory effect on accrual earnings management. Then from the

second column in the table, it can be seen that the regression coefficient of real earnings management and part-time secretary of the board is -0.00175, which conforms to the negative relationship in the hypothesis, but is not statistically significant.

Then we divide the real earnings management into abnormal cash flow, abnormal product cost and controllable expense, and regress them respectively. When the enterprise adopts the way of sales control to carry out real earnings management, the operating cash flow of the current period will obviously decline, thus showing a lower abnormal operating cash net flow. When the enterprise adopts the way of production control to carry out real earnings management, such as overproduction under normal operating environment and using scale effect to reduce unit product cost, then the production cost of the current period will rise significantly, thus showing a higher abnormal production cost. When the enterprise adopts the expense control to conduct real earnings management, such as reducing the controllable expenses in the normal business environment, then the controllable expenses in the current period will inevitably decline, thus presenting a lower abnormal controllable expenses.

Table 3 Regression analysis

	AM	REM		REM	
	Model 1	Model 2	abCFO	abPROD	abDISX
JR	-0.00913**	-0.00175	0.00047	-0.00222	0.00429***
	(-2.05)	(-0.44)	(0.26)	(-0.93)	(2.74)
Size	-0.01000***	-0.00260	0.00292***	-0.00196*	1.00e-05
	(-4.91)	(-1.42)	(3.57)	(-1.80)	(0.02)
Lev	0.07317***	0.02419**	-0.01407***	0.02430***	-0.00084
	(6.34)	(2.34)	(-3.04)	(3.93)	(-0.21)
Board	-0.00358**	0.00134	0.00070	0.00113	0.00022
	(-2.55)	(1.06)	(1.23)	(1.50)	(0.44)
Share1	-0.00031***	-0.00023**	-0.00005	-0.00027***	0.00001
	(-3.53)	(-2.57)	(-1.32)	(-5.00)	(0.04)
ROA	-0.05585**	-0.00634	0.00444	-0.01420	0.02985**
	(-2.28)	(-0.25)	(0.33)	(-0.80)	(2.56)
Indep	-0.00735	-0.06877**	-0.01780	0.00431	-0.03584***
	(-0.19)	(-1.97)	(-1.14)	(0.21)	(-2.62)
Audit	-0.00297	0.01160	-3.00e-05	0.00075	-0.00015
	(-0.28)	(1.20)	(-0.01)	(0.13)	(-0.04)
_cons	0.31453***	0.17754***	0.11818***	0.05956**	0.04777**
	(5.85)	(3.64)	(5.41)	(2.04)	(2.49)
Year	Control	Control	Control	Control	Control
Ind	Control	Control	Control	Control	Control
N	11280	11280	11280	11280	11280
R2	0.0383	0.0089	0.0098	0.0072	0.0080

From column 3-5, we can see that cash flow of abnormal operating activities, cost of abnormal products and powerful executive with additional post as board secretary are not significantly correlated, but the regression coefficient between controllable expenses and powerful executive with additional post as board secretary is 0.00429, which is significant at the level of 1%. It indicates that powerful

executive with additional post as board secretary can inhibit enterprises from adopting the real earnings management mode of expense control, so as to present large abnormal controllable expenses. In general, powerful executive with additional post as board secretary reduces real earnings management to a limited extent.

Then we use the multiple regression method to test hypothesis 2, that is, the impact of executive ownership on earnings management. We extracted samples of enterprises with concurrent status from the whole sample, and the empirical results are shown in table 4. It can be seen from table 4 that in the case of concurrent tenure, the correlation coefficient between executive shareholding and accrued earnings management is -0.00363, which is significant at the level of 1%. It shows that the executive shareholding has a significant negative impact on earnings management. That is, executive shareholding in both roles can restrain the degree of accrual earnings management. However, the regression coefficient of executive shareholding and real earnings management is -0.00251, which is consistent with the negative correlation proposed in the hypothesis, but not significant. Similarly, we divide real earnings management into abnormal cash flow from operating activities, abnormal product cost and controllable expenses. From the table, we can see that the cash flow and controllable expenses of abnormal operating activities are positively correlated with executive shareholding, while the controllable expenses is negatively correlated, which conforms to the hypothesis. But only manageable costs are significant at the 5% level.

Table 4 Regression analysis

	AM	REM	REM		
	Model 3	Model 4	abCFO	abPROD	abDISX
Dual	-0.00363*** (-2.64)	-0.00251 (-0.80)	0.000670 (0.48)	-0.00157 (-0.87)	0.00324*** (2.60)
SIZE	-0.00549*** (-6.95)	-0.00297* (-1.65)	-0.00248*** (-3.11)	-0.000400 (-0.39)	-0.00152** (-2.13)
LEV	0.03626*** (7.99)	0.04223*** (4.10)	0.01550*** (3.38)	0.02116*** (3.54)	0.00762* (1.86)
ROA	-0.09807*** (-7.37)	0.00814 (0.27)	0.0178 (1.32)	-0.000290 (-0.02)	0.02222* (1.85)
Share1	-8.00e-05 (-1.61)	-0.00026** (-2.33)	-0.00008* (-1.65)	-0.00031*** (-4.69)	3.00e-05 (0.62)
Board	-0.00120** (-2.13)	0.00052 (0.41)	0.00024 (0.43)	0.00076 (1.02)	-0.00018 (-0.36)
Indep	0.00369 (0.24)	-0.02870 (-0.82)	-0.01690 (-1.08)	0.01590 (0.78)	-0.03246** (-2.33)
Audit	-0.00532 (-1.42)	0.01548* (1.82)	0.00113 (0.30)	-0.00053 (-0.11)	0.00120 (0.35)
_cons	0.17958*** (8.55)	0.17450*** (3.65)	0.11257*** (5.30)	0.04592* (1.66)	0.08198*** (4.32)
YEAR	Control	Control	Control	Control	Control
IND	Control	Control	Control	Control	Control
N	7571	7571	7571	7571	7571
R2	0.0700	0.0121	0.0119	0.0123	0.0078

In addition, this paper uses lag one period method and instrumental variable method to test the robustness, and the test results are basically consistent with the previous research conclusions.

4. Conclusion

(1) There is a negative correlation between the powerful executive with additional post as board secretary and the degree of accrual earnings management, but the powerful executive with additional post as board secretary has little influence on the real earnings management. This shows that the powerful executive with additional post as board secretary can indeed reduce the behavior of earnings management to a certain extent, but it does not have enough effect on some practical ways of earnings management which are more hidden and difficult for audit institutions to supervise.

(2) In addition, compared with state-owned enterprises, the negative influence of the part-time secretary to the board on earnings management in non-state-owned enterprises is more significant. Similarly, because this paper mainly studies earnings management through the influence mechanism of information asymmetry, the effect of information disclosure is not obvious for the real earnings management, which is a kind of earnings manipulation with high concealment and low recognition.

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