

The Empirical Research of Equity Balance and Performance of Agricultural Listed Companies under the Dynamic Competitive Perspective

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Abstract: This paper discuss the relationship between the equity balance and the corporate performance of the agricultural listed companies under the dynamic competitive perspective, and joining the variable of the defense capabilities into the model to explore how equity balance effects on corporate performance. This paper adopted the section data of 2014 agricultural listed companies to analysis the relationship between the equity balance, the defense capability and the performance of the agricultural listed companies. The conclusions as follows: equity balance is beneficial to improving enterprise's defensive capabilities in dynamic competition; Equity balance has a positive correlation with the enterprise performance; Equity balance degree has a positive correlation with the enterprise performance through improving the defense capability of the enterprise.

Keywords: Equity balances; Corporate performance; Defense capability

1. Introduction

Our country is an agricultural country. The basic national conditions that a large number of population and arable area which is limited decides that the agriculture is the first industry and the foundation of other industries. Our life is closely related to agriculture, so the agriculture plays a important role in our country, but the performance of the agriculture listed companies is not satisfactory in recent years, and the characteristics of equity balance may affects on production and management of the agricultural listed companies, which in turn affects the corporate performance, so discussing the relationship between the equity balance and the performance of agricultural listed companies is necessary.

Equity balance is refer to the checks and balances problem between the previous large controlling shareholders of the listed companies. If the first big shareholder's stakes more than 50% in the listed companies which will lead to the control rights are highly in the control of by individual. In the past, there are a lot of studies about the relationship between equity balance and corporate performance, but by contrast, previous studies mostly according to entrust - agent theory and assuming that the equity balance was positively correlated with the company's operating performance, but doesn't discussing how equity balance effects on the company's operating performance, therefore, this paper was to explore the rela-

tionship between equity balance and performance, also explore its action mechanism .

With the era of large data coming, various factors effect on the market at the same time, the market competition already shift from static into dynamic competition. Dynamic competition requires enterprises in the market having keen response ability, not only has strong defense capability under attacked, but also has an ability to integrate their resources to launch counterattack. Equity balance has a great influence on the defense capability, because equity balance is the key mechanism of the corporate governance, it will affect on the decision-making mechanism as well as the attitude to participate in market competition. Therefore the defense capability of the enterprise is adopted in the model, and discussing the mediation role of defense capability between the equity balance and corporate performance, revealing its action mechanism.

2. The Study Design of the Relationship between Agricultural Listed Companies' Equity Balance and Operating Performance

2.1. Forwarding hypothesis

Hypothesis 1: the equity balance has a positive correlation with the enterprise's defensive ability

Equity balance is refer to that the sum of the enterprise's second largest shareholder to the tenth largest sharehold-

er's stakes proportion divided by the proportion of the largest shareholder's stakes, which revealing that the degree of the mutual restriction between large shareholders. If the degree of the agricultural listed companies' equity balance is high, means that the agricultural listed companies having multiple large shareholders to share control rights of the company, comparing with the condition that only a single largest shareholder exclusive control right ,multiple shareholders can bring more knowledge and integration ability. When the company attacked by external, the listed company with multiple shareholders control has an ability to launch a counterattack, so if the degree of the listed company's equity balance is high, the enterprise defense capability will be higher to.

Hypothesis 2: The equity balance has a positive correlation with the company's performance

The degree of the equity balance is high, means that multiple shareholders have more ownership and control rights, so the big shareholders have ability and desires to participate in corporate governance, which will improving the level of company's management and supervision.

Hypothesis 3: the enterprise's defensive ability has a positive correlation with the company's operating performance

Enterprise' defense capabilities is refer to that when the listed companies in the face of attacks, they have the ability to integrating internal resources and making a response quickly. So if enterprise's defensive capability is high, the enterprise will hold a solid position in the dynamic market competition, in turn the corporate performance will be high.

Hypothesis 4: Enterprise defenses ability plays a mediating role between equity balance and corporate performance.

Equity balance is the key mechanism in the corporate governance which will affect decision-making mechanism and the attitude participating in market competition.

Also, equity balance can lead to the collective decision-making which is beneficial to improving the defense capabilities, more over, if defensive ability is stronger, the listed companies will have a solid position in the dynamic market, in turn increasing the company performance.

2.2. Process of obtained samples

According to the 2014 Listed Companies Industry Classification released by China Securities Regulatory Commission (CSRC) in the 2014, the agriculture will be divided into: agriculture, forestry, animal husbandry, fisheries and Service Industry of forestry and animal husbandry and fishery. According to this standard to collect the data of agricultural listed companies in 2014 on the securities star.

When selecting sample data, the following factors were considered:

(1) Rejecting those agricultural listed companies which are "special treatment" (ST) and "transfer of special" (PT). Because those agricultural listed company's financial situation are unusual, if take those data into the empirical analysis which will influence the reliability of the results.

(2) Rejecting those agricultural listed companies which issued the A share, B share, H share, and shares of listed abroad at the same time. In order to make the data comparable, selecting those agricultural listed companies which only issue a share.

According to those principles of data selection, a total of 37 listed agricultural companies in 2014 are selected, investigation period for a whole year in 2014.

3.3. Definition of variables

The definition of the independent variables and dependent variables is shown as Table 1. The definition of the control variables is shown as Table 2.

Table 1. Definition table of the independent variables and dependent variables

variables	meaning
Enterprise defenses ability (DC)	When the listed companies in the face of attacks, they have the ability to integrate internal resources and make a response quickly. Using the total asset turnover as indicators
Corporate performance (PER)	Using the total assets net profit margin as the indicators
Equity balance (EB)	the sum of the enterprise's second largest shareholder to the tenth largest shareholder's stakes proportion / the proportion of the largest shareholder's stakes

Table 2. Definition table of the control variables

control variables	meaning
Firm Size (Size)	Taking company's total assets as the company size Considering to the total assets is greater, so taking natural logarithm of total assets as the company size
equity concentration (EC)	The top three shareholders' shareholding proportion

Model Construction:

$$Model 1: DC = b_0 + b_1EB + g(\text{control Variable}) + e \tag{1}$$

$$Model 2: PER = b_0 + b_1EB + g(\text{control Variable}) + e \tag{2}$$

$$Model 3: PER = b_0 + b_1DC + g(\text{control Variable}) + e \tag{3}$$

$$Model 4: PER = b_0 + b_1DC + b_2EB + g(\text{control Variable}) + e \tag{4}$$

Control Variable represents control Variable; e represents error; b_0, b_1, b_2, g represent coefficient.

3. The Empirical Analysis of Agricultural Listed Companies' Equity Balance and Performance

3.1. The descriptive statistical analysis of the major independent variables and dependent variable

According to the above table, the average of the equity balance of the agricultural listed companies in 2014 is $0.5670 < 1$, indicating that the second largest shareholders to the tenth have less binding for the first big shareholder. Which is not conducive to corporate governance mechanisms playing a role, also which is not good for shaping defense capabilities in the dynamic market. From the description of the corporate performance statistics of the agriculture listed company, we can see that the average of the net profit rate is 0.0009946, indicating that the

operating performance of the agricultural listed companies in 2014 is very bad. From the description of the total assets turnover, we can see that most agricultural listed companies are not pay attention to shaping defense capabilities, the average of it only 0.0030351.

3.2. Regression Analysis

This paper investigates the relationship between the equity balance and the operating performance of the agricultural listed companies. The data is the section data of the agricultural listed companies in 2014, and the multivariate regression model are established as follows formula 5-8.

Control variable represents control Variable; e represents error; b_0, b_1, b_2, g represent coefficient.

Using SPSS statistical software estimate regression model, results are as follows Table 4.

Table 3. The descriptive statistics of the agriculture listed companies' major independent variables

	N	Minimum	Maximum	Average	The standard deviation
Equity balance(EB)	37	0.03	2.50	0.5670	0.55450
Total asset turnover (DC)	37	0.00080	0.00750	0.0030351	0.00187279
Net profit (PER)	37	-0.42270	0.37340	-0.0009946	0.14937291
Effective N	37				

$$\text{Model 1: } DC = b_0 + b_1EB + g(\text{control Variable}) + e \tag{5}$$

$$\text{Model 2: } PER = b_0 + b_1EB + g(\text{control Variable}) + e \tag{6}$$

$$\text{Model 3: } PER = b_0 + b_1DC + g(\text{control Variable}) + e \tag{7}$$

$$\text{Model 4: } PER = b_0 + b_1DC + b_2EB + g(\text{control Variable}) + e \tag{8}$$

Table 4. The regression analysis table of the equity balance and defense capabilities

Mold	Non-standardized coefficient		standardized coefficient	T	sig	
	B	standard error	Beta			
1	(constant)	0.003	0.005		0.648	0.521
	Equity balance (EB)	0.000	0.001	-0.085	18.19	0.000
	The natural logarithm of firm size (Size)	0.000	0.000	-0.050	-0.299	0.017
	Equity concentration	0.003	0.002	0.277	1.606	0.018
a. dependent variable \: Defense capabilities (DC)						

Table 5. The regression analysis table of equity balance and corporate performance

Mold	Non-standardized coefficient		standardized coefficient	T	sig	
	B	standard error	Beta			
1	(constant)	-0.156	0.391		-.399	0.692
	Equity balance (EB)	0.017	0.048	0.065	1.169	0.016
	The natural logarithm of firm size (Size)	0.005	0.032	0.025	0.148	0.043
	Equity concentration	0.191	0.171	0.198	1.117	0.032
a. dependent variable \: The net interest rate (PER)						

According to the Table 4, the significance of the equity balance is $0.000 < 0.05$, indicating that the equity balance of the agricultural listed companies has a positive corre-

lation with the enterprise's defensive capabilities, so that the hypothesis 1 was Verified.

According to the Table 5, the significance of equity balance is $0.016 < 0.05$, indicating that the equity balance of the agricultural listed companies has a positive correlation with the corporate performance, so that the hypothesis 2 was Verified.

As can be seen from the table 7, compared with the table 5, joining the intermediary variable defense capabilities

(DC), the equity balance degree failed to pass the test of significance of regression coefficients, indicating that defense capability play a partial mediating role between the equity balance and the corporate performance .so that the hypothesis 4 was verified.

Table 6. The regression analysis table of defense capabilities and corporate performance

Mold	Non-standardized coefficient		standardized coefficient	T	Sig.	
	B	standard error	Beta			
1	(constant)	-0.126	0.391		-0.323	0.748
	defense capabilities (DC)	-5.414	14.260	-0.068	1.849	.037
	The natural logarithm of firm size (Size)	0.004	0.032	-0.023	0.136	0.003
	Equity concentration	0.194	0.173	0.202	1.123	0.049

a. dependent variable \: dependent variable (PER)

Table 7. The regression analysis table of defense capabilities, equity balance and corporate performance

Mold	Non-standardized coefficient		standardized coefficient	T	Sig.	
	B	standard error	Beta			
1	(constant)	-.141	0.399		-0.353	0.727
	defense capabilities (DC)	-5.003	14.509	-0.063	-0.345	0.032
	Equity balance (EB)	0.016	0.048	0.059	0.331	0.143
	The natural logarithm of firm size (Size)	0.004	0.032	0.022	0.128	0.049
	Equity concentration	0.208	0.180	0.216	1.154	0.027

a. dependent variable \:Net profit(PER)

4. The Conclusion and Suggestion of the Empirical Research

4.1. The conclusions

(1) If the equity balance degree is high, the defense capability of the enterprise will be high too. If the equity balance degree is high, which will lead to multiple shareholders sharing control rights in the agricultural listed companies, so that the multiple shareholders can bring more knowledge and integration abilities, which will avoid a dominant equity structure, in the same time which has the very good constraints to the behavior of the activist shareholders, in turn improving the defense capability of the agricultural listed companies ,which ensure that agricultural listed companies have solid position in the dynamic market competition.

(2) The equity balance can improve the company's operating performance. The equity balance degree is high, means that the agricultural listed companies with multiple shareholders which have more ownership and control rights, also have the ability and desire to participate in corporate governance and supervision, thus improving the business performance of the agricultural listed companies.

(3) The defense capability of the enterprise can improve the company's operating performance. In the dynamic market competition, enterprise's defensive ability is refer to that in the face of the opponent's attack, enterprises are able to quickly integrate internal resources to launch a counter-offensive, which also ensure the enterprise hold-

ing a stable position, thus improving the business performance of enterprises.

(4) The equity balance degree through improving defense capability of the enterprise to have a positive impact on the business performance. The paper verifies that the equity balance has a positive correlation with the corporate performance through empirical analysis. And the equity balance degree through improving defense capability of the enterprise to have a positive impact on the business performance.

4.2. Policy suggestion

(1) Moderately reduce agricultural listed companies controlling shareholder's stakes, and improve the company's equity balance degree. Equity balance reflects that the constraints and counterweight of the company's other big shareholders for the controlling shareholder. This paper empirically test the positive role of the agricultural listed companies equity balance degree in the corporate governance: equity balance degree introduced the collective decision-making mechanism as well as the attention to the long-term development of the company, which can improve the defense capability of the enterprise, at the same time, equity balance can better realize that effectively supervise managers and inhibition the action that the controlling shareholder "empty effect", which has an obvious role in promoting the company performance. Therefore the agricultural listed companies should appropriately reduce the controlling shareholder's stakes, gradually promoting equity diversification, and raising

equity balance degree to perfect the corporate governance structure, thus improving the quality of the corporate governance, finally realize enterprise growth.

(2) Perfecting dynamic competition ability evaluation system of the agricultural listed companies, and attaching importance to cultivating the defense capability. The previous enterprise competitiveness evaluation are mostly based on static perspective inspecting the product and market advantages, these evaluations just reflects the firm's ability to launch a attack in the dynamic competition. This paper verifies that the defense capability of the agricultural listed companies has an important role in the dynamic competition through empirical analysis, which promoting enterprise' performance. Research conclusion improves that the importance of agricultural listed companies to shape and cultivate the defense capability, so that in constructing dynamic competition ability evaluation system of the agricultural listed companies should consider defense capability, making the management attaches great importance in the defense capabilities' cultivation and promotion

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