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## RESEARCH ON THE EFFECTIVENESS OF CORPORATE STOCK INCENTIVES AND CORPORATE RELATIVE PERFORMANCE BASED ON THE PERSPECTIVE OF HIGH-TECH INDUSTRY

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**ABSTRACT:** *This paper selects 1468 sample data of 490 private listed companies listed on the Shanghai and Shenzhen stock exchanges (2013 to 2017) to study the relationship between Chinese corporate equity incentives and corporate relative performance. The empirical research results show that there is a significant positive correlation between the equity incentive level of private listed companies and the relative performance of the company; the grouping research results based on high-tech industries show that in non-high-tech industries, the level of equity incentives promotes the relative performance of the company. In high-tech industries, this effect is not significant. Finally, the article puts forward relevant suggestive measures.*

**KEYWORDS:** private listed companies; effectiveness of equity incentives; relative performance evaluation; high-tech industry

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## INTRODUCTION

As an effective means of restraint, equity incentives can change the position of senior executives by giving management equity, and try to avoid managers' short-sighted behaviors that are not conducive to other stakeholders. The research on the relationship between corporate equity incentives and corporate performance originated in the discussion of "separation of ownership and control" in 1932. In the case of separation of the two powers, using company resources to satisfy their own interests and harm the interests of shareholders is an option that professional managers are likely to implement. This will contradict the management goal of maximizing shareholder interests. As the issue of internal management efficiency has been ignored before, the importance of management incentives and constraints has gradually attracted the attention of academic circles. Scholars have successively explored the theoretical basis of equity incentives from different theoretical perspectives. These theoretical perspectives include principal-agent theory, signaling theory and human capital.

At this stage, China's equity incentive plan is gradually deepening, and Chinese private listed companies have begun to pay attention to the application of equity incentive models. The "Opinions on Creating a Better Development Environment to Support the Reform and

Development of Private Enterprises" released in December 2019 further promoted the high-quality development of the private economy and increased the enthusiasm of private listed companies to implement equity incentive plans. The research of Yan Ruosen et al. (2016) shows that there is a positive moderating effect on the impact of equity incentives on corporate R&D investment, and the higher the shareholding ratio of the CEO, the more obvious the moderating effect; Chauvin KW (1993) Empirical research shows that there is a significant positive relationship between R&D investment and corporate value. For companies in the high-tech industry, how does the effectiveness of equity incentives affect their relative performance at this stage? This article uses China's 490 Shanghai and Shenzhen A-share private listed companies from 2013 to 2017 as the research object to explore the relationship between the level of equity incentives and the relative performance of companies in the high-tech industry.

## **THEORETICAL ANALYSIS AND RESEARCH HYPOTHESIS**

The advantage of the equity incentive plan is to link the remuneration of the management to the performance of the company, so that the interests of the agent and the principal are generally in the same direction to reduce the company's agency costs, and to further maximize shareholder wealth is the goal of equity incentives. This is also this article The antecedents of the relationship between equity incentives and listed company performance.

Johnson (2002) found through the panel data research of listed companies that the higher the manager's shareholding ratio, the lower the agency cost and the better the company's performance. Jensen and Murphy (1990) believe that the compensation structure can promote the improvement of the company's value more than the compensation level. Equity incentives can serve the corporate salary system, but there is no direct relationship between corporate performance and incentive levels. In China, scholars such as Yu Dongzhi (2003) selected cross-sectional data of listed companies in China, and after studying the relationship between the performance of listed companies and management's shareholding ratio, they found that there is a significant positive relationship between management shareholding ratio and company performance. Zhou Liye and Gu Bin (2007) conducted research on equity incentive plans prior to 2002, and believed that equity incentives had little effect on corporate performance, and said that low effectiveness is a characteristic of equity incentives at this stage in China. It can be seen that the academic circles have not reached a unified view on whether management equity incentives affect the improvement of company performance. All in all, the current academic circles have two main views on the relationship between equity incentives and company performance: the first view is that company performance is related to equity incentives; the second view is that company performance and equity incentives are not related (Or the correlation is not significant). However, none of the above-mentioned studies reflects specific discussions on private enterprises.

This article focuses on the private listed companies in China. Compared with state-owned

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holding enterprises, most private enterprises are in competitive industries. Due to the sufficient competition in the industry, this article concludes that the effect of equity incentives is better. Combining existing mainstream scholars' research and related theories, this article puts forward the following hypotheses for research and exploration:

H1: There is a positive correlation between the equity incentive level of private listed companies and the relative performance of the company

For companies, not only hope that equity incentives can achieve financial growth, but also hope that equity incentives can promote technological progress, so that companies can gain advantages in technological competition, and thereby maintain more lasting competitiveness and sustainable financial growth. Ma Heng , Wan Jiaqing (2017) research shows that equity incentives in non-state-owned enterprises have a better effect on promoting technological progress and independent innovation. But after all, technological progress and financial growth are two dimensions. Technological progress requires a long process of innovation, and it also requires a process to transform technological progress into financial growth. For listed companies, the absence of beautiful financial statements means that investors are selling off, stock prices are falling, and executives are cutting salaries. Based on this, executives of listed companies often make short-sighted decisions that cut off unprofitable investments, especially future investments that have been delayed in seeing profits. In this article, we will conduct this kind of useful discussion, because the more sophisticated the enterprise, the more likely it is that the long-term investment in research and development is urgently needed, and this investment may not have economic benefits for several years. As many high-tech companies in China have realized, it is not enough to just throw money at the top high-tech companies. They must also train their own mathematicians and physicists. For the private enterprises studied in this article. This article is based on the "Notice on the Classification Catalogue of High-Tech Industry Statistics" issued by the National Bureau of Statistics of China, Guotong Zi [2002] No. 33, and based on previous scholars Xu Xin et al. (2012), the sample companies are divided into high-tech Industries and non-high-tech industries. Compared with non-high-tech industries, high-tech industries have higher technical barriers. Specifically, the high-tech industries defined in this article include chemical raw materials and chemical product manufacturing (C43), chemical fiber manufacturing (C47), electronics manufacturing (C5), medical device manufacturing (C7340), and aerospace vehicle manufacturing Industry (C7530), Instrument and Meter Manufacturing (C78), Medicine and Biological Manufacturing (C8) Information Technology Industry (G). In the five-year dimension of the empirical research in this article: In view of the fact that equity incentives in high-tech industries are more common, technological innovation paths are longer, and their performance is transformed into slower performance, the following hypotheses are proposed:

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H2A: In non-high-tech industries, there is a positive correlation between the equity incentive level of private listed companies and the relative performance of the company

H2B: In the high-tech industry, the equity incentive level of private listed companies is not significantly correlated with the company's relative performance

## **RESEARCH SAMPLE AND VARIABLE SELECTION**

### **Research sample**

This paper takes A-share private listed companies that are implementing equity incentives in Shanghai and Shenzhen from 2013 to 2017 as the research object, and selects all samples according to the following methods, and removes as much as possible the samples that have an abnormal impact on the research conclusions.(1) Delete company samples with insufficient financial data and abnormal data; such sample data will have a negative impact on research;(2) Delete the company that is processed by ST, which will lead to deviation of the empirical conclusion;(3) The sample of companies in the financial and insurance industry has been deleted. The particularity of the financial and insurance industry has an impact on the research conclusions.This paper finally confirmed 1468 sample data of 490 Shanghai and Shenzhen A-share private listed companies from 2013 to 2017 as the research object. Most of the data in this article comes from the Wind database and Guotai Junan database. In order to avoid the influence of extreme values on the results, this article Winsorize the continuous variables at the level of 1% and 99%.

### **Variable selection**

This paper selects the relative return on assets (RELROA) as the explained variable, and the management's shareholding level as the explanatory variable, selects the asset-liability ratio, the natural logarithm of the total assets at the end of the year, the shareholding ratio of controlling shareholders, the ratio of independent directors, and the implementation of equity The incentive year and industry are the control variables. Specific variable definitions are shown in Table 1.

**Table 1 Relevant variables**

| Variable              | Variable name                                  | Index    | Description                                                                          |
|-----------------------|------------------------------------------------|----------|--------------------------------------------------------------------------------------|
| Dependent variables   | Corporate Equity                               | RELROA   | Return on Assets of the Year - Average Return on Assets of the Same Industry         |
|                       | Incentive Effectiveness                        | RELNPGR  | Net profit growth rate in the current year                                           |
| Independent variables | Enterprise Equity Incentive Level              | HODING   | Number of management holdings/total corporate equity                                 |
| Control variables     | Enterprise capital structure                   | DAR      | Total assets at year end                                                             |
|                       | Level of enterprise                            | SIZE     | Total assets at year end                                                             |
|                       | Shareholding ratio of controlling shareholders | CSER     | Number of shares held by controlling shareholders/total share capital of the company |
|                       | Proportion of independent directors            | IDR      | Number of independent directors/total boards                                         |
|                       | Year                                           | YEAR     | Year of equity incentive                                                             |
|                       | Industry                                       | INDUSTRY | Industry of the enterprise                                                           |

### Model construction

Considering only the two control variables of the equity incentive year and the enterprise industry, the following regression model 1 is established to verify hypothesis 1:

$$RELROA_{i,t} = \beta_0 + \beta_1 HODING_{i,t} + \beta_2 YEAR_{i,t} + \beta_3 INDUSTRY_{i,t} + \varepsilon \quad (\text{model 1})$$

In the case of considering all the control variables, in order to verify the hypothesis 1 and 2, the following regression model is established:

$$RELROA_{i,t} = \beta_0 + \beta_1 HODING_{i,t} + \beta_2 DAR_{i,t} + \beta_3 SIZE_{i,t} + \beta_4 CSER_{i,t} + \beta_5 IDR_{i,t} + \beta_6 ROE_{i,t} + \beta_7 YEAR_{i,t} + \beta_8 INDUSTRY_{i,t} + \varepsilon \quad (\text{model 2})$$

$$RELNPGR_{i,t} = \beta_0 + \beta_1 HODING_{i,t} + \beta_2 DAR_{i,t} + \beta_3 SIZE_{i,t} + \beta_4 CSER_{i,t} + \beta_5 IDR_{i,t} + \beta_6 ROE_{i,t} + \beta_7 YEAR_{i,t} + \beta_8 INDUSTRY_{i,t} + \varepsilon \quad (\text{model 3})$$

## Empirical Analysis

### Descriptive statistics

In this part, descriptive analysis of the variables involved in the study is carried out. Table 2 shows the results of descriptive statistical analysis of the collected data:

**Table 2 Results of descriptive statistical analysis**

| Variable | Size  | Mean    | Std. Dev. | Min     | Max     |
|----------|-------|---------|-----------|---------|---------|
| RELROA   | 1,469 | 0.0102  | 0.0563    | -0.7718 | 0.3002  |
| HODING   | 1,469 | 0.2114  | 0.1999    | 0.0000  | 0.7432  |
| DAR      | 1,469 | 0.3874  | 0.1896    | 0.0244  | 1.0372  |
| SIZE     | 1,469 | 22.1258 | 1.1411    | 19.5550 | 28.0699 |
| CSER     | 1,466 | 0.3656  | 0.1439    | 0.0016  | 0.8185  |
| IDR      | 1,469 | 0.3785  | 0.0576    | 0.2857  | 0.6667  |

Through descriptive statistical analysis results, from the perspective of the effectiveness of corporate equity incentives, the average return on assets is 0.010, the minimum is -0.772, the maximum is 0.300, and the standard deviation is 0.060. The effect of equity incentives is significantly different. From the perspective of control variables, the average asset-liability ratio of private listed companies is 0.386, the maximum is 1.037, and the minimum is 0.024. The difference between the maximum and minimum is 1.013, indicating that the capital structure of private listed companies in China is quite different. From the perspective of the level of corporate equity incentives, there is a large gap in the management shareholding ratio of private listed companies in China, with the minimum value being  $3.58e-7$  and the maximum value being 0.743. The average overall shareholding is 0.205, indicating that the proportion of management holdings of Chinese private listed companies is relatively high. This may be the reason why the management of Chinese private listed companies has better incentives and strong vitality. The average size of private listed companies is 22.135, the minimum is 19.555, the maximum is 28.070, and the standard deviation is 1.136. In the proportion of independent directors, the maximum is 0.667 and the minimum is 0.286. Among the controlling shareholders' shareholding ratio, the maximum value is 0.819 and the minimum value is 0.0016. There is a big difference. This may have a certain relationship with our data from various industries.

### Correlation analysis

When using the regression model to explore the effectiveness of private listed companies' equity incentives, we must first ensure that the hypothetical influence factors will not be affected by endogenousness. From this perspective, the mutual independence of factors affecting the

effectiveness of equity incentives must be tested before conducting research. This article uses STATA14.0 statistical tools to conduct a correlation analysis on the selected variables, and the results are shown in Table 3 below:

**Table 3 Results of correlation analysis**

| Variable | RELROA   | HODING   | DAR     | SIZE    | CSER    | IDR |
|----------|----------|----------|---------|---------|---------|-----|
| RELROA   | 1        |          |         |         |         |     |
| HODING   | 0.0562*  | 1        |         |         |         |     |
| DAR      | -0.1917* | -0.2413* | 1       |         |         |     |
| SIZE     | 0.0711*  | -0.3730* | 0.5767* | 1       |         |     |
| CSER     | 0.1265*  | 0.1290*  | -0.0376 | -0.0415 | 1       |     |
| IDR      | 0.0098   | 0.0374   | 0.0146  | 0.0139  | 0.1384* | 1   |

**Note:** \*, \*\*, \*\*\* indicate significant at the 10%, 5%, and 1% levels, respectively.

The analysis results from Table 3 above show that the absolute value of the correlation coefficient between the variables is far less than 1, that is, there is no obvious correlation, and there is no problem of multicollinearity between variables.

### Regression Analysis

There are many factors that affect the effectiveness of private listed companies' equity incentives. This section mainly explores the impact of the level of corporate equity incentives on the effectiveness of corporate equity incentives. From the perspective of asset return, the relative return on assets (RELROA) is used as a measure of private listed company equity incentives for the effectiveness index, we use the panel fixed effects model to eliminate firm individual characteristics and regional fixed effects.

### Hypothesis 1 Empirical analysis results

**Table 4 Regression analysis results between the equity incentive level of private listed companies and the company's relative performance (model 1)**

| RELROA             | Coef.   | t       | P> t    |
|--------------------|---------|---------|---------|
| HODING             | 0.046** | 2.05    | 0.041   |
| INDUSTRY           | control | control | Control |
| YEAR               | control | control | Control |
| _cons              | -0.004  | -0.49   | 0.624   |
| F value            | 3.30    |         |         |
| Prob > F           | 0.0058  |         |         |
| Adj.R <sup>2</sup> | 0.0167  |         |         |
| N                  | 1468    |         |         |

**Note:** standard errors in parentheses(\*p<0.1, \*\*p<0.05, \*\*\*p<0.01)

**Table 5 Results of Regression Analysis between Equity Incentive Level and Relative Performance of Private Listed Companies (Model 2)**

| RELROA             | Coef.     | t       | P> t    |
|--------------------|-----------|---------|---------|
| HODING             | 0.059***  | 2.63    | 0.009   |
| DAR                | -0.100*** | -5.22   | 0.000   |
| SIZE               | 0.033***  | 5.76    | 0.000   |
| CSER               | 0.016     | 0.71    | 0.475   |
| IDR                | 0.130**   | 2.45    | 0.015   |
| INDUSTRY           | control   | control | control |
| YEAR               | control   | control | control |
| cons _             | -0.730*** | -5.87   | 0.000   |
| F value            | 8.32      |         |         |
| Prob >F            | 0.0000    |         |         |
| Adj.R <sup>2</sup> | 0.0717    |         |         |
| N                  | 1465      |         |         |

**Note:** standard errors in parentheses(\*p<0.1, \*\*p<0.05, \*\*\*p<0.01)

Table 4 and Table 5 show that the management shareholding ratio has a positive effect on the relative return on assets. From the above test results, it can be seen that when the relative return on assets (RELROA) is used as an index to measure the effectiveness of equity incentives for private listed companies, the RELROA model has a better fit when the function introduces control variables,  $R^2=0.0717$ , that is, the dependent variable pair The explanatory power of the independent variable is 7.17% (because model 2 is better than model 1, in the empirical analysis of subsequent hypotheses, we choose the better model 2 for research). The F value was 8.32, which passed the significance test at the level of  $\alpha=1\%$ , and the coefficient value of the independent variable HODING was 0.059, which passed the t value test at the 1% level. It shows that when the relative return on assets is used as an indicator to measure the effectiveness of private listed companies' equity incentives, the management shareholding ratio is significantly positively correlated with the relative return on assets. Every additional unit of a listed company's management shareholding ratio will increase the relative return on assets by 0.059 units. We can think that the relationship between management shareholding ratio and corporate performance is statistically significant, and the incentive effect is obvious. Hypothesis 1 has been verified . This is consistent with the conclusions of some scholars outside of China, and also in line with my expectations. Among them, the debt-to-asset ratio (DAR) is negatively

correlated with the relative return on assets at the level of 1%. The higher the corporate debt, the lower the relative return on assets. The size of the company (SIZE) and the relative return on assets (RELROA) are at 1%. There is a positive correlation, the larger the size of the enterprise, the higher the relative return on assets. The controlling shareholder controlling ratio (CSER) has no significant effect on the relative return on assets (RELROA). The proportion of independent directors (IDR) and the relative return on assets (RELROA) are positively correlated at the 5% level. These are mostly in line with our expected analysis of influencing factors.

### Empirical analysis results of Hypothesis 2A and Hypothesis 2B

We strictly follow Guotong Zi [2002] No. 33 issued by the National Bureau of Statistics of the "Notice of the Statistical Classification Catalog of High-tech Industries" and follow Xu Xin (2012) to classify the sample companies and classify all the data Divide into two groups.

#### A. Assumption 2A regression results

After excluding companies with missing data, 380 companies in the first group of non-high-tech industries were selected, with a total of 1129 samples. The regression results are as follows:

**Table 6 Regression analysis results between equity incentive level and relative performance**  
(Private listed companies in non-high-tech industries)

| RELROA             | Coef.     | t       | P> t    |
|--------------------|-----------|---------|---------|
| HODING             | 0.053**   | 2.18    | 0.030   |
| SIZE               | 0.039***  | 6.40    | 0.000   |
| CSER               | 0.033     | 1.29    | 0.199   |
| IDR                | 0.117**   | 2.00    | 0.046   |
| INDUSTRY           | control   | control | control |
| YEAR               | control   | control | control |
| cons _             | -0.854*** | -6.40   | 0.000   |
| F value            | 8.95      |         |         |
| Prob>F             | 0.0000    |         |         |
| Adj.R <sup>2</sup> | 0.0981    |         |         |
| N                  | 1129      |         |         |

**Note:** standard errors in parentheses(\*p<0.1, \*\*p<0.05, \*\*\*p<0.01)

As shown in Table 6, the management shareholding ratio has a positive effect on the relative return on assets. The t-test value of each coefficient is shown in the table above. From the above test results, it can be known that for non-high-tech companies, when relative return on assets (RELROA) is used as an index to measure the effectiveness of private listed companies' equity incentives, the RELROA model introduces control variables into the function,  $R^2=0.0981$ , that is, The explanatory power of the variable to the independent variable is 9.81%. The F value is 8.95.

The coefficient value of the independent variable HODING was 0.053, which passed the t-value test at the 1% level. It shows that when the relative return on assets is used as an indicator to measure the effectiveness of private listed companies' equity incentives, the proportion of management holdings and the relative return on assets are significantly positively correlated. Every additional unit of a listed company's management shareholding ratio will increase the relative return on assets by 0.053 units. It can be considered that the correlation between management shareholding ratio and corporate performance is statistically significant and the incentive effect is obvious.

Hypothesis 3A has been verified. This is also consistent with the hypothesis 1 conclusion. Similarly, the debt-to-asset ratio (DAR) is negatively correlated with the relative return on assets at the level of 0.1%. The higher the corporate debt, the lower the relative return on assets. The size of the company (SIZE) and the relative return on assets (RELROA) are at 0.1%. The level is positively correlated. The larger the size of the enterprise, the higher the relative return on assets, which is the same as Hypothesis 1. The controlling shareholder controlling ratio (CSER) has no significant effect on the relative return on assets (RELROA). The proportion of independent directors (IDR) and the relative return on assets (RELROA) are positively correlated at the 1% level, which is also consistent with the regression results of the previous hypothesis 1.

## **B. Assuming 2B regression results**

Also according to the above method, the second group of private listed companies that meet the national classification of high-tech enterprises are selected. There are 54 companies and 173 sample data. The regression results are as follows:

**Table 7 Results of regression analysis between equity incentive level and relative performance  
(High-tech private listed companies)**

| RELROA             | Coef.   | t       | P> t    |
|--------------------|---------|---------|---------|
| HODING             | 0.056   | 0.32    | 0.749   |
| DAR                | -0.117  | -0.70   | 0.488   |
| SIZE               | 0.044   | 1.12    | 0.276   |
| CSER               | 0.519*  | 1.87    | 0.074   |
| IDR                | 0.501   | 1.20    | 0.243   |
| INDUSTRY           | control | control | control |
| YEAR               | control | control | control |
| _cons              | -1.259  | -1.36   | 0.186   |
| F value            | 1.38    |         |         |
| Prob > F           | 0.2532  |         |         |
| Adj.R <sup>2</sup> | 0.3507  |         |         |
| N                  | 58      |         |         |

**Note:** standard errors in parentheses(\*p<0.1, \*\*p<0.05, \*\*\*p<0.01)

As shown in the empirical results in Table 7, the management's shareholding ratio is not significantly related to the relative return on assets. From the above empirical results, we can know: For high-tech enterprises that meet the strict national standards, the relative return on assets (When RELROA is used as an indicator to measure the effectiveness of equity incentives of private listed companies, the RELROA model introduces control variables into the function,  $R^2=0.0490$ , and F value is 0.63. The coefficient value of the independent variable HODING is 0.032, which failed the t-value test, and the independent variable has no correlation with the dependent variable. It shows that in such a high-tech enterprise, when the relative return on assets is used as an indicator to measure the effectiveness of private listed companies' equity incentives, in the five-year dimension of our empirical data, the correlation between management's shareholding ratio and corporate performance is in statistics. The above is not significant, and the incentive effect is not obvious. Hypothesis 2B is supported by the empirical analysis results.

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**Robustness Test**

This section conducts a robustness test on the above empirical results. From the perspective of company growth, we use the relative net profit growth rate (RELNPGR) as an indicator to measure the effectiveness of private listed companies' equity incentives, instead of the relative return on assets, and adjust the model with the introduction of control variables, that is, model 3, Using relative net profit growth rate (RELNPGR) as a substitute dependent variable for analysis.

The results of robustness test using alternative indicators are shown in Table 8 (see appendix). From Table 8, we can see that the management shareholding ratio (HODING) and the relative net profit growth rate (RELNPGR) have a significant correlation. Through the above analysis, we can find that the empirical conclusions obtained for hypothesis 1 are robust. For 380 companies in non-high-tech industries, the results of robustness tests using alternative indicators are shown in Table 9 (see appendix). From Table 9, we can see that the management shareholding ratio (HODING) and the relative net profit growth rate (RELNPGR) have a significant correlation. Through the above analysis, we can find that the empirical conclusions obtained for Hypothesis 2A are robust.

For companies in the high-tech industry, after adjusting the indicators, their robustness results are shown in Table 10 (see appendix). It can be seen from Table 10 that the management shareholding ratio (HODING) and the relative net profit growth rate (RELNPGR) do not have a significant correlation. Through the above empirical analysis, it can be concluded that the empirical conclusions obtained for Hypothesis 2B are robust.

**CONCLUSION**

This paper uses the 2013-2017 Shanghai and Shenzhen A-share private listed companies as a research sample to examine the effectiveness of equity incentives and their relationship with the background of the company's technology industry. The empirical research results show that there is a significant positive correlation between the equity incentive level of private listed companies and the relative performance of the company, and the equity incentive model has significant effectiveness; the effectiveness of equity incentives in non-high-tech companies is significant, while equity incentives in high-tech companies are almost ineffective. While affirming the positive effect of the equity incentive model on private listed companies, the study also warns that companies must adjust their equity incentive plans based on understanding the nature of their industry. For technology companies, due to the time lag in the benefits of technology research and development, its performance benefits cannot be reflected in the current corporate performance, so companies should pay more attention to the long-term incentive model for scientific researchers.

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## Appendix

**Table 8 Regression Analysis of Equity Incentive Level and Relative Performance  
(Manager-controlled Private Listed Enterprises)**

| RELNPGR  | Coef.     | t       | P> t    |
|----------|-----------|---------|---------|
| HODING   | 54.171*** | 3.06    | 0.002   |
| DAR      | -4.258    | -0.28   | 0.780   |
| SIZE     | 3.248     | 0.72    | 0.469   |
| CSER     | -19.256   | -1.06   | 0.290   |
| IDR      | 38.140    | 0.90    | 0.368   |
| INDUSTRY | control   | control | control |
| YEAR     | control   | control | control |
| _cons    | -89.004   | -0.90   | 0.368   |
| F value  | 4.21      |         |         |

|                    |        |
|--------------------|--------|
| Prob>F             | 0.0000 |
| Adj.R <sup>2</sup> | 0.0376 |
| N                  | 1465   |

**Note:** standard errors in parentheses(\*p<0.1, \*\*p<0.05, \*\*\*p<0.01)

**Table 9 Results of regression analysis between equity incentive level and relative performance  
(non-high-tech private listed companies)**

| RELNPGR            | Coef.     | t       | P> t    |
|--------------------|-----------|---------|---------|
| HODING             | 71.298*** | 3.12    | 0.002   |
| DAR                | -7.385    | -0.38   | 0.702   |
| SIZE               | 3.616     | 0.62    | 0.534   |
| CSER               | -27.963   | -1.14   | 0.256   |
| IDR                | 64.124    | 1.15    | 0.249   |
| INDUSTRY           | control   | control | control |
| YEAR               | control   | control | control |
| _cons              | -107.246  | -0.85   | 0.398   |
| F value            | 4.23      |         |         |
| Prob>F             | 0.0000    |         |         |
| Adj.R <sup>2</sup> | 0.0490    |         |         |
| N                  | 1129      |         |         |

**Note:** standard errors in parentheses(\*p<0.1, \*\*p<0.05, \*\*\*p<0.01)

**Table 10 Results of Regression Analysis between Equity Incentive Level and Relative Performance  
(High-tech Private Listed Companies)**

| RELNPGR | Coef.  | t     | P> t  |
|---------|--------|-------|-------|
| HODING  | -2.982 | -0.43 | 0.665 |
| DAR     | -2.303 | -0.39 | 0.699 |
| SIZE    | -1.251 | -0.60 | 0.552 |

|                    |         |         |         |
|--------------------|---------|---------|---------|
| CSER               | -1.679  | -0.33   | 0.741   |
| IDR                | 0.578   | 0.03    | 0.975   |
| INDUSTRY           | control | control | control |
| YEAR               | control | control | control |
| _cons              | 29.013  | 0.63    | 0.527   |
| F value            | 0.93    |         |         |
| Prob>F             | 0.5043  |         |         |
| Adj.R <sup>2</sup> | 0.0705  |         |         |
| N                  | 173     |         |         |

**Note:** standard errors in parentheses(\*p<0.1, \*\*p<0.05, \*\*\*p<0.01)