Differences between "exploration" and "exploitation" of cross-border mergers & acquisitions and its value creation effect

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ABSTRACT: This paper adopts the case study method to respectively research the value creation in the exploration and exploitation type of China's four cross-border mergers & acquisitions, and discusses the similarities and differences between the value creation in the utilization and exploration type of mergers & acquisitions, and finds that the former type of mergers and acquisitions is suitable for a medium or higher level of integration in the aspect of the organization structure, culture, human resources and supply chain, so as to realize the value creation through the improvement of synergies and market forces; the latter type of mergers and acquisitions is suitable for higher level of integration in the aspect of the supply chain, research & development, brand and channel, so as to create value by broadening the marketing channel and enhancing innovation capability.

Keywords: exploration; exploitation; cross-border mergers & acquisitions; value creation

1 INTRODUCTION

In recent decade, due to the in-depth development of globalization, Chinese enterprises actively devote to cross-border mergers & acquisitions boom. According to *World Economic Beige Book* published by Chinese Academy of Social Sciences in 2011, Chinese enterprises are converted from the acquirees into the asset acquirers. China's mergers & acquisitions turnover in 2010 ranks the second in the world, only behind the United States. Even in the post-crisis era with decelerated global economic growth and exacerbated competition in international trade, the cross-border mergers and acquisitions of Chinese enterprises are still constantly accelerated. In 2011, China ranked the world's top three merger transaction countries (Economist, 2011); in 2014, there are even 272 cases of overseas mergers and acquisitions by Chinese mainland enterprises with turnover of $56.9 billion dollars, which is just next to the peak $66.9 billion dollars in 2012 at record. Moreover, currently, China vigorously promotes the Belt and Road Initiative and the open economic system construction, so the trend of the enterprise's cross-border mergers & acquisitions is bound to steadily push forward and create a new high. However, can the rapidly expanding cross-border mergers & acquisitions bring a good performance to the enterprise? What factors affect the performance of cross-border mergers and acquisitions? This paper intends to do research for "exploration" and "exploitation" types of cross-border mergers & acquisitions, and respectively discusses the performance of two types of cross-border mergers and acquisitions and factors affecting the performance, so as to provide a reference for the practical enterprise's mergers & acquisitions.

2 LITERATURE REVIEW

For a long time, the research on the cross-border mergers and acquisitions are focused on three aspects: motivation, performance and performance influencing factors. And different schools reveal the motivation of cross-border mergers and acquisitions from different theoretical levels. However, the scholars have different opinions on the value creation of the cross-border mergers and acquisitions. Some scholars believe that the cross-border mergers and acquisitions create value for the acquirer's enterprises (Harris & Ravenscraft, 1991; Markides & Ittner, 1994; Rossitza, 2006; Gu Lulu & Reed, 2011). Some scholars believe that the

value creation is not obvious (Cybo-Ottone & Murgia, 2000; Wu Song &Li Mei, 2010), and even bring value losses (Bülent & Aysun, 2009). Some scholars (Gugler, 2003; Gu Lulu & Reed, 2011) believe that, the enterprise obtains non-negative income in a medium and long term in the cross-border mergers and acquisitions. However, Ravenscraft & Scherer (1987), Dickerson (1997), Chen Zhenbo (2012) point out that, the cross-border mergers & acquisitions fail to improve the performance of the mergers & acquisitions enterprises. For the influencing factors of the value creation in the ross-border mergers & acquisitions, the scholars believe that they are intangible assets (Harris & Ravenscraft, 1991; Mork & Yeung, 1992), growth rate (Gleason et al. 1999), mergers & acquisitions experience (Haspeslagh & Jemison, 1991), corporate governance structure (Jensen & Mecking, 1976), industry (Hitt et al. ,2001), mode of mergers and acquisitions (Husayn Shahrur, 2005), host country (Markides & Ittner, 1994; Kiymaz & Mukherjee, 2000), enterprise scale, integration manner, organizational learning and so on. However, the research rarely considers the type of assets acquired by the enterprise, and its way to use assets.

3 RESEARCH FRAMEWORK

The concepts "exploration" and "exploitation" were first proposed by March (1991). According to the World Bank Investment Report, the cross-border mergers & acquisitions are divided into traditional type (that is, natural resource acquisition type) and strategic asset acquisition type. For the traditional type of the cross-border mergers and acquisitions, regardless of its specific motivation that is to obtain natural resources, market or efficiency, it is based on the enterprise's unique and proprietary advantages formed in former overseas investment in the parent country. Even if there is debugging for the special environment of the host country, it also basically belongs to a "paradigm copy" type of investment behavior by the use of existing resources and capabilities of the enterprise (Cantwell & Janne, 1999); for the strategic asset acquisition type of the cross-border mergers and acquisitions, the enterprise obtains complementary strategic assets through foreign investment, so as to build new proprietary advantages of the enterprise or enhance the existing proprietary advantages of the enterprise. Therefore, it belongs to creative resources and capabilities type of investment behavior with more exploration color. Their fundamental difference is that the former is the cross-border application of the proprietary advantages of the enterprise by the cross-border enterprises, while the latter is the cross-border creation of the proprietary advantages of the enterprise by the cross-border enterprises. In a sense, to distinguish the cross-border mergers and acquisitions from the perspective of organizational

learning behavior, that is, to divide into "exploration" and "exploitation" types of cross-border mergers & acquisitions is the development and deepening of previous classification from the perspective of the investment motivation. Thus, in the previous research, as the antecedent variables, the traditional type and strategic asset acquisition type of the cross-border mergers and acquisitions can be converted into the behavioral variables with path, mechanism analysis and operability.

For Chinese enterprises, the natural resources acquired from the "exploitation" type of cross-border mergers & acquisitions are primarily used to ease China's bottleneck of resource limitations, and seek for the pricing and control right of the key resources; meanwhile, the enterprises seeking for such resources are mostly large-scale domestic monopoly enterprises with more advanced technology; therefore, the cross-border mergers and acquisitions largely adopt their own resources and capabilities to achieve economies of scale and increase the market power. The purpose of the strategic asset acquisition type of the cross-border mergers and acquisitions is mainly to obtain the technology, brands, channels and other assets to enhance innovation capability and influence of the mergers and acquisitions enterprises, and occupy a favorable position in the global value chain; the purpose of the cross-border mergers and acquisitions of these enterprises is to explore more resources capacity. The value creation in the cross-border mergers & acquisitions is mainly realized by the pre-merger plan and post-merger integration; the difference between exploration and exploitation of the resources and capabilities by the cross-border enterprises lies in the pre-merger plan and post-merger integration. Therefore, this paper proposes the following research framework, as shown in Figure 1.

4 RESEARCH METHODS

4.1 *Method selection*

According to the viewpoint of Yin (2004), the case study is suitable for exploring the research on the type of the process mechanism. Multiple case studies are more reliable than a single case study, and the conclusion is more universal and general (Eisenhardt, 1989). Therefore, this paper adopts multiple case studies to discuss the similarities and differences between the value creation effect in the exploration and the exploitation types of cross-border mergers & acquisitions of the Chinese enterprises.

4.2 *Data collection*

Through a variety of data sources, we can obtain multi-angle description of the research objects (Glaser & Strauss, 1967). Meanwhile, they can also allow the
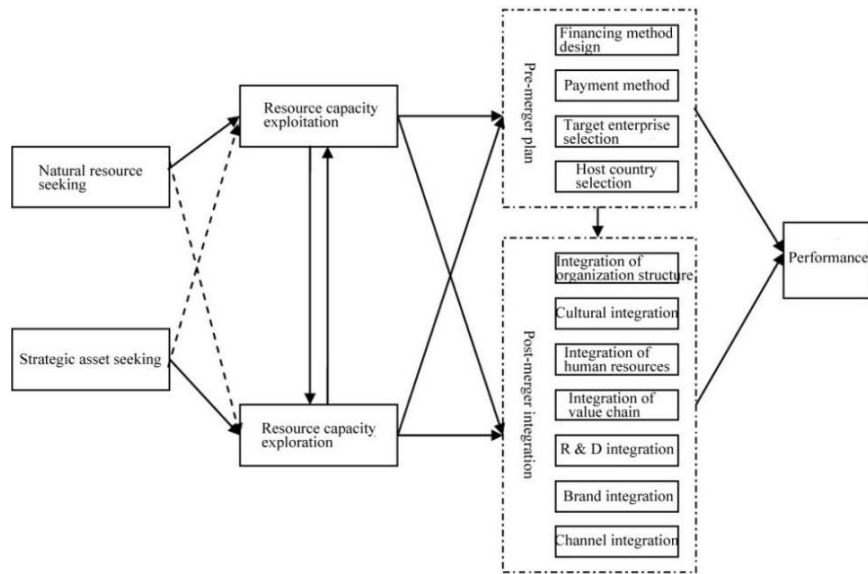
Figure 1. Differentiation and integration framework of Chinese enterprises' cross-border mergers & acquisitions

Table 1. Basic situation of the sample enterprise

	Founded in	Total asset (RMB)	Time	Target enterprise /area	Equity ratio
PetroChina	1955	638.45 billion	2005	PK/ Kazakhstan	100%
Yongzhou Coal	1997	32.12 billion	2009	Felix/ Australia	100%
Zhongjin Lingnan	1984	7.93 billion	2009	PEM/ Australia	50.1%
China Aluminum	2001	105.85 billion	2008	Rio Tinto / Australia	12%
TCL Group	1997	15.97 billion	2004	Thomson	67%
Lenovo Group	1984	6.76 billion	2004	IBM PC Division/ United States	100%
Zoomlion Heavy Industry	1992	5.37 billion	2007	CIFA/ Italy	60%
Geely Group	1986	18.80 billion	2010	Volvo / Sweden	100%

Note: The data of total assets in the Table are the data at the end of the year before cross-border mergers & acquisitions of the enterprise.

researchers for "triangulation" of different data, thereby improving the reliability and validity of the research (Eisenhardt, 1989; Yin, 2003). Therefore, this paper collects the interview data, questionnaire data, observation data and secondary data and so on. In the aspect of measuring the value creation, this paper adopts eleven major financial indicators used by most scholars, such as the corporate profitability, operational capacity, development capacity and so on (Venkatraman & Rananujam, 1986; Sabhewaland & Chan, 2001), and then constructs a composite score function by a sum of the weight of each factor's variance contribution ratio and the factor score $F_i = a_{i1}f_{i1} + a_{i2}f_{i2} + a_{i3}f_{i3} + \cdots + a_{ij}f_{ij}$. Finally, this paper measures long-term value creation in the cross-border mergers and acquisitions of the enterprise and analyze the relationship between the value creation effect and the differentiation and integration path through the composite factor score and its difference value, thereby discussing the long-term value creation mechanism of the cross-border mergers and acquisitions.

5 ANALYSIS OF VALUE CREATION EFFECT OF CROSS-BORDER MERGERS & ACQUISITIONS

PetroChina Co., Ltd, Yongzhou Coal Mining Co., Ltd, Shenzhen Zhongjin Lingnan Non-ferrous metal Co., Ltd and Aluminum Corporation of China have an abundant technical strength and important impacts in their industries. However, major enterprises in developed countries rely on energy consumption to maintain rapid economic development and energy control. In order to break the competition pattern of global resources monopoly, get rid of the international trade controlled by others due to deficiency in the pricing right of the minerals and other resources, and break through the development bottleneck formed by inadequate resource reserves, the cross-border merger & acquisition is an inevitable strategic choice of China's resource-based enterprise. After mergers & acquisitions, these enterprises adjust the organization structure, and integrate the research and development.

Table 2. Integration amplitude of cross-border mergers & acquisitions of China's enterprises

	Organization structure					Culture					Human resources					Supply chain					Channel					Brand					Integration of research & development				
	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1	5	4	3	2	1
PetroChina	√						√					√					√								√		√								√
Yongzhou Coal			√					√					√					√							√			√							√
Zhongjin Lingnan			√					√					√					√							√			√							√
China Aluminum					√					√				√					√						√			√							√
TCL Group	√								√		√						√								√	√							√		
Lenovo Group			√				√						√				√				√						√						√		
Zoomlion Heavy Industry				√			√						√				√				√						√						√		
Geely Group					√		√						√				√				√						√							√	

Note: "5" represents a very high amplitude; "4" represents a high amplitude; "3" represents a higher amplitude;
"2" represents a moderate amplitude; "1" represents a slight amplitude.

Table 3. Factor score of value creation in cross-border mergers and acquisitions of Chinese enterprises

	F0-F-1	F1-F0	F1-F-1	F2-F1	F2-F-1	F3-F2	F3-F-1
PetroChina	0.62094	1.01439	1.63533	−0.37018	1.26515	1.36149	2.62664
Yongzhou Coal	−2.58649	1.55119	−1.0353	0.31009	−0.72521	0.2629	−0.46231
Zhongjin Lingnan	0.30203	0.35316	0.65519	1.78358	2.43877	−0.86945	1.56932
China Aluminum	−1.61408	−0.9728	−2.58688	0.40312	−2.18376	0.35026	−1.8335
TCL Group	−1.46798	−0.50278	−1.97076	−0.18774	−2.1585	0.76653	−1.39197
Lenovo Group	0.41921	0.37526	0.79447	−0.73017	0.0643	2.37399	2.43829
Zoomlion Heavy Industry	−1.64975	0.35354	−1.29621	1.63857	0.34236	0.21899	0.56135
Geely Group	−2.04803	0.24644	−1.80159	1.18612	−0.61547	0.70611	0.09064

Note: F^{-1}, F^0, F^1, F^2 and F^3 respectively represent the composite score of sample enterprises in the previous year, the same year, the next year, the next two years and the next three years of mergers & acquisitions.

What's more, they optimize the supply chain (except for China Aluminum) to improve the resource exploitation efficiency and promote multicultural policy, implement localization management to improve the enthusiasm and initiative of the target enterprise and reduce the integration contradiction. TCL, Lenovo, Zoomlion and Geely are manufacturing enterprises with short history. They have a strong influence and market share in the domestic market by virtue of low-cost advantage, but also have a wide gap in aspects such as technology, brands and channels compared with similar enterprises in developed countries; if they want to break through the trade barriers in developed countries and quickly develop in the international market, the cross-border merger & acquisition is the best choice for them. Therefore, the purpose of their mergers and acquisitions is mostly the enterprises with strong technology in the developed countries. In order to reduce risks, they hire consultants or ask consulting or public relations firms for help in evaluating target enterprises and planning the financing and integration solutions. After mergers and acquisitions, they usually adjust the organization structure (fine adjustment for Geely), optimize the supply chain, adopt dual-brand strategy and introduce their own products through other channels (except for TCL); at the same time, they maintain the sustained innovation of the target enterprise, implement multicultural policy and promote localization management (except for TCL).

In the year of cross-border mergers and acquisitions, PetroChina Co., Ltd and Shenzhen Zhongjin Lingnan Non-ferrous metal Co., Ltd achieve the value creation. The performance of these two enterprises declines, but they achieve the value creation in the third year after mergers and acquisitions; Yongzhou Coal Mining Co., Ltd fails to achieve the value creation from the year of mergers and acquisitions to the third year after mergers and acquisitions, but its performance starts to gradually improve every year in the second year after mergers and acquisitions; the condition of Aluminum Corporation of China is the same as that of Yongzhou Coal Mining Co., Ltd. However, Lenovo achieves the value creation in the year of mergers and acquisitions. Although its performance slightly declines in the second year after mergers and acquisitions, it always achieves a positive value creation after mergers and acquisitions; Zoomlion Heavy Industry and Geely Group fail to achieve the value creation in the year of mergers and acquisitions. However, their performance gradually improves, and they respectively achieve the value creation in the second year and the third year after mergers and acquisitions; TCL fails to achieve the value creation in the third year after mergers and acquisitions, but its performance starts to be gradually improved in the first year after mergers and acquisitions.

6 CONCLUSION AND RESEARCH PROSPECT

This paper adopts the multiple case study method, selects eight events of the exploration and exploitation types of cross-border mergers & acquisitions with different economic cycles, industries, sizes and life cycles, compares the value creation effect of two types of mergers & acquisitions and explores the value creation mechanism of cross-border mergers & acquisitions of Chinese enterprises on this basis. This paper points out that the purpose of the exploitation type of cross-border mergers & acquisitions is to use resources through mergers & acquisitions. After mergers & acquisitions, a medium or higher level of integration in the aspect of the organization structure, culture, human resources and supply chain is necessary, so as to improve resource exploitation efficiency and achieve value creation. Without necessary integration, the value creation will be missed; the purpose of the exploration type of cross-border mergers & acquisitions is to explore new resources and capabilities through mergers & acquisitions. After mergers & acquisitions, a higher level of integration in the aspect of the supply chain, research & development, brand and channel is beneficial to value creation. A medium or lower level of integration shall be given to the organization, human resources and culture based on the respect of the target enterprise, because the autonomy maintenance of the target enterprise is beneficial to achieve sustained innovation and conducive to the value creation after mergers & acquisition. Cross-border merger & acquisition is a complex project. The integration of mergers and acquisitions starts from developing the mergers and acquisitions plan by the acquirer's enterprise rather than after the mergers and acquisitions. As a Chinese transnational corporation in the developing country, mergers and acquisitions not only make them face cultural distance between different countries, sometimes even face the interference of government mergers and acquisitions of the host country. Therefore, before mergers and acquisitions, there is a need to hire related consulting and invest-ment firms or public relations firms to assist, so as to improve the probability of successful mergers and acquisitions, reduce risks of mergers and acquisitions, and promote the value creation after mergers and acquisitions.

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