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Mergers and acquisitions behavior, ceo power and performance expectation gap after m&a——an empirical study of manufacturing enterprises listed on china growth enterprise market

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Abstract

Based on the sample of manufacturing enterprises listed on the growth enterprise market from 2013 to 2017, this paper studies the relationship between merge behavior and performance expectation gap after M&A, and further explores the regulatory role of CEO power on the relationship between M&A behavior and performance expectation gap after M&A. At the same time, according to the previous research results, M&A behavior is divided into M&A with related party and M&A with non-related party to further investigate.

The results show that M&A behavior is positively related to the performance expectation gap after M&A; M&A with related party is positively related to the performance expectation gap after M&A; non related M&A is positively related to the gap of performance expectation after M&A;CEO power can regulate the relationship betweenM&A behavior and performance expectation gap after M&A; CEO power can regulate the relationship between related M&A and performance expectation gap after M&A; CEO power can adjust the relationship between unrelated M&A and post-merger performance expectation gap.The results not only support the previous theory that the top executives, the largest shareholders and controlling shareholders use M&A behavior to "tunneling" the enterprise, but also enrich the relevant research on the performance expectation gap after M&A, and provide a certain reference for corporate governance.

Keywords: *Merge behavior, M&A with related party, M&A with non-related party, CEO power performance expectation gap after M&A*

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Introduction

Accordingtothestatisticsofeastmoney.com, the phenomenon of not meet the standard of performance commitment after M&A in the past five years is on the rise, with the rate of not meet the standard rising from 10.67% in 2013 to 28.74% in 2017, among which the majority are listed on the GEM of small and medium-sized enterprises.The original purpose of merge behavior is to enhance the competitiveness of enterprises. However, the reality is the opposite.It can be seen that there must be a causal relationship between merge behavior and performance expectation gap after M&A.

The research of domestic and foreign scholars on M&A behavior shows that M&A behavior can really affect the corporate performance after M&A. Different M&A behaviors often have different influence on the performance of enterprises after M&A.In particular, related M&A behavior refers to the M&A between the acquiring enterprise and its controlling shareholders, directors and other member companies under its control (Li Shanmin et al., 2013)[1],Therefore, it will bring more serious agency problems, thus reducing the enterprise value (Tang Qingquan et al., 2018)[2].Managers of enterprises can make more convenient use of related M&A to obtain more personal interests, rather than for the better and stronger development of enterprises.At the same time, the listing with good performance provides a hotbed for the first major shareholder or actual controller to make profits for themselves in the associated M&A, which is convenient for them to secretly damage the interests of small shareholders and the company, and affect the enterprise performance (Huang Xingtwin et al., 2006)[3],Therefore, major shareholders or controlling shareholders transfer their interests through related M&A (Li Shanmin et al., 2013). In addition, some scholars believe that connected M&A creates more profits than non-connected M&A (Chen Tao et al., 2013)[4],in other words, related M&A can optimize resources, improve enterprise efficiency, and improve enterprise performance. From the perspective of managerial power theory, the greater the manager's power, the stronger the decision-making ability of the enterprise, the more likely it is to cause the manager's power rent-seeking, damage the interests of the enterprise by using the decision-making power in his hands, and enrich his private purse (Yao Haixin et al., 2016)[5].Therefore, as the core of management, CEOs often use investment opportunities to pursue their own interests rather than shareholders' interests when they have too much power to be supervised by perfect system design (Li Shanmin et al., 2005; Zhang Qia et al., 2013)[6],the greater the CEO's power is, the greater the damage to the enterprise's interests caused by his decision-making behavior. On the contrary, the smaller the CEO's power is, the more severely constrained by other managers, the less the damage to the enterprise's interests caused by his decision-making behavior.

At present, scholars pay little attention to the impact of the difference between related and unrelated M&A on the performance expectation gap after M&A.Therefore, this paper divides M&A behavior into related M&A and non-related M&A. Based on the reality of M&A behavior in China, this paper studies the relationship between M&A behavior, i.e. related M&A behavior and non-related M&A behavior, and the post-merger performance expectation gap.At the same time, this paper studies the moderating effect of CEO power on the relationship between M&A behavior and post-merger performance expectation gap, trying to clarify the causes of performance expectation gap and the mechanism of impact from the perspective of M&A behavior.

In order to solve the above problems, this paper intends to take the M&A events of manufacturing enterprises listed on the growth enterprise market in 2013-2017 as the research sample, to explore the relationship between M&A behavior and the expected gap of post-merger performance, and the moderating role of CEO power on the relationship between M&A behavior and the expected gap of post-merger performance.

Theoretical analysis and research hypothesis

At present, most scholars think that, based on the principal-agent theory, there is a behavior of "hollowing out" the enterprise by the managers of the acquiring enterprise, and the behavior of enterprise merger and acquisition can perfectly whitewash the greedy desire of the managers. Based on the information advantage in hand, the merger and acquisition of enterprises can damage the interests of the shareholders to consolidate their position and pursue their own interests.In addition, the major shareholders or the controlling shareholders' meeting will also transfer the interests to themselves through the merger and acquisition based on their own voice and decision-making power, which will damage the interests of enterprises and small and medium shareholders.Scholars have found that the degree of Chinese large shareholders or controlling shareholders using their own voice and decision-making power to infringe on the interests of small and medium-sized shareholders is far higher than that of western countries (Li Shu et al., 2009)[7],therefore, using the whitewash of M&A behavior to enrich private pockets will inevitably lead to the decline of corporate performance.

Performance expectation fall, performance expectation gap refers to the gap between the actual performance and aspiration level of an enterprise (Song Tiebo et al., 2017)[8],In other words, the performance expectation gap is determined by two factors, one is the actual performance level, the other is the expected performance level. If the actual performance level is better than the previous performance level, but fails to reach the expected performance level, then the performance expectation is still in a state of falling rather than surplus. Assuming that the expected performance level is affected by the historical performance level and the industry performance level (Chen W.R., 2008; Chrisman J.J., & P.C. Patel, 2012; Chen Weihong, etc., 2018; Guo Rong, etc., 2017; He Xiaogang, etc., 2017; Lian Yanling, etc., 2015)[9],Then, driven by the "hollowing out" consciousness of the main and combined enterprise management, M&A behavior will continuously damage the interests of enterprises and shareholders, and make the actual performance level decline after M&A, thus increasing the gap of performance expectation after M&A.In addition, the main channel for the transmission and swallowing of private interests by the major shareholders or controlling shareholders of the merger and acquisition enterprise is the use of related merger and acquisition (Huang Xingluan et al., 2006; Li

Shanmin et al., 2013).At the same time, the performance of enterprises after M&A caused by related M&A is declining.This is closely related to the original intention of merger and acquisition.That is to say, the motivation of senior management to launch M&A is more to "hollowing out" enterprises than to make profits for the development of enterprises and shareholders.

Therefore, this paper proposes the following research hypotheses:

Hypothesis 1a: there is a positive correlation between merge behavior and performance expectation gap after M&A

Hypothesis 1b: there is a positive correlation between related M & A behavior and performance expectation gap after M&A

Hypothesis 1c: there is a positive correlation between unrelated M & A behavior and performance expectation gap after M&A

Under normal circumstances, enterprises achieve their growth and development through M&A, some of which achieve scale, finance, operation and other synergies, some of which reduce transaction costs in the transaction link, some of which achieve the goal of diversification risk dispersion.However, the purpose of M&A driven by CEO is not completely for the needs of the growth and development of the enterprise, just to maintain or increase their own income, have a better personal reputation and more company-paid consumption through M&A expansion.Such M&A can-not produce synergy or integrate upstream and downstream resources to reduce transaction costs. In this case, CEOs will not care about or fear the following business risks. They are more concerned about whether their personal interests are strengthened and protected in the whole M&A activity.

The greater the CEO's power, the more confident the CEO will be. Because the CEO can control more resources and personnel allocation power, this will become the main reason for the CEO's overconfidence. Moreover, the greater the CEO's power, the higher the degree of overconfidence will be.Managers with high level of self-confidence prefer to carry out unrelated M&A, and the corporate performance after M&A is significantly less than expected, and the corporate performance is less than that after M&A by non-overconfident managers (Ja. Doukas, & D. Petmezas, 2007; Zhai Aimei, Zhang Xiaojiao, 2012; Hu Ze, etc., 2013, etc.)[10].The greater the power of CEO, the higher the level of self-confidence, will affect the selection of the reference point of the performance level of the top management team. Too high self-confidence leads to too high expected performance level of the enterprise, so that the reference point of the performance level is far higher than the actual.Therefore, the greater the CEO's power is, the more opportunities can be obtained to take advantage of the "hollowing out" enterprises through related M&A, so as to reduce the actual performance level brought by merge behavior, and improve the selection of reference points for expected performance, resulting in the greater expectation gap after M&A.

Therefore, this paper proposes the following research hypotheses:

Hypothesis 2a: CEO power adjusts the relationship between M&A behavior and performance expectation gap after M&A

Hypothesis 2b: CEO power adjusts the relationship between related M&A behavior and performance expectation gap after M&A

Hypothesis 2c: CEO power adjusts the relationship between non-related M&A behavior and performance expectation gap after M&A

Research design

(1) Model design

This paper constructs a regulatory effect model of the relationship between CEO's power and M&A behavior and performance expectation gap after M&A. See Figure 1 for details.

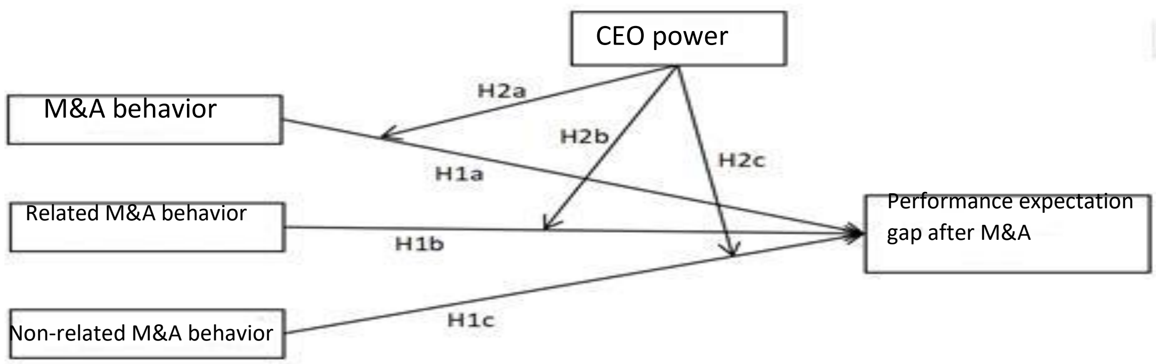

Figure 1 theoretical model of this paper

Source: organized by the author

In this paper, the overall model design of the impact of M&A behavior on the Performance expectation gap after M&A is as follows:

In order to test hypothesis 1a, 1b and 1c, set up the equation:

$PEG=\beta_0+\beta_1 M\&A+\varepsilon_1$ ①

In order to test hypothesis 2a, 2b and 2c,set up the equation:

$PEG=\beta_0+\beta_1 M\&A+\beta_2 M\&A \times POW+\varepsilon_2$ ②

2) Sample data

Based on the sample database of manufacturing enterprises listed on the growth enterprise market from 2013 to 2017(Song Tiebo et al., 2017; Zhou Ming et al., 2009; Zhang Ruiwen et al., 2007)[11].The specific steps of the research data screening process are as follows:

(1) Select and retain samples of manufacturing enterprises listed on GEM;

(2) Cutting the company samples with missing financial data from 2013 to 2017;

(3) Reject the sample of ST company;

(4) Reject the company samples with serious missing data;

(5) In order to eliminate the influence of outliers, winsorize is used to reduce the tail of samples whose main continuous variables are in the range of 0-5% and 95% - 100%;

(6) The sample range of M&A events is 2013-2017. For a company that has multiple M&A events in a year, only the largest M&A amount is taken.

and finally obtained 588 samples in 2013-2017, a total of 2352 observed value.

3) Variable measurement

The main variables selected in this paper are defined as follows:

Independent variable, mergers and acquisitions behavior (M&A).According to the existing research literature, this paper defines the M&A behavior as a binary variable, which measures whether the enterprises initiate the M&A behavior in the statistical year. If the enterprises in the research sample have at least one successful M&A behavior in 2013-2017, and the M&A is assigned as 1; the non-associated M&A behavior is assigned as 0.

Dependent variable, performance expectation gap after M&A (PEG).Referring to Chen (2008), Song Tiebo (2017), He Xiaogang (2013)[12],this paper sets PEG as the gap between the actual performance (P) and the desired level (A)(Lian Yanling et al., 2015; Guo Rong 2017).

In this paper, return on total assets (ROA) is selected to measure the performance level. Calculation formula:

Return on total assets = earnings before interest and tax / average total assets

The expectation levelhavethe historical desire level and social desire level as a comprehensive desire level (Greve, 2003 [13]; Song Tiebo, et al., 2017).

Moderator variable, CEO power (POW). According to the research, the larger the CEO's power is, the higher the salary he receives, and the larger the salary gap with other senior managers (Zhang Qia et al., 2013)[14].the average value of CEO pay gap is calculated. If it is higher than the average value, with a value of 1. If it is lower than the average value, with a value of 0.

Empirical analysis and results

In this paper, through spss22.0 statistical software, first of all, the variable data are centralized. Since the independent variable is a binary virtual category variable, the general linear single variable variance analysis is carried out, and the results are shown in Table 1 below:

Table 1 Analysis of the relationship between M&A behavior and the performance expectation gap after M&A

Source	Sum of squares of the third kind	df	Mean square	F	Significance
M&A behavior	0.173	2	0.087	81.955	0.000

a.Rsquared =0.219(Adjusted R square=0.216)

It can be seen from table 1 that the F value is 81.955, with a significance of 0.000, which is less than 0.001, indicating that it is significant at the level of 1%. Suppose 1a passes the test. Next, we will classify the M&A behaviors, and investigate the relationship between the related M&A behaviors and the non-related M&A behaviors and the expected drop of performance after M&A, as shown in Table 2:

Table 2 Analysis of the relationship between related M&A and non-related M&A respectively andthe performance expectation gap after M&A

Source	Sum of squares of the third kind	df	Mean square	F	Significance
Related M&A	0.120a	1	0.120	115.467	0.000
Non-related M&A	0.053b	1	0.053	47.539	0.000

a.R squared =0.202(Adjusted R square =0.200)

b.R squared =0.269(Adjusted R square =0.264)

From table 2, we can see that the F value is 115.467, with a significance of 0.000, which is less than 0.001, indicating that the two are significant at the 1% level, assuming 1b passes the test. The F value is 47.539, with a significance of 0.000, which is less than 0.001, indicating that the two are significant at the level of 1%, assuming 1c passes the test.

Next, we will test the moderating effect of CEO power on the relationship between M&Abehavior andperformance expectation gap after M&A. Because CEO's power is assigned as binary dummy variable in this paper, when the independent variable and regulatory variable are classified variables, we use general linear one-way ANOVA, and the interaction term is the regulatory effect, as shown in Table 3:

Table 3 Analysis of the moderating effect of CEO power on the relationship between M&A behavior and performance expectation gap after M&A

Source	Sum of squares of the third kind	df	Mean square	F	Significance
Interaction item	0.004	1	0.004	4.013	0.046

a.Rsquared =0.227(Adjusted R square =0.222)

It can be seen from table 3 that the F value is 4.013, with a significance of 0.046, which is less than 0.05, indicating that it is significant at the level of 5%, assuming 2a passes the test.

Next, the M&A behavior is divided into two groups: related M&A and non-related M&A. the power of CEO is divided into two groups: large and small. The moderating effect of CEO power on the relationship between CEO power and performance expectation gap after M&A is investigated. See Table 4 for details:

Table 4 Analysis of the moderating effect of CEO's power on the relationship between related M&A and non-related M&A and the performance expectation gap after M&A

Variable name	RelatedM&A				Non-related M&A			
	Small CEO power		Big CEO power		Small CEO power		Big CEO power	
	F	Sig.	F	Sig.	F	Sig.	F	Sig.
Interaction item	65.192	0.000	8.143	0.007	115.343	0.000	14.983	0.000

a.Rsquared =0.272(Adjusted R square =0.270)

b.Rsquared =0.412(Adjusted R square=0.406)

c.Rsquared =0.092(Adjusted R square=0.086)

d.Rsquared =0.189(Adjusted R square=0.166)

From table 4, we can see that in the related M&A group, In the two groups the F value is 65.192 and 8.143respectively, and the Sig is 0.000 and 0.007 respectively, which are less than 0.001 and 0.05 respectively, i.e. significance at the level of 1% and 5%. In the non-merger group, the F value is 115.343 and 14.983, and the sig. is 0.000 both, which is less than 0.001, which is significant at the level of 1%. And so the hypothesis 2b and2c is verified. That is to say, the power of CEO will affect the decision-making behavior of senior executives, and thus affect the performance expectation gap after M&A.

In order to test the stability and reliability of the model results, this paper uses ROS instead of ROA as the variable measurement index. According to the characteristics of this part of variables, the general linear single factor analysis of variance is re used to test the stability of the results. Firstly, the ROS is standardized and then calculated. The result shows that assuming 1a and 1c passes the robustness test, and assuming1b can not pass the robustness test, and assuming2a, 2b and 2cpasses the robustness test.

Discussion and conclusion

1.Discussion

Combined with the empirical research results, ROA can reflect the real correlation more than ROS. Enterprise managers, the largest shareholders and controlling shareholders all have the motivation of "hollowing out" the enterprise or damaging the interests of small and medium-sized shareholders, and can use M&A behavior to cover up their private enrichment (Tang Qingquan, et al., 2018; Huang Xingtwin, et al., 2006; Chen Tao, et al., 2013; Yao Haixin, et al., 2016).The analysis results of the expectation gap after M&A calculated by ROA confirm the previous scholars' research conclusion that M&A behavior, whether or not associated with M&A, will lead to different degrees of decline in actual performance and expand the expectation gap after M&A.And the power of CEO has a strong impact on M&A behavior and the gap of performance expectation after M&A.The greater the CEO's power is, the stronger the CEO's voice power is. "One word" will make the CEO more overconfident, and increase their motivation and opportunity of "hollowing out" the enterprise. Therefore, the greater the CEO's power is, the more likely it is to accelerate the expansion of post-merger performance expectation gap.

Conclusion

This paper focuses on the M&A events of manufacturing enterprises listed on the GEM in China, pays attention to the impact of M&A behavior on the performance expectation gap after M&A, further explores the regulatory role of CEO power on the relationship between M&A behavior and the performance expectation gap after M&A, and clarifies the relationship between M&A behavior, CEO power and the performance expectation gap after M&A.The empirical results show that the M&A behavior has a significant positive impact on the post-merger performance expectations. This result proves that there are serious agency problems in the M&A activities of enterprises in China's M&A market. Executives, the largest shareholders and controlling shareholders do use M&A activities to cover up the behavior of "hollowing out" the enterprise's wealth to fill their own pocket, while the interests of enterprises in the M&A activities are continuously swallowed by the insiders.As a result, the market investors worry about their own interests being damaged and make further passive investment, which further reduces the value of the acquiring enterprise and further reduces their performance.Further research shows that CEO power has a moderating effect on the relationship between M&A behavior and post-merger performance expectation gap. When the CEO's power is greater, it will accelerate to expand the gap of performance expectation after M&A. in other words, the greater the CEO's power is, the weaker the enterprise's supervision power is, which improves the hotbed of power rent-seeking and self-interest seeking for executives such as CEO or the largest shareholder and controlling shareholder. Therefore, how to establish a set of efficient and powerful incentive system is often more effective than a set of cold and strict supervision system.

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