

# Executive Compensation, Media Attention and Agency Costs

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## Abstract

Executive compensation level is one of the important factors affecting agency cost. Based on executive compensation contract and management power theory, this paper takes the data of China's listed companies from 2010 to 2018 as the research sample, and empirically tests the impact of executive compensation on agency cost by manually collecting media and network reporting data of listed companies. At the same time, this paper explores the mediating effect of media attention in the process of executive compensation affecting agency cost. The results show that executive compensation has a significant positive correlation with management expense ratio, executive compensation has a significant positive correlation with total asset turnover, and the increase of executive compensation has a positive impact on the increase of agency cost. In this paper, media attention, the public pressure factor, is included in the research scope of corporate governance, executive compensation, media attention and agency cost are included in the same framework for research, enriching and expanding the relevant literature on the formation mechanism of agency cost, and providing theoretical reference for improving the executive compensation system of Chinese companies.

## Keywords

Executive Compensation; Media Attention; Agency Costs.

## 1. Introduction

Party's 19 report and the government work report in 2018, the two shows the eighteenth big since the party and the government in the construction of the people's livelihood and remarkable achievements in the field of social development, with the emergence and development of the modern market economy, the enterprise scale expanding gradually, listed companies in China face the external environment of increasingly complex, companies need to establish a perfect modern management system.

Corporate governance environment in our country, the executive is a crucial position in the company, the principal-agent theory suggests that the company's franchise with all separate makes problems such as information asymmetry between principal and agent [1], a series of consequences, leading to adverse selection and moral hazard under the principal-agent system, This division of labor between principal and agent, namely the separation of two rights, will inevitably bring some negative effects, namely the emergence of agency cost [2][3]. Chinese scholars on the relationship between executive compensation and agency cost a lot of research, but the current study focused on the role of enterprise internal governance factors [4], the theory and practice of research scope is relatively narrow, phase separation and deductive ability is not strong, and in the current executive compensation of listed companies and the research status of agency costs, There are few literatures considering media reports as a public

factor [5], which is not conducive to better understanding of the current research progress, nor to better guiding practice. Therefore, the data of Chinese listed companies from 2010 to 2018 as research samples, through manual collection media network report data of listed companies, the empirical test on executive pay influence on agency costs, and explores the media attention on executive compensation mediation effect in the process of influencing agency costs, in order to research on executive pay and agency cost in-depth thinking.

## 2. Theoretical Analysis and Research Hypothesis

Due to information asymmetry, managers and operators as well as the economic interests of the conflict, lead to executive compensation is not reasonable phenomenon emerge in endlessly, make our country enterprise internal personnel salary gap widened gradually, which fully reflects the irrationality of executive compensation in our country to develop, under this background, the executive compensation mechanism and its influence to the agency cost has become the focus of the field of corporate governance. Zhu Desheng [6] et al. found a U-shaped relationship between executive compensation and agency costs, and appropriate executive compensation can reduce agency costs. The empirical results of Ren Guanggan [7] et al. show that there is a significant positive correlation between executive compensation and management expense ratio, and thus it is concluded that the increase of executive compensation has a certain influence on the increase of agency cost. Hua Hin et al. [8] used structural equations to study the positive correlation between the degree of external inequality of executive compensation and agency cost in small and medium-sized enterprises. The higher the degree of external inequality, the higher the agency cost generated by on-job consumption and investment. The degree of external equity of executive compensation is negatively correlated with corporate performance [9], and the agency cost has a significant partial mediating effect between the two [10]. The impact of the degree of external equity of executive compensation on corporate performance through the agency cost generated by investment behavior is greater than that of in-service consumption behavior [11]. Based on the above analysis, this paper believes that the executive compensation of an enterprise will have a significant impact on agency costs. Therefore, the following hypotheses are proposed:

Hypothesis 1: There is a positive correlation between executive compensation and agency costs.

Media reports have played a crucial role in China. Therefore, the role of media in corporate governance has attracted more and more attention from scholars, mainly through the dissemination of information to trigger the intervention of relevant departments or affect the reputation of the company to achieve the effect of corporate governance. Zhao Jingru affirmed the influence of media supervision on executive compensation level based on the current stage of social development and economic situation in China [12]. based on the relationship between executive control and executive compensation, Wu Haojie further discussed the mechanism of media negative reports on external governance on the supervision and governance of listed companies [13]. Zhang Weiqian studied the way that media reports affect the level of executive compensation, and explored how media reports produce such an effect [14]. based on the above analysis, this paper believes that media reports will affect the level of executive compensation and adjust the relationship between executive compensation and agency cost. Therefore, the following hypotheses are proposed:

Hypothesis 2: Media attention has a negative moderating effect on the relationship between executive compensation and agency cost.

### 3. Research Design

#### 3.1. Sample Selection and Data Sources

In this paper, A-share listed companies in Shanghai and Shenzhen from 2010 to 2018 were selected as the initial samples. The sample data mainly includes three parts: executive compensation data of listed companies, attention data of online media and agency cost. Among them, the financial data related to executive compensation data and agency cost are mainly from Wind database and CSMAR database, and some data are obtained from the annual reports of listed companies through manual sorting. In order to ensure the validity of the data, this paper carried out the following processing: excluding the samples of companies such as ST and \*ST which were specially processed during 2010-2018; Samples of companies with business interruptions and missing data were removed; Exclude financial companies; In addition, in order to eliminate the influence of extreme outliers, this paper carried out Winsorize processing of 1% ~ 99% of all continuous variables, and finally obtained 22,550 panel data of 3301 companies.

#### 3.2. Definition of Variables

##### 3.2.1. Explained Variable

In previous studies, most scholars adopt two indicators to measure of the agent cost of enterprise, comprehensive cannot get effective guarantee, so this article draw lessons from the research achievements of Chen guan, etc. [16], the management fee and total asset turnover instead of agency cost measure, the management rate = management fee/advocate business wu income, Total assets turnover = main business income/total assets. In this paper, management expense ratio (MC) and total asset turnover ratio (TAT) are used to measure agency cost. The management expense ratio can reflect the influence degree of executive management expenses including on-the-job consumption on agency cost to some extent.

Total asset turnover can reflect an enterprise's asset utilization efficiency, which is mainly used to replace agency cost with low or ineffective asset utilization efficiency.

##### 3.2.2. Explanatory Variables

Referred to the measurement method of executive compensation in the existing literature [17], this paper uses the logarithm of the top three total amounts of executive compensation disclosed in the annual reports of listed companies as the index to measure executive compensation.

##### 3.2.3. Control Variables

The relevant research results of domestic scholar Ning Junjun [18] and others show that variables such as company size also have a significant impact on executive compensation. Foreign studies also prove that factors such as board size have a certain impact on executive compensation. Domestic scholar Jiang Nannan [19] et al. showed that the situation that the chairman of the board of directors and the general manager of a listed company would have a significant impact on the agency cost of the company. Therefore, indicators such as company growth, ownership ratio, executive shareholding ratio, company size, combination of two jobs and board size are used as control variables in this paper.

#### 3.3. Model Construction

Based on the research hypothesis proposed above, and aiming at the relationship between executive compensation and agency cost under media attention, this paper establishes regression model 1 and model 2 to test and analyze the research hypothesis:

**Table 1.** Definition of main variables

Variable name variable	variable symbol	definition
Total asset turnover	TAT	Main business income/total assets
Management expense ratio	MC	Administrative expenses/revenue from main business
Media attention	MEDIA	Take the logarithm of the total number of network reports
Executive compensation	LnCOMP	Take the logarithm of the sum of the top three in executive pay
The enterprise scale	ASSET	Take the natural log of total assets
Both of	DUAL	The positions of chairman and general manager of the enterprise are not set as 1, but 2 concurrently
Financial leverage	LEV	Total liability to assets ratio
Board Size	SIZE	Total number of directors
year	YEAR	Year dummy variable

$$MC / TAT = a_0 + a_1 LnCOMP_{it} + a_2 ASSET_{it} + a_3 DUAL + a_4 LEV_{it} + a_5 SIZE_{it} + \sum YEAR + \varepsilon_1$$

$$MC / TAT = a_0 + a_1 LnCOMP_{it} + a_2 ASSET_{it} + a_3 DUAL + a_4 LEV_{it} + a_5 SIZE_{it} + a_6 MEDIA_{it} + \sum YEAR + \varepsilon_2$$

$\varepsilon_i$  represents the random error term.

## 4. Empirical Results and Analysis

### 4.1. Descriptive Statistics

Descriptive statistics are shown in Table 2. The average value of the companies holding two concurrent positions is 1.730, indicating that the majority of sample companies hold two concurrent positions, that is, the majority of the cases where the chairman and general manager are one. The average value of one of the agency cost indicators of the enterprise is 0.22, indicating that the overall management expense ratio of the sample enterprises is low, but the maximum value reaches 2115 and the minimum value is zero. It also indicates that there is a large gap in the management expense ratio of the sample enterprises, and the expenditure situation of some enterprises is worrying. The mean value of total asset turnover is 0.640, the median is 0.520, and the standard deviation is 0.540. The difference between the two is small, the maximum value is 11.4, and the minimum value is 0, which also shows that the total asset turnover of sample enterprises has a large gap and the problem of imbalance among enterprises. It can be seen that the agency problem has become the key to hinder the healthy and sustainable development of enterprises. The mean value of firm size is 8.650, the median is 9.00, and the standard deviation is only 1.730, indicating that the sample size is similar. Sample enterprise's media reported the number of averages of 332.50, the median was \$168, the standard deviation is 868.0, and network media reported the number of maximum and minimum tea gaps, about different sample enterprises get media attention is bigger, also shows that the media attention also plays a certain role in the process of corporate governance. Financial leverage of the mean value of 0.430, which indicates that overall sample enterprise financial performance is better, but standard deviation is 0.540, the samples show that individuals in financial performance gap is bigger, between different enterprises and financial leverage the minimum appeared negative situation, the maximum value of up to 29.70, this also shows that the sample enterprise gap. The average executive compensation of listed companies is 14.26, the maximum and minimum values are 18.05 and 10.31, respectively, and the standard deviation is 10.31, which indicates that there is a large pay gap between CEOs and other

executives in sample companies, which on the other hand indicates that pay incentive and promotion incentive have been widely implemented in many enterprises.

**Table 2.** Descriptive statistics of main variables

variable	N	mean	p50	sd	min	max
DUAL	22274	1.730	2	0.450	1	2
SIZE	22503	8.650	9	1.730	0	18
MC	22515	0.220	0.0900	14.15	0	2115
MEDIA	22163	332.5	168	868.0	1	49471
LEV	22533	0.430	0.410	0.420	-0.190	29.70
TAT	22514	0.640	0.520	0.540	0	11.42
LnCOMP	22493	14.26	14.25	0.720	10.31	18.05
ASSET	22550	22.04	21.87	1.350	13.08	28.52

## 4.2. Correlation Analysis

As can be seen from Table 3 of correlation analysis, the value range of all correlation coefficients is between (-0.5, 0.5), indicating that there is no multicollinearity problem among variables. In the preliminary test of hypothesis, the correlation coefficient between management expense ratio MC and total asset turnover ratio TAT, one of the indicators of agency cost, and executive compensation is 0.498 and 0.108, respectively, and both of them pass the significance test at the 1% level, indicating that the two types of agency cost are significantly positively correlated with executive compensation. Hypothesis 1 is preliminarily verified. The correlation coefficient between LNCOMP and media attention was 0.215, which passed the significance test at the 1% level, indicating that there was a significant positive correlation between executive compensation and media attention. In other words, the higher the level of executive compensation was, the more media network reports were reported. The preliminary verification of Hypothesis 2 was conducted.

**Table 3.** Correlation analysis of major variables

	DUAL	SIZE	TAT	MC	MEDIA	LEV	LnCOMP	ASSET
DUAL	1							
SIZE	0.183***	1						
TAT	0.00200	0.099***	1					
MC	-0.012*	-0.00800	-0.00600	1				
MEDIA	0.027***	0.090***	0.308***	-0.00200	1			
LEV	0.075***	0.066***	0.047***	0.115***	0.057***	1		
LnCOMP	0.00200	0.108***	0.498***	0.0110**	0.215***	0.00600	1	
ASSET	0.199***	0.279***	0.394***	-0.034***	0.325***	0.167***	0.458***	1

## 4.3. Regression Analysis

The table 4 shows that when the agency cost of the first model using the management fee to measure, the executive compensation and the agency cost of correlation coefficient is 0.09, and a significant under 1% level, explain enterprise implementation of executive compensation incentive for a firm's agency cost plays a significantly positive correlation, would lead to agency costs of enterprises have more spending, hypothesis 1 verified, this is consistent with most previous studies. It shows that the construction of Model 1 is reasonable and can explain the relationship between agency cost and executive compensation. Comprehensive the above analysis it can be seen that the agency cost and present a significant positive correlation

between executive compensation and the higher the level of executive pay, shows that the enterprise produces the phenomenon of information asymmetry between operators and managers, to prevent managers use information asymmetry for a variety of conducive to enterprise development decision-making, more likely to choose to pay a higher agency cost, maintain the interests of the enterprise. The correlation coefficient between media attention and agency cost is negative.

When the index of agency cost is measured by management expense ratio, the correlation coefficient between the two is -0.089, which is significant at the 1% level. When the index of agency cost is measured by total asset turnover, the correlation coefficient between the two is -0.097, which is significant at the 5% level. this indicates that the number of corporate media network reports has a negative correlation with the relationship between executive compensation and agency cost. Therefore, we believe that agency cost is an important moderating variable, and Hypothesis 2 has been verified. this fully reports the test results of whether network media can effectively supervise the executive compensation agency problem. Executive pay is the result of the game between shareholders and executives, is the embodiment of the executives' efforts, comprehensive analysis shows that the number of network media to agency cost and the relationship between executive pay levels significantly weaken effect, reasonable executive pay gap can fully embody the compensation incentive effect, make the senior management team more work hard.

According to tournament theory at the same time pay gap can effectively make up for the pure dependence on absolute performance salary incentive, but to make a compensation incentive mechanism, based on the relative performance of executives can produce a better incentive effect, thus effectively restrain executive or major shareholders demand for agency cost, agency cost can get effective control, This also shows that the current executive compensation in China is unreasonable, and the high level of executive compensation promotes the generation of agency costs.

**Table 4.** Regression analysis of major variables

Variable	TAT	MC	TAT	MC
SIZE	.03464716***	.05327996*	.07362836**	.04354263***
MEDIA	-.0894171***	-.0971528**		
LEV	.04435855***	.008273865*	.06549752**	.009885245*
LnCOMP	.06404972***	.05788432**	.05621209*	.09023692***
ASSET	.06827326***	.05643790***	.04324896***	.0768769**
_cons	.80545827***	.80545827***	.14526388**	.83737628***

legend: \* p<.5; \*\* p<.1; \*\*\* p<.05

## 5. Summary

The study found that senior executives would use their own rights to influence or even dominate the design of the compensation system, which led to the benefit of the compensation



system to the management. Although more and more studies have found the negative correlation between executive compensation and agency cost, how to promote the role of executive compensation system in alleviating the principal-agent problem has important theoretical and practical significance. Based on the background of the new era in China, this paper measures the degree of attention of online media by the number of online media reports. Based on the data of A-share listed companies in China from 2010 to 2018, this paper finds that: The executive compensation level of listed companies in China is significantly positively correlated with the agency cost. The executive compensation tool does not play its due role in solving the principal-agent problem, and there is a relatively prominent executive compensation agency problem. Based on this, this paper puts forward the following suggestions: First, enterprises need to develop a reasonable executive compensation system to reduce the generation of unnecessary agency costs. In the case of widespread agency problems, it is important to reduce the agency problems between shareholders and managers, so that managers can objectively make scientific and reasonable decisions according to the actual situation. Second, we should give full play to the huge role of media in corporate governance, cultivate good moral media personnel, timely expose the behaviors that harm the society and others' interests, pay attention to the bad behaviors of listed companies, and urge enterprises to assume their due social responsibilities.

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