

Analysis of Equity Incentive Effect in Home Textile Industry

Rang Hang, Yang Liu

Sichuan University of Science & Engineering, Zigong 643000, China

Abstract: With the continuous improvement and optimization of the legal environment in the domestic market economy, more and more enterprises began to implement the equity incentive plan. In such circumstances, the textile industry is also facing the traditional enterprise management can not retain talents, and the innovation ability of the whole industry began to decline. Home textile industry has also carried out strategic planning for its own enterprise development according to the changes of The Times. Home textile enterprises want to gain a foothold in the industry, there is no way to expand their own development through the traditional way, only in this era to seek a differentiated and distinctive development path can have the opportunity to surpass other enterprises, the development of the rules will eventually be opened by other enterprises. Therefore, in 2011, Fuanna took the lead in focusing on the equity incentive, and soon implemented it. From the very beginning, she showed the benefits of the equity incentive and the imperfections. After several years of development, other home textile enterprises also began to imitate. Therefore, equity incentive is gradually emerging in the home textile industry. However, with the prevalence of equity incentive, many problems have also been exposed. Equity incentive does not bring long-term effect for home textile enterprises, and often loses its effect in one or two years. Through regression analysis, the home textile enterprises are analyzed empirically, and found that the disadvantages of equity incentive and can be optimized. It provides some reference opinions for the development of equity incentive of home textile enterprises.

Keywords: Home textile industry equity incentive, Regression analysis.

1. Introduction

With the change of The Times, some traditional enterprise management and sales models have been outdated and not applicable, most enterprises need to find a way out in the changing situation, to open up a suitable road for the development of enterprises. However, as a traditional manufacturing industry, the home textile industry cannot completely change its existing production technology and marketing methods, and is faced with the shortage of excellent design talents and innovation ability. In view of the above transformation needs, in order to base on the rapid development in the industry, the implementation of equity incentive mode can play a certain role in promoting, the importance of equity incentive mode for the strategic transformation of enterprises is self-evident.

At the same time, the introduction of equity incentive is gradually by the recognition of China's listed companies, but in the process of actual execution equity incentive mechanism, the design scheme is not scientific, the choice of incentive object inappropriate, incentive set unreasonable and so on factors make the last arouse the enthusiasm of employees, improve enterprise performance dimension did not achieve the desired goal, therefore, whether the performance of listed companies is influenced by the equity incentive mechanism has become the focus of extensive scholars research and attention.

2. Literature Review

The effects of equity incentives are diverse, and in the Mahmoud Agha and Baban Eulaiwi study, whether the government ownership of the GCC national listed companies affects the behavior of the CEOs receiving equity incentives, namely the ownership of those companies. Company

performance decreased as the CEO stock incentive level increased. Second Aboody, Johnson and Kasznik selected a large number of enterprises as samples, through a long time of observation and empirical research, the results show that equity incentive for the development of the company can play an effective role, the implementation of the equity incentive company after the profit has the obvious upward trend, so also has relatively sufficient cash flow, can improve the anti-risk ability of enterprises, provide strong support for the development of the enterprise. The Jensen and Meckling, which conducted the theoretical research of equity incentive, took the lead in putting forward the theory of "benefit convergence hypothesis". Bailey and Means proposed the idea that there is a positive correlation between stock incentives and corporate performance. Boone By studying the relationship between the enterprise situation and the equity incentive, the following conclusions: the implementation of the company CEO equity incentive plan will reduce the quality of the information disclosed by the enterprise, but the equity incentive can promote the development of the enterprise, increase the capital cost of the company's equity, and improve the work creativity and sense of value of employees. At the same time, Kuo's research shows that equity incentive has a positive effect on the improvement of the company's performance. Compared with enterprises with higher profits in the same industry, the effect of implementing equity incentive scheme for enterprises with lower profits will be more obvious, which can help enterprises to spread the difficulties and improve the profits of enterprises faster. Alessandro Zattoni Mainly studied the European stock incentive plan, the process they designed and the characteristics of the equity incentive implemented, triggered investors and academic concerns about the ability of such plans to link the interests of corporate employees to the interests of shareholders.

3. Analysis of the Equity Incentive Status Quo In the Home Textile Industry

3.1. Definition of the Home Textile Industry

Home textiles are also called decorative textiles, home textiles including curtains, cloth art, bedding, wool carpet and so on. As an important part of textiles, as a part of the "soft decoration" in the family life of mass consumers, home textiles play an indispensable role in building the family environment.

It continues to develop and innovate from the traditional to meet the basic needs of daily life, now the home textile industry has both fashion, personality, safety and health and other multi-functional style, the position of home textiles in the textile industry is more and more popular with the public.

3.2. Analysis of the Equity Incentive Situation of Listed Companies in China National Textile Industry

3.2.1. Equity Incentive Status of Listed Companies of Home Textile Enterprises

Some of the companies in the home textile industry that implemented the equity incentive between 2016 and 2020 have just started to implement the first equity incentive, And some home textile enterprises have been implemented more than twice, One of the main purposes of equity incentive is to obtain certain advantages in the competition of the home textile industry, Because this way in the enterprise can promote development on the one hand, on the other hand, they can retain their own core team as much as possible, Therefore, through the way of equity incentive to stabilize the demand for talents has become a more common way in enterprises, This effectively stimulates the initiative and creativity of employees, Actively build a good innovation team, Further promote the positive creation of the atmosphere of enterprises.

3.2.2. Analysis of the Incentive Methods of Home Textile

There are various forms of equity incentive, including performance stocks, stock options, stock appreciation rights, restricted stocks, etc. The data survey from 2016 to 2020 shows that there is no diversity in the implementation of equity incentive schemes in the home textile industry of listed companies in China, and they are basically stock options and restricted stocks. In the five years from 2016 to 2020 when equity incentive was implemented, there was almost no plan to adopt the model of restricted stock. With the improvement and modification of relevant systems, restricted stock is more popular among enterprises than stock options. The advantage of restricted stock lies in the fact that its power and the corresponding obligations are not much different. After the incentive conditions are met, shares can be obtained, and the interests of employees are linked to the value of the stock, and the value of the stock is closely linked with the interests of the incentive beneficiaries. However, the stock option does not have this point. Only the restricted stock incentive model that directly links the interests of the company with the interests of the individual can have a stronger binding force.

3.2.3. Analysis of Incentive Sources

After summarizing the data of equity incentive of listed companies in the home textile industry, all home textile enterprises have adopted to obtain equity incentive shares through directional issuance of shares. From the implementation process, it is more concise and more

convenient; from the perspective of payment, this method requires no excessive cash payment, which is more conducive to the cash flow. In general, the enterprises in the home textile industry are more inclined to the way of directional issuance.

4. The Empirical Study of Equity Incentive on The Home Textile Industry

4.1. Select Variables

4.1.1. Selection of the Explained Variables

In the comparison of the effect of equity incentive, we need to pay attention to the change of the increased equity in the corporate profits. Net profit reflects the revenue of the enterprise's operating performance at a certain level, so we can understand the performance status of the enterprise through the return on equity. Most enterprises in China choose to compare the relevant data of net profit and shareholders' equity through this method.

4.1.2. Selection of Explanatory Variables

For explanatory variables, this paper through the home textile enterprise sales scales namely operating income, asset-liability ratio, the company growth income growth rate, and the percentage of equity incentive four aspects, which with equity incentive proportion as a key variable, main analysis of equity incentive and link between home textile enterprise performance. The sales scale is expressed by the business income, and the growth rate is measured by the ratio of the growth of the revenue of this year to the total revenue of the previous year.

4.2. Make Assumptions

In our research on the growth and development of home textile enterprises, we find that the relationship between executive shareholding and enterprise performance of home textile enterprises is an indispensable part. In the world we know, there are a lot of opinions on the relationship between the two, both abroad and domestic and in the theoretical and practical circles. However, in recent years, home textile enterprises have improved and standardized equity incentive policies and systems, and more enterprises have joined in it. Therefore, when most enterprises begin to try to apply equity incentive, it is not difficult for us to see that equity incentive will have a more or less positive impact on the performance of the company. Therefore, considering the commonness of the development of Chinese enterprises and the characteristics of the development of the home textile industry, the assumptions can be proposed:

The performance of home textile enterprises is positively related to the shareholding proportion of senior management employees.

The more shares the company is held by its core staff, the greater the performance of the industry will increase. Because many positive correlations are not necessarily reflected in the short-term performance, the general equity incentive is based on the long-term interests of the growth of the company. Therefore, when the equity incentive proves the home textile industry, the time of the senior management shareholding and the company's business performance will also consider the development process of performance improvement.

4.3. Sample Selection and Data Source

The research of this paper is 2016-2020 listed home textile

enterprises, a total of 47, the sample is 2016-2020 did equity incentive plan of home textile listed companies, including 21 companies and the paper defined home textile industry has obvious deviation, so the paper research home textile enterprises actually a total of 26, including 3 every textile enterprise in 2020 successively listed after no reference, has not yet implement equity incentive enterprises a total of 11. With the integrity and rigor of the data guaranteed, the final number of samples is 15, accounting for more than 65% of the whole industry, and it is believed that the empirical study is feasible and representative. The statistical software uses Excel form, online SPSS, and conducts statistical research on the sample data of 15 enterprises. The data in the empirical study comes from the annual financial statements of Juchao net and related listed companies.

In order to clearly indicate the meaning and situation of each variable, the variables used in this study are explained as follows, and the specific contents are as shown in Table 1:

Table 1. Variable explanation

Variable	The meaning of interpretation
Return on equity (ROE) (Y)	Net income / net assets
Sales scale (X1)	Operating income in the income statement
Financial leverage (X2)	Debt / assets
Growth rate (X3)	(This year income-last year income) / last year income
Equity incentive ratio(X4)	Number of shares used for equity incentive / total share capital of the Company

4.4. Empirical Analysis and Conclusion

In this study, I first used the EXCEL table to sort out the sample data of this paper, and then studied the impact of equity incentive on the performance of the home textile industry through descriptive statistical analysis, correlation analysis and linear regression analysis through online SPSS and EXCEL statistical software. It describes the data and meanings of various changes among various variables, conducts Person correlation test of the variables, and conducts regression analysis of the impact of equity incentive on the performance of home textile industry according to the results of multiple linear regression. The specific analysis is as follows:

4.4.1. Descriptive Statistical Analysis

Table 2. Descriptive statistics

Name	Sample capacity	Seast value	Crest value	Average value	Atandard deviation	Median
Y	15	-7.31	64.68	14.27	16.74	11.68
X1	15	103811.25	1423172.79	453866.064	384165.4532	287404.98
X2	15	19.49	65.99	37.52	13.92	40.47
X3	15	-22.14	173.99	31.87	50.17	12.80
X4	15	0.21	6.11	2.53	1.80	1.80

By table, the performance of the descriptive analysis, the statistical sales scale of X1 home textile enterprises, X2 financial leverage, X3 enterprise revenue growth, X4, the proportion of equity incentive, Y return on equity minimum, maximum, average and standard deviation, to explore these data.

In addition, we can also know that the maximum value of the equity incentive level (X4) is 6.11, the minimum value is 0.21, and the average value is 2.53, which indicates that most of the home textile industry has been implementing the equity incentive plan, but there are still some home textile enterprises that have not vigorously started the equity incentive plan. In addition, we can know that the proportion of equity incentive implemented in the home textile industry is relatively moderate.

The maximum value of sales scale (X1) is 14231727,900 yuan, the minimum value is 10381125 million yuan, and the average value is 453866064 yuan, indicating that the scale of companies in the home textile industry is large, and the structure scale of sales is quite different.

The maximum value of enterprise revenue growth rate (X3) is 173.99%, the minimum value is-22.14%, and the average value is 31.87%, which shows that there is a large gap in the income growth rate of listed home textile enterprises

implementing equity incentive, and there are some home textile enterprises with negative growth, and the revenue growth rate of some home textile companies is not very good.

The maximum value of financial leverage (X2) is 65.99%, the minimum value is 19.49%, and the average value is 37.52%, indicating that the selected sample home textile enterprises is close. But the asset-liability ratio is still relatively high.

The maximum value of earnings per share (Y) is 64.68, the minimum value is-7.31, and the average value is 14.27, indicating that the overall financial performance of home textile enterprises implementing equity incentive is good, there are some differences, and the comparability of various companies is similar and strong.

4.4.2. The Correlation Analysis

In this study, Person correlation test was implemented for multiple variables with the impact of equity incentive on performance in the home textile industry, and the correlation degree among various variables was studied, including testing whether there is multicollinearity between different variables. The specific degree of correlation of each variable with each other can be seen in the correlation coefficient matrix diagram listed in the table.

Table 3. Person correlation test

		Y	X1	X2	X3	X4
Y	Correlation coefficient	1	0.214	-0.354	0.833**	-0.207
	P Price		0.444	0.195	0	0.459
X1	Correlation coefficient	0.214	1	0.242	0.135	-0.148
	P Price	0.444		0.384	0.632	0.598
X2	Correlation coefficient	-0.354	0.242	1	-0.098	-0.2
	P Price	0.195	0.384		0.729	0.475
X3	Correlation coefficient	0.833**	0.135	-0.098	1	0.227
	P Price	0	0.632	0.729		0.417
X4	Correlation coefficient	-0.207	-0.148	-0.2	0.227	1
	P Price	0.459	0.598	0.475	0.417	

From the analysis of Person correlation in the table:

The correlation coefficient between return on equity (ROE) (Y) and sales scale (X1) is 0.214, which is close to 0, and the P-value is $0.444 > 0.05$, so it did not pass the significance test. This means that there is no correlation between the return on equity (ROE) (Y) and the sales scale of the home textile industry (X1).

Return on equity (ROE) (Y) and financial leverage (asset-liability ratio) (X2) the correlation coefficient value is -0.354, close to 0, P value is $0.195 > 0.05$, so no significance test, so shows that return on equity (ROE) (Y) and home textile industry financial leverage (asset-liability ratio) (X2).

Return on equity (ROE) (Y) and growth rate (income growth rate) (X3) the correlation coefficient of 0.833, but also presents a 0 degree of significance, so through the significance test, can show that the home textile industry return on equity (ROE) (Y) and the home textile industry growth rate (income growth) has a positive correlation between (X3). It shows that the higher the income growth rate of the home textile industry, the higher the performance of the home textile enterprises will be.

The correlation coefficient value between return on equity (ROE) (Y) and equity incentive ratio (X4) is -0.207, close to 0. At this time, the P-value is $0.459 > 0.05$, so the significance test is not passed, and there is no correlation between return on equity (ROE) (Y) and equity incentive ratio (X4) can be shown. That is to say, the higher the level of equity incentive, the greater the earnings per share will not be, which is inconsistent with the assumption that this equity incentive cannot have a positive impact on the performance of the home textile industry.

4.4.3. Multiple Linear Regression Analysis

(1) Build a regression model

From the assumptions and selection variables mentioned above, the operating income, asset-liability ratio and income growth rate of home textile enterprises are added, and an effective regression model is established. The specific regression model is as follows:

$$Y=C+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\alpha$$

In this model, Y said home textile enterprise performance, the performance measured by enterprise net return, β_1 , β_2 , β_3 , β_4 are corresponding variable regression coefficient, X1 said home textile enterprise sales scale namely operating income, X2 represents the asset-liability ratio is financial leverage coefficient, X3 said enterprise revenue growth, X4 for the proportion of equity incentive, α said random error.

(2) Regression analysis of the impact of equity incentive on the performance of the home textile industry

The following regression analysis of the empirical research results of equity incentive and the overall performance of enterprises in the home textile industry is conducted through the equity incentive model and method. In this part, the statistical software online SPSS and EXCEL are used to analyze and count the data, and download the performance and equity incentive data of home textile companies from the Juchao network,

Conduct regression analysis on the 15 household textile companies with equity incentive listed in Shanghai and Shenzhen, and show the results:

Table 4. Analysis of the normality test

Name	Average value	Standard deviation	Skewness	Kurtosis	K-S checkout		S-W checkout	
					D Price	P	W price	P
Y	0.143	0.167	2.103	5.77	0.283	0.002**	0.787	0.003**
X1	453866.064	384165.453	1.902	2.911	0.272	0.004**	0.734	0.001**
X2	0.375	0.139	0.233	-0.475	0.171	0.278	0.921	0.201
X3	0.319	0.502	1.819	3.822	0.205	0.091	0.818	0.006**
X4	0.025	0.018	0.959	0.079	0.24	0.020*	0.888	0.062

The normality test was conducted for Y, X1, X2, X3 and X4, because the sample size of 15 data was all less than 50, so the S-W test was used.

Analysis item: Y (return on equity), significant P value is 0.003**, significant at the level, the original hypothesis is rejected, so the data is not normal distributed, the absolute

value of kurtosis (5.77) is less than 10 and the absolute value of skewness (2.103) is less than 3.

Analysis item: X1 (sales scale), significance P-value of 0.001**, significance on the level, rejected null hypothesis, so the data does not show normal distribution, the absolute value of kurtosis (2.911) is less than 10 and the absolute value

of skewness (1.902) is less than 3.

Analysis item: X2 (asset-liability ratio), the significant P-value is 0.201, which does not appear significant at the level, and the original hypothesis cannot be rejected, so the data meets the normal distribution.

Analysis item: X3 (revenue growth rate), significant P-value is 0.006***, significant at the level, the null hypothesis is rejected, so the data does not show normal distribution, the absolute value of kurtosis (3.822) is less than 10 and the

absolute value of skewness (1.819) is less than 3.

Analysis item: X4 (proportion of equity incentive), the significant P-value is 0.062*, which does not appear significant at the level, and the original hypothesis cannot be rejected, so the data meets the normal distribution.

Conclusion: Y, X1 and X3 do not have normal characteristics. In addition, X2 and X4 have normal characteristics.

Table 5. Linear regression analysis

	Non-standardized coefficients		Standardization coefficient	T	P	VIF	R ²	Adjust R ²	F
	B	Standard error	Beta						
Consant	0.171	0.082	-	2.082	0.064	-	0.774	0.684	F (4, 10) = 8.562, P = 0.003
X1	0	0	0.065	0.408	0.692	1.115			
X2	-0.351	0.189	-0.292	-1.853	0.094	1.098			
X3	0.265	0.053	0.795	5.03	0.001**	1.105			
X4	0.257	1.48	0.028	0.174	0.866	1.114			
Dependent variable: Y									
D-W value: 2.127									

As can be observed from the above table, X1, X2, X3 and X4 are taken as independent variables and Y as dependent variable

for linear regression analysis, so the model formula can be obtained, which:

$$Y=0.171 + 0.000*X1-0.351*X2 + 0.265*X3 + 0.257*X4$$

The square value of model R is 0.774, indicating that X1, X2, X3 and X4 can explain the 77.4% change of Y. During the F test on the model, the model passed F test (F =8.562, p =0.003 <0.05), which also indicates that at least one of X1, X2, X3 and X4 will affect Y. Besides, the multiple collinearities of the model shows that all VIF values in the model are less than 5, which means that there is no collinearity problem; and the D-W value is 2.127, it is concluded that the model has no autocorrelation, there is no correlation between the sample data, and the model is good. The final specific analysis shows that:

The regression coefficient value of X1 home textile enterprises' sales scale, namely the operating income, is 0.000 (t =0.408, p =0.692 > 0.05), which can be seen that X1 will not have an impact on Y.

The regression coefficient value of X2 financial leverage is -0.351 (t = -1.853, p =0.094 > 0.05), which can be seen that X2 will not have an effect on Y.

The regression coefficient value of the X3 income growth rate was 0.265 (t =5.030, p =0.001 <0.01), indicating that X3 will have a significant positive effect on Y.

The regression coefficient value of the proportion of X4 equity incentive is 0.257 (t =0.174, p =0.866 > 0.05), which can be seen that X4 will not have an impact on Y.

The summary analysis shows that the income growth rate of X3 enterprises will have a significant positive impact on the return on equity of Y. However, the sales scale of X1 home textile enterprises, namely the operating income, X2 financial leverage and X4 equity incentive ratio, will not have an impact on Y. Therefore, equity incentive does not have a positive impact on the performance of the home textile industry, but the growth rate of income has a great positive

effect, and no clue or blind expansion of the enterprise scale has no correlation to the performance of the enterprise.

5. Conclusion

In this paper, the impact of the equity incentive plan on the business performance of home textile enterprises is not difficult to find that the equity incentive plan does play a role in promoting the development of enterprises, but with the fluctuation of time, the incentive plan also has its limitations. With the rapid development of the market, the update of incentive plans and the improvement of detailed rules are more important. Due to the complexity and huge number of the domestic market and enterprises, the situation is more variable. With the standardization of relevant legal provisions, most of the loopholes and deficiencies have been filled. At the same time from the perspective of the industry, the implementation of the equity incentive plan effectively promotes the benign competition of the industry, active market atmosphere, through the equity incentive plan the personal interests and value of the employees and the interests of the enterprise closely linked together, make enterprise development faster and more stable, talent more willing to stay in the enterprise shine. Through the literature of all parties, we found the imperfection of the equity incentive plan of each enterprise, so as to solve the problem and put forward improvement plans, and also provide valuable suggestions for the subsequent home textile enterprises and enterprises in other industries that want to implement the equity incentive plan.

References

- [1] Todd Griffith, Brian Roseman, Danjue Shang. 2020. The effects of an increase in equity tick size on stock and option transaction costs [J]. Journal of Banking and Finance, 114.
- [2] Boone. 2020. Australian Journal of Manage Volume 45, Issue2. 195-222.
- [3] Alessandro Zattoni Proceedings of the 3rd International Conference on Judicial, Administrative and Humanitarian

- Problems of State Structures and Economic Subjects (JAHP 2018).
- [4] Bailey, Means. 2016. Proceedings of the 2016 International Conference on Education, E-learning and Management Technology.
- [5] Aboody, Johnson, Kasznik. 2004. The Accounting Review Volume 79, Issue 2.251-275
- [6] Mahmoud Agha, Baban Eulaiwi. 2020. Journal of Management Studies Volume 58, Issue 3.782-81