

# Executive Compensation Level, Executive Characteristics and Quality of Internal Control

DuoDuoRu<sup>1\*</sup>, Mao Cui Guo<sup>1</sup>, and Ze Min Wang<sup>1</sup>

<sup>1</sup>school of management, Northwest University for Nationalities, 730030, Lanzhou, China

**Abstract.** In the process of transformation of economic momentum, the digital transformation and upgrading of enterprises has become an inevitable trend. As an important human resource of enterprise operation and management, senior executives play an irreplaceable key role in the process of enterprise transformation and upgrading. therefore, A total of 2244 A-share listed companies in China from 2015 to 2019 are selected for panel data analysis to verify the influence of the level of executive compensation, characteristics of senior executives and quality of internal control. The results show that there is a correlation between the level of executive compensation and the quality of internal control, and the characteristics of senior executives have a partial moderating effect between the level of executive compensation and the quality of internal control, but this moderating effect is weak and may be negative.

## 1 INTRODUCTION

With the advent of knowledge economy and Internet economy, human capital has become a crucial strategy for enterprises Resources [1]. As an important member of the enterprise, senior management plays an irreplaceable role in the sustainable development of the enterprise. Internal control quality as one of the important representatives of enterprise management quality, for managers to fully understand the production and operation of the enterprise, clear decision-making is particularly important. However, due to the influence of many factors, executive compensation is now regarded as one of the effective measures to solve the problems of enterprise management, and a scientific and reasonable incentive level of executive compensation can effectively promote the improvement of the quality of enterprise internal control. [2] In addition, the characteristics of senior executives will inevitably be displayed in various decisions. Based on this, this paper conducts an in-depth study on the relationship between the level of executive compensation, characteristics of senior executives and the quality of internal control of enterprises, in order to help enterprise owners give full play to the management potential of senior executives and better improve the level of internal control of enterprises.

## 2 Theoretical analysis and research hypothesis

According to the management style theory, different executives, influenced by their own characteristics, usually show their distinctive behavior styles when making operational and management decisions, which ultimately affects the correctness and rationality of

management decisions made by senior executives. The level of management ability of enterprise managers can be reflected through the level of education to a certain extent. Therefore, the more abundant the professional knowledge and skills of senior executives, the more efficient they will be in dealing with the problems faced by the enterprise in the process of development, so as to achieve a significant improvement in the quality of internal control. Based on this, hypothesis 1 is proposed:

**Hypothesis 1:** There is a positive correlation between the characteristics of senior executives and the quality of internal control

Theresa found that there was a positive correlation between the basic compensation of senior executives and the effectiveness of internal control. [3] However, due to the different internal control environments among enterprises, there is no internal control mode applicable to all enterprises. Executives need to combine the internal and external environment of the enterprise with appropriate internal control systems and methods to achieve the best control effect. The management style of managers is an important part of the control environment. Different management styles of managers will affect the implementation effect of internal control in the daily operation and management process. [4] Therefore, scientific and reasonable compensation level can promote executives to be more involved in the implementation of internal control, so as to improve the quality of internal control. Based on this, the paper proposes the second hypothesis:

**Hypothesis 2:** There is a positive correlation between the level of executive compensation and the quality of internal control

Executive decision-making plays a crucial role in the process of enterprise management. In the process of operation and management, executives will make

\* Corresponding author: 1410841388@qq.com

operation and management decisions based on the relevant knowledge they have mastered. executives' own characteristics will also be reflected in various decisions. [5] Therefore, the characteristics of senior executives will have an impact on the production and operation of an enterprise, and further affect the management level and internal control level, and the executive compensation will also be affected by the level of management level. Based on this, the third hypothesis is proposed:

**Hypothesis 3:** There is a moderating effect between the two characteristics

### 3 RESEARCH DESIGN

#### 3.1 Sample selection and data source

In order to make the empirical research more effective, this paper takes China's A-share listed enterprises as the basic research object, and sets the effective period of the research as 2015 to 2019. The relevant effective data of this paper are selected from CSMAR database, and the internal control index is derived from the internal control index database of Dubbo Company. Besides, relevant financial data as well as relevant enterprises listed by ST and \*ST during the research period are excluded, and 2244 effective research samples are finally obtained through screening.

#### 3.2 variable definition

To a certain extent, the education level of executives has a crucial influence on the business decisions of enterprises. Therefore, this paper draws on the research results of Xiao Hua and uses the educational background of executives to measure the characteristics of executives. [6] When calculating specific values, the scoring method is firstly adopted to determine the education level of senior managers. The specific scoring criteria are shown in Table 1. After screening the grades of executives' educational level, the selected data are added and the average value is obtained. The larger the value, the more obvious the characteristics of executives are.

**Table 1** Evaluation grade table of education level of senior executives

item	schooling	score
Executive Education Level	Ph. D. degree	5
	master's degree	4
	bachelor degree	3
	college degree	2
	else	1

#### 3.3 executive compensation

$$IC = \beta_0 + \beta_1 Wage + \Sigma \theta_i Control Variables + \varepsilon \quad (1)$$

$$IC = \beta_0 + \beta_1 EC + \Sigma \theta_i Control Variables + \varepsilon \quad (2)$$

$$IC = \gamma_0 + \gamma_1 Wage + \gamma_2 EC + \Sigma \theta_i Control Variables + \varepsilon \quad (3)$$

$$IC = \gamma_0 + \gamma_1 Wage + \gamma_2 EC + \gamma_3 Wage \times EC + \Sigma \theta_i Control Variable + \varepsilon \quad (4)$$

## 4 EMPIRICAL ANALYSIS

### 4.1 descriptive statistics

The average value of EC of executive characteristics is 3.418, indicating that the educational level of executives in the enterprise is basically maintained above the medium level, and the standard deviation is 0.641, which is relatively large, indicating that there is a big difference in the educational level of executives and obvious differences among characteristics of executives. In addition, the maximum value of the natural logarithm of executive compensation is 15.49, the minimum value is 9.954, and the standard deviation is 0.564, indicating that there is a large gap in the compensation level among executives, and the quality performance of the internal control of the enterprise is relatively good.

### 4.2 correlation analysis

The correlation coefficient between LN WAGE and LNIC is 0.2604, and it is significant at the level of 1%, indicating that the level of executive compensation has a significant effect on the quality of enterprise internal control. The correlation coefficient between executive characteristics and enterprise internal control quality is 0.0369, showing significance at the level of 10%, indicating that the correlation between EC and LNIC is weak. However, the correlation coefficient between EC and LN WAGE is 0.1844, which is significant at the level of 1%, indicating that there is a strong correlation between executive characteristics and executive compensation level.

### 4.3 analysis of regression

#### 4.3.1 Executive compensation level and internal control

The regression results of the research model are shown in Table 2. Model (1) is a regression test model of the relationship between the level of executive compensation and the quality of enterprise internal control. the level of executive pay coefficient is 0.0701, and the significant level was  $p < 0.01$ , the level of executive compensation and corporate there is significant positive correlation between internal control quality, that is the higher the level of executive pay, pay to keep its predominance and diligent work, to improve the internal control of enterprises, the better the quality.

#### 4.3.2 Characteristics of senior executives and quality of internal control

Model (2) is a regression model of the relationship between the characteristics of senior executives and the

quality of enterprise internal control. As can be seen from the table, the coefficient between executive characteristics and quality of internal control is 0.0117, and the results show that the two are correlated at the significance level of  $p < 0.1$ , which may indicate that there may be a certain relationship between executive characteristics and quality of internal control. In addition, it may be that the variables selected in this paper are too single. Only the educational level of senior executives can not fully represent the characteristics of senior executives, so the research results do not show a significant correlation between the two.

### 4.3.3 Mediating role of executive characteristics

As shown in Model (3), the correlation coefficient between the level of executive compensation and the quality of internal control decreases from 0.0701 to

0.0694, which is significant at the level of  $P < 0.01$ , which proves that executive characteristics have a partial mediation effect. Hypothesis (3) is true. On the basis of Model (3), the intersection of executive compensation level and executive characteristics is added to further test the mediation effect of executive characteristics. As shown in Model (4), the correlation coefficient between executive compensation level and internal control quality increases from 0.0694 to 0.0756. Moreover, the significance level between the level of executive compensation and the quality of internal control changes from  $P < 0.01$  to  $P < 0.1$ . In addition, the coefficient of interaction term is -0.00179, which indicates to some extent that executive characteristics may have a moderating effect on the level and quality of executive compensation, but such a moderating effect is likely to be negative.

**Table 2** Regression results of sample variables

Variable	(1)	(2)	(3)	(4)
lnwage	0.0701*** (0.0114)		0.0694*** (0.0117)	0.0756*** (0.0442)
ec		0.0117* (0.0103)	0.00382* (0.0105)	0.0264 (0.159)
we				-0.00179* (0.0125)
lnsize	0.0190** (0.00764)	0.0327*** (0.00682)	0.0188** (0.00765)	0.0188** (0.00763)
lev	-0.381*** (0.0645)	-0.401*** (0.0638)	-0.380*** (0.0644)	-0.380*** (0.0644)
roa	0.00178** (0.000893)	0.00193** (0.000947)	0.00178** (0.000897)	0.00178** (0.000897)
tech	control	control	control	control
N	2244	2244	2244	2244
R-sq	0.174	0.153	0.175	0.175

**Note:**\*\*\*,\*\* and \* are expressed at the 1%,5% and 10% levels, respectively.

### 4.3.4 robustness test

In order to make the research results more convincing, the paper finally carries out the relevant robustness test, replacing the internal control defects with internal control defects to measure the quality of enterprise internal control, so as to test the influence of executive compensation level on the quality of enterprise internal control. The test results show that there is indeed a certain degree of positive correlation between the level of executive compensation and the quality of internal control, and the test results are still significant. At the same time, there is a partial regulatory relationship between executive compensation and the quality of internal control, but this regulatory relationship is not obvious. Based on the above empirical results, the assumptions made in this paper are in line with expectations.

## 5 CONCLUSION

In the process of the transformation of economic drivers, the digital transformation and upgrading of enterprises

has become an important prospect for future development. The level of human resource management and internal control is the necessary condition to coordinate the transformation and upgrading of enterprises. As an important human resource, senior management plays an increasingly prominent role in enterprise management. Based on this, this paper explores the relationship between the level of executive compensation, executive characteristics and the quality of internal control. It is found that enterprises should appropriately increase the salary level of managers, and at the same time balance the work potential of executives synergically motivated by their academic qualifications, so as to ensure the effectiveness of internal control in the process of enterprise transformation and upgrading.

## References

1. Luo Yanmei. Employee Compensation Incentive, Knowledge Competence and Internal Control Quality -- Empirical Evidence from Chinese Manufacturing Listed Companies. J. Journal of Nanjing Audit University,17 (2020)

2. Yang Mengtian. The Factors Influencing the Quality of Internal Control in Enterprises -- Empirical Analysis Based on the Management Characteristics. *J. 20. Operations and Management*, (2020)
3. Li Chunxiao, Fan Xiaohong. Research on Influencing Factors of Internal Control Effectiveness of Listed Companies. *J. Business Research* (2020)
4. Geng Hejiang. Executive Compensation Gap, Internal Control and Green Innovation: A Case Study of Chinese Manufacturing Listed Companies. *J. Friends of Accounting*, (2020)
5. Feng Lijuan, Gou Yongning. Research on the influence of executive internal compensation gap on firm performance: From the perspective of firm internal control. *J. Business Accounting*, (2020)
6. Zhang Mei. Corporate Culture, Executive Characteristics and Firm Growth. *J. Finance and Accounting Bulletin*, (2019)