

# Empirical Study on Corporate Governance and Earnings Quality of the Publishing Listed Firms – Empirical Evidence from the Chinese Stock Market

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**Abstract:** In this paper, we use the publishing industry Listed Companies as research samples, select the data from 2010 to 2014 to study the relationship between corporate governance and earnings quality from three aspects: the ownership structure, the board of directors feature and the management incentive compensation. The study found that in terms of ownership structure, there is no significantly positive correlation between the largest shareholder proportion and earnings quality; in terms of board of directors feature, there is a significant positive correlation between the net asset value per share and the number of directors, there is a significant positive correlation between the net assets per share and the proportion of the board of directors, there is no significant correlation between the net assets per share and the number of board meetings; in terms of management incentive compensation, there is a significant negative correlation the top three executives total compensation and earnings quality.

**Keywords:** Corporate governance; Earnings governance; Earnings governance

## 1 Introduction

China's domestic GDP grew by 7.4 percentage points in 2014, surpassing \$ 10 trillion for the first time, making China the world's second-largest country, surpassing the \$ 10 trillion after the United States. In such a good economic background, China's publishing industry is also in the modernization, internationalization, networking and other aspects of the progressive growth trend. For example, Jiangsu Phoenix Xinhua Limited by Share Ltd through the listing and financing, and actively build China's modern publishing industry's first website. However, with the rising of the economy, the financial statements of Listed Companies false news, uneven distribution of shares within the enterprise, internal governance structure is not perfect and so on.

Therefore, this paper will take the publishing industry as an example to study the relationship between corporate governance and earnings quality of Listed Companies in the publishing industry. First of all, we will interpret the relationship between internal factors of governance and earnings quality, secondly, select the financial data of Listed Companies in the publishing industry for further empirical analysis, in order to draw some practical measures to improve the corporate governance of publishing industry. At the same time, we put forward some practical policy recommendations to improve the authenticity of the financial statements of Listed Companies in the publishing industry, to improve the corporate governance structure, and to improve the quality of earnings information in the publishing industry.

## 2 Theory and hypothesis development

### 2.1 Ownership structure and earnings quality

As for the corporate governance structure, it is the basis of the distribution of shares owned by the shareholders, the greater the share of shareholders, the greater the right. Therefore, the size of the shares held by the shareholders, will determine his decision-making power of the company. The following is the analysis of the relationship between ownership structure and earnings quality, which will be analyzed from the perspective of ownership concentration.

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Shleifer A and Vishny [1] found that other shareholders can monitor the balance of major shareholders, especially the largest shareholder, to protect the rights and interests of external investors and improve the quality of accounting earnings. GulFA, KimJB., and Qiu AA [2] studied the data of China from 1996 to 2003, and found that the higher the degree of ownership concentration, the lower the quality of corporate earnings. In summary, we propose the following hypothesis:

*H1: the greater the proportion of the first largest shareholder, the higher the quality of earnings.*

## 2.2 Board characteristics and earnings quality

Jensen's [3] empirical study shows that the larger the board size, the more effective the control of earnings management behavior. Vafeas [4] found that small-scale boards make higher-quality earnings information relative to large-scale boards.

The independent director belongs to the directors of the company, does not work in the company, without any management behavior in the company but has the right to make independent judgment of the decisions made by the company, so the proportion of independent directors in the company's shareholders can be used as a standard to judge whether the decision of the board is fair, objective, independent.

Peasnell [5] explored the earnings management of UK companies and found that the presence of independent directors helped strengthen the supervisory role of the board of directors. Park and Shin [6] studied 202 companies listed in Canada from 1991 to 1997, and concluded that the number of independent directors can not effectively constrain earnings management behavior. Klein [7] concluded that the negative correlation is more pronounced when the number of independent directors is less than 51%.

The number of meetings held by the board may indicate the degree of involvement of directors in corporate governance. The greater the number of board meetings, the greater the degree of managerial involvement of directors in the company. Abbott et al. [8] found that the higher the frequency of board meetings, the more conducive to the performance of supervision of directors to improve the effectiveness of financial information disclosure and reduce the level of earnings management. In summary, we propose the following hypotheses:

*H2: the greater the size of the board, the better the quality of earnings.*

*H3: the higher the proportion of independent directors, the higher the quality of earnings.*

*H4: the larger the number of board meetings held, the higher the quality of earnings.*

## 2.3 Management compensation incentive and earnings quality

Good management requires timely and appropriate management incentives. Management incentives mainly include two aspects of compensation and equity incentive, linking the pay incentive to the management's final performance, to promote the completion of the company's development goals. Efendi et al. [9] found that firms with higher executive-option compensation are more likely to have financial restatements, ie, equity incentives and earnings management are positively correlated. On the contrary, Shuto [10] found that there is a negative correlation between executive pay and earnings quality. In this paper, we from the perspective of pay incentives to analyze. In this paper, we only analyze and research from the perspective of compensation incentive:

*H5: the more the management incentive compensation, the higher the quality of earnings.*

## 3 Sample selection and research design

### 3.1 Sample selection

In this paper, according to the China Securities Regulatory Commission (CSRC) industry classification, from the "culture, sports and entertainment industry" in the screening of the "news and publishing industry". We use the information of Listed Companies in the publishing industry from 2010-2014 for analysis. In order to ensure that the data is valid, the data is strictly according to the data integrity and effectiveness, we removed the extreme data of net profit growth rate and asset liability ratio.

### 3.2 Variable definition

The variables used in the research on corporate governance and earnings quality of Listed Companies in the publishing industry are listed in the following table 2.

Table 1: Sample size

year	2010	2011	2012	2013	2014	sum
total	12	13	13	13	11	62
Number of rejections	5	4	1	1	3	14
Valid sample	7	9	12	12	8	48

Table 2: List of variables and descriptions

Variables	Descriptions
BVPS	Net assets per share = total net assets at the end of the year / total number of shares of the company
OC	Shareholding ratio of the largest shareholder = number of shares held by the largest shareholder / total number of shares of the company
BDS	Total number of directors
DR	Proportion of independent directors = number of independent directors / total number of directors
PD	Number of annual meetings held in the board of directors
MS	Total annual remuneration of the top three executives
SIZE	Natural logarithm of total assets
DAR	Asset-liability ratio = total liabilities / total assets
GROWTH	Net profit growth rate = (net profit this year - the previous year net profit) / net profit the previous year

### 3.3 Empirical model

According to the above-mentioned sample variable theoretical analysis, we will construct the multivariate linear research model as follows:

$$BVPS = \alpha + \beta_1 OC + \beta_2 BDS + \beta_3 DR + \beta_4 PD + \beta_5 MS + \gamma_1 SIZE + \gamma_2 DAR + \gamma_3 GROWTH + \delta$$

Among them,  $\alpha$  is the constant intercept,  $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$  are the regression coefficients of OC, BDS, DR, PD and MS respectively.  $\gamma_1, \gamma_2$  and  $\gamma_3$  are the regression coefficients of the controlled variables,  $\delta$  is the random error item.

## 4 Empirical analysis

### 4.1 Descriptive statistical analysis

Table 3: Descriptive statistical analysis

Variable	Mean	Median	Standard deviation	Minimum	Maximum
BVPS	4.26	3.92	1.63	1.79	8.71
OC	59.07%	64.17%	17.22%	14.47%	75.78%
BDS	13.23	12.00	4.17	7.00	29.00
DR	28.94%	30.00%	5.05%	18.75%	41.67%
PD	8.83	8.00	2.80	3.00	17.00
MS	187.24	154.50	121.53	70.21	572.90
GROWTH	13.40	14.34	26.45	-47.60	75.88
DAR	32.37	31.26	11.48	5.95	59.65
SIZE	13.12	13.26	0.84	10.89	14.34

From Table 3 can be seen, the minimum proportion of the first shareholder is 14.47%, the maximum proportion is 75.78%, the average proportion is 59.07%, indicating that there is a huge difference in the proportion of the first

shareholder of enterprises. From the perspective of the number of the board of directors ,the minimum is 7, the maximum is 29,the average is 13.23.The proportion of the independent directors is between 18.75% and 41.67%, the average is 28.94%, indicating that the number of directors of the sample, not meeting the provisions of the number of independent directors must be accounted for one third. The difference in the number of meetings held by the board of directors is relatively large, at least three times a year, up to 17 times a year, with an average of 8.83. In the management of compensation, the total of the top three executive remuneration, at least 702,100 yuan, up to 5,729,000 yuan, the average total salary reached 1,872,400 yuan, which shows the total remuneration of the top three executives in the sample is very different, of course, the number of executive compensation is also related to the size of the company. The minimum company size is 10.9, maximum value reached 14.34, the average size of 13.12, indicating the the size difference in the sample.

## 4.2 Correlation analysis

In order to further test the assumptions made before, this paper will use the regression test for further regression analysis of the data. The specific results are shown in Table 4 below.

Table 4: Correlation analysis

	BVPS	OC	BDS	DR	PD	MS	GROWTH	DAR	SIZE
BVPS	1								
OC	0.4487**	1							
BDS	0.4271*	0.1105	1						
DR	0.1879	0.0002	-0.0787	1					
PD	0.2533	0.1656	0.3205	-0.1965	1				
MS	-0.2467	-0.5919***	-0.0237	0.1483	-0.0048	1			
GROWTH	0.3294	0.0764	0.1068	0.1221	0.1235	0.4058	1		
DAR	-0.1219	-0.376	0.5148***	0.0126	-0.1817	0.0726	-0.2275	1	
SIZE	0.0891	-0.0857	0.2919	0.2437	-0.0183	0.3131	0.209	0.4839	1

Note: marked with \*\*\* in the case of 1% significant; with \*\* in the case of 5% significant; with\* in the case of 10% significant.

In the analysis of relational relations, the division of the correlation consists of four blocks. There is no correlation between 0~0.1, there is a weak correlation between 0.1~0.3, there is a moderate correlation between 0.3~0.5, there is a strong correlation between 0.5~1.

According to Table 4, the correlation between the net assets per share and the largest shareholder is 0.4487, which is moderate correlation. In terms of board characteristics, the coefficient of the number of directors and net assets per share is 0.4271, which is moderate. The correlation coefficient between independent directors and net assets per share is 0.1879, which is weak correlation. The correlation coefficient of the number of board meetings and net assets is 0.2533, which is weak correlation. From the aspect of control variables, the correlation coefficient between growth and net assets per share is 0.3294, which is moderate correlation. The correlation between asset-liability ratio and firm size is less than 0 and 0.0891 respectively, and there is no correlation.

## 4.3 Regression analysis

According to the correlation analysis above, we can draw the conclusion that there is a positive correlation between corporate governance and earnings quality of of Listed Companies in China’s publishing industry. We will come to a more specific conclusion through regression linear regression analysis.

Table 5: Fitting test of the model

Number of samples	F	R2	Adjusted R2	Square root of the residual
48	0.0001	0.5344	0.4389	1.2209

From Table 5, the R2 is 0.5344 and the adjustment R2 is 0.4389. The overall model significance is 0.0001, less than 0.05, in summary, the model analysis is of statistical significance. Moreover, the regression equation in the variance expansion factor are less than 10, there is no multiple co linearity.

Table 6: Results of regression analysis

Variable	Coefficient	Standard deviation	T	P
OC	0.0079	1.7592	0.00	1.00
BDS	0.2165***	0.0660	3.28	0.00
DR	7.6201*	3.7776	2.02	0.05
PD	0.0117	0.0766	0.15	0.88
MS	-0.0053**	0.0024	-2.20	0.03
GROWTH	0.0181**	0.0086	2.11	0.04
DAR	-0.0515*	0.0300	-1.72	0.09
SIZE	0.2094	0.2954	0.71	0.48
$\alpha$	-1.2441	3.1856	-0.39	0.70

Note: \*\*\*, \*\* and \* represent 1%, 5% and 10% significant level, respectively.

From able 6, there is no significant relationship between the largest shareholding ratio and the net asset value per share ( $t = 0$ ,  $p = 1.00$ ), H1 has not been verified. There is a significant positive correlation at 1% level between the total number of directors and the net assets per share ( $t = 3.28$ ,  $p = 0.00$ ), which is consistent with the H2. There is a significant positive correlation at 10% level between the proportion of independent directors and the net assets per share ( $T = 2.02$ ,  $= 0.05$ ), which is consistent with H3. There is no significant correlation between the number of board meetings and earnings quality ( $t = 0.15$ ,  $p = 0.88$ ), H4 has not been verified. The top three executives total compensation and net assets per share for the 5% level of significant negative correlation ( $T = -2.2$ ,  $P = 0.034$ ), contrary to the H5.

## 5 Conclusion and recommendation

### 5.1 Conclusion

The empirical results show that there is no significant positive correlation between the proportion of the largest shareholder and the net assets per share, which shows that the concentration of ownership of listed companies in the publishing industry can not affect the earnings quality. There is a significant positive correlation between the size of board of directors and the quality of earnings, which shows that the higher the number of directors is, the better the earnings quality will be in the listed companies in publishing industry. There is a significant positive correlation between the proportion of independent directors and earnings quality, 30% of the independent directors, will strengthen the external supervision of enterprises, thereby reducing tax evasion, financial statements fraud and other acts, and ultimately promote the improvement of earnings quality. There is no significant relationship between the number of meetings held by the board of directors and the quality of earnings, indicating that the number of meetings held by the board of directors can not promote the earnings quality. There is a significant negative correlation between the total remuneration of the top three executives and earnings quality, if the pay of management is too much, suggesting that management at this time the decision-making power of the enterprise is too large, there is the threat of arbitrary dictatorship of the enterprise, so there will be financial statements and other acts of fraud, and the quality of earnings will decline.

### 5.2 Recommendation

#### 5.2.1 Improve the equity concentration

Listed companies should focus on the top ten shareholders of the shareholders' equity, a higher degree of equity concentration can ease the contradiction between the directors, and strengthen shareholder supervision of corporate governance, thereby enhancing the accuracy of the financial statements information, so that the earnings quality is improved. Equity structure should also be more perfect, so that operating efficiency can be improved, the company's competitiveness can be improved.

Listed companies in China's publishing industry should also improve the ownership structure of China, and enhance the proportion of holding shares of state-controlled and director-controlled, thus activating the enthusiasm of staff management. This will be more conducive to the healthy growth of enterprises to actively and enhance its external competitiveness.

### 5.2.2 Improve the structure of the board of directors

Although there is a significant positive correlation between the number of board members and the quality of earnings, it also shows that the increase in the number of board members will promote the improvement of corporate earnings quality. On the contrary, the excessive number of directors will result in a certain amount of waste of resources. If the number of the board is too small, will inevitably lead to corporate regulation failure.

Nowadays, for the Chinese stock market, trustworthy financial data is very important for the enterprise analysis. Therefore, the supervisory department should strengthen the supervision to the listed companies. In particular, the proportion of the independent directors of the listed companies should meet at least 30%. At the same time, we should establish a strict review system and information disclosure system, so that the governance structure of listed companies can have a transparent environmental mechanism.

### 5.2.3 Improve the management compensation incentive

According to the results of the top three executive compensation factors, the managers should be given appropriate incentives to make them more motivated and attentive to the company, the company's interests can be maximized, and meet the requirements of shareholders. At the same time, the company should actively seek more ways of executive incentives, such as improving the management of holding laws and regulations, so that the enthusiasm of the management work can also be improved. While encouraging the management, it should also strengthen the board of directors to control and supervision, to prevent the management of excessive power behavior.

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