

The Correlation of Benefit Distribution Between Shareholder and Employee & Its Effect on Corporate Performance: a Case Study of Chinese 90 Listed Companies

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Abstract: How to allocate interests among corporate stakeholders is an essential issue for a corporation to develop in coordination. This article, through selecting Chinese 90 listed corporations as a sample and taking shareholder and employee as the representatives of benefit distribution, has investigated the correlation involved in the actual allotment of the dominant economic interests between the two parties and its possible influence. The results indicate that within a long-term there is certain correlation between the change in shareholder interests and the change in employee interests, and this type of correlation has certain effect on corporate performance at regional difference. An increase in the coordination of benefit distribution possibly is a potential factor to affect the performance.

Key words: Benefit distribution; Correlation; Employee; Stakeholder

1 Introduction

The result of the benefit distribution in a corporation tends to determine the attitudes of its stakeholders toward the corporation, which may affect the corporate performance. So how to handle the relationship of benefits between the stakeholders is one of the key issues to maintain the harmonious development of a corporation.

In recent years, most of studies on benefit distribution is concentrated on how to make a rational distribution in theory, for examples, Shapley value method^[1], Nash negotiations model, Group weight model, Simplified MCRS (Minimum Cost Remaining Savings), etc. Especially, many of the present researches put emphasis on the benefit distribution between partners in a supply chain, such as probing into distribution of profits among supply chain by use of game model^[2], applying structural equation to reveal the impact of the mutual trust between partners on the interests of their cooperation^[3]. There are also some researchers who focus the influence on corporate performance from the perspective of partner satisfaction level^{[4][5]}. However, the actual allocation of benefit and its role are rarely researched. This paper tries to select shareholder and employee as a representative relationship between corporate stakeholders to do an empirical study on benefit distribution. Its purpose is to examine the actual results of the benefit distribution existing in corporations, and to analyze the correlation of the benefit distribution between the two parties as well as their possible roles, and then to find the main factors to affect corporate performance based on their roles, and to make an attempt to explore a new factor to enhance corporate strategy management.

The basic approach is that according to certain standards 5 consecutive years of financial data of 90 listed companies are selected as a sample, then calculating the proportion of the dominant economic interests the shareholder and employee receive in allocation, and then testing the correlation of both incomes, and verifying the relationship between the correlation and the growth of corporate performance, and finally analyzing and summarizing. This study may be helpful for Chinese corporations to deal with the relations between stakeholders to keep smooth operation, but also is enlightenment for other studies on interest distribution.

2 Compositions of the Dominant Economic Interests of Shareholder and Employee

The distribution of benefits in a corporation is mainly reflected by the allocation of dominant economic interests. Therefore, the distribution of benefits between different members and its influence may be indirectly quantified and measured by design of a series of indicators of financial statements related to economic interests. This article refers to studies by Ren Haiyun, Deng Hanhui and so on^{[7][8]}, following the principle of simplification and feasibility and through a combination of the financial statements items to quantify the dominant interests of shareholder and employee.

In this paper, among the stakeholders involved, to quantify the dominant economic interests of shareholder only need the income statement, employee will need balance sheet together with cash flow statement to quantify the dominant economic interests.

2.1 The economic interest of shareholder

Enterprise owners are shareholders, who have the final property right and bear the ultimate risk. In theory, shareholders are the owner of enterprise, who need notice the overall financial situation, but in the limited liability system, as a result of the free transfer of shares and frequent change of shareholders, the shareholder interests in a corporation is mainly focused on the pursuit of profitability, that is, return on investment, retained earnings and dividend distribution ratio, as well as the dominant economic interests reflecting the status of corporate operation, such as fluctuation of stock price. So the dominant interests of shareholder are mainly reflected by the items of the net profit in income statement and the equity in balance sheet. However, the items include the cumulative economic benefits of shareholders since the date of establishment of the corporation; it fails to reflect the true value of the economic interests of shareholders within an accounting period, so it should be based on the net profit in income statement to quantify the dominant economic interests of shareholder during a particular accounting period. Nevertheless, in the process of net profit allocation, as a major source of expenditure of the collective welfare of employee, the Community Chest reflects part of the dominant interests of employee, therefore, in a business circle, the dominant economic interests of shareholder should be the balance of net profit after removing the Community Chest, that is, the dominant economic interests of shareholder = the distribution of dividends, profits or cash payment for interest.

2.2 The economic interest of employee

Employee is also an important stakeholder, the input of employee into a corporation is mainly their professional skills with a high degree of specialization, rather than tangible assets. In their pursuit of interests are mainly the contracted payment and welfare and reflected in the items of the Community Chest in income statement, the payable wage and welfare in balance sheet, and the "cash paid to/payable to workers "in cash flow statement. The subject of Community Chest reflects the collective welfare of employee; the payable wage and welfare reflect the payment paid or payable to employee; the "cash paid to/payable to workers " reflect the actual payment in the current period. For the sake of simplification, given that the dominant economic interests of employee = the cash paid to/payable to workers.

3 Sample and Data

In view of the relatively mature system of listed corporations, sample enterprises are mainly selected from the corporations publicly listed in Shanghai and Shenzhen Securities of China. In the sampling process, in order to increase comparability of corporate performance, the corporations affected significantly by external factors are ruled out, such as large-scale petrol, chemical, electric power, aviation and other state-owned monopoly enterprises, the real estates impacted by industry cycle, non-ferrous metals industry with unique resources affected by price fluctuations and so on. At the same time, following to the general practice, financial corporations, ST and PT categories of listed companies are also excluded from sample enterprises, as well as the enterprises with ratio of asset to liability more than 1, to ensure that the selected corporations have the raw data at least for nine consecutive years. Accordingly, 30 sample enterprises are selected from more than 1000 listed corporations respectively in the eastern, central and western areas, for a total of 90 corporations and 3150 financial data are collected from 2002 to 2006. All data are obtained from the corporate reports that Shanghai Stock Exchange officially published.

As a result of a longer span of years, uncertain factors can not be eliminated from the data collection, such as the change of the main business, accounting method changes, the merger of statements and so on. However, appropriate adjustments have been made, such as data conversion, etc.

Owing to the large number of original data, here are omitted.

After such a process, the mentioned above dominant interests are expressed in the light of the combination of financial indicators, and then their proportions to the revenue of main business are processed as the specific figures. The descriptive statistics of the sample data are obtained as Table 1.

As can be seen from Table 1, for the 90 listed companies, all interests are originated from operating revenue, the revenue of each company is very changeable in regions. Usually, the eastern economy in China is more developed, the western is not so developed, and their diversification is prominent.

Table 1 Descriptive Statistics

Areas	Year	Ratio of Economic Interest Revenue to	N	Minimum	Maximum	Mean	Std. Deviation
Eastern	2002	Shareholder	30	0	0.203804	0.055603	0.049373
		Employee	30	0.001914	0.169921	0.062881	0.044857
		ROE	30	-31.55	27.18	6.345103	9.397892
	2003	Shareholder	30	0	0.206537	0.056703	0.052377
		Employee	30	0	0.171414	0.061412	0.046699
		ROE	30	-17.61	15.09	5.0143	5.328241
	2004	Shareholder	30	0	0.174894	0.046496	0.044011
		Employee	30	0	0.175221	0.063571	0.045731
		ROE	30	-100	11.54	0.466333	20.1766
	2005	Shareholder	30	0.005754	0.193973	0.049047	0.045963
		Employee	30	0.004238	0.173819	0.062514	0.042474
		ROE	30	-100	11.01	0.345193	19.79004
	2006	Shareholder	30	0	0.267986	0.043217	0.048743
		Employee	30	0.010475	0.144135	0.05882	0.03964
		ROE	30	-173.29	19.55	-0.56237	32.96318
Central	2002	Shareholder	30	0	0.21336	0.060003	0.044915
		Employee	30	0.016685	0.139652	0.071942	0.030062
		ROE	30	-12.36	16.09	4.8043	5.220772
	2003	Shareholder	30	0.006034	0.302588	0.060119	0.069099
		Employee	30	0.00364	0.247505	0.082113	0.048164
		ROE	30	-70.24	14.04	-0.87115	16.31317
	2004	Shareholder	30	0.007786	0.50846	0.059027	0.088224
		Employee	30	0.003605	1.144199	0.109075	0.19886
		ROE	30	-51.55	18.405	2.589797	11.50286
	2005	Shareholder	30	0.006864	0.519355	0.065604	0.098652
		Employee	30	0.004673	0.809522	0.097396	0.139542
		ROE	30	-106.46	23.801	-0.33143	22.04422
	2006	Shareholder	30	0	0.853329	0.0713	0.153223
		Employee	30	0	0.202971	0.072552	0.043253
		ROE	30	-33.27	23.36	4.3829	9.740195
Western	2002	Shareholder	30	0.011963	0.229159	0.074204	0.055755
		Employee	30	0.019655	0.266265	0.106622	0.066987
		ROE	30	-86.04	15.02	-5.94663	27.92134
	2003	Shareholder	30	0.005637	0.171662	0.063594	0.037291
		Employee	30	0.019467	0.235593	0.109599	0.057629
		ROE	30	-46.04	19.84	2.2439	13.19787
	2004	Shareholder	30	0	0.106663	0.040492	0.027242
		Employee	30	0.026421	0.186294	0.093788	0.042041
		ROE	30	-65.51	26.67	1.037963	19.9221
	2005	Shareholder	30	0.001435	0.126499	0.042971	0.030785
		Employee	30	0.027087	0.16137	0.087866	0.037707
		ROE	30	-100	20.83	-4.68811	28.235
	2006	Shareholder	30	0	0.099795	0.034441	0.027992
		Employee	30	0.029191	0.260497	0.095602	0.050411
		ROE	30	-145.43	19.83	-3.58945	33.8258

4 Results and Analysis

4.1 Correlation of proportions of shareholder and employee interests to corporate performance

According to the usual statistical testing methods, this paper establishes the following model expressing the relationship between the proportion of shareholder and employee interests and the corporate performance (Figure 1), and then examine the following correlations: (1) the correlation between proportion of the shareholder interests & employee's; (2) the correlation between proportion of the shareholder interests & corporate performance; (3) the correlation between the proportion of employee interests & corporate performance;

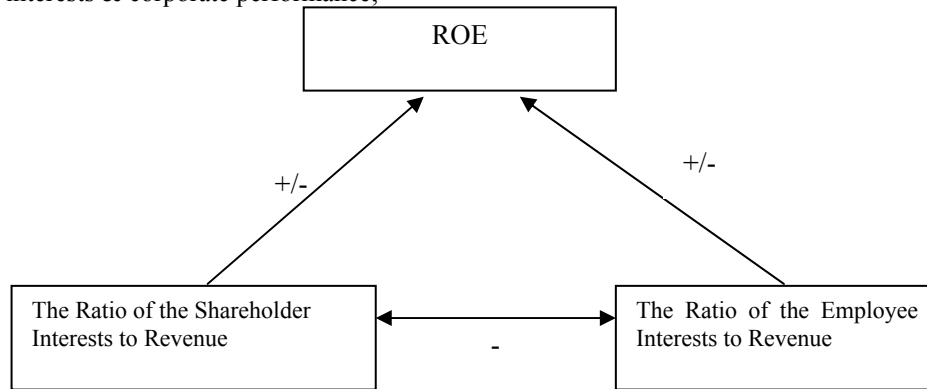


Figure 1 Model for Relationships of Proportions of Shareholder and Employee Interests with Corporate Performance

Based on the above sample data, test results obtained shown in Table 2, the other correlation coefficients marked in Figure 2:

Table 2 Correlations of Interest Distribution to Corporate Performance

ROE (5 Year Average)	Pearson Coefficient to Proportion of Shareholder Interests N=30	Pearson Coefficient to Proportion of Employee Interests N=30	Significance Level
Eastern Companies'	0.185521	0.056755	0. 01
Central Companies'	-0.21211	-0.12554	0. 01
Western Companies'	0.243937	-0.14164	0. 01

To mediate effect of fluctuations, return on net assets (ROE) is calculated with a average of five-year's, and the results to test the hypothesis see a very small correlation between each other, irrelevant or negative correlation, indicating that the effect of benefit distribution is very limited on the performance. Even in the central area, an increase in the shareholder interest appears to decline corporate performance. This may be explained by the fact that the shareholders obtained too much benefit from the corporations, but corporate performance was not dependent on the autonomy, initiative of shareholder or employee, corporations were still in the development stage of the low-level management. On the other hand, in the case of a very low proportion of employee interests, the corporations maintained their performance to a certain level, in comparison, the effect of the shareholder benefit proportion on corporate performance is far greater than the effect of the proportion of the employee benefit, which to some extent shows that the employee have not the dominant position in the corporations, the performance is mainly affected by the management.

It is somewhat unexpected, according to the statistical results of the three areas, there are a higher positive correlation between the shareholder interests and the employee interests (see Figure 2, $r = 0.42$). Probably the consistency of both interests was guaranteed by the conditions of income policy.

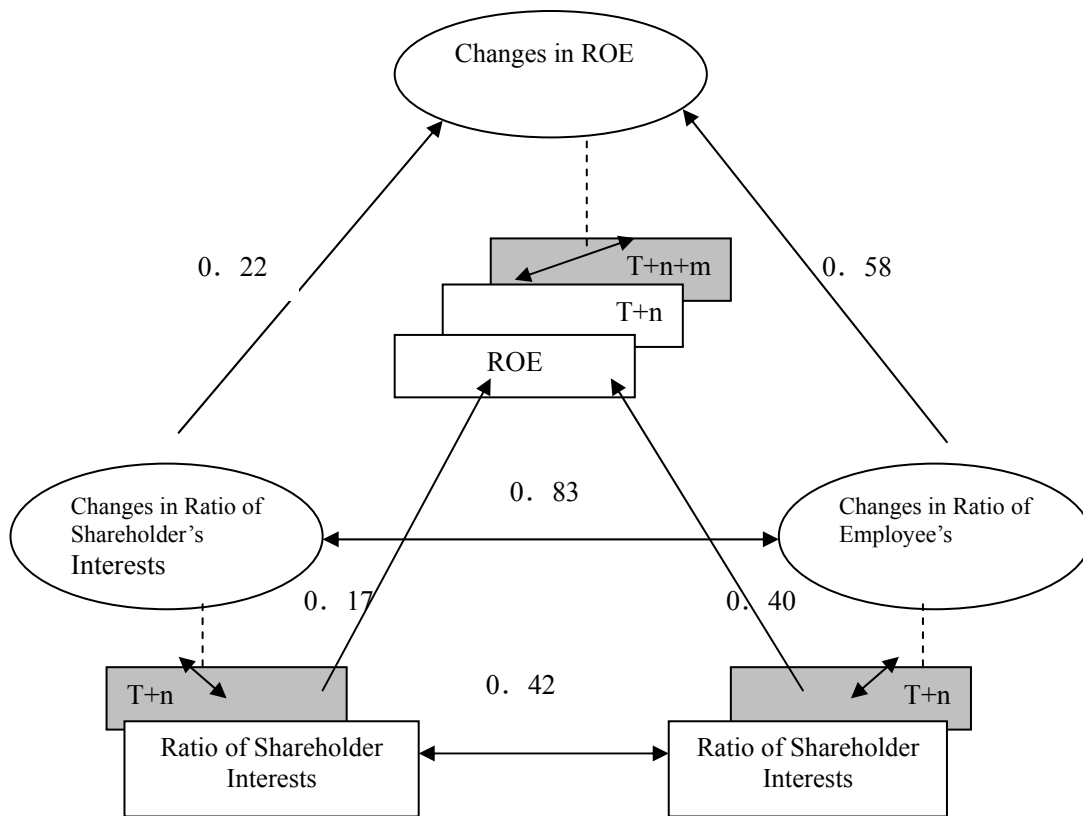


Figure 2 Relationships of Changes in Benefit Distribution and Changes in Performance

4.2 Correlation of changes in proportions of shareholder and employee interests to corporate performance

For further analysis of the impact of changes in the interest allocation on performance, the values of ROE and the values of proportions of economic interests are smoothed at every 3-year: 02-04,03-05,04-06 and taken to estimate the correlation of the change in value of interests with changes in the value of performance. The main results obtained are labeled in the following Figure 2.

In time series analysis, from T= 02 to T + n = 04 period, the correlation coefficient between the change in the shareholder interests and the change in the proportion of employee benefits is 0.83 , and the correlation (r = 0.58) between changes in employee benefits and change in ROE rate was much higher than the correlation (r = 0.228)between change in the shareholder interests and changes in ROE. That is, in the respective of future trend, it showed a strong correlation between the shareholder interests and the proportion of employee interests, improved consistency of shareholders and employees benefit brought about performance improvement, and vice versa. In a longer period, this correlation is more distinct, indicating that changes in the benefit distribution will be, at a later time, a significant impact on the changes of the performance.

5 Conclusions

Comprehensive analysis on the above results concludes that the correlation of the changes in the distribution of interests between shareholder and employee have a certain impact on the performance, which may reflect an important feature of the corporate culture in China, that is, people pay little attention to whether the absolute level of benefits is high or not, but emphasize, compared with other companies or other members, if or not level of income or benefits is increased. The short-run correlation of the interests assigned between shareholder and employee has little impact on performance, while in the long run, the change in this correlation will have a more significant impact. Moreover, this effect has obvious regional differences, in the more developed areas; the coordination of the benefit distribution is more closely related to the growth of performance.

Enhancement of correlations of the benefit distribution among stakeholders lies in the adoption of

new institutional arrangements and the choice of strategic approach, which may further contribute to the integration and effective improvement of the different interests, especially in the developed areas. A corporate system with mutually beneficial mechanism embedded is more likely advanced to the stage of a coordinated development. Since this study only collects a limited financial data, whether in the longitudinal analysis of time series, or the choice of cross-sectional data are not sufficient. A clearer definition of the relationships between various elements is essential to more accurate statistical analysis (such as the strength of relations, direction of cause and effect, etc.). Meantime, more in-depth study needs a more comprehensive survey so as to provide more reliable prerequisite to conclusions. This study is just a beginning of such a possible examination, a further research is necessary in this aspect.

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