International Journal of Science and Research (IJSR)
ISSN (Online): 2319-7064
Index Copernicus Value (2016): 79.57 | Impact Factor (2017): 7.296

The Impact of Corporate Governance Structure on the Efficiency Performance of Internet Companies in China

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Abstracts: ***With the rapid development of the Internet industry, the governance of Internet companies has attracted attention gradually. Based on the Internet companies listed in Shanghai and Shenzhen, the paper studies the influence of the multiple linear regression model on the financial performance of the company. The study found that the size of the board was negatively correlated with the performance of the company. The ownership concentration degree, the proportion of senior executives and the proportion of r&d investment are positively correlated with the performance of the company; The proportion of executive compensation and technical staff is not passed by significance test. Through the empirical research, we can provide effective opinions on the governance of Internet companies in China.***

Keywords: Internet companies, Corporate governance structure, Financial performance

1. Introduction

Over the past 20 years, the changes of the Internet to the entire Chinese economic model have affected all aspects of society. Some traditional industry began to reshape, at the same time, some new technology of the new industry (such as social network services, network game industry, search services, etc.) began to develop rapidly, and gradually become a new era that cannot be ignored in China's economic development. The concept of "Internet company" has emerged in this context, and has become a hot topic in academic, practical and regulatory circles.

In recent years, scholars at home and abroad have conducted extensive researches on Internet companies and published a number of articles, documents and reports on Internet companies. But it can be seen through the observation that, the current research about Internet companies mostly focused on the development strategy, development model and relevant theory, the empirical studies of Internet corporate governance structure is a little and more concentrated in a particular case or a certain type of Internet companies. The development of the company is good or not is closely related to the company's governance structure, in order to better promote the development of Internet companies, this article from the perspective of the Internet the company's governance structure, through the empirical analysis to study the Internet companies. Internet governance can'tbreak away from the essence of corporate governance, but also because of the characteristic of the Internet industry with high technical, company success or failure is directly related to technology innovation, and corporate governance structure will affect the technological innovation.So, when this article on study the problem of Internet companies governance structure, it includes the r&d investment to total assets ratio and technical staff to total staff ratio as a measure of technological innovation, and combining the traditional corporate governance structure theory to the study of corporate governance structure of the Internet.

2. Overview and Hypothesis of Research

This paper mainly studies the influence of the Internet corporate governance structure on corporate performance by referring to the influence of traditional corporate governance structure on corporate performance.Through the analysis of previous literatures, the research on corporate governance structure mainly focuses on the influence of the board size, shareholding structure and management incentive on the performance of the company.Jensen and Meckling first studied the value of the company and the concentration of the company's equity. They found that the more concentrated of the company's equity structure lead to the higher the value of the company. While, Holdemess and Sheehan have found that there is no correlation between equity structure and corporate performance by comparing companies in listed companies with concentrated equity and dispersed equity.According to the study of listed companies in China, Sun yongxiang and Zhang rongtong's research has found that there is a significant negative correlation between the size of the board and the performance of the company, and they think that the number of board members of listed companies in China should be kept at from seven to eleven.Both Lipton and Lorsch have found that the increase of board size increases the supervision ability of the board of directors.However, if you just increase the size of the board,the loss in the process of coordination and organizationwill exceedthe revenue generated by the supervision ability.In terms of management incentives, Wang peixin, Tian yingchen and Li rui have found a significant correlation between the annual remuneration of senior executives and the company's performance and the size of the company's operations.Kaplan's research believes that senior management membersholding a certain stock has a positive incentive effect on the performance of the company.

On this basis,in connection with the relationship between Internet company governance and technological innovation, this paper constructs a research framework and method for the governance structure of Internet companies, and puts forward the following hypotheses:

(1)The impact of board size on the performance of Internet companies.

The board of directors is a decision-making body that represents the general meeting of shareholders to perform certain rights and responsibilities.The board's expertise and knowledge will determine the board's effectiveness.In previous researches on traditional industry companies, there was no strict functional relationship between the company's performance and the size of the board.It is just that as the board size expands, the knowledge experience among board members is constantly communicated and complemented.The specific impact of the size of the board on the performance of the company cannot be determined.Qu liqing (2007) found that when the board of directors reaches 11, the scale of the board of directors will have a negative impact on the company.Chinese listed Internet companies have a large board of directors of between five and nine, with a small group of between 10 and 15.So an expansion of the size of the board within this range could make the board better coordinated. So we hypothesized that:

Hypothesis 1st: The board size is positively correlated with the company's financial performance.

(2) The impact of equity structure on the performance of Internet companies.

Equity structure is the basis of corporate governance, which will have important influence on the company's mode selection, governance form and governance efficiency.In the analysis of the shareholding structure, we mainly consider the concentration degree of equity, which is one of the basic starting points of the study of equity structure, and also an important index to measure the shareholders' control of a company.The more concentrated the equity, the closer the shareholder's interest and the company's performance. Major shareholders are more motivated to participate in corporating governance, improving management and improving the performance of the company. So we hypothesized that:

Hypothesis 2st: ownership concentration is related to the company's financial performance.

(3) The impact of managerial incentives on Internet companies' performance.

The senior management is the actual operator of the company, and its behavior will have a direct impact on the company's performance.However, due to the existence of principal-agent mechanism, the interests of managers and shareholders are divided, and the incentive mechanism of management is one of the effective methods to solve the problem of agency.There are two kinds of incentives for management.The first is to improve management compensation, the higher the remuneration, the shareholders demand the company's performance is better.The second is to allocate equity to managers. By unifying the interests of managers and shareholders, this can improve managers' enthusiasm and enthusiasm, thus improving the performance of the company.Therefore, we propose the following two hypotheses:

Hypothesis 3st: The average executive compensation is positively correlated with the company's financial performance.

Hypothesis 4st: The shareholding ratio of senior executives is positively correlated with the company's financial performance.

(4) The impact of technological innovation on the performance of Internet companies.

High technology is one of the important characteristics of Internet companies.Internet companies currently use computer technology to provide products or services through Internet platforms.Therefore, technological innovation will have a critical impact on the development and operation of the company.Considering the particularity of technology,In this paper, we study the corporate governance structure of Internet companies,including the proportion of the company's r&d investment to the total assets and the ratio of technical personnel to the total workforce.Technological innovation can not only help companies design new products or services, but also optimize and improve existing ones.Thus reducing the cost of production and improving the company's financial performance.Therefore, we hypothesized that:

Hypothesis 5st: The proportion of r&d investment is positively related to the financial performance of the company.

Hypothesis 6st: The proportion of technical staff is positively correlated with the company's financial performance.

3. Variables of Research and Data Source

(1) Variable design and selection

To test the hypothesis proposed above, this paper introduces three types of study variables: explained variables, explanatory variables, and control variables.

Explained variable - company financial performance

Return on equity (ROE) is one of the most commonly used indicators to measure the profitability of a company, which can be used to determine the financial performance of a company. Therefore, this paper selects the return on equity as the explained variable to represent the company's financial performance.

Explain variables - corporate governance variables

Based on the previous hypothesis, this paper designs six explanatory variables for corporate governance structure.In turn, the total number of board members (BS), the top 10 shareholders' shareholding ratio (CR_10), the average salary

of the top three executives (AP_3), the proportion of senior executives (MSR), the proportion of r&d investment in total assets (RDA), and the proportion of skilled employees (RDR).

Control variables

The company's financial performance is also affected by the size of the company and the capital structure of the company.This paper uses total assets (A) to represent the company's size, and the asset-liability ratio (AL) to represent the asset structure of the company. The two indexes of total assets and asset-liability ratio are selected as the control variables, so as to study the influence of corporate governance structure on corporate financial performance more accurately.

Table 1: Variable name and definition

Variable types	symbol	appellation
explained variable	ROE	Return on equity
Explanatory variables	BS	Total number of board members
	CR-10	The top 10 shareholder shareholding ratio
	AP	The logarithmic of the average salary of the top three executives
	MSR	The proportion of executives holding shares
	RDA	Proportion of r&d investment to total assets
	RDR	Proportion of technical staff to total staff
Control variables	A	The logarithmic of the total assets
	AL	Asset-liability ratio

(2) Data sources and descriptive statistics

Based on the availability of data, according to China Securities Regulatory Commission's classification index of listed companies,this paper selects the Internet companies listed in Shanghai and Shenzhen as the research objects. We collect datathrough WIND financial database and CCER database and filter out companies with negative return on equity and missing data. Finally we got sample data from 133 listed Internet companies in late 2015, which all from WIND database, CCER database and 2015 annual report of listed companies.We use SPSS software to handle the data.Descriptive statistics are shown in the table below.

Table 2: Descriptive statistics of sample data

variable	N	The minimum	The maximum	The average	The standard deviation
ROE	133	0.002	0.5769	0.1103	0.0796
BS	133	5	15	8.323	1.869
CR_10	133	0.2151	0.8342	0.5644	0.1352
MSR	133	0	57.6759	2.1061	7.3386
AP	133	13.2697	16.1931	14.3959	0.5658
RDA	133	0.0027	0.2169	0.4949	0.0377
RDR	133	0.0673	0.9335	0.5812	0.2087
A	133	19.7227	24.2865	21.559	0.8982
A L	133	0.0465	0.7753	0.3038	0.1613

Table 2 shows that, the average value of return on equity (ROE) is 0.1103, the minimum is 0.0020 and the maximum is0.5769.There is a big gap between them. In terms of explanatory variables, the average proportion of senior executives is 2.1%, but the maximum value is 57.6%, the minimum value is 0, the proportion of executives is less, and the phenomenon of zero-ownership is relatively common. At the same time, it can be found that there is a large gap between the proportion of R & D input and the proportion of technicians. On the asset side, the Internet company has a low asset-liability ratio, with an average value of around 30%, but the maximum value can be above 70%.

4. Research Design and the Results of Research

(1) Model building

In order to verify the influence of Internet corporate governance structure on the company's financial performance.At the same time, the complexity of the research and the limitation of the sample data should be taken into account.in this paper, a multi-regression linear model is used for empirical analysis. Based on the above assumptions, build the following regression model:

$$ROE = \alpha_0 + \alpha_1 BS + \alpha_2 CR\_10 + \alpha_3 AP_3 + \alpha_4 MSR + \alpha_5 RDS + \alpha_6 RDR + \alpha_7 A + \alpha_8 AL + \beta$$

Among them, α_0 is constant, α_1 - α_6 is explanatory variable coefficient, α_7 and α_8 are control variable coefficients, and β is random error term.

(2) Multicollinearity test

When there is a linear relationship between explanatory variables, the analysis results of regression equations will be greatly affected.Therefore, in the process of regression analysis, multicollinearity test are performed to ensure the accuracy of the results.In this paper,variance inflation factor(VIF) is used as the test index of multicollinearity. If the VIF of a variable is greater than 10, it can be considered that this variable has a higher collinear.SPSS software was used to test the explanatory variables, and the results were shown in table 3.

As can be seen from the table,the VIF of all explanatory variables were less than 2,far less than 10, and the tolerance is far greater than 0.Therefore, it can be concluded that there is no multicollinearity relationship between explanatory

variables, which will not have a large impact on the regression result.

Table 3: The results of multicollinearity test

Variables	Tolerance	VIF
BS	0.81	1.235
CR_10	0.811	1.233
MSR	0.959	1.042
AP	0.687	1.455
RDA	0.86	1.162
RDR	0.958	1.044
A	0.531	1.884
AL	0.671	1.491

(3) Regression analysis

Through the multiple collinearity tests above, it is concluded that there is no serious multicollinearity between the explanatory variables and the control variables. Regression analysis was carried out with
SPSS software, and the results were shown in table below:

Table 4: Analysis of regression variance of variables

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	0.251	8	0.031	6.657	0
Residual	0.601	124	0.005		
Total	0.837	132			

Table 5: Regression coefficients of explanatory variables

variables	coefficients	t	t-sig
BS	-0.171	-2.054**	0.042
CR_10	0.221	2.738***	0.007
MSR	0.354	4.618***	0.000
AP	0.130	1.410	0.161
RDA	0.153	1.889*	0.061
RDR	-0.121	-1.572	0.119
A	0.157	1.487	0.140
AL	0.151	1.769*	0.079

*means significant at the level of 10%,
** means significant at the level of 5%,
***means significant at the level of 1%.

As shown in Table 4, the F test value of the model is 6.657.It passed the significant test at the level of 99%.It shows that the model is significant for statistics.There is a significant linear relationship between explanatory variables and explanatory variables.

We can see the correlation coefficient and significance test results of each explanatory variable from table 5, the results showed that:

1) The board size (BS) is negatively correlated with corporate financial performance (ROE). Hypothesis 1 is not established,which shows that small board of directors is more effective than large-scale board of directors in Internet companies' governance.For Internet companies,whether a new technology can be developed smoothly depends on the decision of the board of directors.In the large board of directors, more exchanges and discussions are needed due to the increasing divergence of opinions, which often results in delays in the development of new technologies, reducing their value and reducing their economic benefits.
2) Ownership concentration (CR_10) has a significant positive correlation with corporate financial performance (ROE), hypothesis 2 is established. For Internet companies,the more concentrated ownership, a few people have more control over the company and the company has a stronger ability to make decisions. At the same time, the company's performance is more closely related to the shareholder's interest, and the greater the incentive for large shareholders to participate in corporate governance and improve the company's operating conditions.
3) The proportion of executive shareholding (MSR) is positively correlated with corporate financial performance (ROE), and the correlation is extremely high, hypothesis 4 is established. This fully demonstrates that, for Internet companies, the incentive mechanism for allocating equity to senior managers can greatly enhance the company's ability to grow.
4) At the same time, we noticed thatthe average salary of senior executives (AP) is positively correlated with ROE.But it can't pass the significance test. This suggests that improving executive pay may help companies improve performance to some extent, but it is not absolute.
5) The proportion of R & D expenditure (RDA) is positively correlated with the financial performance of the company,hypothesis 5 is established.This illustrates the importance of technological innovation to the development of Internet companies. Internet companies need to increase the level of investment in technological innovation in order to continue to provide new products and services to ensure the company's good development. But the technical staff ratio (RAR) did not pass the significance test, assuming that hypothesis 6 can't be explained.

5. Conclusion

This paper studies the relationship between corporate governance structure and corporate financial performance in China.Based on the data of 133 Internet listed companies, the paper analyzes the correlation between the size of the board of directors, the ownership structure, the management incentives and corporate performance.At the same time, considering the high-tech characteristics of Internet Co, this paper introduces the influence factors of technological innovation.The research shows that there is a close relationship between the corporate governance institutions and corporate performance in China.The establishment of a reasonable corporate governance organization is of great significance to the management of the company. At the same time, streamlining the size of the board of directors, increasing the concentration of equity, attaching importance to executive incentive mechanism and increasing investment in technological innovation is an important measure to ensure the healthy development of Internet companies.

References

[1] Jensen and W . Meckling . Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics, 1976.
[2] Lipton, Martin, and Jay W. Lorsch. A Modest Proposal for Improved Corporate Governance. Business Lawyer, 1992.
[3] Kaplan, S.N. and B. Minton, Appointments of Outsiders to Japanese Boards: Determinants and Implications for Managers. Journal of Financial Economics,1994.
[4] Ang J, Lauterbach B, Schreiber BZ. Pay at the executive suite: How do US banks compensate their top management teams? Banking. Financ, 2002.
[5] Gedajlovic E, Shapiro DM. Ownership structure and firm profitability in Japan. The Acad. Manage, 2002.
[6] Brown LD, Caylor LM. Corporate governance and firm Performance. Georgia State University working paper, 2004.