Impact of Core Employee Equity Incentive on Enterprise Performance

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Abstract

Considering China's A-share listed enterprises that completed equity incentive from 2010 to 2017 as the research sample, this paper empirically analyses the impact of core employee equity incentive on enterprise performance. Controlling key enterprises' variables such as size, type, financial leverage, book to market ratio in a time series regression, return on equity and earnings per share are explained by incentive of core employees and importance of core employees' ratio. The results suggest that, increasing the intensity of equity incentive of core employees has an incentive effect on corporate performance and also, the higher the enterprise attaches importance to employees in equity incentive, the more obvious the incentive effect on performance. The empirical results of this paper have important implications for the design of equity incentive schemes for listed companies, which will serve as a guide for investors' decisions. Therefore, in order to solve the agency cost problem, the shareholders of listed enterprises should increase the incentive intensity and importance of the core employees who are the cornerstone of the enterprise, in the design of the equity incentive scheme.

Keywords

Core Employee Equity Incentive, Enterprise Performance, Agency Cost Problem, Incentive Intensity

1. Introduction

The separation of ownership and management rights in modern enterprises leads to the agency cost problem, and a reasonable incentive system can improve the work engagement of personnel management and reduce agency cost (Jensen

& Meckling, 1976). Yermack (1995) found that the implementation of managerial equity incentive was mainly for the purpose of reducing agency costs. Its core purpose is to make incentive objects motivated to operate enterprises according to the principle of maximizing shareholders' interests and reducing or eliminating short-term behaviors through profit sharing and risk sharing between incentive objects and enterprises. However, the motivation for some listed enterprises to choose equity incentive is for the purpose of welfare, and equity incentive is not a substitute for agency cost but a result of agency cost (Fama & Jensen, 1983).

The development of an enterprise cannot be separated from senior executives, not to mention core employees, especially technical personnel and middle-level managers. Therefore, this paper chooses to use empirical analysis to study the impact of core employee equity incentive on enterprise performance. The results show that increasing the intensity of equity incentive of core employees has an incentive effect on corporate performance and also, the higher the enterprise attaches importance to employees in equity incentive, the more obvious the incentive effect on performance.

Most of the previous research on equity incentive is based on the principal-agent theory, focusing on the agency problem between executives and shareholders, but paying less attention to the core employees. Hence, this paper bridges an obvious gap in the literature by discussing the role of equity incentive for core employees and draws in-depth study on the incentive method and incentive validity period.

Literature Review and Research Hypotheses

In their study, Jensen & Meckling (1976) pointed out that management shareholding has an incentive effect and thus, contributes to increasing the value of the firm. Through the management equity incentive policy, the company allows the senior management of the company to own shares of the company and share in the residual income of the company, thus effectively tying the interests of the executives to the interests of the company. By setting performance targets for management and allowing them to share in the company's residual income, companies can motivate management to focus more on the long-term development of the company and avoid their short-term behavior, which in turn helps to increase the value of the company. Larcker (1983) suggested that the performance of a company would be improved when the company is given equity incentives. Defusco et al. (1991) and Mehran (1995) demonstrate that firm performance is positively related to management shareholding. Guay (2001) argues that firms facing capital needs and financing constraints will use larger stock options to compensate and that firm performance will significantly improve during the period when stock options are implemented. Oyer (2005) finds that equity incentives for employees can enhance employee belonging and improve corporate performance. Hass (2016) analyses the Chinese market and argues that equity incentives for executives increase their propensity to engage in corporate

fraud.

Zhou & Sun (2003) postulate that the number of shares held by executives is positively related to firms' performance in firms with high growth. Wang & Huang (2006) posit that there is an inverted U-shaped relationship between management equity incentives and firm performance. Cheng & Xia (2008) demonstrate that the implementation of equity incentives for corporate executives in state-owned enterprises can effectively improve the performance of state-owned enterprises. Lu et al. (2009) studied the characteristics of their equity incentive schemes and their incentive effects by using a sample of listed companies that announced their draft equity incentive schemes from January 1, 2005 to December 31, 2008. They concluded that both incentive and welfare effects exist in the equity incentive schemes designed by listed companies and that the equity incentive effect can be increased by improving the incentive conditions and the incentive validity period. Wu & Wu (2010) collected 82 drafts of listed companies and suggested that most companies were exceptionally lenient in the design of performance assessment indicators in their equity incentive schemes, which facilitated executives to obtain and exercise stock options, reflecting obvious self-interest of executives. They found that at the corporate governance level, the shareholding ratio of major shareholders has a restraining effect on the self-interested behaviour of executives, and the equity incentive scheme will have an incentive effect under such circumstances. Lu et al. (2011) suggests that the imperfection of corporate governance structure and the lack of supervision and control on managers will make managers choose equity incentives for welfare purposes, which affects the incentive effect of stock options. Liu (2017) argues that the implementation of equity incentives can curb the corporate principal-agent problem.

However, some scholars believe that the correlation between equity incentives and company performance is not significant. Yang & Wang (2013) for example, examined the changes of each of the eight categories of financial performance indicators during the implementation of equity incentives in China's listed companies. After employing the PCA principal component analysis, these authors concluded that whether listed companies implement equity incentives will not affect their profitability, shareholders' profitability, cash flow capacity and short-term debt servicing capacity at the same time, the equity incentive plan has no direct impact on the operating capacity and development capacity of listed companies. Xu et al. (2016) found that the implementation of equity incentives and the intensity of CEO equity incentives had a significant positive relationship with firm performance; however, after excluding the "noise" of surplus management in firm performance, no significant relationship was found between equity incentive plans and the intensity of CEO equity incentives and firm performance. Wang & Liang (2019) argue that the positive relationship between executive equity incentives and firm growth is only significant when the proportion of the first largest shareholder is between 20% and 50%. Xie et al. (2018) posits that listed companies with equity incentives had a significant phenomenon

of "stepping over the line" to meet the performance condition of the exercise. It was found that the managers achieved the performance targets in a way that might be detrimental to the long-term interests of the company.

Some scholars have also found that equity incentives are negatively related to firms' performance. Wang & Li (2015) argue that under low competitive product market conditions, management shareholding is significantly negatively related to firms' performance. Hu et al. (2020) found that equity incentives for employees can complement the deficiencies in executive incentives. Bartov & Mohanram (2004) postulates that in the implementation of equity incentives, the performance in the two years before the exercise was much better than after the exercise. Too short an equity incentive validity period is associated with performance manipulation by executives. Lu et al. (2009) argues that equity incentives that are valid for more than five years are more motivating. Li & Ren (2014) argue that the length of the validity period designed in the equity incentive program has a significant correlation with the incentive effect. Zhou & Gao (2012) studied the perspective of large shareholders and state-owned private enterprises and concluded that the more shares of large shareholders in state-owned enterprises, the better the effect of equity incentives, and the more shares of large shareholders in private enterprises, the worse the incentive effect. Bryan (2000) argues that stock options promote management bias towards high-risk and high-reward business projects. Bebchuk & Fried (2003) studied the types of equity incentives and find that stock options are more motivating and binding than restricted stock. Zhao & Yu (2011) argued that stock options elicit a better market response than restricted stock, and investors prefer listed firms to choose stock options as an incentive method. Chang et al. (2015) found that choosing stock options for employee equity incentive programs stimulates employee innovation. Aldatmaz et al. (2018) argued that stock options in equity incentives options use will reduce employee turnover and can increase firm turnover. However, Wang & Qian (2021) argue that restricted stock incentives are more effective than stock options when it comes to equity incentives for core employees.

In general, research on the relationship between equity incentives and firm performance is relatively matured, and the influencing factors in equity incentives have been relatively well researched. However, the majority of research on equity incentives concentrates on the incentives for executives and does not address the incentives for the firm's core employees. This paper thus, proposes the following hypotheses based on the previous research gaps.

H1: The greater the proportion of core employees incentivized in equity incentives, the more obvious the incentive effect on listed enterprises.

H2: The higher the importance of equity incentive scheme to employees, the stronger the incentive effect on the performance of listed enterprises.

2. Study Design and Sample Selection

2.1. Sample and Data

This paper selects all A-share listed enterprises that completed equity incentive

from 2010 to 2017 as the research sample, and after initial sorting, continued to screen and process the data according to the following criteria. First, eliminates financial and insurance listed enterprises. Second, the sample of ST (special treatment) and ST* (special treatment that warns of the risk of termination of listing) firms is excluded. Thirdly, when the same company carries out equity incentive for many times in the same year, considering that the type of conditions and incentive objects of the newly announced equity incentive of the company are different from those of the original equity incentive, multiple equity incentives in the same year are regarded as different samples. In this paper, the financial data of the company, the nature of equity, the information of senior executives and other attributes, as well as the data related to the equity incentive plan are all taken from Wind database and CSMAR database (China Stock Market & Accounting Research Database). Among them, the missing data of relevant variables in the equity incentive text and finance are supplemented with the data of equity incentive announcements of Shanghai Stock Exchange and Shenzhen Stock Exchange. In addition, in order to eliminate the interference of extreme values of sample data on the analyzed results, the variables in the model are winsorized by 1% above and below. Finally, 1143 equity incentive documents and corresponding company data are obtained.

This article, draw from the works of previous scholars like (Shen & Wu, 2012; Li, 2017; Tian, 2022) and, control the following variables; Incentive mode, Length of validity, Total compensation of the top three executives, Top five ownership concentration, The joining together of chairman and manager, The separation rate of the two rights of the actual controller, Equity balance degree, The company size, Financial leverage, Book to market ratio and Nature of the company.

2.2. Study Design

For Hypothesis 1, in the process of exploring the relationship between employee equity incentive and corporate performance, this paper constructs a model with return on equity (Roe) as the explained variable, as shown in the following equations;

$$
\begin{aligned}
Roe_{it+1} = \alpha &+ \beta_1 Inc_{it} + \beta_2 Type_{it} + \beta_3 Term_{it} + \beta_4 lntop3_{it} + \beta_5 Top5_{it} \\
&+ \beta_6 Position_{it} + \beta_7 Sep1_{it} + \beta_8 Balance_{it} + \beta_9 Size_{it} + \beta_{10} Lev_{it} \quad (1) \\
&+ \beta_{11} State_{it} + \beta_{12} Bm_{it} + \varepsilon_{it}
\end{aligned}
$$

The standard model with earnings per share (Eps) as the explained variable is shown in (2) as below;

$$
\begin{aligned}
Eps_{it+1} = \alpha &+ \beta_1 Inc_{it} + \beta_2 Type_{it} + \beta_3 Term_{it} + \beta_4 lntop3_{it} + \beta_5 Top10_{it} \\
&+ \beta_6 Position_{it} + \beta_7 Sep1_{it} + \beta_8 Balance_{it} + \beta_9 Size_{it} + \beta_{10} Lev_{it} \quad (2) \\
&+ \beta_{11} State_{it} + \beta_{12} Bm_{it} + \varepsilon_{it}
\end{aligned}
$$

For Hypothesis 2, in the process of exploring the emphasis on employees in equity incentive and corporate performance, this paper constructs the following model shown in (3) as;

$$Roe_{it+1} = \alpha + \beta_1 Ratio_{it} + \beta_2 Type_{it} + \beta_3 Term_{it} + \beta_4 lntop3_{it} + \beta_5 Top5_{it}$$
$$+ \beta_6 Position_{it} + \beta_7 Sep1_{it} + \beta_8 Balance_{it} + \beta_9 Size_{it} + \beta_{10} Lev_{it} \qquad (3)$$
$$+ \beta_{11} State_{it} + \beta_{12} Bm_{it} + \varepsilon_{it}$$

The standard model with earnings per share (Eps) as the explained variable is as follows in (4);

$$Eps_{it+1} = \alpha + \beta_1 Ratio_{it} + \beta_2 Type_{it} + \beta_3 Term_{it} + \beta_4 lntop3_{it} + \beta_5 Top10_{it}$$
$$+ \beta_6 Position_{it} + \beta_7 Sep1_{it} + \beta_8 Balance_{it} + \beta_9 Size_{it} + \beta_{10} Lev_{it} \qquad (4)$$
$$+ \beta_{11} State_{it} + \beta_{12} Bm_{it} + \varepsilon_{it}$$

2.3. Research Variables and Definitions

Based on the literature reviewed, this paper selects the following commonly used control variables (Table 1):

Table 1. Variable definition.

Variable types	Variable name	Variable symbol	Variable definition and calculation method
Explained variable	Return on equity	Roe	Lagged one-period weighted average return on equity excluding non-recurring gains and losses.
	Earnings per share	Eps	Lagged one-period basic earnings per share after deducting non-recurring gains and losses.
Explanatory variables	Incentive intensity of core employees	Inc	Core employee equity/total share capital of the company on that day.
	Importance of core employees	Ratio	This incentive core employee rights/this executive incentive.
Control variables	Incentive mode	Type	This is a dummy variable. Where 0 represents options and 1 represents restricted stock.
	Length of validity	Term	Length of validity period of equity incentive.
	Total compensation of the top three executives	Lntop 3	Ln (Total remuneration of the top three executives + 1).
	Top five ownership concentration	Top 5	Shareholding ratio of the top five shareholders.
	The joining together of chairman and manager	Position	The dummy variable is marked as 1 if the chairman and general manager are the same person, and 0 if they are not.
	The separation rate of the two rights of the actual controller	Sep 1	Refers to the control right—ownership of the controller of a listed company.
	Equity balance degree	Balance	Shares of the 2 - 5 shareholders/shares held by the largest shareholder.
	The company size	Size	Ln (Total assets at year-end + 1).
	Financial leverage	Lev	Total liabilities at year-end/total assets at year-end.
	Book to market ratio	Bm	Ln (Total assets/market value + 1).
	Nature of the company	State	Dummy variables, marked 1 for state ownership and 0 for private ownership.

3. Empirical Analysis

3.1. Descriptive Statistics

As posited, in this paper, A-share listed companies from 2010-2017 were selected for the study, and after data screening and 1% tailing process, a total of 1143 listed companies' equity incentive data were obtained, and the sample descriptive statistics are shown in Table 2 below.

According to the descriptive statistics in Table 2, there are 1143 samples considered in this paper. The mean value of core employee incentive intensity (Inc) is 1.583, which represents 1.583% of the total equity in the whole sample. The maximum value is 1.438, the minimum value is 0.343, and the standard deviation is 0.962. It proves that there is a large difference in employee equity incentives in the whole sample. Combined with the ratio variable, it indicates that in all the equity incentives implemented from 2010 to 2017, listed enterprises have encouraged core employees. The mean value of incentive mode (Type) is 0.744, indicating that 74.40% of the stock incentive schemes are implemented in the way of restricted stock, and restricted stock is the most preferred stock incentive method of listed enterprises in the selected sample. The average value of term of equity incentive is 4.369, the maximum value is 5, and the minimum value is 4, indicating that the term of validity of equity incentive plan is more likely to be 4 - 5 years, which exceeds the minimum period of 3 years set by China Securities Regulatory Commission, but will not exceed 5 years.

Table 2. Descriptive statistics.

Variables	N	mean	sd	min	max
Roe	1143	0.076	0.125	−0.495	0.086
Eps	1143	0.414	0.642	−1.748	0.327
Inc	1143	1.583	0.962	0.343	1.438
Ratio	1143	7.410	9.981	0.681	3.289
Type	1143	0.744	0.437	0	1
Term	1143	4.369	0.479	4	5
Lntop 3	1143	5.230	0.529	4.432	5.201
Top 5	1143	54.91	12.18	34.63	55.34
Position	1143	0.380	0.486	0	0
Sep 1	1143	4.352	7.030	0	0
Balance	1143	0.860	0.653	0.0583	0.696
Size	1143	3.405	0.859	2.269	3.257
Lev	1143	0.362	0.167	0.130	0.354
Bm	1143	0.408	0.123	0.213	0.418
State	1143	0.070	0.255	0	0
VARIABLES	N	mean	sd	min	max

3.2. Regression Analysis

The results of the regression of core employee equity incentives on hypothesis one and firm performance are shown in Table 3 below.

Table 3. Regression results of core employee equity incentive intensity on performance.

Variables	(1) Roe	(2) Eps
Inc	0.007*	0.023
	(1.90)	(1.12)
Type	−0.028***	−0.067
	(−3.58)	(−1.63)
Term	−0.005	0.000
	(−0.62)	(0.01)
Lntop 3	0.026***	0.166***
	(2.75)	(3.90)
Top 5	0.001***	0.007***
	(3.11)	(4.53)
Position	−0.003	0.012
	(−0.41)	(0.30)
Separation	0.001**	0.003
	(1.96)	(1.19)
Balance	−0.007	−0.037
	(−1.23)	(−1.23)
Size	−0.000	0.090***
	(−0.06)	(2.69)
Lev	−0.009	−0.019
	(−0.28)	(−0.14)
Bm	−0.088***	−0.304*
	(−2.83)	(−1.87)
State	0.028**	0.098
	(2.27)	(1.19)
Constant	−0.037	−1.011***
	(−0.68)	(−3.61)
Observations	1143	1133
R-squared	0.046	0.076
Industry	YES	YES
Year	YES	YES

Robust t-statistics in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

In regression (1) with return on net assets (Roe) as the explanatory variable, core employee incentive intensity (Inc) is significantly positive at the 5% level with a regression coefficient of 0.007, indicating that future years' return on net assets collection is positively related to core employee equity incentive intensity, and the greater the firm's equity incentive to core employees, the greater the future years' return on net assets.

In regression (2) with earnings per share (Eps) as the explanatory variable, the intensity of core employee incentives (Inc) is significantly positive at the 5% level with a regression coefficient of 0.023, indicating that earnings per share in the coming year is positively related to the intensity of core employee incentives, and the greater the intensity of corporate equity incentives for core employees, the more earnings per share in the coming year, hence, hypothesis 1 is approved.

In the regression for hypothesis two, this paper only considers whether core employee equity incentives affect performance. In order to explore the impact of the importance of core employee incentives on performance, the variable core employee importance (Ratio) is introduced instead of core employee incentive intensity (Inc) as an explanatory variable, and the regression results are shown in Table 4 below.

In regression (3) with return on net assets (Roe) as the explanatory variable, core employee importance (Ratio) is significantly positive at the 1% level with a regression coefficient of 0.001, indicating that future year's return on net assets is positively correlated with core employee importance, and the greater the percentage of employee importance in an equity incentive, the greater the future year's return on net assets.

In regression (4) with earnings per share (Eps) as the explanatory variable, the degree of core employee importance (Ratio) is significantly positive at the 1% level with a regression coefficient of 0.007, indicating that earnings per share in the coming year is positively related to the degree of core employee importance, and the greater the proportion of core employees valued by the company in an equity incentive, the more earnings per share in the coming year. Hypothesis 2, the higher the importance of equity incentive schemes to employees, the stronger the incentive effect on the performance of listed enterprises is hence, approved.

3.3. Robustness Test

In order to verify the robustness of the main findings, this paper uses the variable substitution method to conduct robustness tests from replacing the measures of the explanatory variables. Here in this paper, total net asset margin (Roa) is chosen as the new explanatory variable in place of return on net assets Roe, and operating profit per share (Opps) is chosen in place of earnings per share (Eps).

3.3.1. Robustness Validation for Hypothesis 1
The regression results are shown in Table 5 below.

Table 4. Regression results of core staff importance on performance.

Variables	(3)	(4)
	Roe	Eps
Ratio	0.001**	0.007***
	(2.25)	(3.19)
Type	−0.029***	−0.062
	(−3.70)	(−1.59)
Term	−0.004	0.010
	(−0.45)	(0.23)
Lntop 3	0.025***	0.162***
	(2.71)	(3.87)
Top 5	0.001***	0.007***
	(2.80)	(4.14)
Position	−0.003	0.006
	(−0.41)	(0.15)
Separation	0.001**	0.004
	(2.09)	(1.41)
Balance	−0.008	−0.041
	(−1.29)	(−1.34)
Size	−0.002	0.076**
	(−0.34)	(2.29)
Lev	−0.002	0.019
	(−0.05)	(0.14)
Bm	−0.078**	−0.245
	(−2.51)	(−1.50)
State	0.024*	0.076
	(1.96)	(0.91)
Constant	−0.028	−1.002***
	(−0.52)	(−3.59)
Observations	1143	1133
R-squared	0.046	0.086
Industry	YES	YES
Year	YES	YES

Robust t-statistics in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 5. Results of robustness tests on the intensity of equity incentives for core employees.

Variables	(5)	(6)	(7)	(8)
	Roa	Opps	Roa	Opps
Inc	0.003***	−0.002	0.003***	0.082***
	(2.93)	(−0.10)	(2.92)	(2.95)
Incmarket			−0.001	−0.116***
			(−1.08)	(−3.88)
Type	−0.001	−0.076	−0.001	−0.083*
	(−0.53)	(−1.59)	(−0.56)	(−1.76)
Term	0.004*	0.054	0.004*	0.052
	(1.87)	(0.97)	(1.86)	(0.95)
Lntop 3	0.011***	0.224***	0.011***	0.204***
	(5.79)	(5.62)	(5.63)	(5.09)
Top 5	0.001***	0.010***	0.001***	0.010***
	(8.41)	(6.11)	(8.42)	(6.31)
Position	0.004**	0.057	0.004**	0.071
	(2.24)	(1.26)	(2.30)	(1.51)
Separation	0.000	−0.001	0.000	−0.002
	(0.41)	(−0.42)	(0.33)	(−0.75)
Balance	0.002	−0.037	0.002	−0.027
	(1.30)	(−1.12)	(1.38)	(−0.81)
Size	0.005***	0.140***	0.005***	0.123***
	(3.69)	(3.79)	(3.56)	(3.53)
Lev	−0.091***	−0.240	−0.092***	−0.305*
	(−13.49)	(−1.52)	(−13.48)	(−1.87)
Bm	−0.080***	−0.396***	−0.081***	−0.452***
	(−9.46)	(−2.64)	(−9.47)	(−3.03)
State	−0.013***	−0.018	−0.013***	−0.031
	(−3.99)	(−0.21)	(−4.02)	(−0.35)
Constant	−0.001	−1.537***	0.001	−1.343***
	(−0.06)	(−4.19)	(0.09)	(−3.82)
Observations	1143	1143	1143	1143
R-squared	0.331	0.094	0.331	0.108

Robust t-statistics in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 6. Results of robustness tests on employee importance in equity incentives.

Variables	(9)	(10)	(11)	(12)
	Roa	opps	Roa	opps
Ratio	0.000***	0.008***	0.000	0.005
	(5.30)	(3.65)	(0.91)	(1.28)
Type	−0.001	−0.062	−0.002	−0.206**
	(−0.53)	(−1.32)	(−0.32)	(−2.54)
Term	0.004**	0.062	0.003	0.082
	(2.28)	(1.16)	(0.46)	(0.96)
Lntop 3	0.011***	0.219***	0.020**	0.243***
	(5.74)	(5.61)	(2.64)	(2.82)
Top 5	0.001***	0.009***	0.001***	0.014***
	(7.75)	(5.55)	(2.83)	(3.47)
Position	0.004**	0.047	0.009	0.031
	(2.14)	(1.05)	(1.25)	(0.36)
Separation	0.000	−0.001	0.000	−0.006
	(0.74)	(−0.20)	(0.20)	(−0.88)
Balance	0.002	−0.041	0.002	−0.038
	(1.13)	(−1.23)	(0.32)	(−0.67)
Zize	0.004***	0.128***	0.007	0.168**
	(3.02)	(3.39)	(1.13)	(2.23)
Lev	−0.087***	−0.210	−0.108***	−0.456
	(−13.07)	(−1.32)	(−3.38)	(−1.24)
Bm	−0.075***	−0.349**	−0.094***	−0.461
	(−8.97)	(−2.36)	(−3.25)	(−1.38)
State	−0.014***	−0.035	−0.019	−0.305
	(−4.65)	(−0.40)	(−0.61)	(−0.86)
Constant	0.002	−1.577***	−0.057	−1.893***
	(0.12)	(−4.22)	(−1.17)	(−3.37)
Observations	1143	1143	84	84
R-squared	0.342	0.105	0.397	0.415
Industry	YES	YES	YES	YES
Year	YES	YES	YES	YES

Robust t-statistics in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

After transforming the explanatory variables, the results of regression (5) on the intensity of core employee equity incentives are similar to the original regression (1), and the correlation and significance of the control variables with the explanatory variables are similar to the original regression. However, with operating profit per share (Opps) as the explanatory variable in regression (6), core employee equity incentives are not significantly positive because operating profit per share is not a complete proxy for earnings per share. For SMB (Small and Medium Enterprise Board) and GEM (Growth Enterprise Market) firms, the results of regression (7) and regression (8) verify that the intensity of core employee incentives for SMB and GEM firms has a significant negative correlation with firm performance. Therefore, the regression results of Hypothesis 1 in the original model are considered robust in this paper.

3.3.2. Robustness Validation for Hypothesis 2

The regression results are shown in Table 6.

After transforming the explanatory variables, the results of regression (9) and regression (10) for the importance of core employees are similar to the original model, and the correlation and significance of the control variables with the explanatory variables are similar to the original model. For SMB and GEM companies, the results of regression (11) and regression (12) verify that the importance of core employees has a significant negative correlation with corporate performance for SMB and GEM companies. Therefore, the regression results of Hypothesis 2 in the original model are considered to be robust.

4. Conclusion

Equity incentives are widely used by listed companies as an effective measure to address agency costs. This paper draws the following conclusions from studying the 1143 equity incentive schemes announced by listed enterprises that successfully implemented equity incentive schemes from 2010-2017.

First, the greater the intensity and importance attached to the core employees in the equity incentive, the stronger the incentive effect on the performance of listed enterprises, but this is not the case in the SMB and GEM markets. This is because the equity incentive for core employees reduces the conflict between core employees and shareholders of the enterprise, optimizes the mechanism for distributing the interests of the enterprise and makes the interests of core employees and shareholders of the enterprise consistent and risk-sharing, therefore improving the performance of the enterprise. However, the difference between SMEs and the main board is that the regulatory requirements for SMEs are different, thus there is a significant "stratification" between the main board and SMEs, and the main board market is relatively independent from the SME and GEM markets, with market segmentation.

Second, stock options are better than restricted shares for listed companies in the equity incentive scheme, and stock options are better for corporate performance incentives. The reason for this is that restricted shares require a one-time

payment of funds from the incentive recipient, which requires more funds from the incentive recipient and is more beneficial to the management of the enterprise, but fails to solve the agency problem.

Lastly, the validity period of equity incentive is positively related to the performance of the enterprise. The longer the validity period of the incentive, the more obvious the effect of the incentive. The reason for this is that if the incentive period is too short, management may use accounting treatment to whitewash the performance of the company in the short term. It is also difficult for management to implement effective measures to genuinely improve performance within the required time frame. Many of the measures need to be implemented over a long period of time in order to be profitable and have a healthy and visible effect on performance.

5. Recommendations and Limitations

The empirical results of this paper have important implications for the design of equity incentive schemes for listed companies, which will serve as a guide for investors' decisions. Therefore, in order to solve the agency cost problem, the shareholders of listed enterprises should increase the incentive intensity and importance of the core employees, who are the cornerstone of the enterprise, in the design of the equity incentive scheme. Besides, enterprises should strengthen the communication efficiency with market investors.

Generally, future studies could endeavor to address the following limitations of this paper. First, the data used in this article only covers the period from 2010 to 2017, which may seems not to be comprehensive enough. Second, though the validity of our data is of no doubt, indicators of performance assessment in equity incentives could still be improved to make the data more reliable. Moreover, the analysis of the data is constrained with regards to considering the length of time the equity incentive is offered to core employees. Thus, comparing the difference between short-term and long-term equity incentives to prove long-term equity incentives is more helpful to corporate performance. Finally, since equity incentives include restricted stock and stock options, it should be compared using much disaggregated data to see which is more effective in motivating core employees.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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