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The empirical study on the pertinence relation between the senior directors' remuneration and companies' performance in listed media companies of China

Jian-hua Dai*, Song-min Lan, Jian Hu
School of Economics and Management, Communication University of China, Beijing, (CHINA)
E-mail : daijianhua66@gmail.com; lansongmin@gmail.com; hujian09@hotmail.com

ABSTRACT

In this paper, the empirical study on the relation between the remuneration of the senior directors of the China's listed companies in media industry and the performance of their company is carried out on the sample data collected from 23 listed media companies in Shanghai and Shenzhen from 2009 to 2012. The study manifests that the remuneration of senior directors has a significant positive relationship with the scale of companies, an insignificant positive relationship with their companies' performance and no significant positive relationship with senior directors' share proportion. According to the research, however, the senior directors' remuneration is negatively related with the state-own shares proportion in an obvious way and negatively related with the ratio of independent directors in a non-significant way.

KEYWORDS

Listed media companies; Remuneration of senior directors; Performance of companies.

INTRODUCTION

Salary system constitutes the integrant part of the whole modern company system. A reasonable salary system can encourage the personnel of the company, improve economic performance and stop the brain strain in the fierce personnel competition. What attracts attention in the whole salary system is the remuneration of the senior executives and the exorbitant pay for them is subjected to criticism and raises doubt. As a sunrise industry in China, medium industry is thriving with the government's support. The study on senior executives' remuneration in the listed media companies is beneficial to building sound salary-incentive system, retaining talents and improving the sound development of the listed media companies.

LITERATURE REVIEW AND STUDY AREA

In terms of the study abroad on executive pay and corporate performance, many scholars came to varied conclusions on basis of different theories and from different perspectives. According to Murphy K (1985), significant positive relationship could be found between senior executives pay and corporate performance[1]. From the perspectives of Brian J Hall and Jeffrey B Lineman (1988), the significant positive relationship resulted from shares and options of senior executives[2]. The study of Atria Chakra Borty (2009) suggested that high executive pay could improve the corporate performance relative to business volume[3].

While domestic research carried out by Zengquan Li (2009) proved that executive pay of the listed companies in China has relationship with corporate scale but not its performance[4]. Through data collected from 597 listed companies, Jinling Zhang and Xun Zhao found that the senior executive pay relates to corporate performance, size and the share held by executives in a positive way[5]. By analyzing data of 12 listed media companies from 2003 to 2009, Dequan Yao and Qian Li (2011) found significant but unsteady positive relationship between senior **executive** pay and corporate economic performance and non-significant positive relationship between share proportion held by senior executives and corporate performance[6]. In the view of Feng Xia (2012), the executive pay has significant positive relationship with corporate performance and corporate scale, has significant negative relationship with state-owned share proportion and has no obvious relationship with executive-hold share proportion[7].

MATERIAL AND METHODS

Research hypothesis

Senior executive pay and corporate performance

According to the Principal-Agent Theory, principals pay agents according to their performance and encourage them with reasonable remuneration to make profits for companies. Through this way, the interests of principals and agents are effectively related. Given to this, a hypothesis is put forward:
H1: Senior executive pay is positively related to the corporate performance.

Senior executive pay and corporate size

It seems a general idea that the lager the company is the higher salary the executive will ask. Because of more complex corporate structure and more management levels, managers will be more qualified and responsible to operate the increasing resources. Given to this, the second hypothesis is proposed:
H2: Senior executive pay is positively related to the corporate scale.

Senior executive pay and their share proportion

According to the Principal-Agent Theory, senior executives are always in quest for their maximum interest. Their personal interest will be closer to that of their companies if they have much more share. Also they will keep a watchful eye on long-term corporate interest, and make efforts to improve corporate interest in order to get higher remuneration. Given to this, the third hypothesis is raised:

H3: Senior executive pay is related to their share proportion in a positive way.

Senior executive pay and state-owned share proportion

Many listed companies in China are state-owned holding companies and state-owned shares is in a holding position. This leads to the short of subject of state-owned capital, which weakens the incentive mechanism. Moreover, the stress on the justice of salary system in the state-owned companies will put a cap on the executive pay. Therefore, another hypothesis is formulated:

H4: Senior executive pay is negatively related to state-owned share proposition.

Senior executive pay and the ratio of independent directors

The establishment of the independent director system aims at transforming the policy-making structure of the board of directors. The higher the proportion of the independent directors in the board of directors is, the more independent the board of directors is and the more effective to prevent the exorbitant remuneration. For this reason, the fifth hypothesis is put forward:

H5: Senior executive pay is negatively related to the ratio of independent directors in an obvious way.

Sample selection and data source

Objects of study in this paper are huge companies listed on Shanghai and Shenzhen A-share stock market. They focus on and invest a lot in media industry. According to CSRC, 33 companies are in accordance with the criteria above. Sample data used in the study are those published between 2009 and 2012 and in line with the criteria following:

(1) In order to avoid any deviation of the extremes in the conclusion, the sample data does not include companies that has merged, declared bankruptcy or reorganized.

(2) In order to ensure the consistence of samples and the integrity of the information, media companies listed after December 31st, 2009 are not included. According to criteria above, the paper selects 23 listed media companies and gets 92 sets of data.

Data in this paper are taken from CSRC official website and the information disclosure website designated by CSRC (http://www.cninfo.com.cn/). Data process in based on Eviews6.0 and this empirical study is conducted through Panel Data Model.

Variables selection

Explained variables

Senior Executive Pay: it is represented by LNINCOME, the logarithm of INCOME, the total amount of the pay of the top three highest paid senior executives.

Explanatory variables

Corporate Economic Performance: ROE (return on equity) and EPS (earnings per share) are chosen to be the criteria for measuring corporate performance, and they are taken directly from annual reports of listed companies. ROE is the ratio of corporate net assets and stockholders' equity, showing the overall profitability of companies. EPS is the ratio of after-tax profits and the amount of general capital, a fiscal standard for corporate profitability.

The Size of Companies: it is represented by LNSIZE, the logarithm of the total amount of corporate assets. It is also the factor influencing senior executive pay and corporate performance.

Senior Executives' Stockholding Ratio: it is represented by HRM, the ratio of the general amount of senior executives' share and the total amount of general capital.

TABLE 1 : Variable Definition

	Names of Variables	Symbols of Variables	Definitions of Variables
Explained Variables	Senior' executive pay	LNINCOME	the logarithm of the total amount of the pay of the top three highest paid senior executive
Explanatory Variables	Corporate performance	ROE	the ratio of corporate net assets and stockholders' equity
		EPS	the ratio of after-tax profits and the amount of general capital
	Corporate size	LNSIZE	the logarithm of the total amount of corporate assets.
	Senior executive shares proportion	HRM	the ratio of the general amount of senior executives' share and the total amount of general capital.
	State-owned shares proportion	GOV	the ratio of the general amount of state-owned shares and the total amount of general capital
	Ratio of independent directors	IDD	the ratio of the numbers of independent directors and the total number of the board.

State-owned Shareholding Ratio: Represented by GOV, the ratio of the general amount of state-owned shares and the total amount of general capital, it is the sum of state-owned shares and state-owned legal person shares.

Independent Director Ratio: it is represented by IDD, the ratio of the numbers of independent directors and the total number of the board.

Model building

Models are built in this paper for studying the correlation of senior executive pay and corporate performance. They are as follows:

$$LNINCOME_{it}=c_i+\beta_1*ROE_{it}+\beta_2*LNSIZE_{it}+\beta_3*HRM_{it}+\beta_4*GOV_{it}+\beta_5*IDD_{it}+\varepsilon_{it}$$

$$LNINCOME_{it}=c_i+\beta_1*EPS_{it}+\beta_2*LNSIZE_{it}+\beta_3*HRM_{it}+\beta_4*GOV_{it}+\beta_5*IDD_{it}+\varepsilon_{it}$$

In models above, "i" means individuals (i= 1,2,…,23); "t" is years (from 2010 to 2013); "ci" represents the unobserved individual fixed effect; "βi" is the parameter to be estimated; "εit" is the random error term. Eviews6.0 is adopted to evaluate and exam these models in this paper.

RESULTS AND DISCUSSIONS

Selection of panal data model

In order to ensure the model is suitable for analyzing data, right type of models should be chosen before evaluating panal data. In generally, F-test is used firstly to decide which panal data model is used, the mixture regression model or the fixed effect model. Then Hausman-test is adopted to decide either random effect model or fixed effect model is to be set.

F-test

TABLE 2 : Results of F-test

	Model 1			Model 2		
Effects Test	Statistic	d.f.	Prob.	Statistic	d.f.	Prob.
Cross-section F	13.3221	(22,64)	0.0000	12.2651	(22,64)	0.0000
Cross-section Chi-square	158.1566	22	0.0000	151.9613	22	0.0000

It is clear in TABLE 3 that both model one and model two pass the significance test of F-test with a level of 5% (=0.0000<0.05), or reject null hypothesis (*H0:*mixture regression model is prior to fixed effect model). Therefore, both models should adopt fixed effect model or random effect model.

Hausman-test

TABLE 3 : Results of Hausman-test

	Model 1			Model 2		
Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Cross-section random	6.1760	5	0.0290	6.1735	5	0.0289

Conclusion can be made according to TABLE 4 that both models should adopt fixed effect model because they pass the significance test of Hausman test with a level of 5%, or reject the null hypothesis (*H0:*random effect model is prior to fixed effect model).

Analysis of the regression results of fixed effect model

Evaluate the panal data by using the fixed effect model, and the results are as follow in TABLE 5:

TABLE 4 : Regression Results of Models

	Model 1			Model 2		
Variable	**Coefficient**	**t-Statistic**	**Prob.**	**Coefficient**	**t-Statistic**	**Prob.**
c	9.68	7.1645	0.0000	9.60	7.1332	0.0000
ROE?	0.09	0.1145	0.9091	----	----	----
EPS?	----	----	----	0.13	0.7927	0.4301
LNSIZE?	0.23	3.8290	0.0002	0.23	3.8700	0.0002
HRM?	0.04	0.1454	0.8847	-0.001	-0.0222	0.9823
GOV?	-0.67	-3.4069	0.0010	-0.67	-3.4425	0.0009
IDD?	-0.15	-0.2107	0.8336	-0.15	-0.2165	0.8291
R-squared		0.2422			0.2476	
Adjusted R-squared		0.1981			0.2038	
F-statistic		5.4966			5.6590	
Prob (F-statistic)		0.0002			0.0001	

Analysis of the overall regression results of models

According to TABLE 5, Model 1 and model 2 are in sound goodness of fit, for volumes of R2 of both models are 0.1981 and 0.2038 respectively after revision; the regression model is valid because volumes of F-statistic of both models are 5.4966 and 5.6590 respectively, and both pass the significance test with a level of 5% ($\rho<0.05$).

Analysis of the regression results of corporate performance

According to TABLE 5, there is weak positive correlation between senior executive pay and corporate performance due to the ROE in Model 1 being 0.09, $\rho=0.9091>0.05$; in Model 2, EPS is 0.13, $\rho=0.4301>0.05$, which shows that although positive correlation can be found between senior executive pay and corporate performance, it is weak. Based on those results, Hypothesis One does not hold water. It shows that corporate performance is not taken into consideration when senior executive pay is decided in listed media companies.

In fact, most listed media companies in China are those reorganized state-owned companies. Senior executives are paid in the pattern of "annual base salary + variable bonus", among which variable bonus, relating with corporate performance, makes up a small part.

Therefore, it can hardly inspire them to make profits for companies. What's more, the absence of punitive measures stops senior executives from being afraid of punishment for corporate performance lower than expectation. All these lead to the divorce between senior executive pay and corporate performance.

The regression result analysis of corporate size

Coefficients of LNSIZE of Model 1 and Model 2 are positive and pass the significance test with a level of 5%, ($\rho<0.05$). It demonstrates that strong positive correlation can be found between senior executive pay and corporate size, or Hypothesis two is valid. The larger the company is, the bigger the chance is for senior executives to get better paid.

The regression results analysis of their shareholding proportion

Neither of the volume of HRM in Model 1 and Model 2 passes the significance test with a level of 5%, so no strong positive correlation exists between senior executive pay and their shareholding proportion, or Hypothesis Three is not valid. In China, short-term incentive mechanism of fixed remuneration is carried out in most listed media companies. Expect of some non-state-owned companies, most senior executives hold little corporate shares, which gives no full play of the role of long-term incentive of stockholder's right. Therefore, senior executive shareholding proportion has little influence on their pay.

The regression results analysis of state-owned share proportion

Coefficients of GOV in Model 1 and Model 2 are negative, and pass the significance test with a level of 5%, ($\rho<0.05$). It shows that strong negative correlation can be found between senior executive pay and state-owned share proportion and Hypothesis Four is valid. With a large proportion of state-owned shares and hence its majority shareholding status, most listed media companies in China is to some extent short of the subject of state-owned capital, which may restrict the incentive mechanism. And the stress on the justice and balances of remuneration may also put a cap on senior executive pay. These result in the strong negative correlation between senior executive pay and state-owned share proportion.

The regression results analysis of independent director proportion

Both of the coefficients of IDD in Model 1 and Model 2 are negative, but with a significance test result lager than 0.05. It provides that weak negative correlation can be found between senior executive pay and the independent director proportion. Therefore, Hypothesis Five does not hold water. It manifests that the independence of the board of directors remains weak, and independent directors do not play a role of supervision and checks and balances. These may lead to the concomitant executive pay. So, the decision-making structure of the board needs a further promotion.

CONCLUSIONS AND POLICY SUGGESTIONS

The empirical study manifests that the senior executive pay has a strong positive correlation with the corporate size, a weak positive relationship with their companies' performance and no significant positive relationship with senior executives' share proportion. However, the senior executive's remuneration is negatively related with the state-own shares proportion in a significant way and negatively related with the ratio of independent directors in a non-significant way. Given to discussions above, three suggestions are put forward.

Improving remuneration pattern

In order to enhance the incentive mechanism, listed media companies in China should give more consideration to corporate performance and stockholders' right when deciding senior executive pay, and establish a remuneration pattern including long-term and short-term incentive mechanism. For establishing the short-term incentives, companies should conduct the remuneration incentive mechanism of linking up senior executive pay with corporate performance, enhancing the proportion of variable bonus so as to bind senior executive pay and corporate performance. In terms of the long-term incentives, companies should improve senior executive shareholding system by giving more shares to senior executives. Having more stakes in corporate interest, they will pay more attention on the long-term corporate interest and development.

Standardizing the remuneration system of modern companies

Listed media companies in China should continue the process of the reduction of state shares, and standardize modern corporate system. According to the empirical study, the reduction of state shares can diminish its restriction on senior execution pay and raise the incentive of remuneration. However, it sets higher requirements for listed media companies to practice standardized operation. In terms of remuneration system, companies should formulate transparent senior executive pay system, combining the remuneration and responsibility of senior executives and corporate performance; set up remuneration management commission, making comprehensive evaluation on senior executives in accordance with remuneration evaluating system so as to ensure the justice of senior executive pay.

Improving the independent directors system

Listed media companies in China should improve the independent directors system as soon as possible, giving full play of its role in corporate management. Independent directors should be set up in line with the requirement of CSRC, making the number of that no less than one third of the number of the board. Responsibilities and obligations of senior executives should be highlighted. Companies should link the independent directors' pay and corporate performance through rational remuneration system so as to strengthen their positivity and objectivity. What's more, companies should establish effective communication mechanism with independent directors to ensure their rights to know and to supervise, and protect their rights to speak when making decisions.

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