Modeling analysis of cross-border acquisition control and performance

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Abstract. This paper aims to find out the influencing variables of control methods and acquisition performance after a cross-border acquisition. Modeling analysis is adopted in this research, based on qualitative comparative analysis and with a sample of Chinese enterprises' cross-border acquisition. There are four main results. First, acquisition motivation is the most important influencing factor of post-acquisition control strategy among the factors discussed in the research. Second, institutional distance and ownership can influence post-acquisition control. Thirdly, corporate capability and relative scale have effect on the decision of post-acquisition control to some extent. Last, post-acquisition control has significant effect on acquisition performance, but there is no fixed effect path. It can be concluded that different control method with different degree after a cross-boarder acquisition can achieve high performance level under different conditions. Firms should take the most important factors into considering when making post-acquisition decisions.

Key words. cross-border acquisition, acquisition control, institutional theory, acquisition legitimacy.

1. Introduction

Cross-border acquisition is an important way for enterprises to enter the international market and gain global competitiveness. At this stage, the cross-border acquisition of Chinese enterprises also showed a rapid growth trend, showing the characteristics of large quantity, fast, and large scale. However, there are also quite

 $^{^1\}mathrm{Acknowledgment}$ - The paper is supported by Key Projects of Philosophy and Social Sciences Research of Ministry of Education with project number 15JZD020, Guangdong Natural Science Foundation with project number 2014A030313442 and Guangzhou Philosophy and Social Science with project number 2017GZYB43 in China.

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a lot of problems exposed for Chinese enterprises transnational acquisition, the acquisition success rate is not satisfactory, especially the integration difficulties after the success of the acquisition transaction, resulting that it is difficult to achieve the desired goal smoothly. Some scholars have pointed out that the key to the success of acquisition integration is whether appropriate control strategies can be adopted[1]. For many Chinese enterprises, how to formulate the control strategy after cross-border acquisition is the key to success and the biggest difficulty. On the one hand, adequate control is a prerequisite to ensure full integration, is the foundation to realize the expected target successfully[2]. But on the other hand, the height control will bring challenges to the acquisition legitimacy, especially when the acquisition of western enterprises in developed countries. For Chinese enterprises cross-border acquisition also carried out some researches, but the research on post-acquisition integration mainly focuses on cultural differences, organizational learning, resource acquisition and other factors[3]. There has not been some in-depth researches yet for cross-border acquisitions control.

On the one hand, a large number of theoretical and empirical research about acquisition and performance, mainly based on western mature market economy background[4], whether the basic conclusions obtained are applicable to the interpretation of corporate strategic behavior in other institutional contexts or market environments (such as specific transition or transformation economic environment) that are rarely verified[5]. Especially in the developed economies of cross-border acquisitions in the integration process, whether it is the enterprise competence, enterprise culture, management system, strategic orientation, etc, there are considerable differences with enterprises in emerging market countries cross-border acquisitions [6]. Therefore, the legitimacy barrier caused by the difference of foreign institutional environment is worthy of further discussion on the transnational acquisition impact, especially the post-acquisition control strategy. On the other hand, under the new situation, Chinese enterprises are faced with new challenges in the effective integration of successful cross-border acquisitions so as to achieve the expected goal of purchase [7]. When cross-border acquisitions occurred, firms need to consider how to integrate technology[8], how to allocate resources rationally and effectively use information[9], how to communicate[10], how to carry out the respective market, the relationship between the upstream and downstream, before how to consolidate the social relations, how to continue the development of income distribution, how to adjust the personnel etc. And these must rely on the effective control of the principal and subordinate enterprises, so that they can achieve the strategic expectations before acquisition, obtaining the expected benefits of the strategic behavior. Therefore, the acquisition motivation has an important influence on the control strategy after the acquisition. Therefore, this study through qualitative analysis and comparison of control strategy for multinational companies after the acquisition of China by the acquisition of influence of motivation and institutional distance are studied, which reveals the key factors controlling transnational acquisition strategy and its effect on acquisition performance. Therefore, this study is aim that control strategy of Chinese cross-border enterprises post-acquisition is influenced by motivation and institutional distance through qualitative comparison and analysis, which reveals the key factors controlling transnational acquisition strategy and its effect on acquisition performance.

2. Research design

2.1. Research methods

This study focuses on the two main factors that influence post-acquisition control decisions, namely, acquisition motivation and institutional distance, and the effect of acquisition control strategy on acquisition performance. This paper attempts to conduct a qualitative comparative analysis. Qualitative comparative analysis is a research method between case oriented (qualitative method) and variable oriented (quantitative method), and it is a comprehensive research strategy that can have both advantages of the two methods. In this study, the latest version of qualitative comparative analysis software developed by Fiss(2011) was developed by fs/QCA3.0.

2.2. Samples and variables

In this study, a questionnaire survey was used to obtain first-hand data for empirical analysis. The sample of the survey was a private enterprise with cross-border acquisition, and an acquisition event form a sample. Based on the design of this study, acquisition refers to the assets or equity acquisition by the principal and subordinate enterprises, thus becoming the merged company shareholders, including the holding and equity participation. The respondents of this survey were mainly corporate executives or directly responsible for the acquisition of related personnel. A total of 60 valid questionnaires were obtained. The number of samples conforms to the requirements of qualitative comparative study.

The main variables of the study include post-acquisition control, acquisition motivation and institutional distance. The acquisition control(AC) is determined by the control extent of the acquired company by the acquiring company after the acquisition happens, including strategic control(ST), financial control(FI), operational control(OP) and cultural control(CU), using Likert seven point measurements. The value of the variable of acquisition control(AC) is measured as the Equation 1. The institutional distance is judged by the difference of the regulatory(RE), normative(NO) and social cognitive(SC) institutional environment between the host and the home region with the Likert seven point measurements. The value of the variable of institutional distance(ID) is measured as the Equation 2.

Equation1: AC=(ST+FI+OP+CU)/4 Equation2: ID=(RE+NO+SC)/3

The motivation of the acquisition were judged by the respondents and the main motivation of the cross-border acquisitions was measured by 0-1 dummy variables. The value of technology driven acquisition was 1, and the value of market driven acquisition was 0. At the same time, this study tries to analyze the effect of post-acquisition control strategy on acquisition performance. The acquisition performance measurement is also determined by the respondents to determine the extent

of the main acquisition and the enterprise in the scale, profit, market, innovation and other aspects of the expected goal(Equation 3), using the Likert seven point measurements.

In addition, based on previous research, we consider the ownership characteristics of the acquiring firm(CO), and the relative corporate capability (CC) and relative scale of the two parties (RS) as the control variables. When the acquiring firm is state-owned, the value of ownership is 1 and otherwise, the value is 0. The relative corporate capability is judged the main and enterprise and is the enterprise in the production, marketing, research and development, operations, finance, management and the ability of the compared with Likert seven points(Equation 4). The relative size of the respondents judged the main and enterprise is compared to the enterprise size, using the Likert seven point measurement.

Equation3: AP=(SCALE+PROF+MARK+INOV+OTHER)/5 Equation4: CC=(PROD+MARK+RD+OPE+FIN+MANA)/6 The model of this research is shown in Figure 1.

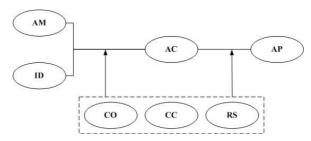


Fig. 1. The model of control and performance in cross-boarder acquisition

3. Analysis and results

According to Fiss (2011), the consistency threshold is set to 0.8. First of all, we take the high control (AC) as the independent variable, and according to Fiss's (2011) suggestion, this study chooses the output result of the intermediate scheme. A total of 5 configurations were obtained, with a total coverage of 0.62 and a consistency is 1, as shown in table 1. In qualitative comparative analysis, * means and; \sim means non. According to the combination characteristics of these configurations, this study divides them into three categories. The first type is configuration 1 (AM*~CO*CC), and the dominant private enterprises are market-oriented and cross-border, regardless of the institutional distance and the acquisition relative size, and tend to control post-acquisition. The second type includes configuration2 $(AM*ID*\sim CO*\sim RS)$ and configuration $(\sim AM*ID*\sim CO*\sim CC*RS)$, the main feature is the cross-border acquisition of private enterprises to enter the big regional system distance, which is the motivation of market configuration small-scale acquisitions and configuration based on large-scale resources acquisition based on the motive, tend to be highly controlled. The third category includes configuration 4 (AM*~ID*CC*~RS) and configuration5 (~AM*ID*CO*CC*~RS), are the main

features that enterprises with relatively strong ability purchase the relative small scale cross-border target enterprise, and the configuration 4 is to show that markets based on market motives are small in terms of institutional distance, and the configuration5 showed that the ability of the state-owned enterprises based on target area enterprises of resource motive acquisition system large distance, preference height control.

	Type1	Туре2а	Type2b	Туре3а	Type3b
High control	Config.1	Config.2	Config.3	Config.4	Config.5
Acquisition motive (AM)	*	*	#	*	#
Institutional distance (ID)		*	*	#	*
Corporate ownership (CO)	#	#	#		*
Corporate capability (CC)	*		#	*	*
Relative size (RS)		#	*	#	#
Raw coverage	0.26	0.21	0.03	0.18	0.06
Unique coverage	0.15	0.15	0.03	0.12	0.06
Consistency	1	1	1	1	1
Solution coverage	0.62				
Solution consistency	1				

Table 1. Configurations of post- acquisition high control

Note: * indicates the condition exist; indicates the condition does not exist; a blank indicates that this condition can exist and does not exist in this configuration.

Subsequently, we take the high performance level as the result variable and take the post-acquisition control level as one of the antecedent variables, and the QCA analysis results show the following configurations, see table 2. Based on the post-acquisition control level, we can divide the four configurations into two categories. The first category can be called *Resource oriented with high control*, which mainly includes configuration 1 and configuration 2. The main feature is that the acquisition motivation is based on resource obtained, implementing the height control strategy after acquisition. Second type can be called *Excellent state-owned enterprises with low control*, including configuration 3 and configuration 4, the main features is relatively strong ability of state-owned enterprises to acquire relatively small overseas enterprises, implementing low control strategy after acquisition.

Table 2. The configuration of high performance in cross-board acquisition

	Type1a	Type1b	Type2a	Type2b
High performance	Config.1	Config.2	Config.3	Config.4
Acquisition control (AC)	*	*	#	#
Acquisition motive (AM)	*	*	*	#
Institutional distance (ID)		#	*	#
Corporate ownership (CO)	#	*	*	*
Corporate capability (CC)	*	#	*	*
Relative size (RS)	#	*	#	#
Raw coverage	0.17	0.04	0.04	0.04
Unique coverage	0.17	0.04	0.04	0.04
Consistency	1	1	1	1
Solution coverage	0.292			
Solution consistency	1			

4. Conclusions

Cross-border acquisition is an important way for Chinese enterprises to realize technological innovation, expand market scale and enhance international competitiveness. Through international acquisitions, contribute to the acquisition of foreign advanced technology, effective learning and integration, and further promote the enterprise technological innovation, enhance the enterprises international competitiveness, and promote the innovation of related industrial technologies in China, and enhance the domestic industry status in the global value chain. However, the post-acquisition control strategy is the key factor, even the decisive factor, to decide whether the cross-border acquisition can achieve the expected goal. From the perspective of institutional theory and resource-based view, this paper discusses the control strategy and acquisition performance of Chinese enterprises cross-border acquisitions. Based on the 60 acquisition samples qualitative comparison and analysis, the following conclusions are obtained.

First is about the influence factors of post-acquisition control strategy. First, the acquisition motivation is the most important factor in the post-acquisition control strategy, which is used as the antecedent variable in the five configurations. However, corporate characteristics and environmental characteristics will have an impact on the acquisition motivation and the preference of the post takeover control strategy. Different types of enterprises will have different post acquisition control strategies when they enter different institutional distance areas. Secondly, the ownership system is the main combination of distance and impact control strategy after the acquisition, specifically, private enterprises to carry out cross-border acquisitions into regional institutional distance, will tend to exhibit higher acquisition control (configuration 2 and configuration 3). In addition, the enterprise competence and

the relative size is control strategy another major influence combination, to be more detailed, enterprise that has strong competence purchase smaller overseas target enterprises, which tend to implement higher acquisition control (configuration 4 and configuration 5).

Second is about the relationship between post-acquisition control strategy and acquisition performance. It is found that the post-acquisition control strategy is an important variable in the acquisition performance, but there is no established impact path. Under different conditions, different control levels can achieve high performance level. Specific performance in: resource oriented and post-acquisition high control is possible one of the effective combination paths to achieve high performance, and state-owned enterprises, strong, relatively small scale and post-acquisition low control is another possible path combination.

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