From Chinese Local State-Owned Enterprise to Global MNE: a Mixed Methods Investigation into pre- and post- Strategic Asset Seeking OFDI in sub-national CMNEs

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Abstract

Over the last several decades, Chinese local state owned enterprises (LSOEs) have become significant forces in Chinese outward foreign direct investment (OFDI). I first show, using a quantitative regression model, how LSOEs have a comparatively stronger strategic asset seeking (SAS) orientation. Operating within a diversified external political economy, and possessing unique status and features following decentralization, LSOEs face particular challenges, to which SAS oriented OFDI has arguably been one response. I then investigate the case of China's Northern Heavy Industries (NHI) Group from Liaoning Province. The group operates in the Tunnel Boring Machinery (TBM) industry and has become one of the world's most successful TBM players. It has done so through several large foreign strategic asset related acquisitions (one in France and one in the US). I draw from interviews and hand-collected primary information from the parent firm in China, and the acquired subsidiaries in France, the United States and Germany. I explore in particular pre and post SAS related FDI decision making and integration strategies and behaviours. I identify: (1) Local state ownership as an important factor determining pre-OFDI strategic decision making and post-OFDI integration; (2) The Chinese institutional environment as a potential comparative advantage for LSOEs in negotiating with foreign investment targets or partners; (3) the challenges and responses to post FDI SAS integration for local state-owned Chinese businesses. To date we know relatively little in detail about the ways in which local Chinese MNEs have managed to catch-up with developed market counterparts. This research therefore contributes to our understanding of theories like Mathews' (2006) 'LLL' model, the 'springboard' perspective of Luo and Tung (2007), and Chinese OFDI determination theory by Buckley et al. (2007). It also sheds important new light on the institutional perspective, particularly the role of local government in spurring Chinese MNEs (CMNE) OFDI related catch-up.

Keywords: Chinese LSOEs; SAS oriented OFDI; pre-OFDI Strategy determination; post-OFDI performance; knowledge and management integration

Durham University Business School

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Thesis Submitted in Fulfilment of the Requirements for the Doctor of Philosophy Degree in Management

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To my Parents

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List of Abbreviations

B&R: Belt and Road

CDB: China Development Bank

CMNE: Chinese Multinational Enterprise

CRCHI: China Railway Construction Heavy Industry Co., Ltd.

CRG: China Railway Group Limited

CRTE: China Railway Tunnelling Equipment Co., Ltd.

CSA: Country Specific Assets

DLTG: Dalian Machine Tools Group

DMNE: Development Country Multinational Enterprise

EMNE: Emerging Market Multinational Enterprise

EPB: Earth Pressure Balance

EXIM: Export and Import Bank of China

FSA: Firm Specific Assets

HRM: Human Resource Management

IB: International Business

IPM: Internationalization Process Model

LB: Location based

LLL: Linkage – Leverage – Learning

LSOE: Local State Owned Enterprise

M&A: Merger and Acquisition

MOFCOM: Ministry of Commerce of the People's Republic of China

NFM: Neyrpic Framatome Mécanique

NHI: Northern Heavy Industry Co., Ltd

NLB: Non-location Based

OFDI: Outward Foreign Direct Investment

OLI: Ownership, Location, and Internalization

PLC: Programmable Logic Controller

POE: Private Owned Enterprise

R&D: Research and Development

RBV: Resource Based View

RMB: Ren Min Bi (Chinese Yuan)

SAS: Strategic Asset Seeking

SASAC: State Owned Asset Supervision and Administration Commission

SHMG: Shenyang Heavy Machinery Group

SMMG: Shenyang Mining Machinery Group

SMTCL: Shenyang Machine Tool Co., Ltd.

SOE: State Owned Enterprise

TBM: Tunnel Boring Machinery

TYHI: Taiyuan Heavy Industry Co., Ltd

TZ: Taiyuan Heavy Industry Co., Ltd

USD: United States Dollar

XEMC: Xiangtan Electric Manufacturing Co., Ltd

XCMG: Xuzhou Construction Machinery Group Co., Ltd.

Declarations

I, Hongshu Wang, hereby declare that this PhD thesis is my solely original work and material contained in the thesis has not been previously submitted for examination of any other degrees and institutions.

Statement of Copyright

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As I approach the end of several years of PhD study, my heart is filled with thankful emotions. During the time I have spent in Durham, I have grown not only in terms of knowledge, but also personally through the opportunities to face and overcome challenges, and to flourish in love and friendship. This has been a remarkable period in my life, and warm memories of it will stay with me always.

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To my parents and family, I offer my heartfelt thanks. Their endless love and unconditional support continually encourage me, enlighten my faith, and give me the confidence to pursue my dreams and face challenges bravely.

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Chapter 1 Introduction

1.1. Theoretical backgrounds and emerging phenomenon

Between late 2017 to early 2018, a number of noted EMNE scholars (Luo & Tung, 2018; Cuervo-Cazurra & Rui, 2017; Mathews, 2017; Buckley et al., 2018; Hernandez & Guillén, 2018; Ramamurti & Hillemann, 2018) published review articles marking a decade anniversary since the publication of a number of highly cited research papers looking at EMNEs. A decade ago, with the rising importance of emerging markets, these papers arguably opened up and developed a new research agenda in the field of EMNEs. The introduction of the 'dragon multinational' Linking-Leverage-Learning model (Mathews, 2006), the Springboard perspective (Luo & Tung, 2007), complementary resources concepts (Hennart, 2012), SAS and absorptive capacity (Rui & Yip, 2008), and the CMNEs' determination framework (Buckley et al., 2007) all complemented and extended the conventional IB theories in different aspects and extent. Mathew (2008)'s LLL theory, and springboard perspective that indicated by Luo and Tung (2007) provide initial explanation on emerging market multinational enterprises (EMNE)', which believe that EMNE's from developing countries' OFDI always go to advanced economic bodies, which is motivated by strong strategic assets seeking (SAS) (Rui & Yip, 2008) orientation in order to obtain firm specific advantage (FSA) and to catching up (Hennart, 2009; 2012). Institutional circumstance (e.g. imperfect market, state ownership, etc) of their home countries, play determinant roles in motivating, shaping, or supporting these 'latecomers' foreign OFDI actions (Buckley, 2007).

In their recent papers, these scholars identify the rapid change and diversification that have taken place over the last 15 years, and suggest retrospective updates and

extensions to their original arguments. For example, based on their belief that China has developed rapidly over the last decade and is now quite different not only from the advanced economies, but also from other emerging economies, Buckley et al. (2017) update their previous theoretical concepts and variables, and attempt to ask sufficiently challenging questions about the effects of home country institutions on OFDI. Luo and Tung (2017) also articulate the unique strengths and weaknesses of EMNEs caused by the dynamic and diverse home country institutional circumstances. They discuss amalgamation, ambidexterity, and adaptation advantage and introduce an upward spiral model to advance the understanding of the linkage between pre- and post- springboard activities.

Since beginning of the 21st century, on the 'periphery of the global economy have been astonishing changes in the international business system. (Matthews, 2017: 769).' Many of the EMNEs have now transfer from catching up to caught up and are moving from imitation to innovation. While such emerging market firms 'continue to grow in numbers, size and importance in the global economy, they face many new challenges' (Luo & Tung, 2017: 129). These indicated rapid changes would bring more diversity and specialized insights to the EMNE theoretical fields, which are suggested as direction of future research agenda by previous mentioned noted EMNEs scholars (Luo & Tung, 2018; Mathews, 2017; Buckley et al., 2018).

Calls of filling in theoretical gaps are required by the facts of changes. The core case company of this PhD research, the Northern Heavy Industries Group Co. Ltd (NHI) is a representative one of experiencing such changes in the last two decades. The

external and internal changes bring this decentralized provincial state owned enterprise (SOE) with specific characteristics and different challenges in both pre- and post-foreign acquisitions. The NHI is a solely provincial state-owned enterprise established in 2006 through a merger between the Shenyang Heavy Machinery Group (SHMG) and Shenyang Mining Machinery Group (SMMG). Located in Shenyang, the capital city of Liaoning province in northeast China, it is one of the largest SOEs in that province, with 20 subsidiary companies, total assets of 3132.2 million USD, and 12,300 employees (Orbis, 2013). The NHI Group also ranks among the top three firms in the Chinese heavy machinery industry (China-sz.com, 2016).

NHI's two predecessor companies, SHMG and SMMG, were founded in 1937 and 1921 respectively. Between the 1950s and 1980s they were among China's largest central SOEs, owned and supervised by the 1st Ministry of Machine Industry of the People's Republic of China, a powerful central government industrial department during the planned economy era. However, in the 1980s both firms underwent decentralization reform. The new owner, the local government of Liaoning province, was unable to provide the financial and policy support needed to remain competitive in the domestic market, so that by the 1990s both firms were facing serious difficulties.

After decentralization, both SHMG and SMMG faced a series of reform and restructuring challenges. Outdated industrial structure and a lagged business administration style resulted in serious financial difficulties and large-scale unemployment. Fortunately, the firms were able to survive, first thanks to local government fiscal subsidies, and then by seeking more opportunities from overseas for

further growth. The NHI launched its first foreign acquisition with a company called NFM Technology Co., Ltd, which is a world leading soft ground TBM manufacturer based in Lyon, France. It is worth noting that, after acquiring NFM Technology in 2007, the NHI Group surpassed its peers to become the Chinese TBM manufacturer best able to provide high quality machines. Nevertheless, as space in the domestic market has shrunk since entry of China Railway Tunnelling Equipment Co., Ltd. (CRTE) and China Railway Construction Heavy Industry Co., Ltd. (CRTHI) in 2009, the NHI Group have had to seek more opportunities from the foreign market to further enhance FSA in order to compete with global magnates such as Germany's Herrenknecht AG. The NHI pursued its second Foreign M&A deal of buying Robbins Company from the United States in 2016.

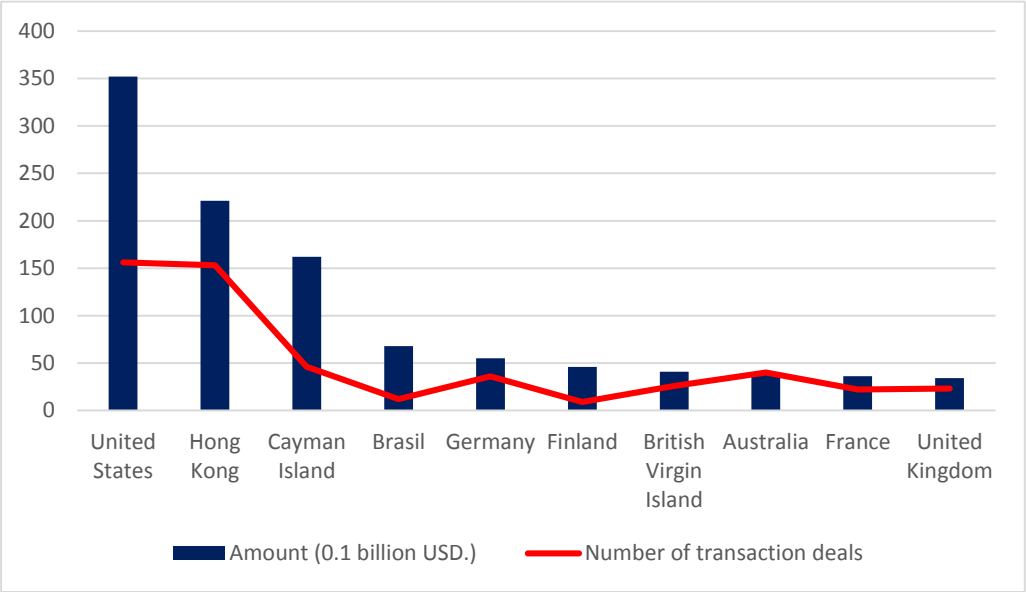
After acquiring NFM Technology and the Robbins Company from France and the USA respectively, the NHI Group's mission is to establish a global value chain connecting from Asia to Europe and America, which involves cross time zone producing line, cross region markets accessing, cross sites resource sharing, cross country management co-operating, and so on. However, the merger was just the first step: both NHI and its foreign subsidiaries had to face integration tasks and difficulties in the post-acquisition period (see later chapters). If this new connected global TBM value chain was to succeed, then in-depth (e.g. from finance to psychic), smart matching (e.g. complementary with each other) and integration (e.g. transferring, absorbing, and learning) would be necessary. However, the NHI faces massive challenges and obstacle to get these from a Chinese LSOEs to a world leader in a short period of time.

The NHI's foreign acquisition is not an occasionally one off case of the Chinese OFDI. Over the last two decades from early 2000's to 2018, motivated by the 'zou chu qu' (走出去) or so-called 'Go Global' national strategy of China, Chinese outward foreign direct investment increased continuously, with high growth rates of 35.8% annually. The outward foreign direct investment (OFDI) flow in 2016 was 72.6 times that of 2002, while China's global OFDI share increased from 0.5% in 2002 to 13.5% in 2016. As shown in the table 1.1, both Chinese OFDI flow and stock experienced high speed growth in volume from 20012 to 2016, and also raised ranking positions to the 2nd and 6th globally. In 2015, China became the second largest OFDI and capital output country, surpassed only by the United States. In 2016, promoted by the 'yi dai yi lu' (一带一路) or 'Belt and Road' (B&R) national strategy, Chinese non-financial OFDI increased by 44.1% compared to 2015, and reached a new peak of 170.11 billion USD in total, covering 7961 cross-border enterprises in 164 foreign countries and regions (Deloitte, 2017). 2016 also saw an unprecedented level of Chinese foreign M&A, with 765 foreign acquisition deals implemented in 74 countries, accounting for 44.1% of the total OFDI value.

Among all the Chinese multinational enterprises (CMNEs), in this research, because their shrinking domestic market shares, relevant lower status domestic institution, and less strength in domestic competition, Chinese LSOEs, like NHI Group, are among the most eager to obtain foreign strategic assets to enhance their FSAs. Thus they are arguably among the most aggressive and active investors among Chinese businesses. Given the diverse nature of the Chinese political economy, it is worthwhile

to classify the remarkable headline facts of OFDI implementation according to a range of aspects and to screen the CMNE OFDI behaviours in detail and in depth. First of all, with regard to OFDI target industries, manufacturing ranks first and in 2016 accounted for 22.3% of total Chinese OFDI, followed by information technology, which accounted for 19.5%. Thus, it is clear that the technology and skilled industries are particularly prominent in Chinese OFDI actions.

Figure 1. 1 Ranking of top 10 Chinese OFDI destinations in amount and number.



Source: MOFCOM report, 2017

Secondly, with regard to OFDI location choice, 8 out of the top 10 target locations are highly developed countries or regions, ranging from the USA and Western Europe, to Asia Pacific. As presented by the table 1.2 and figure 1.1, developed countries occupies very significant proportion of receiving Chinese OFDI, with both highly in weight and volume. The enterprises based in these developed places normally enjoy advantages in terms of cutting-edge technologies and skills, which is an indication that CMNEs tend to be particularly keen to pursue strategic asset seeking oriented OFDI.

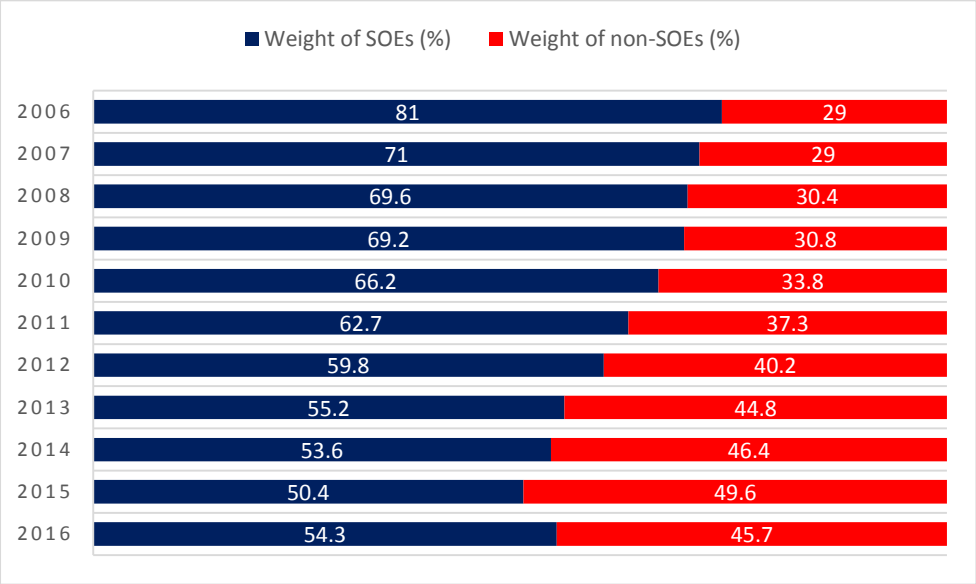
Thirdly, with regard to ownership, although there is a growing trend of privatization of the Chinese economy, over the last decade state ownership has continued to play a dominant role in Chinese OFDI, as shown in the Figure 1.2 as below. From 2006 to 2016, SOEs occupied the largest portion of Chinese non-financial OFDI stock value. However, SOEs are not a homogenous group; while some continue under central state ownership and control, as part of China's decentralization a large number of SOEs have been passed to local state ownership. In 2016, enterprises in local state ownership accounted for 60% of China's total OFDI, and 83% of non-financial OFDI, with an outflow value of 150.51 billion USD (MOFCOM report, 2017). These figures suggest that among all the Chinese SOEs, it is the local SOEs, which possess both local and state-owned features, that are among the most aggressive in terms of their OFDI activity.

In addition, consideration from an industrial perspective will further clarify and enhance our understanding of Chinese OFDI. According to figures provided by Deloitte (2012), Chinese manufacturing firms account for the largest proportion of Chinese foreign M&A, with 45% of the total. Moreover, as shown by the table 1.3, among various industrial sectors, manufacturing sector also rank at the first position of Chinese OFDI in terms of deals numbers, amounts and percentages, which is published by MOFCOM report in 2017.

Several implications can be drawn from this. First of all, as technology and skills represent the core competitive capacity for manufacturing firms, it is reasonable to infer that strategic assets such as patents and trademarks represent a primary motivation and

key driver for pursuing SAS oriented OFDI. More details will be introduced in the Section 6.3.4. Secondly, many manufacturing firms in China are normally run as provincial or city level SOEs, which reflects the point made earlier that local SOEs are the most active power of Chinese foreign acquisition.

Figure 1. 2 Weight (%) of SOEs and non-SOEs that are contributed to Chinese OFDI.



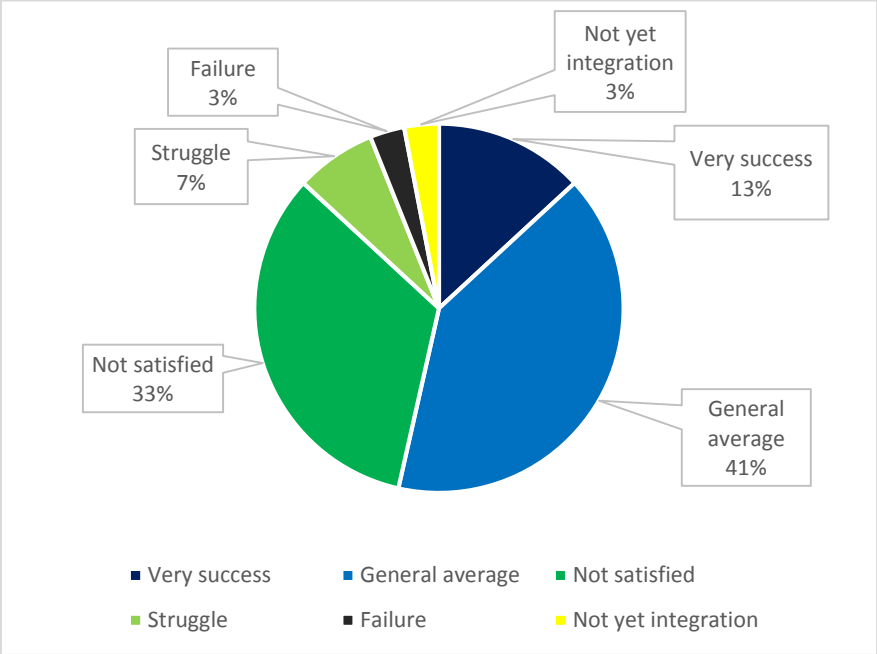
Source: MOFCOM report, 2017

Early in 2012, as shown by the table 1.4 below, Deloitte (2012) has already highlighted the most representative Chinese foreign acquisition cases since 2001. Almost 90 percent of these highlighted manufacturing CMNEs' OFDI deals were undertaken by Chinese local SOEs (or designated sub-national SOEs), once again underlining the fact that Chinese local SOEs have become the central power of Chinese OFDI, especially of foreign M&A with strategic asset seeking orientation. However, to date there is a scarcity of literature to discuss and provide insightful theories to explain this newly emerged but significant phenomenon.

Moreover, there is a need for more extensive and in-depth research on Chinese

local SOEs' post-acquisition behaviours with regard to their next steps in OFDI strategy making and actions to improve integration performance (Luo & Zhang, 2016). On the one hand, it has been indicated that almost all previous OFDI actions by CMNEs have met tough challenges, which have hindered implementation. In some industrial areas, such as automotive manufacturing, the interruption rate is as high as 58% (Deloitte, 2017). The chief reasons for these difficulties are lack of negotiation experience, inadequate understanding of target firms and host countries, and failure to take account of potential risks.

Figure 1. 3 Evaluating post-acquisition integration performance of the Chinese acquirers.



Source: Deloitte, 2016

Table 1. 1 Chinese OFDI growth in flow and stock, and rise of global ranking (2002 - 2016).

Year	OFDI in flow			OFDI in stock	
	Amount (0.1 billion USD)	Ranking Globally	Year-on-year Growth (%)	Amount (0.1 billion USD)	Ranking Globally
2002	27.0	26	__	299.0	25
2003	28.5	21	5.6	332.0	25
2004	55.0	20	93.0	448.0	27
2005	122.6	17	122.9	572.0	24
2006	211.6	13	43.8	906.3	23
2007	265.1	17	25.3	1179.1	22
2008	559.1	12	110.9	1839.7	18
2009	565.3	5	1.1	2457.5	16
2010	688.1	5	21.7	3172.1	17
2011	746.5	6	8.5	4247.8	13
2012	878.0	3	17.6	5319.4	13
2013	1078.4	3	22.8	6604.8	11
2014	1231.2	3	14.2	8826.4	8
2015	1456.7	2	18.3	10978.6	8
2016	1961.5	2	34.7	13573.9	6

Source: MOFCOM report, 2017

Table 1. 2 Ranking of top 20 foreign target destinations of Chinese OFDI.

Ranking No.	Target country or region	OFDI in flow (0.1 billion USD)	Weight (%)
1	Hong Kong	1142.3	58.2
2	United States	169.8	8.7
3	Cayman Islands	135.2	6.9
4	British Virgin Islands	122.9	6.3
5	Australia	41.9	2.1
6	Singapore	31.7	1.6
7	Canada	28.7	1.5
8	Germany	23.8	1.2
9	Israel	18.4	0.9
10	Malaysia	18.3	0.9
11	Luxembourg	16.0	0.8
12	France	15.0	0.8
13	United Kingdom	14.8	0.7
14	Indonesia	14.6	0.7
15	Russia	12.9	0.7
16	Vietnam	12.8	0.7
17	Netherland	11.7	0.6
18	South Korea	11.5	0.6
19	Thailand	11.2	0.6
20	New Zealand	9.1	0.5
	Total	1862.6	95.0

Source: MOFCOM report, 2017

Table 1. 3 Chinese OFDI industries distributions and ranking details.

Industrial sector categories	No. of deals	Amounts (0.1 billion USD)	Weight (%)
Manufacturing	200	301.1	22.3
Information and communication	109	264.1	19.5
Transportation and storage	21	137.9	10.2
Electricity	17	112.1	8.3
Financial activities	13	97.9	7.2
Leasing	77	95.3	7.0
Real estate activities	59	92.7	6.8
Mining and quarrying	29	75.0	5.5
Accommodation and food	15	54.7	4.0
Arts, entertainment and recreation	22	44.1	3.3
Wholesale and retail trade	82	28.2	2.1
Scientific and technical activities	53	24.5	1.8
Human health and social work	4	8.1	0.6
Agriculture, forestry and fishing	33	6.7	0.5
Education	10	4.7	0.3
Water supply and sewerage	8	3.3	0.2
Other services	6	2.1	0.2
Construction	7	0.8	0.1
Total	765	1353.3	100.0

Source: MOFCOM report, 2017

Table 1. 4 Top representative Chinese foreign M&A cases highlighted by Deloitte.

Year	Acquirer	Ownership type	Foreign targets	Host country	Shares acquired (%)
2001	Shanghai Electric Group	Local SOE	AIC Japan	Japan	100.00
2002	DMTG	Local SOE	Ingersoll Production	United States	100.00
2004	Shanghai Electric Group	Local SOE	IKEGAI	Japan	72.22
2004	Shenyang Machine Tool	Local SOE	SCHIESS	Germany	100.00
2005	BYJC Group	Local SOE	Waldrich Coburg	Germany	100.00
2007	NHI Group	Local SOE	French NFM	France	70.00
2008	Goldwind	Private	VENSYS Energy	Germany	70.00
2009	XEMC Windpower	Local SOE	Darwind Holding BV	Netherland	100.00
2010	Shanghai Electric Group	Local SOE	Goss International Corporation	United States	-
2010	Taiyuan Mining Machinery	Local SOE	Valley Longwall International	Australia	100.00
2011	Jiangsu Jinsheng Industry	Private	EMAG Group	Germany	50.00
2011	LiuGong Group	Local SOE	Poland HSW	Poland	100.00
2011	Dalian R&P Machinery	Private	BUZULUK	Czech	90.00
2012	XCMG	Local SOE	SCHWING	Germany	52.00
2012	Sany	Private	Putzmeister	Germany	100.00
2012	Huayi Compressor	Local SOE	Gubigel Compressors S.A.	Spain	100.00
2012	Weichai Power	Local SOE	KION	Germany	25.00

Source: Deloitte, 2012

Moreover, with regard to integration performances, although the Chinese local SOEs have succeeded in completing acquisition deal transactions, in many cases their post-acquisition knowledge and management integration performance does not match their original expectations, owing to factors such as unpredicted external changes, lack of effective cross-organization synergy and internal operating weakness. Indeed, it has been indicated that more than 50% of OFDI deals have not achieved their desired integration performance, which as shown by the Figure 1.3 as above. However, there is no research specifically focused on giving a full picture of such post-acquisition failure, or on identifying and explaining the core reasons for it, especially for the unique case of the Chinese local SOEs. Therefore, in order to provide insights and effective advice and assistance whereby Chinese local SOEs can improve their post-acquisition performance, it is necessary to conduct further investigations to gain a practical perspective on what is required to change behaviours and resolve failures.

1.2. Research motivation

As outlined in section 1.1 above, CMNEs have become gradually more important in global OFDI activities, and Chinese local SOEs in particular have emerged as a major power of Chinese foreign acquisition and strategic asset seeker. While some scholars have begun to notice the importance and unique character of CMNEs' OFDI behaviours and SAS perspectives, to date the literature in this field remains largely based on general theoretical discussion, and has failed to empirically explain why Chinese local SOEs are the most aggressive SAS seeker through OFDI, and also couldn't provide sufficient

or detailed explanations based on in-depth investigation into CMNEs' human and organizational OFDI behaviours, such as decision making logic and process for strategy, as well as learning capacity to transfer strategic assets in the post-acquisition period.

Furthermore, given the diverse and dynamic nature of the Chinese institutions and economy, OFDI behaviours among CMNEs with different backgrounds would be varied and specialized according to their organizational form, ownership, and historical experiences, which will shape their different motivations, location choices and entry modes in their OFDI action. In particular, the Chinese local SOEs, which have already been introduced in this thesis as an important emerging force of Chinese OFDI, represent a group among CMNEs with unique and specific features.

However, previous literature has given very little consideration to matters of taxonomy and typology, or even paid much attention to the heterogeneity among CMNEs. Luo and Zhang (2016) call for future research to provide more insights and identify the diversity and plurality of CMNEs, and suggest a 2×2 matrix to delve into questions of taxonomy and typology. By reviewing previous EMNE literature, they indicate that there exists a research gap with regard to the diversification of CMNEs, reflected in their different backgrounds, motivations and real OFDI actions. Hence, motivated by a theoretical enrichment perspective, this PhD research seeks to fill the gaps in the IB theory literature, especially give complementary extension to strategic asset seeking and institution determination theoretical fields, by considering the diversity of the CMNEs' 'catching up' oriented OFDI behaviours and providing more insights into the specific OFDI features of the Chinese local SOEs.

From a practical perspective, the issues that have been mentioned as causing OFDI interruptions and failures have not yet been satisfactorily resolved. This is especially the case for the local SOEs in northeast China, which face significant problems as a result of ownership decentralization. Located in a relatively minor domestic institutional position, in receipt of less government support and suffering continuous loss of elite local resources, they face serious challenges and difficulties in the post-acquisition period. Although foreign acquisition actions bring them temporary benefits, domestic reputation and potential opportunities in the early post-acquisition stage, the abovementioned difficulties will hinder and undermine their further integrating and operating performance in the long run. Consequently, insightful thinking should be applied and appropriate action implemented in the actual business operation and integration. However, there is currently insufficient attention and concern regarding these difficulties, and consequently these local SOEs lack specific advice or intellectual support to guide them, so that they have to 'wade across the stream by feeling the way' (摸着石头过河)[1] by fight a lone battle. In addition to providing advice for improving post-acquisition performance, by considering their strong SAS motivation for OFDI, in order to add FSA, and their specific institutional position and involvement with local government, this thesis identifies the unique character of Chinese local SOEs' OFDI strategic determination. This raises the need for further explanation of and investigation

[1] 'Wade across the stream by feeling the way' (摸着石头过河): A term popularly used in China to describe the exploratory behaviours of Chinese enterprises in the initial business stage or transforming stage, such as pilot market experiments, learning by doing, and growing from mistakes.

into pre-OFDI decision-making behaviours of Chinese local SOEs, in order that these experiences might be used in their future OFDI implementations.

Therefore, as well as seeking to enrich the IB theory, this PhD research is also motivated by practical matters, aiming to capture past OFDI experiences to guide future strategic behaviours and to create new insights and ideas for resolving current post-transaction business operating and integration problems. To achieve these missions, a mixed research method will be designed, combining deductive quantitative study and qualitative case study so as to give a full picture and detailed explanation of Chinese local SOEs' OFDI behaviours in both pre- and post- OFDI procedures. Section 1.3 presents an outline of the research flow, while more focused and detailed research questions, and hypothesis development would further introduced and explained by Chapter 5 to 7.

1.3. Outline of the thesis

The present thesis is structured as follows: Chapter 1 provides an introduction to the research, and describes the background to the study. It highlights the emergence of Chinese local SOEs as a new and important power of China's outward investment, with very aggressive SAS motivations and catching up ambitious, and points out the scarcity of literature with specific focus on this emerging phenomenon with ignoring Chinese unique and diversified political economy conditions. Thus it describes the motivation behind the research, which aims to explore this issue in depth, especially with regard to different types of CMNE and outstanding the LSOEs, in order to contribute to the

literature in terms of both theoretical and practical perspectives. The core research questions centre on finding out the determinant factors shaping Chinese local SOEs' SAS oriented OFDI catching up strategy and behaviours, and whether and how they have been effective. The research is organized along an 'explorative verify to explanatory reasoning' pathway, to shed light on both pre- and post-OFDI behaviours. This research process is addressed in subsequent chapters, as shown in Table 1.5, as later.

Chapter 2 describes the backgrounds of case companies, which are in terms of case industry and case region, and explains the selection principles and criteria. First, this chapter reviews historical resources and presents descriptive analysis of industrial data related to the targeted case industry. The Tunnel Boring Machinery (TBM) industry is a sub-part of the construction machinery industry, which features a dense concentration of Chinese decentralized local SOEs. From an international business perspective, the TBM industry is a very active OFDI sector, as over the last 20 years most of the world's TBM firms have been involved in foreign acquisition and cross-border joint ventures. Secondly, this chapter also introduces certain remarkable events of the cases regions – the Northeast region of China, which are addressed as backgrounds glance (e.g. history, society, economy, and highlighted issues) and set out to support the case study in detail in Chapters 6 to 7.

Chapter 3 presents a review of the previous literature, following the logics of the evolution of the IB theories, and to screen the multinational firms 'from internal organization to inter-organization', and review their OFDI behaviour from pre- to post-

events. Specifically, discussion of the literature on pre-OFDI strategy traces a process of theoretical evolution. On the one hand, ideas to explain emerging phenomena could be inspired by traditional thinking, such as the OLI model and IPM framework, while on the other hand, new theories, as presented in studies that discuss EMNEs and CMNEs, call for more precise and specific description of the OFDI behaviours of Chinese local SOEs' as strong foreign strategic asset seekers. With regard to the post-OFDI operation and integration performance, the review begins with studies on the micro firm level of inner-organization behaviours, which includes absorptive capacities and knowledge transfer issues. Later, the discussion expands to the inter-organization level and macro level, which provide concepts to evaluate how interaction between Chinese local SOEs and their external environment will influence their post-OFDI strategic assets integration performance. Here, the review highlights the issues of networks, operation as business groups, psychic distance and institutional differences. The ultimate target of the literature review is to formulate research questions through figuring out the gaps and blanks in the literature, which the research presented in this thesis will strive to fill.

Chapter 4 explains the mixed research methodology used in this study. The mixed methods approach is in line with a research logic as 'explorative verify to explanative answer' and a research procedure as 'qualitative to quantitative' that are adopted throughout this thesis. The first procedure of the research applies empirical quantitative approaches to test and verify the emerging new phenomenon, in which LSOEs have been observed as significant OFDI power in China. The 'answering' part, aimed at

explaining the newly emerged phenomena of Chinese local SOEs' OFDI behaviours, is conducted according to a 'core to follow-up' and 'parallel' case study research in the target case companies and industry. The selected case industry is the Tunnel Boring Machinery industry, which forms part of the construction machinery sector, in which there is a dense concentration of Chinese local SOEs. The major case company is the local SOE Northern Heavy Industry (NHI) and its foreign subsidiaries. This chapter also describes the data collection and analysis strategy. Data sources range from primary face to face interviews to filter search from public databases: over 60 hours of trilingual interviews and documents amounting to 20,000 words of first-hand information were collected to support the qualitative analysis; in addition, over 1,000 OFDI deals of OFDI and their firm level data were collected from the Orbis and Thomson ONE databases. The qualitative analysis employs an 'open axial selected' pathway of coding and theming approach, while the quantitative analysis adopts a counted negative binomial regression model.

Following the introduction of the research methodology in Chapter 4, Chapters 5 to 7, three organic structured chapters, describe Studies I, II, and III respectively. Chapter 5 describes a quantitative approach based empirical study, Study I, to examine whether local state ownership impacts significantly on Chinese local SOEs' strategic asset seeking oriented OFDI strategy. A count model is adopted, as our dependent variables, the strategic assets, are numbers of patents and trademarks owned by foreign target firms. Given the counted nature of the variables, the negative binomial regression model is more appropriate than the Poisson model, as it has advantages in terms of

relaxing the over-dispersion restriction regarding the variance.

Table 1. 5 Overview of Thesis chapters.

Chapter No.	Content	
Introduction – Chapter 1	- Introducing and describing the backgrounds to the studying into emerging CMNEs' SAS and institutional arbitrage oriented OFDI phenomenon; - Highlighting importance of LSOEs are as the most strategic asset seeker in Chinese OFDI.	
Backgrounds of the case industry and region – Chapter 2	- Case industry – the TBM sector; - Case region – From northeast region of China to cross the country; - Reasoning of selecting cases.	
Literature review – Chapter 3	- Reviewing previous literatures under three logics: 1. From Pre-acquisition to post-acquisition; 2. Evolution of IB theories development; 3. From internal, to external and macro of the MNEs; - Figure out theory gaps and research opportunities to explain Chinese LSOEs OFDI as aggressive SAS pursuer.	
Methodology – Chapter 4	- Rationale of 'explorative to explanatory' research logic; - Rationale and design of quantitative 'empirical' to qualitative 'reasoning' research procedure; - Rational of case studies logic of the study II and III; - Data sources, collection, and analysis approaches.	
Study I – Chapter 5	Quantitative empirical study	- Introducing counted econometric model to examine independent dummy variable - local state ownership; - Highlighting local state ownership and taxonomy strategic assets.
Study II – Chapter 6	Qualitative case studies	- Adopting three case studies under 'OFDI expansion' progress logic of Chinese LSOEs' OFDI; - Emerging three themes on Chinese LSOEs' OFDI determination.
Study III – Chapter 7		- Adopting three cases studies under parallel logic in terms of managerial and knowledge integration, as well as communication and cooperation issues; - Emerging three themes on LSOEs' post-acquisition performances.
Discussion and Conclusion – Chapter 8	- Positioning of this PhD research; - Integrating research outcomes of the study I, II, and III; - Theoretical contributions and practical implications; - Limitation and future researches.	

The empirical model attempts to discover linkages between home firms' local state ownership and host firms' strategic assets, which will then imply Chinese local SOEs' strategic asset seeking orientation for OFDI. For that purpose, dummy independent variables on local state ownership are set into the regression model, together with variables such as firm size, age, industry and year dummy, which will be run by controlled. The local state dummy is also unpacked into two dimensions, namely 'local ownership' and 'state ownership' in order to examine the effectiveness of each individually. Consequently, the regression results will show whether or not the local state ownership of the CMNEs is significant in driving foreign patents and trademarks seeking OFDI. Moreover, through comparing research outcomes, this chapter also aims to figure out which types of strategic assets, among patents and trademarks, would be more preferred by Chinese local SOEs for pursuing OFDI.

Specifically, Chapter 6, regarding Study II as the first case study, addresses the following up reasoning procedures after study I in order to give more details on Chinese local SOEs' pre-acquisition behaviours in terms of OFDI strategy determination and pathways arrangement. This case study based research utilizes qualitative approaches. The investigation accesses the initial longitudinal single case of NHI Company's acquisition of the French NFM in 2007 to explore how both the acquirer and target sides developed strategies through exchanging strategic assets. In order to add vertical and horizontal aspects to the model, the consideration extends to a further cases, that of NHI's, and also compares NHI with its domestic peer and competitor, CRTE, which is ultimately owned by the central State Owned Asset Supervision and Administration Commission (SASAC). It offers a feasible case for research, as the researcher has been granted access to the NHI group and to its external stakeholders to conduct interviews and observations. Thirdly, the investigation will expand to more follow-up cases of LSOEs' acquisition which are ranging from various regions (e.g. Shandong, Jiangsu, Shanxi, Hunan, Guangxi, etc.) of China. The chapter addresses three themes on different aspects of

OFDI strategy, namely decentralized local state ownership, comparative institutional advantage, and stronger strategic asset seeking orientation, which will contribute to the major research outcome, the theoretical framework on the determination of Chinese local SOEs' OFDI strategy.

Chapter 7 presents the second part of the qualitative case study research as the study III. It investigates the post-acquisition behaviours of Chinese local SOEs' OFDI in terms of strategic knowledge transfer and management integration. Different in Chapter 6, a 'parallel' case study is adopted, while the focus moves from strategic decision-making by senior management to knowledge transfer and management integration behaviours performed by front line workers and middle level staff. The case studies aim to discover whether and how external (e.g. institutional disadvantages, home-host psychic distance) and internal factors (e.g. local state ownership) impact on Chinese local SOEs' post-acquisition target assets transferring behaviours. More technical and operation employees from NHI and its subsidiaries and stakeholders are interviewed, and more on-site observations are implemented in the design office and manufacturing factory plants, with the intention of shedding more light on the behaviours at knowledge transfer and management operation level. Similar to Study II, Study III adopts an 'open – axial – selective' coding process. Another three emerging themes are obtained as case study outcomes, specifically how domestic institutional disadvantage, local state ownership, and psychic distance impact on post-acquisition performance. Based on Study III in Chapter 7, a theoretical model to determine Chinese local SOEs' post-acquisition knowledge and management integration behaviours is developed.

In contrast to the previous two chapters, Chapter 8 presents discussion of the research and findings, and concludes the thesis. It highlights the contributions of each individual study, but also integrates all the separate chapters as a whole in order to give an overall evaluation. Local state ownership and Chinese institution are concluded as the most significant factor that

determining Chinese LSOEs' SAS oriented OFDI strategic decision and performances. The chapter draws attention to the theoretical implications and methodology innovations of this thesis, and offers advice to researchers and practitioners. The limitations of the research are acknowledged, and suggestions are made for future research.

In conclusion, this PhD research can be briefly summarized as follows: By highlighting Chinese local SOEs as a newly emerged OFDI power, and their strong motivation of 'catching up' and specific domestic institution position, and then investigating this phenomenon through a specially designed empirical quantitative study and innovative qualitative case study, this thesis sheds light on the causal relationship between local state ownership and SAS oriented OFDI behaviours, and thus contributes to extending the IB literature. Practically, this thesis provides insights to managerial stakeholders and policy makers from both home and host sides for improving Chinese local SOEs' OFDI behaviours in both strategic and operations perspectives.

Chapter 2: Backgrounds of the tunnel boring machinery (TBM) industry, and the North-eastern region of China

2.1. Overview

As pointed out in Chapter 1, the Chinese manufacturing sector holds the top position in the country's OFDI. Manufacturing accounts for 22.3% of all OFDI deals, with a total transaction value of 30 billion USD. Furthermore, the majority of Chinese LSOEs operate in the manufacturing industry, among them our case company, the NHI Group, one of China's largest Tunnel Boring Machinery (TBM) manufacturers. Indeed, NHI has risen from its position as a failing local SOE to become one of the leading global manufacturers of TBM equipment. It is, in Mathews' (2006) term, a genuine 'dragon multinational', which has succeeded in transforming itself and catching up through leveraging strategic assets within the high-tech TBM manufacturing industry. With this in mind, before embarking on the in-depth research into how this company has been transformed through the transfer of high-edge technology, it will be worthwhile to provide a full introduction to the TBM industry and to explain why NHI chose this industrial area as their OFDI target. In addition, this chapter will provide a historical overview of the past economic glory and recent problems of recession in the northeast region, where NHI is based. This will help to explain why a traditional manufacturer based in a particular local region would choose to go overseas, and what difficulties and challenges it might face.

The rest of this chapter is structured as follows. Section 2.2 introduces the characteristics of the TBM industry, including the TBM product and the market segmentation in both the global and Chinese markets; the pioneering role of NHI, the major case company, in TBM acquisition; and the changing situation of local SOEs in

the domestic market. Then, section 2.3 provides an overview of northeast China, the region in which the major case company is located, in terms of its recent economic history and future revitalization strategy.

2.2. The TBM Industry: A Brief Overview

The TBM Industry, a sub-sector of the construction machinery manufacturing industry, has flourished alongside rapid urbanization and fixed assets investment in modern countries (West, 2005). The TBM equipment is a smart digging tool used to excavate circular cross section tunnels through a variety of soil grounds and rock strata. By significantly reducing the cost of construction projects, while improving safety and ease of operation of underground work, this equipment has led to considerable improvements in efficiency and quality. Consequently, it is now widely used in modern tunnelling and underground construction works (Hard rock tunnel boring machines, 2008).

The history of the TBM industry dates back to 1825, when the first such machinery was used to excavate the Thames tunnel. Subsequently, the industry grew to meet the demands of rapid urbanization and infrastructure construction projects. More recently, TBM machinery played a significant role in the digging work for the Channel Tunnel, a huge project linking Britain with the European continent, as well as in underground projects in major modern urban centres all around the world. Today, the main reputable TBM equipment manufacturers are all based in Europe, North America, or Japan. Indeed, now as over the last two centuries, western developed countries not only lead

the way in advanced TBM technique skills, but they also occupy the majority shares in the global TBM equipment market (Barton, 2000).

However, in recent decades the global TBM industry has undergone tremendous changes and restructuring. On the one hand, given the over-development and the trends of counter-urbanization in developed countries, the demand for TBM equipment experienced a rapid decline in those markets. Despite their advanced techniques and market experience, TBM equipment suppliers in western countries found it more and more difficult to attract new business orders in their home markets. Consequently, some TBM firms lacked sufficient capital for further expansion, and in a few cases faced bankruptcy. The senior managers of these firms were forced to reconsider their strategies for the future, and to seek new ways to survive.

Meanwhile, the major demand for TBM equipment started to transfer to developing markets. In China and other emerging economies, accelerated urbanization, with the accompanying rapid and sustained increase in underground infrastructure projects, led to massive demand for TBM equipment. For example, since 2004, twenty-five Chinese cities have embarked upon the construction of underground metro networks. However, the TBM equipment used for the earliest of these projects was all imported from developed market firms, while the domestic market enterprises still lacked the necessary skills and knowledge to manufacture the required machinery. In order to compete in their home countries, they needed to catch up by improving their technical skills and gaining rich market experience (Tunnelbuilder.com, 2016).

In this situation, Chinese firms' demands in terms of technology and brand proved

to be a perfect fit with the developed TBM firms' requirements for market and capital. Enterprises from both sides began to seek international partners for their business strategies. In China, the first foreign M&A deal came in 2007, when the Northern Heavy Industry (NHI) Group, a local SOE in northeast China which is the subject of this research, bought the TBM equipment firm NFM Technology (Northern Heavy Industries Group Co., 2016). Then, in 2013, the Chinese Railway Group (CRG), a central SOE, merged with Germany's Wirth Company and thus became the largest native TBM equipment producer in China. As the owner of the majority of Chinese underground railway construction projects, the CRG now supplies TBM products to meet its own demand.

Today, the Chinese domestic TBM market is occupied largely by central SOEs like the CRG. Local SOEs and private TBM equipment manufacturers have to seek new pathways to be more competitive in the domestic market and to find more space in the global market. A similar situation can be seen in other Chinese industries. Finding ways to survive through foreign direct investment, and strategies to remain competitive both domestically and globally, are significant tasks for enterprises and stakeholders that base in local regions.

2.2.1. Product segmentation of the TBM industry

This section describes the TBM industry segmentation in terms of product classification, and gives an overview of the TBM market both globally and in China. In order to remain competitive in today's dynamic global and domestic environments, any

modern international TBM equipment manufacturer requires a thorough understanding of both products and markets.

2.2.1.1. Soft ground TBM & Hard rock TBM

TBM products can be segmented generally into soft ground TBM and hard rock TBM, as shown by Figure 2.1, according to the geological conditions of the construction project. Earth pressure balance machines, slurry shields and open-face style machines are the three main types of soft ground TBM equipment, widely used for digging soft soil underground and digging channels in wet conditions. Meanwhile, single and double shields and open type TBM equipment are generally used to excavate different types of hard rock (Hard rock tunnel boring machines, 2008).

European firms, such as Herrenknecht AG in Germany and NFM Technology in France, have particular expertise in earth pressure balance machines and slurry shield techniques, and have earned a high reputation in this area. Their products proved particularly popular and profitable when used for China's urban subway project in the early 2000s. North American companies, such as Robbins, tend to concentrate more on hard rock TBM. For the NHI Group, the opportunity to acquire advanced world leading hard rock TBM techniques was a particular motivation in their ambition to buy the Robbins Company.

2.2.1.2. Segmentation by product consumption

As shown by Figure 2.2, subway construction projects occupy the largest part of

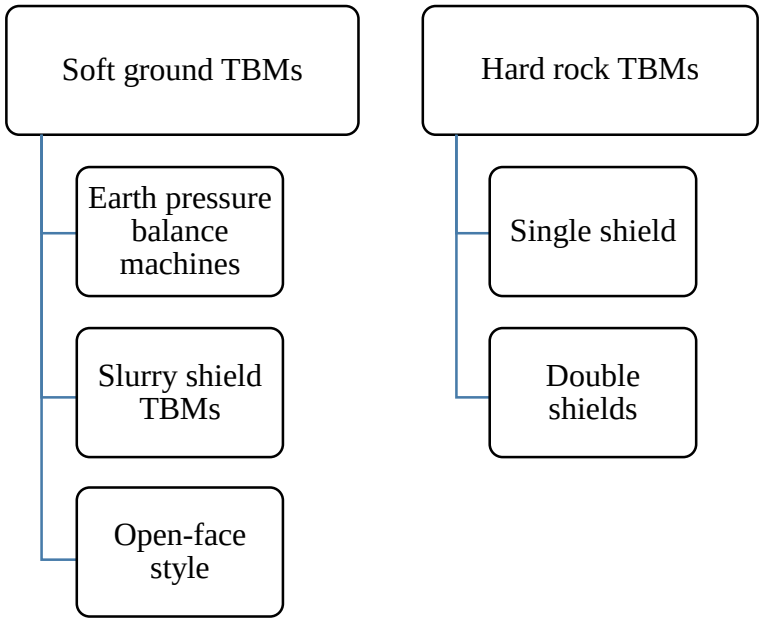
the TBM market share, accounting for around 36 percent of the total. Municipal programmes represent the second largest application segment, accounting for 26% of the TBM market, while highway and railway projects combined enjoy a 28% share. Subway and municipal projects generally require soft ground TBM equipment for digging into urban soil, while highway and railway projects employ hard rock TBM for making tunnels through mountains.

2.2.1.3. Segmentation by producer

The global TBM industry can also be segmented by producers, which are geographically distributed across Europe, China, North America and Japan. It should be noted, however, that the global industry historically has been highly concentrated, with a small number of dominant players, which has noted originally came from developed market economies (i.e. those that had undergone urbanisation earliest).

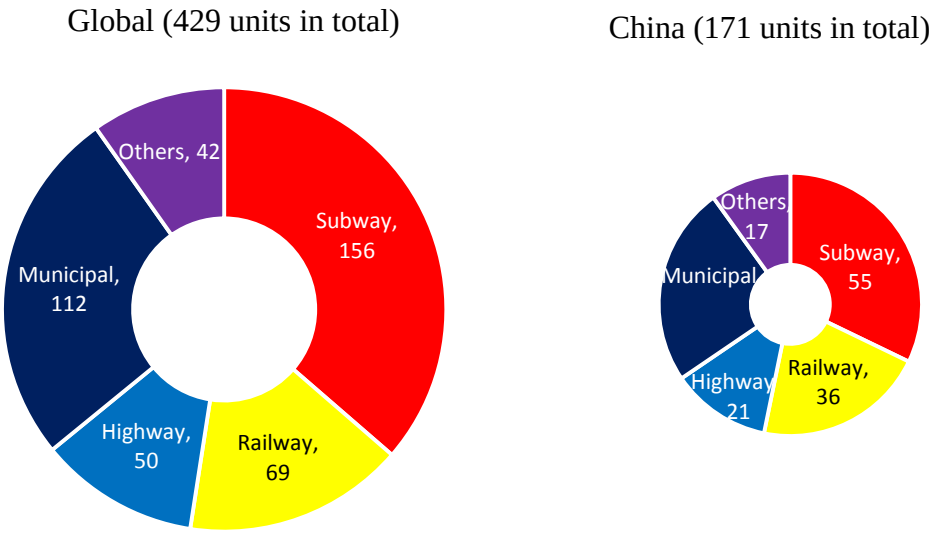
The top ten vendors of the TBM industry worldwide supply about 90 percent of the total global demand for TBM equipment. German and Japanese TBM firms lead in soft ground TBM manufacturing, while North American firms are expert in making hard rock TBM machines. However, by the end of the twentieth century these manufacturers were experiencing a decline in their domestic markets, as noted. Today Europe and North America account for only 14% and 8% of global product consumption respectively, while the Japanese market is even smaller.

Figure 2. 1 TBM products classification.



Sources: In-depth interviews and on-site observations

Figure 2. 2 Global and China TBM consumption volume by application (units) 2016.



Source: TBM industry report (2016)

Table 2. 1 Global top 10 TBM vendors' production value share in 2005 and 2015.

Rank	Year 2005		Year 2015	
	Company	Share (%)	Company	Share (%)
1	Mitsubishi (Japan)	27.07%	Herrenknecht (Germany)	28.66%
2	Herrenknecht (Germany)	18.19%	Mitsubishi (Japan)	15.92%
3	Wirth Group (Germany)	12.25%	Robbins (USA)	9.55%
4	Robbins (USA)	11.14%	CRTE (China)	7.98%
5	Okumura (Japan)	7.66%	Liaoning conscience (China)	6.50%
6	Kawasaki (Japan)	6.86%	CRCHI (China)	6.30%
7	Hitachi Zosen (Japan)	4.41%	NHI (China)	4.29%
8	Komatsu (Japan)	3.81%	Kawasaki (Japan)	3.94%
9	Caterpillar (USA)	2.52%	Okumura (Japan)	3.65%
10	NFM Technology (France)	1.45%	Komatsu (Japan)	3.46%
	Others	4.64%	Others	9.75%
Total (units)	202		412	

Sources: TBM industry report (2016)

However, the Asia Pacific area, comprising numerous developing countries with a high demand for basic urban infrastructure, occupies a 36% share of the global TBM product consumption market. Consequently, western manufacturers have to look to China and other Asian markets as their survival strategy. At the same time, Chinese native TBM manufacturers are becoming increasingly important as global and domestic TBM product suppliers. Indeed, as Table 2.1 shows, the rise of Chinese groups has been

spectacular – in the past two decades rising from nowhere to become key players in the global TBM industry.

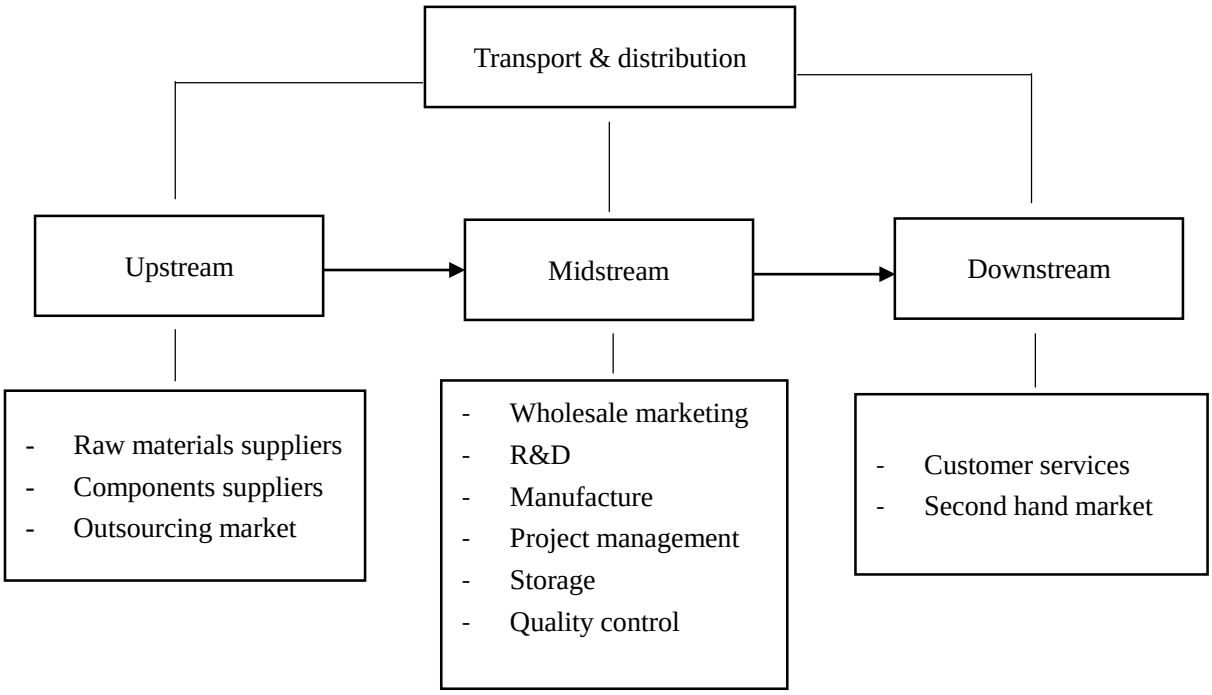
2.2.1.4. TBM product value chains

The TBM industry can also be segmented in terms of the product value chain of upstream sectors, midstream manufacturer, and downstream distributors and customers. The upstream sectors include raw materials and component suppliers, which always determine the cost of manufacturing TBMs, and the product quality.

TBM manufacturers use metal and plastic in the construction of the TBM equipment components. Sometimes, manufacturers outsource their electrical and hydraulic components to other upstream suppliers that specialize in these areas. Multinational TBM firms, which use diverse upstream suppliers, have to balance cost, quality and transport distance in order to select their upstream co-operators.

The TBM industry midstream sectors include wholesale marketing, R&D, manufacture, project management, equipment storage and quality control. These are the key departments of modern TBM manufacturing firms. In the case of a multinational TBM company, it is crucial to consider the management and operation of these departments according to a cross-cultural international background, and in order to remain competitive in a global market they need to implement international HRM. Moreover, in order to handle their acquired markets and businesses in such a way as to maintain an excellent global reputation and maximize cost savings, such multinational firms need to consider downstream customer services and distribution transport.

Figure 2. 3 TBM product value chain.



Sources: In-depth interviews and on-site observations

2.2.2. Global market segmentation of the TBM industry

2.2.2.1. Market size

Over the last decade the global TBM market has experienced rapid expansion. Market value grew from USD 4339.25 million in 2011 to 4683.73 million by 2016, while over the same period global TBM production capacity increased by 44.93%, from 296 units in 2011 to 412 units in 2016, with a growth rate of 7.7 percent. However, in this rapidly expanding market there exist large imbalances between different regions.

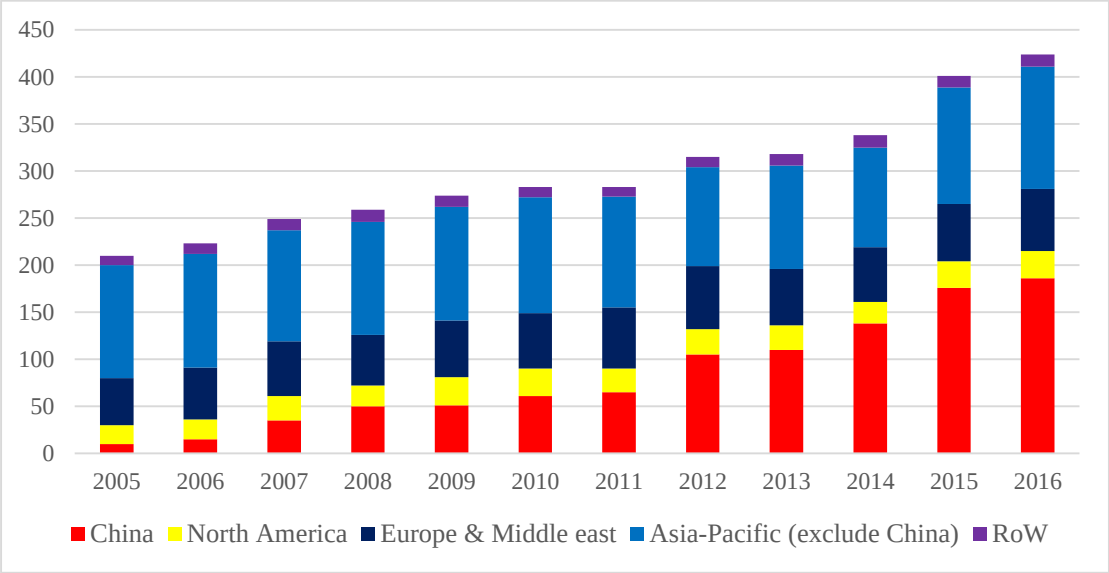
2.2.2.2. Market segmentation and structural imbalance

The global TBM market can be segmented geographically into Europe and the

Middle East area (EMEA), China, North America, Asia Pacific (excluding China), and the rest of the world (ROW). As shown in Figure 2.4 below, in terms of regional consumption volume share, in 2011 China accounted for 41.22 % of the total globally, and emerged as the largest TBM market in the world. The Asia Pacific area ranked second, with a 33.45% consumption share of the global TBM market in 2011, while the EMEA and North America accounted for only 11.82% and 10.14% respectively. The higher shares of TBM consumption in China and Asia Pacific can be attributed to the rapid economic development and high demand for infrastructure construction in these areas, while in developed regions such as North America and Europe, demand for TBM is restricted by over-development and inverse-urbanization.

However, the TBM production capability of the abovementioned regions is in direct contrast to their market size. As shown Table 2.1, on the one hand, the main TBM manufacturers are all from developed regions. Companies based in Europe, North America and Japan own key techniques and have rich market experience, but the TBM demand in their home markets is limited, and decreasing. On the other hand, manufacturers from China and other developing countries are weak in skills and experience, so that domestic production capacity is insufficient to meet the rapidly increasing demand. For example, in 2008 China needed 122 units of TBM for utilizing in construction projects, but the native producers could provide only 20 units. Therefore, in the early stages, Chinese tunnelling construction teams had to seek suppliers from foreign developed countries. They were also forced to pay very high prices.

Figure 2. 4 Dynamic global TBM consumption volume (Units) by regions 2005-2016.



Source: TBM industry report (2016)

2.2.3. The TBM industry in China

2.2.3.1. Rapid growth of domestic TBM demand

From the early years of the twenty-first century, rapid urbanization and high demand for underground construction projects led to a boom in the Chinese TBM industry. By 2009, China had invested over 100,000 million USD into railway and urban underground construction, in order to build over 5,000 km of rail lines within 25 cities. Such massive construction projects demanded around 400 TBM machines in China's domestic market, at a total cost of 2,500 million USD. These trends maintained very high rates until 2013, with a slight decrease from 2013 to 2015, then a further rise in 2016, mainly as a result of new demand for domestic internal infrastructure.

2.2.3.2. Dependence on foreign imports

Eighty-five percent of the TBM equipment used by China for the first modern underground construction projects was imported from foreign countries. Specifically, before 2005, Germany's Herrenknecht AG met 70% of China's TBM demand, with other global players such as Japan's Mitsubishi and Germany's Wirth taking up the remaining 15%. China's lack of independent TBM manufacturing capability led to very high cost of TBM equipment investment and restricted the speed of construction projects. Table 2.2 below lists the different manufacturers' prices for each unit of the same size of TBM equipment.

Table 2. 2 Price difference between manufacturing firms from different regions.

Product	Manufacturer	Origin	Price (USD)
EPB TBM (6.15m)	Herrenknecht AG	Germany	Over $7 million
	Mitsubishi	Japan	Over $5. 5 million
	NHI (Local SOE)	China	Around $4.5 million
	CRTE (Central SOE)	China	Less than $4 million

Sources: TBM industry report (2011)

2.2.3.3. Localization actions by China

This situation prompted Chinese firms to take actions toward the localization of TBM. Some native manufacturers, especially construction equipment companies like NHI Group and CRG, also discovered the great potential of this emerging industry in the domestic market. Meanwhile, owing to the re-urbanization trends in developed

countries, the reduced demand for TBM had brought some western manufacturing firms to the edge of bankruptcy.

In this situation, some of the developed-market producers were driven to exchange their technologies and brands with Chinese firms in order to enter the Chinese market and obtain the financial capital needed to survive. It was against this background that several significant M&A deals between Chinese SOEs and famous foreign TBM manufacturers, such as NHI buying NFM and CRG buying Wirth, took place.

2.2.4. Local SOEs' changing situation in the domestic TBM market

2.2.4.1. China's first TBM foreign M&A deal

The NHI Group, a local SOE in the northeast of China, was the first company in the Chinese TBM industry to implement foreign M&A. Within the first couple of years after buying the French NFM Company, the NHI Group reaped the benefits of the acquired technology and shared brand, gaining good profit performance in both the domestic and global markets.

2.2.4.2. Crowded domestic market

However, the entry of two central state-owned construction giants, the CRG and CSCEC, changed the situation and domestic order of the TBM market. The CRG and CSCEC are the two largest construction firms in China, and their demand for TBM for construction projects accounts for the largest proportion in the domestic market, around 90%. By 2010, they had started to build up their own TBM manufacturing subsidiaries,

CRTE and CRCHI. After buying Germany's Wirth group to enrich its R&D team, the CRTE obtained advanced TBM manufacturing technology and was able to meet its own demand for TBM products, with lower prices. This situation pushed other TBM suppliers, like the NHI Group, into a corner. These local SOEs and private manufacturers were forced to seek new strategies and opportunities to survive. One choice was further internationalization and, in addition, greater cooperation with other dominant central SOEs.

2.3. The major case region – Northeast China

2.3.1. Northeast China – a region's rise and fall

Northeast China, comprising Liaoning, Jilin and Heilongjiang provinces, is the most urbanized and heavily industrialized area of the country. In the pure communist era from the 1950s' to the 1980s', 'owing to the very abundant nature resources, unique development history and geopolitical relations with the pre-Soviet Union' (Zhang, 2008, p. 110), the northeast region was planned and organized as China's industrial heartland, with high investment and favourable policy from the central government. In that thirty-year period the region developed at dramatic speed, establishing a complete heavy industrial system and laying a solid foundation of basic infrastructure and equipment. To take Liaoning province as an example, over those decades both total GDP and GDP per capita were consistently in the top three among all Chinese peer provinces.

'After the People's Republic of China was found in 1949, Chinese people were eager to change this semi-colonized and semi-feudal agriculture nation to be a powerful industrialized

country. Therefore, in the national First Five-Year Plan period (1953-1957), the Chinese central government initiated 156 state key projects were distributed in the Northeast China with total investment of 30×10^9 Yuan which was 37.3% of the whole country. (Zhang, 2008, p. 111)'

Following the 'Reform and Opening-up' national strategy announced in 1979, the northeast's 'star faded as China opened to the world in the 1980s. The deltas of the Yangzi and Pearl rivers made more fertile ground for entrepreneurs; the government-led heritage of the north-east became a millstone' (Economist.com, 2018). In the first three quarters of 2014 the northeast provinces of Liaoning, Jilin, and Heilongjiang ranked in the bottom five among China's 31 provinces for GDP growth. 'Their growth of 6% was 1.4 percentage points less than the national rate. Worse, their industrial output rose just 0.5% year-on-year in October, far below the national average of 7.7%.' In 2017 the GDP of Liaoning ranked the lowest in China, and the province became the first case of negative economic growth in the country.

Yet notwithstanding the above, the decade from 2004 to 2014 was another relatively golden period of development for the northeast region. The national strategy to 'Revitalize the Old Northeast Industrial Base', disseminated jointly by the central government and central committee of the communist party, was a huge boost to the region. By 2016, this programme had attracted 1.6 trillion RMB of state budget and launched major investment projects into the area to support SOEs, encourage entrepreneurs, change the economic structure, create employment, and enhance innovation. According to the Economist (2018)

The idea was to transform state factories into lean, modern entities; foster trade

with nearby countries; and to broaden the economy by cultivating new industries, from tourism to software. … The north-east caught up with the average national growth rate of 10%, and then pulled ahead. Its average growth of 12.4% in 2008-12 was nearly three percentage points above the national pace, making it China's fastest-growing region. (The Economist, 2018)

However, despite rapid growth under the 'Revitalize' strategy, once the benefits of this policy were withdrawn in 2015, the northeast fell into a new round of recession. The region had relied too heavily on government support, a situation exacerbated by the absence of commerce. Economic decline led to bankruptcy and closure of local firms, which in turn led to high unemployment.

There are a number of factors behind this phenomenon of decline. Firstly, according to 'industry life cycle theory', while the national market and influx of resources led to the flourishing of the northeast region's traditional industry during the planned economy era, as the government shifted priority away from the northeast to southern coast provinces, and began to allow free market competition, the region lost its priority in the domestic market and faced difficulties in accessing resources. A second significant factor is depopulation, as discussed in the next sub-section.

2.3.2. Northeast region problem

One consequence of the economic recession in northeast China has been the huge outflow of population from the region, which has become a serious social problem. Emigration of the local population has already resulted in a significant loss of human

resources from enterprises, and could create a vicious cycle of economic decline, worsening the situation yet further. As noted by the Financial Times, 'North-eastern China is facing a demographic crisis as educated millennials abandon the industrial heartland, the country's worst-performing region. … Most of the people who left that region are elites, at the management level or the backbone of production lines' (Ft.com, 2018).

Since the time of the Qing dynasty in the late 1800s, to the first decades of the 21st century, the northeast region had acted as a magnet to a continuous inflow of population from other areas of China. Given their position at the centre of the country's industrial base, the three northeast provinces attracted and absorbed significant elite immigration, including researchers, engineers, and technical staff from all over the country. The SOEs played a vital role in receiving and providing employment for this elite immigrant workforce. For example, during the planned economy era Shenyang Heavy Machinery (SHMG) and Shenyang Mining Machinery (SMMG), predecessors of our case company the NHI Group, accommodated over 10,000 employees respectively at once.

However, even after several waves of 'renaissance', China has still not completed the transition from a centrally planned mode of economic growth to a more balanced modern market mode. Consequently, without support from central government, SOEs face serious challenges, especially in times of recession. Statistics from the Sixth National Population Census show that more than four million people have migrated outwards from northeast China, and that younger people in particular are choosing to leave their homes to seek more and better job opportunities. Indeed, in border areas of

northeast China there is negative population growth, and this depopulation has led to labour shortages. According to previous literature, 'regional economic decline has drained out the local population. All three provinces ranked among the bottom five provinces in China for provincial GDP growth in 2014.' To make matters worse, 'most of the outflow population from northeast China comes from the young and middle-aged workforce', while the northeast provinces currently bear a significant burden in terms of paying pensions to large numbers of retirees who worked in the old industrial SOEs. Hence, the lack of sufficient young labour to create economic growth to support the older generations is creating a serious economic problem. In short, 'the outflow of young people has further worsened economic recovery'.

With specific reference to the NHI Group, the case company of this PhD research, its necessary post-acquisition integration tasks include the recruitment of more elite staff, with rich international experience and high learning ability, to support cross-country operation and knowledge integration. However, as a heavy industrial firm in the old northeast industrial base, the NHI has been a casualty of the recent phenomenon of emigration from the northeast provinces, and has suffered serious losses of elite human resources.

2.4. Concluding remarks

As this PhD research seeks to shed light on the unique features of Chinese local SOEs' OFDI behaviours and to give detailed explanations of those behaviours, it is necessary first to introduce the industry in which the case company operates, and the

local region in which it is based. Only by comprehending the external circumstances and background will it be possible to gain a full understanding of what shapes NHI's strong SAS OFDI motivation. By providing a macro industrial map and looking at particular aspects of the relevant industrial history, this research will consider the deeply diversified features of the CMNEs and the rapidly changing political economy of both the home and host sides. In the next chapter, through reviewing previous literature in the field of IB, I will explore how existing mainstream theoretical ideas could explain our observations and support our understanding. I will also identify gaps in the literature, where this PhD research might enrich EMNE theories.

Chapter 3 Literature Review

3.1. Overview

As noted earlier, LSOEs have become among China's most aggressive foreign M&A acquirers and strategic assets seeker by pursuing OFDI. Such emerging phenomenon has great potential to bring new insights to EMNE theories and expands our understanding of CMNEs' OFDI behaviours. To date, rather than conventional OLI and IPM models, 'SAS' theories and 'institutional' perspectives centres as main stream of literatures that for explaining emerging EMNEs' and CMNEs' OFDI behaviours. They argued that conventional developed countries' multinational enterprises (DMNE) theories, such as John Dunning's 'ownership, location, and internalization' (OLI) model and Uppsala scholars' international process (IPM) theory, cannot explain CMNEs' SAS oriented OFDI behaviours accurately and comprehensively (Hennart, 2012; Luo & Tung, 2007; Mathews, 2006). And they claim that seeking foreign strategic assets through investing into developed country are pursued by EMNEs in order to nurture their lacking of firm specific advantages. Newly developed emerging markets' multinational enterprises (EMNE) theories, important parts of which are based on views of SAS, give a better description of OFDI implementation by multinational enterprises from developing countries, which is stimulated by pursuing SAS and obtain FSA in order to be more competitive. Matthews (2006) started to challenge OLI and IPM theories by introducing 'Linking-Leverage-Learning' (LLL) framework which gives proper insights understanding on EMNEs' and CMNEs' SAS oriented and FSA obtaining logics and pathways. OFDI would be used as 'springboard' to approach the high-tech frontier by EMNEs, which allows them acquires cutting-edge abilities from

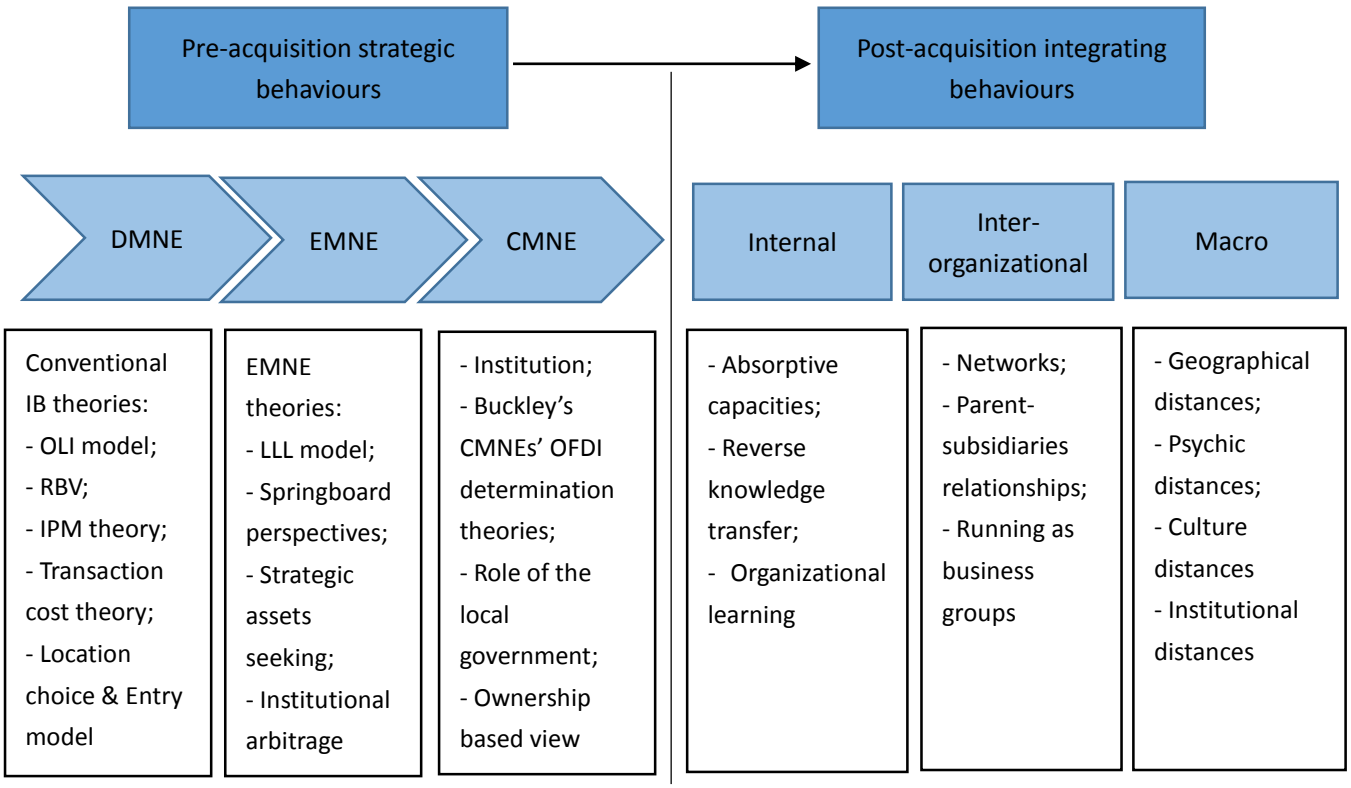
their psychically distant advanced markets counterparts through non-incremental internationalization process (Luo & Tung, 2007).

These EMNE SAS theories has raised over a decade as key theoretical arguments on EMNEs, which successfully win top cited rates by IB scholars since then. In 2018, these top EMNE scholars all revise and update their models and theories emerged a decade ago, which by taking into account of rapid changes of global political economy and development of emerging development countries (e.g. Mathew, 2018; Luo and Tung, 2018, Buckley et al, 2018, Ramamurti and Hillemann, 2017).

Previous highly cited EMNE theories calls for further empirical study and actual case study evidence to examine and approve CMNEs' SAS and 'catching up' oriented OFDI (Luo & Zhang, 2016). Moreover, previous literatures have tended to consider CMNEs at an aggregated level, assuming that *all* CMNEs are the same and have similar characteristics (Choudhury & Khanna, 2014; Duanmu, 2014; Fan, Wong & Zhang, 2013; Luo, Xue & Han, 2010; Meyer, Ding, Li & Zhang, 2014; Pan et al., 2014). Moreover, there has been very little specific discussion on the OFDI behaviour of Chinese local SOEs, even though they are now an aggressive strategic asset seeker for OFDI and become as strong power in Chinese foreign acquisition. Also, previous discussion on post-OFDI SAS integration performance of CMNEs is still insufficient. Buckley et al. (2007) enrich the IB theory by considering institution and ownership as the key characteristics that distinguish China's MNEs as different from DMNEs and other EMNEs, taking into account the specific context of rapid economic growth and

unique political-economic features which in terms of diversified capitalism embedded into rapid changing socialism politics (Naughton, 2007; Kornai, 1992).

Figure 3. 1 Schematic of the literature review.



Thus, as a positive response to Luo and Zhang's (2016) call for further research, this study will consider comparative advantages, institutional complexity, typology and heterogeneity, as well as host – home links, to approve and expand previous EMNEs' SAS theories and institutional perspectives, Moreover, this research will be specifically engaged in explaining the unique OFDI behaviours of Chinese LSOEs and their aggressive SAS activities. In this chapter, I review and structure literature based on three logic pathways, namely M&A process, theoretical evolution, and 'internal – inter-organizational – macro' behaviours, which as shown and mapped as Figure 2.1 as above.

First, I review studies relevant to the M&A process pathway from pre-acquisition motivation and strategy (Section 3.2) to post-acquisition performance (Section 3.3), with sub-sections examining each step within the whole OFDI process and their associated theory. Such logic gives a clear organizing to classify each steps and process among pre- and post- OFDI stages. Secondly, with regard to the theoretical logic, the theory evolution pathway, I discuss each M&A action by examining previous studies that apply conventional IB theories to mature economies (Sections 3.2.1), studies focused on newly developed EMNEs (Sections 3.2.2), and literature regarding CMNE theories (Sections 3.2.3), to assess whether, how, and to what extent previous theories can explain the new diversity and dynamic nature of CMNEs, especially the local SOEs. When comes to the post-OFDI literatures, discussion would start from MNE's internal integration capacities (Section 3.3.1), to inter-organizational relationships (Section 3.3.2), and then up to the impact of macro circumstances (Section 3.3.3). Such logic is helpful to screen CMNEs comprehensively from internal components to external environment, and how these internal and external aspects impact on CMNEs' OFDI performances. As the previous theories are narrowed down and dissected based on both the theoretical and practical pathways, gaps in the literature will be identified and I will draw upon the research targets to fill in those gaps (Section 3.4).

3.2. Theories on pre-acquisition motivation, determination and strategy

3.2.1. Conventional IB theories and Chinese LSOEs' internationalization

3.2.1.1. Basic requirements of adopting conventional OFDI: possession of FSA

Dunning's eclectic paradigm, usually known as the OLI model, provides a classic framework to describe the OFDI determination of MNEs, especially those from developing countries. Specific advantage owned by a MNE has been seen as a primary and necessary requirements for OFDI. Ownership of firm specific advantage (FSA) 'stem[s] from the exclusive privileged possession of or access to particular income generating assets', that are 'enjoyed by a branch plant compared with a de novo firm' and may be 'a consequence of geographical diversification or multinational per se' (Dunning, 1988, p. 2). Sufficient financial capital and cutting edge technologies, in other words 'asset advantages', owned internally by MNEs allow them to go abroad and take benefits from 'transactional advantage' through investing in overseas markets, thus overcoming domestic transactional market failure (Cuervo-Cazurra & Genc, 2008; Ramamurti, 2009; Sloan Paper, 2006). However, it has been argued that the OLI model is inadequate to explain the IB behaviours of MNEs from emerging markets (EMNEs), and thus needs to be extended (Rugman, 2007; Rugman & Li, 2007). The common response has been to question the appropriateness of MNEs from emerging markets engaging in foreign investment behaviours, because EMNEs usually lack firm specific advantages. However, the reality is that they have been quick to pursue OFDI, rather than waiting until they accumulate sufficient FSA. New evolved EMNE theories have

extended conventional eclectic theories to describe the unconventional FSA and different motivation to pursue OFDI for multinational firms from less developed countries.

Chinese LSOEs show unique firm-level characteristics and are positioned in the special context of the Chinese political economy. Hence, existing literature of conventional DMNE 'market seeking' and of updated EMNE 'asset seeking' theories cannot give accurate or comprehensive descriptions of their IB behaviours. For example, CMNEs are generally identified as firms originating from an emerging country with an imperfect capital market and under-developed institutional system (Hennart, 2012; Narula, 2012; D. Yiu, et al., 2005); however, over the last two decades rapidly growing Chinese firms have shown their strong financial power and aggressive motivation. Indeed, their OFDI motivation is more complicated than the 'catching up' or 'escape from the domestic market' addressed by EMNE theory arguments, as they are situated in and shaped by the dynamic and diversified macro political economy environment of their home country – the modern China (Anderson & Sutherland, 2015; Deng, 2012; Yiu, 2011). Moreover, it is hard to give a simple definition of FSA for CMNEs. This is because, under a state-owned regime, accessing and utilizing assets for OFDI would be influenced and restricted by a company's specific institutional position. Ownership of conventional FSA as foreign investment determination and driver could not match exactly the new IB phenomenon exhibited by Chinese LSOEs (Buckley et al., 2007; Li, et al., 2014).

3.2.1.2. Unique international process: Chinese LSOEs go global 'rapidly' rather than 'incrementally'.

Since the 1970s, Scholars from the Uppsala school have been updating their incremental IB theories based on views of 'international' process by investigating Swedish MNEs' internationalization behaviour. The international process model (IPM) provides a pathway framework and network chain to map new MNEs' ways of being multinational. They indicated that Swedish companies start to formalize their internationalization through relying on existing foreign contact networks such as foreign agents, and target closer psychic distance host countries (Johanson & Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975). This steady process allows beginner MNEs to accumulate FSA and familiarity with foreign environments until they are good enough to expand and venture further out. However, in a context of global competition and accelerating knowledge revolutions, the pace of internationalization of MNEs is faster than ever before, and the initial incremental IPM is no longer valid. Johanson and Vahlne (2009) argue that networks, learning experience and knowledge play important roles in accelerating the modern internationalization process. They combine the initial IPM framework with an interplay between experiential learning and commitment as a driving mechanism and platform to accelerate internationalization to other foreign countries.

The role of networks has been demonstrated in the international research (Johanson & Vahlne, 2009). According to Coviello and Munro's (1997) empirical results of SMEs' internationalization, networks provide linkages and make firms familiar to previous

foreign contacts, which will impact on their strategy of location choice and entry model for investment overseas. Such inter-organizational relationships could be with suppliers, customers, investors and also partners, which would impact on MNEs' decision making on OFDI strategy and pathways (Martin et al., 1998; Chen & Chen, 1998). Furthermore, recent studies within the international process model (IPM) have tried to reinterpret the incremental theory by taking account of networks as a way of overcoming 'Outsidership' by forming a business environment to build trust and create knowledge (Johanson & Vahlne, 2009; Meyer et al, 2011; Meyer and Thaijongrak, 2013). With regard to knowledge, given the nature of interconnected relationships within business networks, a firm can create new knowledge from networks with their partners and other coordinators. Thus, 'the network of business relationships provides a firm with an extended knowledge base' (Kogut, 2000; Johanson & Vahlne, 2009). Although a few studies have tried to extend the Uppsala's IPM model on network and knowledge determining OFDI strategy, for example with regard to entry mode (Barkema et al., 1996; Kogut & Singh, 1988), experienced knowledge and networks still play the most important roles in influencing the internationalization process.

However, the series of Uppsala theories cannot provide appropriate explanation for the case of CMNEs, especially Chinese LSOEs. Within the last two decades of Chinese OFDI, the domestically relatively weak LSOEs have gradually taken a major role in foreign acquisition. Although they embarked upon OFDI action with almost no experience or knowledge of merging overseas firms, and had only very limited foreign networks, their deals and pace of outward foreign acquisition process have seen them

‘leapfrog’ in a way that even the newest updated Uppsala theories could not account for. Therefore, the new phenomena of Chinese LSOEs’ strategy and actual commitment in OFDI call for new evolution of theory of the internationalization process.

3.2.1.3. Internalization and transaction cost theories: cross-border M&A for institutional arbitrage

Transaction cost theory suggests that under the circumstance of market imperfection, firms will attempt to build up new organizational structure from overseas, to minimize transaction cost and to maximize risk-adjusted efficiency over the longer period. Such firm-specific transactional advantage is enhanced by higher level of control, and by strengthened internalization ability. Successful MNEs from developed home countries have benefited from their transactional advantage of OFDI implementation, and this can be well explained by transaction cost based IB theory. However, Chinese LSOEs are neither gifted with nor sophisticated in these capabilities when setting their OFDI strategies. Moreover, combined with institution arbitrage theory, institution rules shape the incentive power faced by economic agents in at least four different ways: uncertainty, agency relationships, business transactions and market structures (Meyer & Peng, 2016). The rational choice for firms is to escape from less well developed institutions and turn to pursue a more highly developed institution environment in order to survive. Therefore, why and how rational economic agents, such as local SOEs, act under the constraints imposed by the institutional framework (i.e. fragmentation and inequality after economic decentralization in China) to pursue and control foreign acquisition to minimize transaction cost is of great importance.

In order to survive or to be more competent in the domestic market, many local SOEs choose to go abroad, where they can escape institutional constraints and seek more opportunities. The key reason is that, in many situations, cross-border transaction cost between countries is lower than the cost of transactions across provincial regions inside of the domestic market (Boisot & Meyer, 2008). Boisot and Meyer (2008) describe cross-border FDI transaction cost in their revised model of internationalization. They assert that 'Within the local province, transaction cost can be taken as low and constant. However, these costs rise sharply with distance beyond the provincial border but drop in a step function at the national border so that it costs far less to do business with the nearest country than with the furthest province' Boisot and Meyer (2008, p. 357). The decision to engage in FDI and escape the difficulties of the domestic environment has been labelled 'institutional arbitrage', which could be interpreted as exploitation of the differences between different institutional arrangements operating in different jurisdictions with different transaction costs (Boisot & Meyer, 2008).

Furthermore, unlike central SOEs, which might invest in poorer developing markets to achieve ideological targets, local SOEs would be more enthusiastic to invest in developed market firms, motivated by a SAS perspective and with less concern for psychic and cultural distance. Through such an internationalization process, not only can they decrease cross-provincial transaction costs by investing in a stable and more developed institutional environment, but they can also gain competence advantages through absorbing strategic assets (e.g. technique integrating, and brand sharing) from foreign subsidiaries (Meyer, et al., 2011; Morck, et al., 2008).

As a sub-category of SOE, state ownership plays a very significant role in the FDI decision and process of Chinese local SOEs' OFDI (Huang, et al., 2017; Li, et al., 2014; Wang, et al., 2012). However, to date exactly how that role and the relationship with the local SOEs affects their OFDI actions has not received sufficient attention. Moreover, although the behaviour of the Chinese governments at different institutional levels is by no means uniform, previous research has not recognized the diversity among them (Chen, 2015). There are also big differences in terms of OFDI willingness and capacity between local SOEs on one hand, and private firms on the other. Nevertheless, previous studies have tended to treat all state owned CMNEs as the same, and do not categorize them into groups according to different types of ownership (Luo & Zhang, 2016). In addition, previous research depends heavily on theory and quantitative investigations, There is a lack of more in-depth and comprehensive empirical studies. Some scholars have tried to extend current theories and fill the research gaps, but there is still much work to be done.

3.2.2. EMNE theories: 'Strategic asset seeking' motivating and 'institutional escape' driving OFDI

3.2.2.1. 'Strategic asset seeking' theories

The last two decades have seen the emergence of a growing number of EMNEs based in newly developed industrial economies, such as BRICS and VISTA countries (Duysters et al., 2017; Hennart, 2012). This phenomenon has been accompanied by discussions as to whether it can be explained by existing conventional theories, or

requires a new theoretical framework that concentrates specifically on these EMNEs' behaviours.

Some scholars insist that the emerging EMNE phenomenon can be explained by conventional theories, in which firm specific advantages such as strong capital, reputable brands and advanced technologies are the basic ownership advantages indicated by classical OLI models as fundamental capabilities for considering OFDI. A common argument is that EMNEs have genuine FSA, but that these are not of the conventional type possessed by DMNEs. For example, they own land, natural resources, and experience of an imperfect market, rather than advanced technologies and cutting edge brands. These emerging OFDI powers would take benefits from such unique types of FSA, termed variously as 'locational advantage of countries' (Dunning, 1988) or 'country specific advantages' (Rugman and Verbeke, 1990), for pursuing OFDI. Hennart (2009) introduced a bundle model, according to which complementary local resources are considered as FSA controlled by home countries for negotiating and transacting with foreigners. However, as FSA and country specific advantages (CSA) are specific to certain firms and countries, and as most of them are freely accessible, they are not properties that can add value and provide a long-term basis for multinational activities (Hennart, 2012). Moreover, although the OLI model can explain that the monopoly of FSA and CSA could finance EMNEs to invest in developed countries, it still cannot explain their long-range strategic asset seeking motivated internationalization.

Therefore, EMNE theories, beyond the conventional explanations, are being developed to construct new theoretical frameworks to better explain the emerging phenomenon. Some argue that 'latecomer and newcomer MNEs do not depend for their international expansion on prior possession of resources', but 'instead, these new firms utilize international expansion in order to tap into resources that would otherwise be unavailable' (Mathews, 2006, p. 22). Accordingly, Mathews (2006) introduces a 'linkage-leverage-learning' (LLL) framework to explain that latecomer EMNEs, which are initially lacking in resources and competitiveness, follow an outward-oriented and resource seeking internationalization strategy for catching up, because this powerful strategic tool could link external resources leveraging into FSA, while also accelerating the international expansion process. Similarly, Luo and Tung (2007) suggest that EMNEs not only 'systematically and recursively use international expansion as a springboard to acquire critical resources needed to compete more effectively against their global rivals at home and abroad', but also use such expansion 'to reduce their vulnerability to institutional and market constrains at home' (Luo & Tung, 2007, p. 484).

3.2.3. CMNEs' OFDI strategy: role of institution, ownership, and diversification

A major stream of literature with regard to CMNEs is in line with general EMNE frameworks, arguing that CMNEs share the same characteristics in OFDI as other EMNEs. They are weak in FSA for competition, and operate their business in an underdeveloped and unstable home country institutional environment, hence they are

compelled to invest in foreign advanced markets, motivated by 'institutional arbitrage' and 'strategic asset seeking' with the intention of 'catching up'. However, over the last twenty years China has gradually become an economic power, and it has been argued that this is in large part due to its state-priority institutional environment with strong government intervention. The diverse and dynamic nature of the Chinese political economy shapes different and complex business behaviours among different categories of CMNEs. Therefore, recently scholars have been calling for specific attention to be paid to the OFDI behaviour of CMNEs in this changing and multi-faceted context (Buckley et al., 2007). Buckley et al. (2007) were the first to extend the IB theory to explain CMNEs' behaviours by introducing specific theoretical frameworks of Chinese OFDI determination. They argued that capital market imperfections, ownership advantages and institutional factors all play an important role in determining Chinese OFDI, which add CMNEs concentrations that are nested within the general EMNE theories.

3.2.3.1. Buckley et al.'s CMNEs' OFDI determination theory

In contrast to the conventional belief that EMNEs have to 'escape' from their home countries' market imperfection, where there is low regulation and efficiency but high transaction cost, Buckley et al. (2007) argue that market imperfection in China plays a positive role in promoting Chinese OFDI. More specifically, Chinese market imperfection can be seen in terms of SOEs' availability at lower market rates (Lardy, 1998; Tsui & Lau, 2002); an inefficient banking system that provides investors with soft loans (Antkiewicz & Whalley, 2007; Child & Rodrigues, 2005; Warner et al., 2004);

the existence of conglomerate firms, and cheap capital sharing among family business members (Child and Pleister, 2003; Erdener & Shapiro, 2005; Tsai, 2004), which would cause capital to be offered at lower market rates, 'creating a semi-permanent disequilibrium in the capital market that (potential) outward investors can exploit' (Buckley et al., 2007). Such market imperfection thus offers a specific advantage for CMNEs' OFDI, which is facilitated by the benefits of state ownership. As argued by Buckley et al. (2012), CMNEs, especially SOEs, get financial support from government through export tax rebates, foreign exchange assistance and direct finance support for implementing the 'going global' or 'zou chu qu (走出去)' directive. One target of governments' financial support is to offset capital market imperfections. These 'market imperfections may be transformed into ownership advantages' (Buckley et al., 2007, p. 501) by emerging economy firms.

Consequently, specific ownership advantage and institutional factors are highlighted as further important factors in CMNEs' OFDI. State ownership brings advantages to business activities, allowing firms to operate efficiently and flexibly (Diebold & Wells, 1983), giving priority in utilizing domestic capital and resources, sharing information and easing internalization through establishing close networks, as well as reducing business risks by embedding into familiar institutions. Furthermore, CMNEs' OFDI behaviours are formally or informally shaped by Chinese institutions, and then impact on their OFDI strategy making and pathway choices.

In addition to Buckley et al. (2007), other researchers have also contributed to explain various aspects of CMNEs' OFDI behaviour with state involvement. These

have suggested that government is behind the internationalization of CMNEs, through the provision of financial and information support, and through interference with the use of firms' resources (Luo et al., 2010; Peng et al., 2008; Wang et al., 2012; Ramasamy et al., 2012). It is notable that central SOEs, which are controlled by the State-owned Asset Supervision and Administration Commission (SASAC), have the best financial performance among Chinese firms (Chen et al., 2009). Moreover, Chinese SOEs that are financially supported by the state would engage in more SAS than would private firms, as state intervention allows them 'privileged access to raw materials and other inputs, low-cost capital, subsidies and other benefits' to help them 'offset ownership and location disadvantages abroad' (Buckley et al., 2007; Aggarwal & Agmon, 1990).

However, while all these previous discussions gave little consideration on heterogeneity of CMNE types, which is a gap of literatures IB theories. The new feature of provincial CMNEs, especially multinational LSOEs, shaped by a more diversified Chinese political economic context, requires that discussion on the role of ownership and institution in determining OFDI should consider a greater range of concerns.

3.2.3.2. 'National teams' and running as business groups

For pursuing OFDI, state owned firms have privileged domestic market positions (Morck et al. 2008). On the one hand, they have local monopolies and own the complementary local resources in the home market, which endow them with transactional advantages to internalise firm specific advantages (FSA), such as

advanced technologies, strong brands, from external relationships. On the other hand, in order to enter foreign countries, MNEs from developed markets need to bundle their FSA with complementary local resources in the Chinese market (Hennart, 2009). This also gives them additional financial support and foreign networks for implementing OFDI. Chinese SOEs would be more priority and easier to be financed by the government for pursuing SAS oriented OFDI in developed countries, due to their preferential domestic market positions and monopoly power (Hennart, 2012). However, existing diversity in state capitalism, the lower level provincial state ownership would be weak in monopoly control.

We know big business groups are very important in China. They can help to lower transaction costs through building an internal market, inward linkages, and obtaining more institutional support. While as emerging of provincial CMNEs, the control capacity and policy of local government would be different from that of central state. Yiu (2011) argued that as a new organizational form of MNEs, business groups emerged to substitute Chinese market imperfection, constitute a micro-institutional environment in order to get FSA, as well as financing on the linkage, leverage and learning opportunities for internationalization. The central government has developed a policy to create 100 or so 'trail business groups' as 'national teams' (Sutherland, 2009) for internationalization. These 'national teams' are normally central SOEs that gain priorities rights from central government and financial support from large state-owned banks. Chari (2013)'s study confirm that business groups from emerging markets have greater OFDI to both developing and developed countries. When comes to the SAS

orientation of OFDI, Sutherland (2009) indicates that SAS OFDI in China are to large extent through these business groups controlled by central state.

3.2.3.3. Discussion on diversity of state capitalism

In modern China since the 1980s, 'successive waves of institutional reforms have spawned widespread corporate transformation' (Li et al., 2014, p. 980), which resulting in a restructuring of the institutional system and diversification of ownership within the country (Dacin et al., 2002). Specifically, decentralization of state ownership and the emergence of private ownership have changed the Chinese institutional system: local governments have been authorized with more fiscal autonomy and administration rights, while the promotion of industrial reconstruction and market freedom has shaped different types of CMNEs that 'exhibit distinct motivations, strategic resources, and adaptive capabilities for penetrating foreign markets' (Li et al., 2014, p. 980). Vertical and horizontal institutional changes create diverse domestic status among different types of CMNEs, which reconfigure their 'constellation of resources, capabilities, and priorities, which shape the parameters of their ability to negotiate for home and host country legitimacy' (Li et al., 2014, p. 980). With regard to the role of decentralized local SOEs and the effects of the rise of private ownership against the deterioration of state ownership, scholars have pointed to both positive and negative features for the implementation of OFDI.

On the one hand, a higher level of state ownership or engagement 'creates dependence of SOEs on their home governments, which may undermine manufacturing

SOEs' willingness to conduct OFDI, autonomy and market orientation, and legitimacy in overseas markets' (Huang et al., 2017, p. 176); the OFDI behaviour of these 'national champions' is also pressured by their home countries' political perspectives, which leads to distrust on the part of host countries (Meyer et al., 2014). Local level SOEs would be less restricted by national obligations and would thus earn greater market liberty and management autonomy to design OFDI strategy and pathways based on their own will.

It is worth giving some consideration to the 'national champion' SOEs, which are normally organized as large-scale business groups, and act as a significant mainstay of the Chinese economy. According to Yiu (2011), as an organizational form of CMNEs, business groups emerged to compensate for Chinese market imperfection, constituting a micro-institutional environment in which to get FSA, financing, and linkage, leverage and learning opportunities for internationalization. They can also help to lower transaction costs through building an internal market and inward linkages, and obtaining more institutional support. The central government has developed a policy to create 100 or so 'trail business groups' as 'national teams' (Sutherland, 2009) for internationalization. These 'national teams' are normally central SOEs that gain priority rights from central government and financial support from large state-owned banks. Chari's (2013) study confirms that business groups from emerging markets have greater OFDI to both developing and developed countries. With regard to the SAS orientation of OFDI, Sutherland (2009) indicates that SAS OFDI in China is to a large extent through these business groups controlled by the central state.

In contrast, decentralized local state ownership implies the loss or decline of monopolistic power and domestic market priority in the home country. Local SOEs have been downgraded from ‘national team’ to ‘provincial team’ or even ‘local team’ players, with less home government support and a lack firm specific advantages; hence Chinese local SOEs would be relatively less likely and less capable to pursue outward foreign investment. However, in reality, they are the most aggressive foreign investors and acquirers. To date, there has been very little research to investigate this contradiction between induction and reality (Luo & Zhang, 2016). Moreover, as we know, big business groups are very important in China’s outward economy. While as emerging of provincial CMNEs and they degrade into as ‘local champions’, the status in the domestic institution would be different from when they were central SOEs.

3.2.3.4. Role of local government in SOEs’ OFDI

Previous studies have suggested that governments are behind the internationalization of CMNEs, that they provide financial and information support, interfere with the use of firms’ resources and impact on their internationalization behaviour (Luo et al., 2010; Peng et al., 2008; Wang et al., 2012). Ramasamy et al. (2012) also show that state support for CMNEs is important. Central SOEs that are controlled by the State-owned asset supervision and administration commission (SASAC) are the best financially performing firms (Chen et al., 2009). They find that SOEs which are financially supported by the state do more SAS than that of private firms. While these discussion are all based on China as an indifferent whole, as the

raising of provincial CMNEs and governments in OFDI, there would be extensions to existing theories.

As a result of decentralization, local SOEs are distributed to their local regional governments, the majority of which are at provincial or city level, and their business activities are supervised by, and have obligations to, the local government. Thus local government plays a significant role in Chinese local SOEs' OFDI strategy making and implication. The few studies that do consider this issue discuss regional heterogeneity and cross-regional transaction costs (Boisot & Meyer, 2008; Chen, 2013) and the promotion role of the government in general (Li et al., 2014; Wang et al., 2012; Li & Xu, 2015). Since decentralization local SOEs have performed as sources of profit and as policy tools of local government. Regional governments provide support and also exert pressure in order to increase the SOEs' business performance. As each provincial government pursues its own agenda and protects its own firms, this results in serious local protectionism and fragmentation of the national economic space (Boisot and Child, 1988; Boisot and Meyer, 2008). As the cost of transactions between provinces increases to become higher than that of cross-country transactions in some circumstance, firms would rather engage in OFDI than invest in neighbouring provinces.

Only a few researchers have noted the shortcoming of previous studies, namely that they have neglected the role of different types of government and different forms of involvement (Wang et al., 2012). Recent research has made progress by showing that government involvement would reflect the degree of state ownership and the level of government affiliation (Wang et al., 2012), but this is still not sufficient to fully describe

the nature of diversity, as there exists large inequality between different regions inside China.

Wang et al. (2012) focus on the types of government involvement in firms' OFDI, and their effects. They categorize such involvement according to degree of state ownership and level of government affiliation. As noted by Wang et al. (2008, p. 656), 'Variations in government involvement may generate coercive, normative and mimetic pressures within the firm, influence resource use, and impact EME willingness and ability to invest overseas'. Both of these studies find that based on their different interests and goals, different levels of government create specific institutional environments and exert pressure on firms accordingly, thus influencing their decisions with regard to OFDI, leading to diversity in location choice, type of overseas investment, and other aspects.

Luo et al. (2010) discuss the role of emerging market government in CMNEs' OFDI behaviours. They find that, in China, government OFDI policies provide basic policy preference and initial information (e.g. financial & taxation policy, risk safeguarding, information service, and direction guidance) and monitoring measures (e.g. simplified approval process, and interim measures) to promote CMNEs' OFDI actions. For local governments, given their relatively weaker institutional position and authority, the support provided will be more limited (Luo et al., 2010; Morck et al., 2008; Pan et al., 2014). Meanwhile, the main issue for provincial governments is that their policy should be suited to their unique local conditions. As there are exists large regional disparity within China, the OFDI policies between provinces would be

different (Chen & Zheng, 2008; Fan et al., 2011). This raises the questions: Do local provincial governments provide local provincial groups with domestic market monopolies? And do they also provide access to better information, support networks, and simplified approval processes for promoting Chinese local SOEs' pursuit of OFDI?

In addition to the different interests and goals, level and location are also helpful to understand the diversity of governments in different regions. The governments' interests, motivation and goals that are caused by regional factors (such as provincial economic development level, and state asset weight in province's total GDP) will then influence the regional firms' OFDI activities. In the first research attempt to focus on this area, Chen (2013) discusses the home province determinants affecting OFDI flows from China's provincial firms. After regressing data from the firms, the results show that provincial economic development, innovation and technology, and export-to-GDP ratio are statistically significant determinants, while other aspects tested are found to be less relevant. Chen's empirical model includes the data collected from 30 provinces for the period from 2003 to 2012 and adopts independent variables that describe home province characteristics, such as province GDP per capita and market size.

Chen's paper treats provincial firms as a whole, and does not distinguish between them in terms of ownership. For example, it ignores the fact that in some provinces, such as Shandong and Liaoning, state-owned assets play a main role in OFDI, while for others, like Guangdong, private firms are very important. The study also fails to take into account the role of regional provincial governments, which could be expected to vary according to whether the OFDI firms are state or privately owned. Moreover,

although the macro-economic environment would not impact on firms directly, in many cases it would shape the provincial government and thus have an indirect influence on firms' OFDI behaviour. In addition, Chen's study focuses only on the regional effects on OFDI motivation, and does not indicate other internationalization aspects, such as location choice, entry mode, and post-FDI performance.

However, while previous studies have extended IB theories and considered the role of different types of government and different forms of involvement (Wang et al., 2012), they have not gone deeply into their specific behaviours in order to fully describe the nature of diversity or establish the relationship between local state ownership (Choi, et al., 2011) and strategic asset seeking oriented OFDI.

3.3. Theories on post-acquisition knowledge integration and management behaviours

3.3.1. Micro firm-level influential factors

Buckley and Casson (1976), inspired by Coase's (1937) transaction cost theories, introduced the internalization concept to explain the rationale of MNEs. Their study characterizes multinational firms as knowledge integration institutions, as it is more efficient and reduces transaction cost to internalize knowledge rather than to transfer knowledge through external market mechanisms (Buckley & Casson, 1976). The targeted foreign knowledge than will take over, transit, or integrate through the organization as FSA from parent sites to subsidiary sites or between subsidiaries, or the other way around, to renew and maintain competitive advantage that will be sustainable over the long term (Nohria & Ghoshal, 1997). Therefore, the receiver's learning

capacity to absorb incoming knowledge and technologies is highlighted as a primary determinant factor of post-OFDI intra-organizational knowledge integration (Gupta and Govindarajan, 2000). It also has been argued as significant intra-MNC knowledge flow issues under view of 'subsidiary capital' perspective by previous literatures (Williams & Lee, 2016).

3.3.1.1. Knowledge transfer: basic theories

According to Wang et al. (2004, p. 168), 'successful knowledge transfer requires the transferors to be capable and willing to transfer knowledge on the one hand (e.g. Tsang, 2001; Gupta & Govindarajan, 2000), and the recipients to be capable and willing to acquire knowledge on the other hand (e.g., Hamel, 1991; Lane et al., 2001; Cohen & Levinthal, 1990)'. From a capacity perspective, Buckley et al. (2014) suggest that the idiosyncratic resources possessed by EMNEs, such as cheaper production equipment, priority of access to raw materials, and accumulated investment experience, would enhance knowledge absorption and transform capacity and performance. Moreover, qualification of employees and investment in organization learning ability development contribute significantly to knowledge interpretation, application, transfer, and innovation (Cohen & Levinthal, 1990; Hamel, 1991). Buckley et al. (2014) also mention previous experience and possessed firm assets as highly relevant to post-acquisition integration performance. With regard to the will to succeed in knowledge transfer, psychic distance, ownership type (e.g. wholly owned venture and joint venture) and inter-partner relationships are highlighted as significant criteria.

3.3.1.2. Reverse knowledge transfer: key points

Reverse knowledge transfer (Ambos et al., 2006; Frost and Zhou, 2005; Nair et al., 2015; Rabbiosi, 2011), which describes the reverse learning behaviour whereby parent firms' headquarters learn from foreign subsidiaries, offers a more appropriate model for explaining CMNEs' post-acquisition knowledge inter-organizational transformation than do traditional downward pathways. Moreover, 'in contrast to the "forward diffusion" (Thite, et al., 2012) of knowledge in the context of multinationals from the developed world (DMNEs), the "reverse diffusion" is more pertinent to EM-MNEs owing to their latecomer disadvantages and their constant attempts to overcome these disadvantages' (Nair et al., 2015). Thus, EMNEs face more serious challenges than DMNEs when they intend to leverage knowledge from their foreign subsidiaries with higher level capacities.

Ambos et al. (2006) discussed 'how firms can best 'learn at the periphery'; for example how MNEs could benefit from their subsidiaries through refreshing knowledge (Doz & Santos, 1997). Their findings show that the firm context of the subsidiary and its capacity to process knowledge are two major driving forces influencing the efficiency of MNEs' reverse knowledge transfer from subsidiaries. However, this model would be more fit to DMNEs as parent firms, rather than to EMNEs. Nair et al. (2015) introduce a specific model for EMNE parents to examine the reverse knowledge transfer behaviours of parent firms that have their home base in India. Their findings illustrate that perceived subsidiary capacity, absorptive capacity of the parents, and knowledge relevance have positive effects on reverse knowledge

transfer from advanced foreign subsidiaries. Moreover, presence of learning environment and internal technical knowledge infrastructure shape and are positively related to EMNE parents' absorptive capacity.

However, while previous studies have addressed the issue of reverse knowledge transfer behaviour of EMNEs, to date the literature does not offer a full explanation for our specific case, Chinese local SOEs as foreign investors.

3.3.1.3. Organizational learning as a step of the internationalization process

Organizational learning has been discussed as EMNEs' absorptive capacity for transferring knowledge; however, this corporate cognitive behaviour is not static, but takes on new features in the internationalization process, and is manifested in different ways in various situations. In the conventional incremental IPM theory, organizational learning has been placed as the key step in the 'learning – commitment' international expansion process framework (Johanson and Vahlne, 2003; Zhong et al., 2013). It is a circular and sustainable process between 'learning' and 'commitment' of the internationalization pathway. 'First, firms change by learning from their experience of operations, current activities, in foreign markets. Second, they change through the commitment decisions' (Johanson & Vahlne, 2009, p. 1412). Then learning plays a key role in refreshing knowledge and in the next step, commitment making. 'Experience builds a firm's knowledge of a market, and that body of knowledge influences decisions about the level of commitment and the activities that subsequently grow out of them: this leads to the next level of commitment, which engenders more learning still'

(Johanson & Vahlne, 2009). Hence organizational learning endows knowledge transfer behaviour with a dynamic nature, and pushes the international process expansion to be forward and continuous.

'According to Mathew's (2006) 'linkage-leverage-learning' framework, learning behaviour is the final step in multinational dragons' 'catching up'. The learned knowledge would be transformed and realized by product innovation (Williams, 2009), which would then create more corporate value for the firms. Organizational learning ability thus becomes an important benchmark to measure success or failure of the multinational action by the EMNEs. Such organizational learning ability also influences the speed of internationalization, especially for latecomer EMNEs, considering the differences that exist in forms of knowledge and learning interaction.

Pre-existing knowledge, which reflects the congenital aspects of organizational learning, has a particular impact on the pace of internationalization when the firm is young, while with regard to vicarious and experiential knowledge, learning capacity would make effect on international paces by considering firms' international strategic intentions (Casillas et al., 2015). In addition to speed of internationalization, the organizational learning perspective can also shed light on other issues related to running a multinational firm dynamically, in terms of how to construct the organization to balance the parent-subsidiaries relationship; how to fit into and harmonize with foreign culture, and how to interact with the macro-global institutions ('game-rules') (Globerman & Shapiro, 2009; Vermeulen & Barkema, 2001; Antkiewicz & Whalley,

2007; Deng, 2011). Thus, discussion should not cease at the intra-organizational level, but should extend to inter-organizational and even more macro perspectives.

3.3.2. Intra-organizational level discussions

3.3.2.1. Parent-subsidiary relationships

For MNEs in the post-acquisition period after a foreign M&A deal, one of the most important intra-organizational relationships is the between the home country's parent and the host foreign acquired subsidiaries. Especially to those EMNEs with strong SAS purpose, the quality of relationships between parent and subsidiary firms would be a significant element to affect knowledge transfer and management integration performance in the post-acquisition period. Effective knowledge coordination among parents and subsidiaries matters for the entrepreneurial MNEs (Williams & Lee, 2011; Williams, 2018). It should be noted that there exist huge challenges for such relationships to overcome in terms of geographic distance, institutional variation, culture difference and psychic distance among acquirers and acquired firms with different backgrounds. However, to date most of the literature on parent-subsidiary relationships has mainly focused on the MNEs with parent firms originating in the developed markets (Delios and Beamish, 2001; Luo, 2003; Ortmant, 2016; Rabbiosi, 2011); there are very few studies that concentrate on EMNEs, especially Chinese local SOEs, as acquirers that play parent roles. Thus there is a gap in the literature, which calls for further research on this specific issue. The next sub-section looks particularly

at business groups, which comprise a complex relationships and organizing structure of MNEs that is commonly adopted by CMNEs.

3.3.2.2. Role of business group membership in post-OFDI performance

Following the acquisition of foreign subsidiaries through OFDI, local SOEs, like other Chinese MNEs, always operate as business groups, which offers another way to fill voids in the domestic institutional environment and to save transaction cost through building an internal market within a multinational organization (Choudhury and Khanna, 2014; Keister, 2001; Khanna and Palepu, 2000; Khanna and Rivkin, 2001; Khanna and Yafeh, 2007; Yiu, 2011). In addition to filling in institutional voids, group affiliation brings benefits in the form of 'syntheses and sharing of knowledge, access to information, reputation enhancements or additional revenue enhancement opportunities' (Popli et al., 2017; Gaur, 2007).

Furthermore, according to the resource based view, 'groups provide not only an internal market for factors such as capital and labour for innovative activities but also a platform for sharing resources' (Chang & Hong, 2000; Wang et al., 2014). Moreover, as 'historically, BG have dominated the economies of emerging markets, such as India, South Korea, Taiwan, and various Latin American countries, …, their effects on firm performance, innovation, and internationalization are well documented' (Popli et al., 2017). Hence, for the purpose of extending EMNE theories in the post-acquisition phase, there is a need for more investigation into CMNEs' organizational structure as business groups, and its impact on post-OFDI behaviours and performances.

Unlike DMNEs, in which the parent company is located in a developed market and builds their foreign subsidiaries in less developed countries, multinational local SOEs in emerging markets face very different institutional circumstances and ways of group operation in connection with their foreign subsidiaries. The specific features of Chinese local SOEs would result in particular methods of group control, for example in terms of control mechanism, subsidiaries' autonomy and decision making (Andersson et al., 2005; Bowman et al., 2000; Edwards et al., 2002; Liang et al., 2015); and group operations, for example with regard to communication and labour exchange (Harzing and Feely, 2008), which could impact on the quality of reverse knowledge absorption and business performance. However, although CMNEs commonly run as business groups after OFDI, there is no previous study that specifically indicates how organization as a business group impacts on CMNEs' post-OFDI integration performance. It will also be worthwhile to open up thinking to the macro circumstance, in order to discover how the external environment shapes behaviours of both sides in the group.

3.3.3. Macro level environment matters: geographical and psychic distances

3.3.3.1. Geographical distance

There is a common trend whereby Chinese local SOEs prefer to target their foreign investment to advanced countries with longer geographic and psychic distance, and very different culture and institutions from the home country. The motivation for targeting these developed places as the host country is to seek strategic assets through

acquiring firms there. Therefore, it is necessary to investigate deeply into geographical and psychic distance between home and host countries, and attempt to discover the particular role they play in making OFDI strategies and implementation of Chinese local SOEs distinct.

With regard to tangible and measurable geographic distance, previous international business literature has introduced the concept of 'geographic borders' that divide regions and countries to imply 'domestic' and 'foreignness' (McCarthy & Aalbers, 2016). The border causes institutional and culture differences between host and home countries (Hofstede, 2001; Hennert, 2004), which complicate the communication between the two sides (Chevrier, 2003; Laurent, 1983) and have a negative impact on the quality and the flow of transferred information (Jaffe et al., 1993). These differences introduce uncertainty into business transactions among parties on different sides of a border, and 'lead to situations of "them and us" (McCarthy & Aalbers, 2016)' (Reus & Lamont, 2009; Huntington, 2003).

Geographic location is also highlighted as significant for issues regarding knowledge transfer between different regions, such as spill over effects in the process of patent citation (Jaffe et al., 1993), while investigation into high-tech companies in Europe and Asia has identified geographical distance as a cause of institutional variety that impacts on the performance of knowledge acquisition (Hemmert, 2004).

As for psychic distance, this can increase costs and liability in business deals in terms of 'transaction, monitoring, agency and asymmetric information costs' (McCarthy & Aalbers, 2016), which would be expected to have a negative impact on

OFDI motivation (Böckerman & Lehto, 2006). However, in reality Chinese local SOEs are proving eager to invest in geographically and psychically distant developed countries to pursue SAS oriented OFDI, regardless of the higher 'distance costs'. Thus, it will be worthwhile to discover the factors driving their motivation.

3.3.3.2. Psychic distance: cross-culture and cross-institution issues

Psychic distance, which is defined as 'a firm's degree of uncertainty about a foreign market resulting from cultural differences and other business difficulties that present barriers to learning about the market and operating there' (O'Grady & Lane, 1996), has been placed as a significant variable in international business theories. Previous IB studies have revealed that internationalized business will find it easier to achieve success in countries with closer psychic distance, as there exist more similarities among home and foreign host countries (Johanson & Vahlne, 1977; Johanson & Wiedersheim-Paul, 1975; Johanson & Vahlne, 1992). Thus, there is a common understanding that the 'relationship between psychic distance and organizational performance has been contradictory' (Evan et al. 2000).

Many previous researches adopt culture distance as a representative of psychic distance, and treat these two concepts as the same when exploring the impacts on business performance in the post-OFDI period. The findings show that both closer culture distance as a target strategy in the pre-acquisition phase, and acquirers' better ability of 'national culture-compatibility' in the post-acquisition phase are significantly related to post-acquisition organizational performance improvement and success (Li &

Guisinger, 1991; Morosini & Singh, 1994; Evan et al., 2000). However, previous findings cannot explain further the effects of psychic distance, and also do not give specific attention to Chinese local SOEs as acquirer parents. Moreover, culture distance cannot equate to psychic distance, as there is a large body of literature that discusses other aspects, such as institutional distance (Kostova, 1999; Estrin et al., 2009) and difference in business types.

Institutional considerations have been widely accepted as a determining cause behind EMNEs' OFDI action. That is, in the pre-acquisition strategy making period, EMNEs wish to 'escape' from the domestic institutional environment in order to seek 'institutional arbitrage' from overseas. Institutional considerations are also important for the location choice and entry mode. Furthermore, institutional distance has a significant impact on post-acquisition behaviours. Institutional development in China, which encompasses both vertical and horizontal changes, causes variety in state capitalism, then further shapes CMNEs' diverse OFDI strategies and pathway choices. In this research, the decentralized Chinese local SOEs are located in a relatively weaker position in the domestic institutional regime, and also might find it more expensive to investment domestically across provincial or city boundaries than to go overseas (Boisot & Meyer, 2008), which pushes them to seek more opportunities and enrich FSA through investing abroad.

In making their location choice, on the one hand, investors might seek closer institutional distance in order to reduce transaction costs and shorten the adaption period after entering the foreign market. However, on the other hand, strategic assets,

such as intellectual property or reputable brands, are always possessed by developed country firms, which have further institutional distance with China. Previous literature has introduced both pros and cons of institutional distance, but to date there has been little discussion as to how CMNEs make balanced decisions and what action they ultimately take.

With regard to entry mode, institutional legitimacy has been highlighted as an important issue for entering into foreign host markets. Institutional concerns are a key factor in determining foreign investors' OFDI entry strategy, as they make their choice among Greenfield investment, M&A, or joint venture. The main back reason of causing this is heterogeneity, or even conflict, among institutions in different countries, and both home and host country governments would exert pressure on cross-border investors and target firms. For example the Chinese SOEs are owned by the government, and their business activity is always determined to a greater or lesser extent according to political considerations in the home country; consequently, host country governments will be concerned about possible ideological conflict or even threats to their national security, and will therefore adopt an attitude of distrust and defence in order to protect their national interest (Li et al., 2014; Wang, et al., 2012; Meyer, et al., 2014).

In this situation, it is necessary for Chinese SOEs to adapt their entry strategies when investing in countries with longer institutional distance, in order to overcome potential distrust and conflict, as well as to strengthen their legitimacy in the host country. Normally, Greenfield investment has been argued as more welcomed by host countries than joint venture or M&A, and it is considered that investor firms that have

a smaller proportion of state ownership and are under less obligation to their home country government will find it easier to enter into foreign countries (Meyer et al., 2014; Li et al., 2014).

With the gradual increase in international business activity between Chinese enterprises and foreign firms, and the greater diversification of the Chinese economy, there have emerged many new phenomena and firm-level issues that present challenges to CMNEs' management capacity, such as language problems among cross-border partners, and difficulties of international human resources arrangements. These new psychic distance problems faced by CMNEs have not yet been addressed in any detail in the literature. Moreover, for Chinese local SOEs, these difficulties would appear to be even more serious, and bring huge challenges to their pursuit of OFDI. Thus the definition of the concept of psychic distance should be extended accordingly in order to describe this newly emerged IB phenomenon.

3.4. Identification of gaps in the literature and development of research questions

Through a thorough critical review of the previous literature, this chapter has identified gaps in the relevant theory. This thesis will seek to fill those gaps, in particular by providing a detailed explanation of Chinese local SOEs. Key theoretical limitations have also been identified, as there is very little previous literature that focuses specifically on the increase in Chinese local SOEs' OFDI behaviours or considers the diverse and rapidly changing nature of the Chinese political economy.

Neither conventional DMNE theories nor updated EMNE theories are adequate or

sufficiently accurate to explain the reasons for, or in-depth details of, the emerging OFDI phenomenon of the CMNEs. Chinese local SOEs have undergone transformation in terms of ownership and relationships; they receive only limited support from the government, are located in relatively weaker domestic institutional and market positions, operate under impaired business capacity after decentralization, and maintain special types of psychic distances in relation to the targeted host counties, all of which would impact significantly on their OFDI motivation and actions in terms of pre-OFDI strategic decisions (e.g. SAS orientation, location choice, entry mode) and post-OFDI knowledge integration and performance (e.g. absorptive capacity, legitimacy conflicts with the host country, and barriers to communication and resource transformation). However, previous theoretical and empirical IB studies have given these issues only superficial acknowledgement, treating them as of minor importance and failing to apply any specific empirical testing or sufficient discussion. In particular, the previous literature is marked by an absence of qualitative case studies or comprehensive and detailed explorations of these issues.

Hence, this PhD research will be designed to answer the three questions presented through exploring the 'what and whether' and explaining the 'why and how' of the influential and determinate factors shaping Chinese local SOEs' OFDI behaviours in both the pre- and post-OFDI phases. The essential questions to be addressed are the following:

(1) Are Chinese LSOEs more aggressive than other CMNEs as foreign SAS motivated OFDI pursuers? What external and internal factors shape their features?

(2) How do these unique factors exert effects on pre- OFDI strategy making and post-event asset integrating behaviours?

(3) Related to the above two points, what is the performance of CMNEs owned at the local level in terms of rapid firm-level catching up and integration? What results have they achieved? Are they able to succeed as, in Mathews' (2006) term, 'latecomers' on the global stage?

The specific methodology design, whereby the 'what and whether' questions are addressed by a quantitative pathway, and the 'why and how' questions are explored through a qualitative pathway, will be explained in Chapter 4.

Chapter 4 Methodology

4.1. Overview

Given the complex, diverse and dynamic nature of the Chinese economy, no single narrow methodology can be expected to give a full picture regarding the phenomenon whereby Chinese local SOEs are emerging as a new power of the country's OFDI. A review of previous studies on EMNEs reveals that 69% apply quantitative methods, while qualitative methods account for only 30% of the total number (Luo & Zhang, 2016). Moreover, 'Among these qualitative studies, half are case studies or field studies using descriptive or theoretical analysis focused on theoretical dialogue on EMMNEs. For data sources, 55% of articles used archival data, 33% used survey data, and 13% used no data' (Luo & Zhang, 2016). Thus, to date most research into EMNEs' behaviours has taken an empirical quantitative approach, adopting secondary data.

However, exploration of the rise of Chinese local SOEs as a driving force in the globalization of China involves more behavioural matters, such as strategic decision making and organizational learning in both the pre- and post- OFDI phases. As such, the additional qualitative phase of research calls for more methods that could go in further, such as fieldwork and case study, and access to first-hand data, in order to achieve more insightful observations about the unique characteristics of this specific OFDI power (Eisenhardt & Graebner, 2007). Firstly, in the explorative verify stage, this research adopts empirical quantitative approaches by regressing firm level data in order to examine and confirm the developed hypothesis. Then the second-step qualitative study is attempt to reasoning and extending the empirical study findings in order to offer a full picture and detail-end of Chinese local SOEs' OFDI behaviours. Therefore,

this chapter will introduce and discuss a mixed 'quantitative to qualitative' research method as the main methodological framework of this investigation into Chinese local SOEs' SAS-oriented OFDI behaviours.

The next section, 4.2., explains the rationale for adopting a mixed method research approach in this thesis. It not only provides an overview of the mixed methodology, but also gives brief arguments on both the quantitative and qualitative perspectives, and why they are fitted to this research topic. In section 4.3., the research design links the quantitative and qualitative approaches as consecutive research steps following the logic of 'exploring to explaining' to construct theory from a specific phenomenon. The timeline and agenda of the research are also presented in this section. The following sections, 4.4 and 4.5, give thorough interpretations of the quantitative empirical and qualitative case approaches respectively, in which counted negative binomial regression and two stages case study are highlighted as the key research models. Finally, in sections 4.6 and 4.7, the discussion focuses on data collection and analysis respectively, where both primary and secondary data represent the fundamental evidence and resources for constructing abstractive theoretical frameworks.

4.2. Mixed methods research: rationale and strategy

Mixed research methodology, which integrates both qualitative and quantitative methods in one research (Creswell & Plano Clark, 2007), has undergone a dramatic transformation over the last three decades and become as new fashion of social researches (Hesse-Biber, 2015). According to Molina-Azorin et al. (2017), such

methodology can help to improve the understanding of research problems and complex phenomena to a greater extent than either single approach. As early as 1979, Jick described the triangulation approach, which offered the potential to both offset the weaknesses and cultivate the strengths of any single method. More recently, Edmondson and McManus (2007: p. 1177) pointed out that 'a mix of qualitative and quantitative data leverages both approaches to develop new constructs and powerfully demonstrate the plausibility of new relationships'. With specific reference to this PhD topic, Chinese local SOEs are emerging as a significant international business power, positioned within the dynamic and diverse context of the Chinese political economy. Given the particular internal features and complex external environment, no individual or narrow research method would be adequate to collect all the relevant data or to provide an in-depth or comprehensive picture of the reality. On the other hand, the use of multiple approaches can overcome and neutralize some of the disadvantages of single methods (Molina et al., 2017). Therefore, it is rational to adopt a mixed research methodology in this research, in order to conduct a proper examination and offer a comprehensive explanation regarding our pre-event observation.

> 'Mixed method research employs both approaches iteratively or simultaneously to create a research outcome stronger than either method individually. Overall, combined quantitative and qualitative methods enable exploring more complex aspects and relations of the human and social world (Malina et al., 2011, p. 61).'

Specifically, a positivist quantitative oriented approach, as adopted by most of the previous international business studies, by subjective econometrical analysis of large

scale datasets. Rather, such researches often empirically test hypotheses derived from general theories or try to figure out logical linkages between conceptual invariables as defined in those hypotheses. However, a grounding in phenomenology could create unexpected and unavoidable bias, vagueness, imprecision, and distortion of direct observations. Moreover, it is difficult to generalizing and empirical testing emerging hypotheses from insufficient data samples, where the researcher is concentrating on specific individual items of evidence. As explained in Chapter 1, researchers and social media have identified Chinese LSOEs' foreign M&A as a significant phenomenon. In this PhD, the researcher will begin by examining whether this observation is correct and convincing. In this regard, since quantitative researches are 'encouraged to exploit the potentialities of social observation' (Jick, 1979: p. 605), the initial basic step to testing and confirming our observations of phenomena will be to conduct a quantitative empirical study based on an extended wider population sample.

However, this PhD research will not be confined to the examination of observed phenomena. Rather, in order to discover the underlying reasons and to reveal more details of the phenomena, and to highlight implications in both theoretical and practical aspects, it will be necessary to conduct qualitative research by analysing first-hand data. Hence the PhD research procedure will follow a sequential explanatory design, which is intended to 'explain and interpret quantitative results by collecting and analysing follow-up data' (Creswell, 2009: p. 211).

> 'It is characterized by the collection and analysis of quantitative data in a first phase of research followed by the collection and analysis of qualitative data in a second

> phase that builds on the results of the initial quantitative result. … the two forms of data are separate but connected. An explicit theory may or may not inform the overall procedure. (Creswell, 2009; p. 211)'
>
> 'Quantitative studies persuade the reader through de-emphasizing individual judgement and stressing the use of established procedures, leading to results that are generalized to populations… qualitative research persuades through rich description and strategic comparison across cases … quantitative methods need valid conceptual ground qualitative methods are probably always a necessity to understand social phenomena (Malina et al., 2011, p. 61).'

Because the rise of foreign M&A of Chinese LSOEs has only recently emerged as an international business phenomenon, to date there has been relatively little investigations that base on first hand materials in this area, and consequently there is no sufficient and in-depth discussions according to which empirical first-step quantitative results can be approved and extended. It is also hard to explain the thinking processes of LSOEs' senior managers when formulating foreign acquisition strategy when using quantitative methods. Therefore, a qualitative approach is called for to provide detailed insights from the new phenomenon in the second research step. Compared with quantitative research, the qualitative approach is closer to the research subject; it is able to get inside unstructured phenomena and to access rich data sources to create ideographic theories (Malina et al., 2017).

Therefore, this research adopts a mixed methods approach, following a sequential explanatory procedure of quantitative to qualitative, as the ideal methodological design to give a full picture of LSOEs' foreign M&A behaviours.

The second step, qualitative research, will be based on case studies. Although some writers treat 'qualitative research' and 'case study research' as more or less synonymous terms, there exists critical discussion as to how far it is possible to generalize the results of single cases. A case study procedure from single core case to more follow-up cases, which will be introduced in the next section, is designed as a solution to such concerns.

4.3. Research design and schedule

4.3.1. 'Quantitative to qualitative' two-steps research with 'empirical to reasoning' research logic

As inspired by Creswell (2003)'s sequential explanatory strategy, this PhD research is designed as a two-step 'quantitative to qualitative' study. In brief, the process begins with the empirical quantitative study of emerge hypotheses through a deductive approach, then moves on to qualitative methods to 'assist in explaining and interpreting the findings of a primary quantitative study.' (Creswell, 2003, p. 215). Firstly in the first stage, I conduct deductive empirical study with analysis of quantitative data to test and confirm the initial developed hypotheses and give a clear results of the relationships between the variables. In the second stage, a 'pre- to post-acquisition' designed case study based on qualitative approaches is used to develop a

prototype of the theory on LSOEs' foreign M&A (Yin, 2003). Then, the empirical results are considered in a further examination of the case study, to make the investigation even more detailed. Through integrated discussion and comparison, knowledge can be enriched and developed (Creswell and Clark, 2007).

Specifically, Bryman (1988) argues that there is a strong link between the quantitative study in the first step and the subsequent qualitative study. Quantitative research not only 'precedes and provides an aid to the collection of qualitative data are less numerous than the preceding category', but also 'the initial quantitative research allows a 'mapping' of the issue to be addressed and also provides the basis for selection of comparison groups for in-depth qualitative interviewing. (Bryman, 1988, p. 136-137)'. Sequential explanatory strategy is also 'easy to implement because the steps fall into clear, separate stages' (Creswell, 2003, p. 215). Moreover, sometimes researchers' bias may lead to inappropriate interpretation, causing a gap between constructed concepts and truth. Quantitative empirical work that screens large amounts of sample data to the same degree can be valuable to test previous research hypotheses and to ease the generalization problem of qualitative studies. Thus, quantitative study is designed as a precursor at the first point in order to test hypotheses and then map an appropriate pathway to follow-up qualitative research.

As LSOEs have emerged as a central driving force of Chinese OFDI, in the absence of any specific theory to explain this development, while also considering the potential misuse of quantitative modelling, and also there will always exist some distance between selected specific cases and broader samples. Recent studies have called for

more qualitative research that accesses and observes first-hand data in order to provide insights and accurate description regarding this emerging international business phenomenon. According to Strauss and Corbin (1990: 19), qualitative methods 'can be used to uncover and understand what lies behind any phenomenon about which little is yet known'. Moreover, 'qualitative methods can give the intricate details of phenomena that are difficult to convey with quantitative methods'. Therefore, the qualitative approach is a smart way to investigate the complex backgrounds of Chinese LSOEs and to deal with the multiple data sources encountered and utilized in the process of research. Hence, the second-step case study is set to enrich interpretation to the previous empirical results and also emerged to give further explanation and extension to understanding the phenomenon of LSOEs' OFDI.

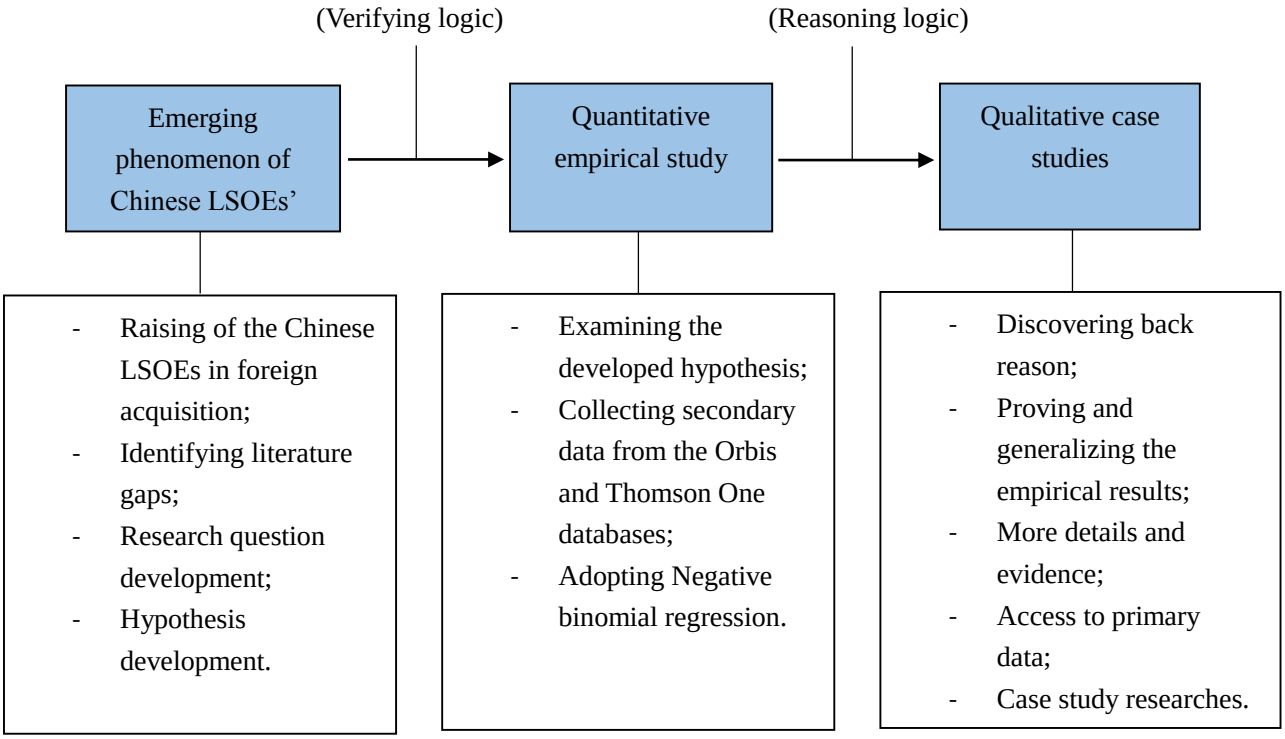
4.3.2. Outline of research design

The two steps outlined below, as shown by Figure 4.1, are designed to yield insights into the determinants of Chinese LSOEs' OFDI behaviour and to highlight the most significant variables that influence their pre-OFDI strategy decision.

Whether or not the determinant features in the pre-acquisition stage still exert effect on post-acquisition behaviours is very important to their integration performance and further strategy making. However, there has been little research focused on analysing the consequences for performance, and this 'incomplete understanding of the performance consequence of OFDI not only limits theorizing on international business, but also influences EMNCs' acquisition strategy'. Such investigation of the post-

foreign-acquisition performance of LSOEs could contribute to establishing new IB concepts both theoretically and practically.

Figure 4. 1 Methodology and research design of this PhD study.



In view of the lack of previous research, this qualitative step is also highlighted as a research design which attempt to explore the determinant factors of LSOEs' post-acquisition behaviours. This step could prove or disprove previous theories, while also offering new explanations. Hence, such further investigation via accessing more cases is necessary, because whether the potential findings for post-acquisition determinant factors are similar to or different from the determinants in the pre-acquisition stage, they will always give valuable extension and in-depth inspiration to the new developing IB theories and future OFDI practice.

4.4. Quantitative approaches: counted econometric models

As this empirical research seeks to discover whether there exists a causal linkage between foreign strategic assets and local state ownership, we need to design a model that can deliver these two variables on the different sides of the equation, say strategic assets as dependent variable and local state ownership as independent variable. In this research, it is considered that the counted numbers of patents or trademarks possessed by foreign target firms represent strategic assets that Chinese local SOEs wish to acquire. Hence, it is necessary to develop a count model rather than a linear model for regressing counted data in our empirical study.

'Models for count data have been prominent in many branches of the recent applied literature' (Greene, 2008), for example 'management (e.g. numbers of patents)' (Wang, et al., 2017). It seems that counted models for regressing patents could trace its previous sources, as 'count data models allow for regression-type analyses when the dependent variable of interest is a numerical count', and they 'provide an appropriate, rich, and flexible modelling environment for non-negative integers, 0, 1, 2, etc.' (Winkelmann, 2015). The Poisson econometric model has been widely adopted as a framework of counted regression; however, there exists an 'effect of over-dispersion on inference made under a Poisson model, and models proposed for accommodating over-dispersion in statistical analysis' (Lawless, 2017).

The unconditional Poisson distribution for specifying dependent variable Y as counted number of events is given as follows:

$$\text{Prob}(Y_i = y_i|x_i) = \frac{e^{-\lambda_i}\lambda_i{}^{y_i}}{y_i!},$$

$$\lambda_i = \exp(\alpha + x_i'\beta), y_i = 0,1,\dots, i = 1,\dots, N$$

Where Y_i is the random dependent variable that represents count number, x_i is a vector of independent variable, and i = 1,…, *N* indicates that there are *N* number of observations of the random sample. y_i indicates the particular count value of the independent variable, while λ represents the observable expected value, which is mean value, of each occurrences of all i entities during a controlled period of time. As the Poisson model is subject to an assumption of basic equi-dispersion (Greene, 2008), the only parameter, the mean occurrence rate λ_i, describes the log-linear conditional mean and variance of distribution at the same time:

$$\text{E}[y_i|x_i] = Var[y_i|x_i] = \lambda_i,$$

However, 'observed data will almost always display pronounced over-dispersion'. With regard to the strategic assets variables in this research, our dependent variables are the counted number of patents and trademarks registered by foreign target firms, which are normally distributed randomly, in a manner characterized by over-dispersion. Thus, 'because of its implicit restriction on the distribution of observed counts – in the Poisson model, the variance of the random variance is constrained to equal the mean'. Therefore, we will adopt more general specifications, such as the negative binomial model, which is 'the standard choice for a basic count data model' (Greene, 2008). A more specific and detailed description of the models can be found in study III in Chapter 7 of this thesis.

4.5. Qualitative perspective exploration approaches

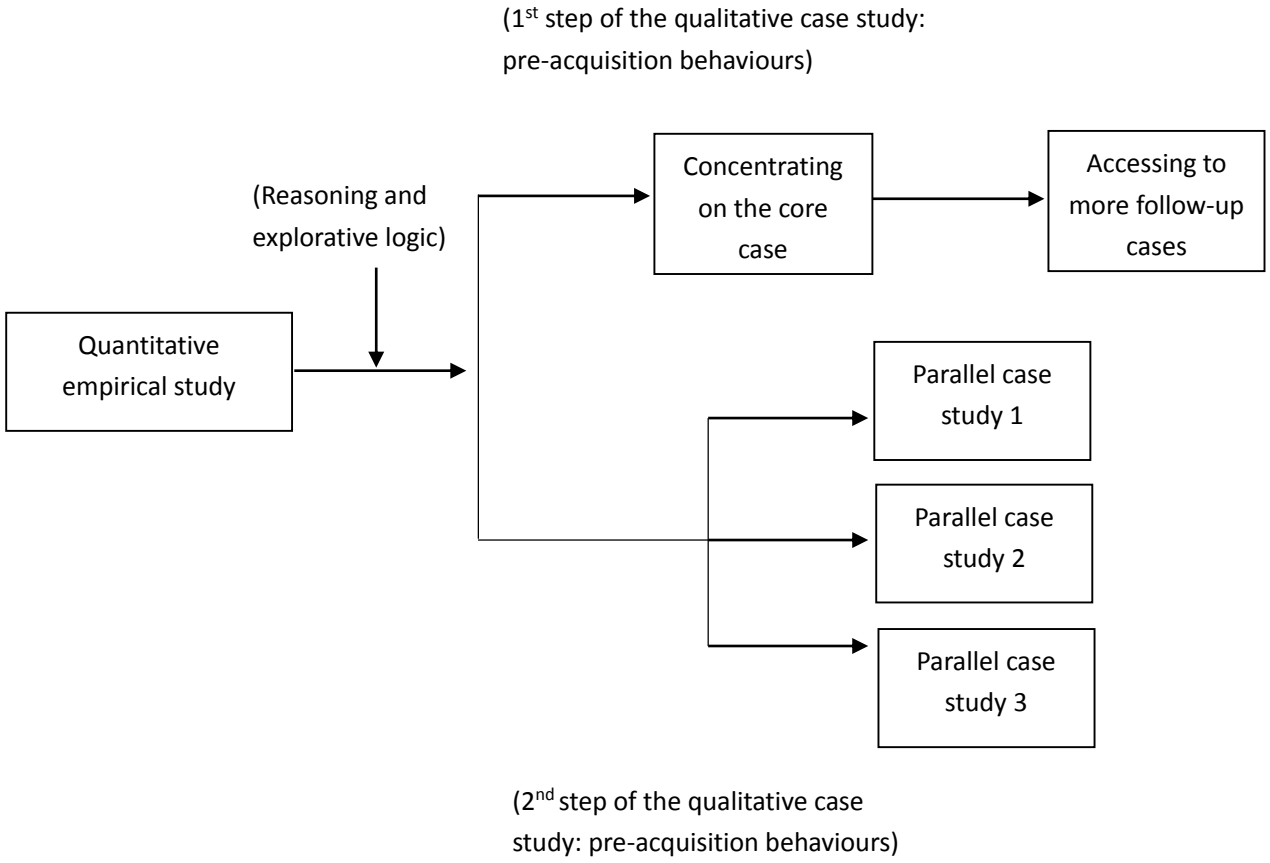
4.5.1. A single core case as point of departure

According to Yin (1994: 38), ‘To confirm, challenge, or extend the theory, there may exist a single case, meeting all of the conditions for testing the theory,’ thus, ‘a single case can observe and analyse a phenomenon previously inaccessible to scientific investigation’, and could ‘represent a significant contribution to knowledge and theory-building’. Because the emergence of Chinese local SOEs as a major power of Chinese outward acquisition is relatively recent, to date there has been little discussion focused specifically on the issue, and as yet no accurate theories regarding this new phenomenon of CMNEs. Therefore, in order to gain the required insights, it is necessary to develop new knowledge and construct new theories. In this situation, it is appropriate to use a single case study as a prelude to our further follow-up case study. Moreover, in order to improve the quality of the single case study, the research is designed to minimize the chance of misrepresentation of single cases and to maximize the possibility of access to information to be collected as the case study evidence.

The core cases used for both pre- and post- OFDI of Chinese local SOEs are based on the foreign acquisition behaviours of North Heavy Industry (NHI) from 2007 to 2016. With the intention to extend current IB theories, in line with CMNEs’ OFDI determination theories and the literature on strategic asset seeking, we formulate our case research questions as ‘what are the key factors determining Chinese local SOEs’ pre-acquisition decisions and post-acquisition integration performances?’ Therefore,

the single cases are designed to explore causal relationships between internal & external determining factors of Chinese investors and the consequences in terms of OFDI actions.

Figure 4. 2 Research Logic of case study.



In order to improve representation, avoid bias and give the fullest possible picture of single cases, the case selection should be closely fitted to the research topic, and the investigator should be able to access various data sources of the single cases concerned. The NHI Company is a heavy machinery manufacturer in northeast China, now a local SOE following decentralization from central government. It completed an M&A deal with a French company in 2007, and another with a US company in 2016. Given NHI's status as a local SOE, and its OFDI activity within the last ten years, it is an ideal

representative of Chinese local state-owned CMNEs, and an appropriate choice for the initial single case study. NHI also offers accessible information and geographic convenience, and is familiar to the researcher conducting the investigation. The researcher has been allowed extensive access to the company, through being granted an internship in the head office, interviews with a full range of key persons, and the opportunity to obtain large amounts of documentary resources. In view of this representative nature and convenience of access, NHI is considered the best single case option for pursuing a high quality research outcome.

4.5.2. More follow-up cases adopted – approval, comparison and extension

Rationale of accessing more follow-up case study after the core case is inspired by Yin (1994)'s instruction on multiple case study. Where multiple cases are adopted, 'the evidence is often considered more compelling, and the overall study is therefore regarded as being more robust' (Yin, 1994; Herriott & Firestone, 1983). According to Eisenhardt (1991), multiple case studies 'permit replication and extension among individual cases', which helps researchers to perceive patterns easily, eliminate chance association, and develop more elaborate theory. For these reasons, in order to deliver a rich theoretical framework of the emerging local CMNE phenomenon, we will access more than one case. Given the diverse and dynamic nature of the Chinese economy, the single case of NHI's acquisition in 2007 of the French company NFM cannot provide a broad or in-depth picture; rather it is necessary to compare it with other OFDI deals with different geographical-temporal-ownership backgrounds. The logic of using

multiple case studies is that while similar results can confirm those of the original single case, contrasting results in other cases will be helpful to extend our findings.

Therefore, according to the replication logic of the multiple case studies as mentioned in previous contexts, when selecting the companies for the further follow-up case researches I consider their complementary differences from the original single case in terms of location, ownership, and temporal perspectives. With regard to geographical heterogeneity, in field investigations the researcher was allowed to enter company sites in different locations, belonging to both the Chinese parents and the foreign target firms. The Chinese parent firms among the follow-up case study companies are based in locations from north to south China, in cities ranging from the capital Beijing to regional centres like Zhengzhou and Changsha, and thus encompass a range of heterogeneous features. The foreign target cases include enterprises originating in France, Germany, and the United States, and such divergence among host countries will yield more insights into investors' entry mode and legitimacy in the foreign target market.

Furthermore, because our research investigates both pre- and post-acquisition behaviours, and also owing to the rapidly changing political economy of China over the last 20 years, the multiple case study compares the different OFDI behaviours of one single Chinese company between 2007 and 2017, a period in which China experienced a dramatically high-speed development of outward foreign investment. Thus, ten years span should be considered as significant factors of influence CMNEs' OFDI strategy and behaviours. Finally, ownership shapes firms' internal governance structure and

external institutional position in the domestic market, and thus has effect on the OFDI decision. Within this research, comparison of the foreign acquisition behaviours of the central state-owned CRTE with that of the original local NHI case will help us to better distinguish how the specific characteristics of Chinese local SOEs make them different in pursuing OFDI.

4.5.3. Rationale of selecting TBM industry and northeast region

In order to explain phenomena and to build up conceptual and theoretical frameworks, it is crucial to select appropriate cases. A suitable case will cover essential characteristics of the research topic in a representative and detailed way (Yin, 1994) and will provide valuable insights to answer the research questions. This PhD research focuses on Chinese local SOEs' foreign M&A behaviour; hence it was necessary to select a suitable case industry in order to better describe the macro-economic environment and to understand the behaviour of individual units. The research explores the new business phenomenon whereby, since the early 2000s, many Chinese local firms have grown to become significant global players. Therefore, I used the following five criteria to select the TBM industry and northeast region based NHI as core case.

First of all, the selected industry should be globally competitive, dynamic and asymmetric. The Chinese domestic market is emerging as a new active market, and Chinese firms are gaining global power. Moreover, as detailed in previous sections, the TBM industry worldwide is a highly competitive market, with key players from all over the world. It is also undergoing rapid changes and restructuring, given the over-

development of advanced countries and the rapid urbanization of China. With regard to industry asymmetry, on the one hand, manufacturing firms from advanced countries are seeking sales markets from emerging countries, while on the other hand, China is the largest market but lacks advanced manufacturing experience and needs to import strategic assets from western countries.

Secondly, there should exist cross-border merger and acquisition activities between Chinese and foreign firms, with the Chinese firms acting as acquirers. Since 2007, there have been at least five foreign acquisition deals undertaken by Chinese TBM firms, which provide good samples to research this phenomenon. As importantly, technology seeking and catch-up motives have been at play in this industry (Mathews, 2006; Luo & Tung, 2007; Rui & Yip, 2008). CMNEs in the TBM industry are trying to catch up with their DMNE counterparts.

Thirdly, the selected case companies of this research should be based in the local region, and with local ownership backgrounds. This is because local (e.g. provincial, or city level) based backgrounds may shape their strong outward FDI motivation and active foreign acquisition actions for seeking strategic assets from the overseas. And also regional government supported SOEs' OFDI behaviour would appear as unique and different characteristics.

Fourthly, the acquiring firms should have several years' experience of operating multinational corporations after acquiring the foreign subsidiaries so we can observe post-acquisition performance. Within my selected case industry, the NHI Group merged with the French NFM Technology in 2007, and now have nine years' post-acquisition

experience. Therefore, the challenges, benefits and difficulties they have faced will be invaluable to others.

Table 4. 1. Rationale and suitability of case selection.

No.	Rationale of case selection	Suitability of the selected cases
1	- Competitive, dynamic and asymmetric globally, with China as a new power in the industry.	- The global TBM industry is globally competitive, and western firms possess advanced technology but face shrinking domestic markets. - China now represents the largest TBM consumption market in the world, but the firms there are weak in technical skills and market experience.
2	- Many foreign M&A deals, with Chinese firms as acquirers.	- Chinese firms engage in cross-border M&A activities, as latecomers acquiring foreign advanced companies.
3	- Local region based, local ownership backgrounds, came cross difficulties in the domestic competition.	- The NHI Group, located at the Northeast region of China and owned by the local government; - It suffered by region's economic 'fall' in 1990's and struggle in domestic competition - Buying NFM Technology (France) in 2007 and the Robbins Company (USA) in 2016 to enhance capacity.
4	- Several years' post-acquisition experience.	- The NHI Group have around 10 years' post-acquisition experience.
5	- Researcher has access to the case industry and companies.	- The researcher has been allowed access to key TBM manufacturer firms to do field study and interviews.

Finally, in order to realize the research project the researcher should have access to observe firms and interview people within the selected industry and regions. This researcher has been allowed such access by the key case companies, thus making it possible to conduct interviews, collect resources and do field observation on site.

4.6. Data sources and collection

As required by a mixed method approach, this research is not restricted to a single source of data, but accesses a wide range of available information. Owing to the different nature of qualitative case study and statistically empirical based research, as introduced in the previous paragraphs, the data in this research can be categorized into two basic groups, namely qualitative data and quantitative data. The table 4.2 below provides an overview of the sources, key features and categorizes, etc, of both the qualitative data and quantitative data of this PhD research.

Qualitative data deriving from field study provides 'rich' and 'deep' information, which allows the researcher to 'explore incidents in great detail and can illuminate the full extent of their subjects' (Bryman, 1988). In the second step of this research, the main target and key research issue is the thinking of senior managers of LSOEs regarding their strategy on OFDI. Given that it is difficult to quantify leaders' thinking, qualified interview is a necessary means to collect effective data for this research. Moreover, the process of qualitative research does not give an immediate interpretation of phenomena at the level of abstractive concept; rather the interpretation is accumulated and constructed by indirect and repeated investigation into the complex

data sources. Therefore, the qualitative part of this research calls for a range of data sources, which could be first-hand primary data, or secondary accessed data.

Table 4. 2. Overview of the data sources, key features, and categorizes

	Categorizes	Data Sources	Key Features
Quantitative Data	Firm level data	- Orbis Database	- Patents and trademarks data that owned by both investor and target sides; - Basic firms' information.
	M&A data	- Thomson One Dataset	- Provides 30,000 deals of OFDI information; - 1124 deals of M&A for regression.
Qualitative Data	Interviews	- Semi-structured interviews; - Both parent and subsidiaries of case firms; - Competitors; - Other collaborate stakeholders.	- From elite to front line workers; - 50+ interviewees with 100+ hours by using multiple languages of English, Chinese, and French; - Ranging among France, China, Germany, and the US.
	On-site observations	- Pre-acquisition observation; - Post-acquisition observation.	- Researcher involved as participant; - More direct data sources.
	Documentations	- Social media; - Firms' publishing documents.	- Multiple sources; - More objective data sources.

4.6.1. Interviews: ranging from elite to front line workers

The interview method allows the researcher to focus directly on topics and provides insights and causal inferences. It is an essential source of case study evidence because most case studies are about human affairs. 'These human affairs should be reported and interpreted through the eyes of specific interviewees, and well informed respondents can provide important insights into a situation' (Yin, 1994). Thus, how well interviewees have been selected and how appropriately the interview has been designed are crucial to the quality of research outcomes. In this research, semi-structured interviews, where questioning is controlled at first but open ended, begin by asking key questions that I wish to concentrate on, but allow for follow-up on any responses that I might not have anticipated. Such semi-structured interviews are particularly effective for qualitative investigations into the new phenomenon of CMNEs' OFDI, and contribute to the construction of a new theoretical framework. In total I interviewed over 50 individuals in around 70 interview sessions, accounting for 100 hours of semi-structured interviews.

With regard to the sample selection, interviewees were chosen to represent a broad range of levels and categories of position in the firms, for both the parent and subsidiary sides, as well as relevant external organizations, and to reflect the different cultures and backgrounds involved. Firstly, this research consults key persons, whose positions range from elite level decision makers to front line manufacturing workers. The 10-year time span of this case study involves both pre-acquisition and post-acquisition periods, while different levels and categories of positions reflect different strategic concerns and

corporate behaviours, thus calling for specific categorization and concentration. Secondly, relationships between Chinese investors and foreign targets impact on several important aspects of each OFDI deal, in terms of motivations of each side, communication and negotiation, as well as parent-subsidiary control and management. These aspects are influential to a greater or lesser extent in decision making, operating, and performance, and cross-cultures add complexity to these matters.

Therefore, it is important that this research selects interviewees from both the Chinese parent firms and the foreign subsidiaries. Thirdly, people external to the companies, for example personnel from government offices, industrial associations and consultancies, are considered highly relevant to assist CMNEs' behaviours. More specifically, government officers and industrial association staff are included in the interview schedule of this research as their macro policy guidance and information sharing help to accelerate and smooth the pace of CMNEs' OFDIs. Further, because in the early stages of their OFDI, CMNEs lacked foreign business experience and relied upon management consultancies to provide micro firm level leverage for their first steps of 'zou chu qu' (走出去), our research interview agenda also covers ideas from consultancies that have been involved in relevant OFDI projects between China and foreign target firms.

4.6.2. On-site observations

'Assuming that the phenomena of interest have not been purely historical, some relevant behaviours or environmental conditions will be available for observation' (Yin,

1994). In this research, the researcher was allowed access to several firm sites of the case companies and was also granted an internship in the head office, working as a secretary to the general manager. This arrangement provided an opportunity for the researcher to observe each sub-department of the company and to collect data from a range of information sources. It was also a good means to substantiate the reliability of the interviews through observing people's actual behaviours, including those of interviewees themselves. Owing to different pre- and post-acquisition behaviours, that is decision making before OFDI actions and integration behaviours afterwards, the site locations for observations and ways of observing varied accordingly.

More specifically, for pre-acquisition behaviours, observations were carried out mainly in market oriented or strategic oriented sectors, such as Marketing and the Executive Office, through attending meetings of senior management and listening to marketing analysts' discussions, always on condition that they agreed to such observation. Meanwhile, the relevant sites with regard to post-acquisition knowledge transfer and management integration included departments of Technology, Human Resources, and Project Management. Moreover, observations were not restricted to indoor offices, but also took place in plant factories, as manufacturing skills and techniques are being transferred directly from those locations. In addition to formal observations and attendance at meetings, brief talks over lunch were also useful to obtain valuable information in a more informal setting.

4.6.3. Documentation and archival records

‘Documents play an explicit role in any data collection in doing case studies’ (Yin, 1994). In contrast with in-field observation, which provides immediate present and scattered information from actual human behaviours, documents are static materials that record historical information and are delivered in various forms, in both system and non-system ways. Historical documents provide a huge information bank, and offer a flexible means to collect data without restrictions of time or space. In this research study, documents provide convenient and sufficient material to corroborate verbal evidence gained in the present and to augment evidence of emerging concepts. The documents drawn on include corporate publications and reports, social media, and industry year books.

Although historical documents have advantages over face-to-face interview and direct observation in terms of quantity and comprehensiveness, information from documentary materials is not normally in a form suitable to answer the research questions directly, as the documents will have been originally created for other specific purposes and readerships. Therefore, systematic searching and examination is crucial to obtaining suitable data. The researcher should also bear in mind the possibility of author bias when interpreting documents as data tanks. Consequently, in order to improve the accuracy and retrievability of the document information, as well as avoid bias, investigators should try to narrow the distance to document sources and authors.

In this research, many of the documents are obtained directly from the target organization sites; for example this study uses business brochures for the last 10 years

and industrial association reports, rather than general articles downloaded from public websites. Moreover, the researcher kept in constant contact with some of materials' authors in order to confirm the evidence presented in the documents and potentially to obtain more unwritten internal information through continued communication. This research also draws on archives that record firms' business activities and historical events, where these are accessible and available from firms and industrial associations, as further support for the argument.

4.6.4. Secondary quantitative data

Firm level data from both Chinese investors and foreign target sides are needed for the quantitative empirical regression. The data for the regression models in study III are collected from two main sources, namely Orbis Database (Bureau Van Dijk) and Thomson One Database. We also draw on public media, firms' archives, and government documents, in order to give a better measurement and enrich the data tank. Orbis is gradually becoming popular for use in IB researches, owing to its wide and rich international coverage, which includes data on over 140 million firms worldwide (Jones & Temouri, 2016). For figuring out the M&A deals, Thomson One's filter search allows us to obtain foreign M&A information between Chinese acquirers and foreign acquired firms, by identifying the ultimate parent firm's country of origin as China and specifying the location of foreign investment targets as excluding China.

As we match and pool the Thomson One M&A data and Orbis firm level data together as one spreadsheet, some loss of observations is unavoidable; to mitigate this

problem, we draw upon other data sources and input missing information manually. We also run robust regressions by controlling various explanatory variables of different groups of models, which could help to ease the shrinking of the observation sample size caused by losing information. More detailed data specifications and descriptions of variables are presented in Chapter Seven.

4.7. Data analysis approaches

4.7.1. Qualitative data analysis

Because the qualitative data of study II and III have multi-source and multi-form characteristics, it is essential that collected data are first well organized and prepared for further analysis. The basic preparation comprises a number of activities. As interviews are conducted in three languages, namely English, Mandarin Chinese, and French, and recorded as audio files, these must be translated and transcribed. Other records, such as fieldwork notes and photographs, must be sorted and edited into coding-friendly ways. Next, it is necessary to read through all the data in order to obtain a general sense of the information they contain and reflect concepts at a top level. Then, an 'open-axial-selective' coding process is applied as the analysis approach, in order to obtain initial concepts and relationships from the rough data.

The analysis then moves on to a more advanced level by 'using the coding process to generate a description of the setting or people as well as categories or themes for analysis'; then, 'beyond identifying themes during the coding process, qualitative researchers can do much with them to build additional layers of complex analysis'

(Creswell, 2003). At this stage the researcher can discover interconnections and relationships among themes to build up a storyline and construct a theoretical framework. Next, following on from the previous coding and theming analysis procedures, a theoretical model is created as our research outcome. It is important to use 'a narrative passage to convey the findings of the analysis' (Creswell, 2003), within which the researcher needs to check whether and to what extent the emerging model can represent the phenomena under investigation. Finally, interpretation of the research outcomes should yield implications to expand theory and inform future practice. The meaning of the qualitative case study and 'lessons learned' from the investigation outcomes will be highlighted as the ultimate goal of the doctoral research.

4.7.2. Quantitative data analysis

A basic task of quantitative data analysis is to give a full picture of the observation sample. In this research the descriptive statistics, created by Stata software, include the number of observations of each variable, as well as values in terms of mean, standard deviation, and range from minimum to maximum. Then, in a second step, in study III, correlation between variables, potential bias and reliability of the data are addressed. This is important because these issues could cause errors and even substantially change the econometric results. Next, the negative binomial regression model of statistical testing is applied to examine the three study hypotheses. As well as testing the key hypotheses, this study runs categorized regression to ensure robustness and to compare results among different sample sizes, and when controlling for different groups of

variables.

Two tables of results will be created as intuition research outcomes, which will directly show the significance and coefficients between explained variables (patents and trademarks from the foreign targets) and explanatory variables (local SOE dummy, and other control variables). Comparison of the results in the two tables will allow us to distinguish Chinese local SOEs' preferences among different options of foreign strategic assets. Then, further examination and interpretation of these statistical results will lead us to discover whether or not, and to what extent, the results point to positive or negative answers to our research hypotheses.

4.7.3. Aggression and integration: a triangulation strategy

Given the 'quantitative to qualitative' procedure and 'empirical to reasoning' logic of this research, as well as its adoption of multiple sources of data, it is necessary and our ultimate target to aggregate and integrate different versions of the obtained research outcomes to pursue tacit and persuaded results. This research will follow a triangulation logic, a model designed for researchers who adopt several different methods in the 'attempt to confirm, cross-validate, or corroborate findings within a single study', in order to address 'well-validated and substantial findings' (Greene et al., 1989; Steckler et al., 1992; Morgan, 1998; Creswell, 2003). The triangulation method has also been utilized by IB researches as an alternative approach to strengthen knowledge creation among different pathways (Marschan-Piekkari & Welch, 2004; Ghauri, P., 2004). In practice, the triangulation approach is implemented as a circular process that integrates

multi sources of data, related to different cases, coded concepts and emerged themes, then aggregates both the quantitative and qualitative phases of findings.

Specifically, first of all, where data are collected from diverse sources and through different approaches, a triangulation framework is helpful to cross-confirm its reliability. For example, data obtained from interviews will always be subject to the problem of bias, and if the information can be substantiated by approved documentary evidence, it will be considered more reliable. Secondly, at the intermediate level, the triangulation process is an ideal way to link different emerged concepts and themes, and to discover relationships and build up coherent justification between them; it also provides inspiration to view different cases cross horizontal and vertical. Finally, at the top level between the quantitative and qualitative parts of the study, the systematic triangulation technique is helpful to offset subjectivity and bias of each individual qualitative and quantitative approach, in order to give a more valid, generalized and complete picture of the research findings (Jonsen & Jehn, 2009).

Chapter 5: Study I – The impact of local state ownership on Chinese local SOEs' strategic asset seeking oriented OFDI: A quantitative empirical study

This Chapter presents an empirical quantitative study, as the first explorative step of this research, to uncover the relationship between local state ownership and foreign strategic asset seeking (SAS) by Chinese 'local' SOEs. As noted in the introduction, anecdotally there appears to be a high prevalence of local owned SOEs undertaking aggressive asset seeking deals. Can we, in a more formal approach, isolate a stronger SAS orientation in local SOEs? We focus on our Chinese multinational enterprises (CMNE) sample with OFDI transactions, and theorize them according to their ownership type around two dimensions: (1) local vs central, and (2) state-owned vs. privately owned. For examining SAS perspectives, we categorize the SAS variables as patents and trademarks that owned by foreign targets for examination and further comparison.

Using 1124 deals of firm-level cross-sectional OFDI data from provincial level parents and their foreign targets, we test whether and how 'local' state ownership marks out Chinese local SOEs as an aggressive and active type of Chinese strategic asset seeker. Our major finding is that Chinese local SOEs can indeed be identified as among the most aggressive SAS seekers among CMNEs. These findings contribute to the current CMNE literature by showing that local state ownership has a stronger positive effect than other types of Chinese MNE ownership for pursuing SAS oriented OFDI. Moreover, I find that patents from foreign targets are more attractive than trademarks for Chinese local SOE investors, which could indicate their long-term oriented business strategy for OFDI. We contribute to the literature on SAS and firm-level catch-up by further showing that not all strategic assets have the same properties. It cannot be

assumed CMNEs seek both patents and brands to the same degree, as a great deal of the SAS literature currently assumes.

5.1. Introduction

Chinese local state-owned enterprises (local SOEs), which are regionally based and owned by local governments, now play an important role in Chinese outward FDI including strategic assets seeking (SAS) oriented outward FDI (Chen, 2013; MOFCOM, 2014). The acquisition of foreign subsidiaries by local SOEs offers a potential way to gain advanced knowledge, innovative capacities, and reputable brands in order to offset their domestic competitive disadvantage (Choudhury & Khanna, 2014; Khanna & Palepu, 2000; Khanna & Rivkin, 2001; Khanna & Yafeh, 2007; Lisa A Keister, n.d.; Yiu, 2011). In this situation, local SOEs are becoming a significant force in Chinese foreign M&A. However, with a few notable exceptions, there has been very little research focused on what significant features distinguish local SOEs in aggressive SAS oriented foreign acquisition compared with central SOEs and POEs (Boisot and Meyer, 2008; Li et al., 2014; Li and Xu, 2015; Wang et al., 2012).

Owing to China's great regional and institutional heterogeneity, there exist various forms of firm organization and ownership styles. It seems likely that different types of ownership, for example state ownership and local ownership, shape Chinese firms' OFDI motivations. With regard to foreign target firms, intangible strategic assets, such as patents and trademarks, are particularly potentially attractive to CMNEs. However, to date there has been very little empirical research that distinguish diversity and

dynamic nature of CMNEs and try to examine the relationship between local state ownership drivers and foreign strategic asset attractors.

Previous literatures have provided evidence that Chinese firms 'link' to advanced foreign technology by acquiring overseas firms, whereby the processes of 'learning' and 'leverage' (Mathews, 2006) lead to knowledge absorption and higher rates of innovation (Deng & Yang, 2015; Wu & Voss, 2015). However, previous research assumes 'China' as a single unified whole, whose firms share a set of similar characteristics (Luo et al., 2010; Meyer et al., 2014; Pan et al., 2014). This ignores the true diversity and rapidly changing strategies adopted by different types of firms in China. The present paper provides evidence that local SOEs represent an emerging economic power in outward FDI, with special behaviours, where interaction between local state ownership and foreign strategic assets plays a significant role. Our work takes into account the diversified nature of CMNEs with regard to strategic asset seeking, in order to provide empirical evaluation of the extension to international business (IB) theory provided by our previous case studies.

Through quantitative regression analysis of cross-section data of 1124 OFDI deals, this research will shed light on whether and how the coefficient between local state ownership of investors, and strategic assets possessed by foreign targets, is significant. And also compare whether and how patents and trademarks matters for CMNEs' OFDI motivations as different. Through quantitative studies, this chapter substantiates and expands on our understanding of heterogeneity (Fan, 1995) in Chinese firms' FDI within a technology-intensive global industry. The researcher access and collect data

from the ORBIS and Thomson ONE databases, which provide detailed firm-level information of both parents and foreign targets, and M&A deals data of both sides for the last 10 years, was used to developed a unique data-set. Given the nature of counted dependent variables and the use of dummy variables, negative binomial regression is an appropriate fitted model for the analysis.

By running a negative binomial regression model with robustness checks, the finding of this empirical research are consistent with some previous case studies, and provide insights that confirm a significant and positive linkage between local state ownership and SAS, especially with patents. Owing to the dual nature of local ownership and state ownership, Chinese local SOEs have arguably become among the most aggressive CMNEs for SAS related OFDI, with strong motivation to seek foreign patents and trademarks. Extending Buckley's CMNEs' OFDI determination theory, and taking into account institutional based and resource based perspectives, this empirical quantitative research highlights in particular the nature of local state ownership and strategic asset seeking as crucial driving and attracting factors from home and host sides respectively: (1) Chinese local SOEs, owing to their local state-owned nature, are the CMNEs most aggressive and active in adopting strategic asset seeking oriented OFDI. Foreign acquisition allows them to acquire advanced patents and reputable brands to gain firm specific advantages (FSA) in order to 'catch up'. (2) Joint effects between the 'local' and 'state' dimensions are stronger and more stable than single or separate influences as drivers of SAS oriented OFDI, which supports our initial findings of the significance of local state ownership. (3) Patents possessed by foreign targets are more

significant than trademarks to attract Chinese local state-owned investors. This is because influence exerted from non-location bound intelligence and technical assets would be more durable and effective than location bounded brands in the Chinese market. This finding also indicates that Chinese local SOEs prefer a long-term oriented business strategy.

5.2. Hypothesis development

Recent IB research has attempted to expand theories for explaining EMNEs' OFDI behaviours in terms of 'catching up', 'springboard', 'knowledge leverage' and 'institutional arbitrage' (Cuervo-Cazurra, 2012; Yadong Luo & Tung, 2007; Mathews, 2006; Morck et al., 2008; Rui & Yip, 2008), which are the key motivations driving EMNEs' OFDI in order to acquire critical resources to add FSA and thus ease institutional disadvantages and market pressures, and be more competitive in the domestic market (Gaur, et al., 2014; Lien & Filatotchev, 2015; Peng, et al., 2008). Critical resources, or strategic assets, are key targets pursued by EMNEs, which allow firms to get assets 'know-how, technologies, brands, equipment, buildings and sites' in order to create or extend FSA for competition (Anderson, et al., 2015; Eden, 2005; Rui & Yip, 2008).

However, as argued by previous chapters, previous literatures do not consider the heterogeneous nature of the emerging market generally, and China in particular. Moreover, existing literature does not provide a clear and categorized definition of strategic assets that attract CMNEs' OFDI. Hence, in this research the key questions

are: Would different types of ownership, such as local ownership or state ownership, all have the same effect on promoting CMNEs' OFDI to pursue strategic assets? Would CMNEs with different ownership and background have similar preference and appetite for targeting different types of strategic assets (e.g. patents and trademarks)?

In this section, I will begin by describing the heterogeneous nature of China, looking in particular at the importance of ownership in both the horizontal (state vs. private ownership) and vertical (local vs. central ownership) dimensions, and its effect on CMNEs' OFDI. Then, by reviewing IB theories on determinants of CMNEs' motivation for acquisition, and defining different categories of strategic assets from overseas as OFDI targets, I will formulate hypotheses and attempt to fill the research gap to explain how local and state ownership impact on CMNEs' strategic asset seeking oriented OFDI.

5.2.1. Evolution of heterogeneity in modern China

As pointed out by Li and Xu (2015, p. 7), 'In the 1980s and 1990s China undertook significant enterprise reforms. The overall tendency was to decentralize the oversight of SOEs, to grant SOEs more autonomy in production, investment and financing.' In addition, many central SOEs were downgraded to provincial or even city SOEs (Ding, 2007; Zhang, 2006). Following the 1994 fiscal reform, local governments acquired more autonomy and rights. Local SOEs now have to pay revenues to both central and local government, and local government can retain these revenues and local taxes as its own (Jackson & Deeg, 2008; Khanna & Palepu, 2000; Li & Xu, 2015). Moreover, as

direct owner, the delegated local government has an important claim upon the SOEs' assets returns (Li & Xu, 2015). As a result, local SOEs play an important, even vital, role as local governments' policy tools and profit makers. However, decentralization has also had some adverse consequences. Fiscal decentralization, together with distorted price systems and duplicated industrial structures, led to rent-seeking behaviour by local governments, resulting in serious local protectionism and fragmentation of the domestic market (Zhang, 2012).

According to Boisot and Meyer (2008, p. 353), 'Decentralization has led to a feudalization of China's industrial structure and an economic fragmentation of the national economic space.' More specifically, as SOEs are downgraded and placed under the control of local government, the provincial authorities seek to use those SOEs to achieve their local economic targets, hence they protect their owned firms and set obstacles to entrants from other places. The consequence is a fragmented domestic market, resulting in very high transaction cost of cross-province business, thus exacerbating regional inequality yet further. However, so far the Chinese central government has taken only limited action to resolve such economic fragmentation and distortion.

5.2.2. Ownership diversity of CMNEs

As part of the economic transformation that began in the 1980s, China's planned economy state-owned monopoly situation has changed, and new ownership styles have emerged as rising powers in Chinese outward business activities (Cui & Jiang, 2012;

Huang, et al., 2017). On the one hand, vertical decentralization led to local governments receiving more management and decision making authority from the central government. Local SOEs have emerged as leading forces of foreign investment, used by local governments to revitalize regional development (Li, et al., 2014; Meyer, Mudambi, & Narula, 2011; Xu, 2006). On the other hand, with regard to horizontal changes, private ownership and foreign investors have been encouraged by the Chinese government in order to activate local economies. Meanwhile, different ownership backgrounds shape the specific positions of firms with regard to Chinese economic and political institutions, which in turn determine their domestic market priority and access to local complementary resources, as well as policy inclination and financial support from government. For those CMNEs that seek strategic assets through implementing foreign acquisition, differences in ownership type shape their various motivations and pathways of overseas investment.

Ownership has been identified as a key criterion for research on the taxonomy and typology of EMNEs' internationalization behaviours. Among the studies that have taken ownership into consideration when identifying different OFDI behaviours, Li et al. (2014) note that different categories of ownership exhibit distinct motivation, strategic resources and adaptive capabilities for penetrating foreign markets. The authors indicate some specific OFDI actions, such as foreign subsidiary establishment, ownership modes, and overseas location preferences, and the differences in behaviour between central and local SOEs in implementing these. Such heterogeneity of SOEs is an outcome of multiple institutional reform processes, including decentralization,

market restructuring, and market liberalization (Aulakh and Kotabe, 2008; Dacin et al., 2002; Li et al., 2014). Li et al.'s (2014) empirical results show that central SOEs play a role as 'national champions' and are subject to stronger institutional pressures from home and host countries, while local SOEs have more autonomy, and fewer government obligations. Li et al. (2014) contribute to the IB theories by comparing the FDI behaviour of SOEs owned by different levels of government. However, current research is still not able to answer whether and how Chinese local SOEs have become the central driver of Chinese strategic asset seeking oriented OFDI.

Local SOEs are more market orientated, rather than operating as policy tools, and therefore have less central government support (Li et al., 2014; C. Wang et al., 2012). Unlike central SOEs, local SOEs are no longer obligated to fulfil government mandates. Hence they have access to fewer institutional resources and government bank loans, and are thus less able to operate competitively within the domestic market. Moreover, in an improved domestic institutional environment, central SOEs are becoming more active in engaging in domestic competition (Huang et al., 2017) and are able to make rapid progress in occupying the domestic market. Although local SOEs benefit from advantages in manufacturing competence and market experience, their lower status in the domestic market makes it difficult for them to access projects that have a strong government background, or to compete on price. Therefore, local SOEs are more eager to merge with advanced firms from overseas in order to add FSA in domestic competition.

One the other hand, when state-owned firms invest overseas, especially to those countries that are advanced in terms of technology and institutions, they not only situate in unfamiliar competitive markets, but must also conform to a different regulatory environment (Li et al., 2014; Meyer et al., 2014; Wang et al., 2012). As advanced countries' legitimation systems are facilitated by strict rule of law, as well as strong protection of domestic technology and shareholders, SOEs from emerging markets normally use greenfield entry modes and gain small proportions of acquisition ownership (Brouthers, 2002; Meyer et al., 2014). Hence, in the post-OFDI period, Chinese SOEs face obstacles in terms of access to resources and market integration performance. The decentralization of state-capitalism in China led to a diverse situation in which the newly emerged local SOEs are characterized by more managerial autonomy, less institutional support, less monopoly power, and greater market orientation (Li et al., 2014). They have greater self-responsibility, which provides an incentive to prioritize profitability and the reduction of risk when setting their business strategy.

Given the heterogeneous nature of the Chinese economy, Chinese local SOEs are highlighted as having specific characteristics as to the extent, motivations and pathways of their SAS oriented OFDI. As shown from our previous case study results, the selected coding concept 'decentralized local state ownership' reveals a more serious 'reform dilemma' for local SOEs than for central SOEs and POEs; consequently, local SOEs are more likely than firms with other ownership types to adopt a foreign acquisition strategy, which will allow them greater access to the patents and reputable

trademarks possessed by developed country foreign firms. Therefore, we formulate our first hypothesis as follows:

Hypothesis 1: Local state owned CMNEs have a stronger SAS OFDI than other types of CMNEs.

Chen (2013) indicates that from 2010, there was a rapid increase in OFDI by provincial firms, and by 2012, their share in China's total OFDI flows had increased to 34 percent. Although some SOEs have been downgraded to local firms, they are still owned by the government and operate accordingly. Limited government commitment and ideological intervention can contribute to earning trust from host countries' governments, and facilitate legitimation in the host country. Technology intensive and reputable firms need approval from their native governments to co-operate with foreign firms. A lower level of government influence will shorten the 'psychic distance' between home and host country firms, and make it more likely for home country local SOEs to gain host country government approval when they invest overseas. In contrast, central SOEs would face more institutional and ideological restraints. Thus, we find that decentralized 'local owned' is more important than 'state owned' in promoting OFDI, as set out in Hypothesis 2 below.

Hypothesis 2: 'Local ownership' effects more than 'state ownership' to the local state owned CMNEs in impacting on SAS motivation and OFDI pursuing.

5.2.3. Categorizing strategic assets: ‘location based’ trademarks and ‘non-location based’ patents

In addition to impact on location choice, moreover, the SAS orientation would also affect the choice of entry mode and post-acquisition parent-subsidiaries relationships. Thus, it is obvious that SAS is a strong motivation behind CMNEs’ decision to implement OFDI in order to exploit pre-existing FSA in new markets (Anderson et al., 2015; Sutherland, 2009; Cuervo-Cazurra, 2012; Ramamurti, 2012). Moreover, integration of strategic assets is also identified as a crucial criterion to evaluate CMNEs’ post-acquisition performance. However, to date, ‘strategic asset’ is only generally defined in IB studies, while different types of strategic intangible assets exert very different effects on CMNEs’ OFDI strategy and behaviours. For example, patents, which are ‘non-location bounded’, are more transferable than ‘location bounded’ trademarks.

It is clear that EMNEs are actively acquiring foreign strategic assets, and this is seen as one of the major motivations of their OFDI behaviours. A further question relates to the fact that there exists heterogeneity among different types of strategic assets, and such heterogeneity can be used to distinguish further between EMNEs and DMNEs in terms of their pursuit of foreign investment. Rugman and Verbeke (2001), as well as Verbeke and Kano (1991) introduced the concepts of location based (LB) and non-location based (NLB) FSA. They imply that location based FSA would be ‘more easily diffused within the MNE than others, which remained “sticky” and bound to certain

locations' (Sutherland & Anderson, Forthcoming), while on the other hand, non-location bounded FSA need not necessarily originate from the parent company, but 'may also be created by a subsidiary or by joint efforts of the firm's different operations located abroad' (Verbeke & Rugman, 2017).

In line with the NLB/LB contribution of categorizing strategic assets, given that NLB assets are more easily transferable with lower marginal cost than are LB assets, through cross-border multinational business groups' globalization activities (Chari, 2013; Yiu, 2011), discussion has arisen as to whether and how different degrees of cross-border transferability impact on DMNEs' and EMNEs' OFDI preference and decision making. For Chinese local SOEs, many of which are already reputable in the domestic market, patents offer more and better FSAs and improve domestic competitiveness. Trademarks, of course, may represent the brand equity of a company. However, many, if not most, foreign brands are not know about in China. This would suggest they have only limited value in the domestic Chinese market. There is a line of thought which argues that CMNEs undertake SAS primarily for repatriation of assets to the home market, where they can be exploited (Hennart, 2012). For example, NHI Group has looked to develop the technologies acquired overseas back in China, where there is very fast growing domestic market. In this regards, local SOEs are often interested in acquiring production technologies, and not brands. Therefore, the following hypothesis is proposed:

Hypothesis 3: Non-location based patents from foreign markets are more attractive than location based foreign trademarks for Chinese local SOEs as foreign OFDI SAS targets.

5.3. Quantitative empirical research methods

Previous international business research has identified differences between CMNEs and developed MNEs (DMNEs) in terms of SAS oriented foreign acquisitions (Sutherland & Anderson, forthcoming), whereby CMNEs are considered to be the most aggressive emerging market MNE asset seekers for foreign M&A. Moreover, within the diverse and dynamic Chinese economy, Chinese local SOEs, motivated by the desire to 'catch-up' by gaining FSA and easing their institutional disadvantage, are more aggressive than central SOEs in their foreign acquisition behaviour. In this research we aim to identify the unique features of CMNEs' OFDI that are shaped specifically by local state ownership as distinct from central state ownership and private ownership, in terms of motivation and activities for implementing SAS oriented OFDI. To do so we adopt a negative binomial model to shed light on the relationships between local state ownership of CMNEs and strategic assets owned by foreign target firms. We regress a sample of 1124 Chinese international OFDI deals between 2006 and 2016, including all industries and all types of ultimate ownership.

5.3.1. Negative binomial regression model

The negative binomial model is a more appropriate functional form of model that relaxes the Poisson restriction of over-dispersion. This alternative counted model assumes the existence of a degree of non-observable heterogeneity (Cameron & Trivedi, 2007), which distribution is followed by Gamma function (Ramasamy et al., 2012). With regard to the latent heterogeneity in the conditional mean value (Gourieroux et al.,

2017), the Poisson model, according to Greene (2008), could be re-written as:

$$\mathrm{E}[y_i|x_i, \varepsilon_i] = \exp(\alpha + x_i'\beta + \varepsilon_i) = h_i\lambda_i,$$

$$\mathrm{E}[y_i|x_i] = \lambda_i,$$

$$Var[y_i|x_i] = \lambda_i\left[1 + \left(\frac{1}{\theta}\right)\lambda_i\right] = \lambda_i[1 + k\lambda_i],$$

Where $k = Var[h_i]$, and $h_i = \exp(\varepsilon_i)$ is followed by one parameter gamma distribution, then the mean value of $\mathrm{G}(\theta, \theta)$ is 1 and variance $\frac{1}{\theta} = k$. Hence, on the one hand, when $\theta \to 0$, the $\mathrm{Var}(y_i)$ value is inflated so that over-dispersion is addressed; while on the other hand, when $\theta \to \infty$, where the value of observation is significantly different from zero, the $\mathrm{Var}(y_i) \to \lambda_i$ returns to the original form of Poisson model. Therefore, when taking into account the issue of over-dispersion, the negative binomial model provides an appropriate extension to the Poisson model for this research.

5.3.2. Building up the econometric equation

The purpose of our regression model for the first research section is to discover the potential differences in SAS-oriented OFDI motivations between Chinese local SOEs and other CMNEs with different ownership backgrounds. To do this, we design an econometric equation between strategic assets and investor firms' specific ownership (FSO) and advantages (FSA) and try to discover relationships between them, as shown as follows:

$$F[SAS_t] = f(FSO_i, FSA_i),$$

Where SAS_t represents strategic assets owned by targeted foreign firms, then FSO_i and FSA_i represent the Chinese investor's ownership nature and firm specific

advantages respectively. As discussed above, overseas strategic assets, as represented by counted number of patents and trademarks possessed by the foreign target firms, are set as the explained variable for the negative binomial regression model. In order to examine hypotheses 1 and 2, we set local state ownership dummy variables as explanatory variables, and also run the unpacked 'local' and 'SOE' dimensions separately, to discover their coefficient relationships with foreign patents and trademarks. For hypothesis 3, we regress patents and trademarks as two different models to shed light regarding Chinese local SOEs' SAS preferences and choices for pursuing OFDI.

5.3.3. Model specification

The design strategy of our regression model is to identify how local state ownership makes Chinese local SOEs unique among CMNEs in their pursuit of SAS (patents and trademarks) oriented OFDI. We employ the counted negative binomial regression model for the analysis, and take as the dependent variables number of patents and trademarks of foreign targets. We run 18 regressions in total with 4 basic econometric models, observing 3 different groups of observations to both patents and trademarks dependent variables.

Models 1 to 4 are formulated as the basic standard group of models for testing the role of local state ownership in SAS oriented OFDI. Specifically, model 1 is intended to figure out the significance of and coefficient between the local state ownership dummy of the Chinese parent firms and patents possessed by the target firms, in order

to discover why Chinese local SOEs are highlighted as the most aggressive CMNEs for chasing SAS oriented OFDI.

Model 1: $\text{Patents}_T/\text{Trademarks}_T =$

$f(\alpha_1 Local\ state\ ownership\ dummy_A, \beta_1 Patents_A, \beta_2 Trademarks_A, \beta_3 Size_A, \beta_4 Emplyees_A,$

$\beta_5 Subsidiaries_A, \beta_6 Age_A, \beta_7 Industrial\ dummy_A, \beta_8 Year\ dummy_A);$

We then unpack local state ownership into 'local' and 'state' dimensions in model 2 and model 3 respectively, in order to examine their respective effectiveness.

Model 2: $\text{Patents}_T/\text{Trademarks}_T =$

$f(\alpha_1 Local\ ownership\ dummy_A, \beta_1 Patents_A, \beta_2 Trademarks_A, \beta_3 Size_A, \beta_4 Emplyees_A,$

$\beta_5 Subsidiaries_A, \beta_6 Age_A, \beta_7 Industrial\ dummy_A, \beta_8 Year\ dummy_A);$

Model 3: $\text{Patents}_T/\text{Trademarks}_T =$

$f(\alpha_1 State\ ownership\ dummy_A, \beta_1 Patents_A, \beta_2 Trademarks_A, \beta_3 Size_A, \beta_4 Emplyees_A,$

$\beta_5 Subsidiaries_A, \beta_6 Age_A, \beta_7 Industrial\ dummy_A, \beta_8 Year\ dummy_A);$

Within model 4, the dummies of both dimensions are regressed together, in order to explore their interactive effects.

Model 4: $\text{Patents}_T/\text{Trademarks}_T =$

$f(\alpha_1 Local\ ownership\ dummy_A, \alpha_2 State\ ownership\ dummy_A, \beta_1 Patents_A, \beta_2 Trademarks_A,$

$\beta_3 Size_A, \beta_4 Emplyees_A, \beta_5 Subsidiaries_A, \beta_6 Age_A, \beta_7 Industrial\ dummy_A, \beta_8 Year\ dummy_A);$

Similarly, models 9 to 12 are based on the same logic as models 1 to 4, but with respect to the trademarks variable. Further, in order to check the robustness of results, models 5 to 8 and models 13 to 16 observe samples of different size (number), and also control for different independent variables.

5.3.4. Data and sample

We concentrate first on M&A deals rather than Greenfield OFDI, as this mode is usually highlighted as a key pathway for Chinese SOEs to acquire strategic assets from overseas firms. Then, we expand our observation to all 1124 deals of CMNEs with foreign subsidiaries, in order to screen the linkage between local state ownership and foreign strategic assets.

First, we match firm-level data of both parent and foreign subsidiary sides, collected from Orbis (Bureau Van Dijk), and M&A deals selected from the Thomson ONE database, in each case using as a filter the location of acquirer and acquired firm. Orbis provides firm-level financial information data of over 140 million companies worldwide, while Thomson ONE allows us to figure out 8288 M&A deals of transactions between Chinese investors and foreign targets. With regard to search strategy, we set China as the ultimate owners' location, that is, where the parent firms originate, whereas target firms are selected by world regions excluding China in both datasets.

Table 5. 3 Distributions of the sample OFDI deals.

OFDI target	No. of deals	OFDI target	No. of deals	OFDI target	No. of deals
Hong Kong	331	New Zealand	6	Antigua and Barbuda	1
United States	139	Romania	6	Argentina	1
Germany	108	Israel	5	Barbados	1
Australia	53	Poland	5	Bangladesh	1
Singapore	52	Thailand	5	Bulgaria	1
Netherland	50	Taiwan	5	Congo	1
United Kingdom	35	Vietnam	5	Colombia	1
Virgin Island	29	United Arab Emirates	4	Algeria	1
Italy	28	Czech	4	Ecuador	1
Cayman Islands	27	Finland	4	Ethiopia	1
Canada	20	Ghana	4	Lithuania	1
France	12	Luxembourg	4	Latvia	1
Spain	11	Indonesia	3	Madagascar	1
Ireland	11	Kenya	3	Marshall Islands	1
India	11	Kazakhstan	3	Panama	1
Korea	11	Mongolia	3	Peru	1
Malaysia	11	Philippines	3	Pakistan	1
Japan	10	Turkey	3	Seychelles	1
Belgium	9	Austria	2	Sweden	1
Brazil	9	Egypt	2	Tajikistan	1
Russia	9	Fiji	2	Tanzania	1
Chile	7	Hungry	2	Ukraine	1
Denmark	7	Lao	2	Uzbekistan	1
Macao	7	Mauritius	2	Samoa	1
Bermuda	6	Mexico	2		
Switzerland	6	Nigeria	2		

Table 5. 4 Description of variables and data sources.

Varibales	Measurement	Data sources & references
Dependent variables		
TARpatents	Count number of patents in the overseas target firms	Orbis database
TARtrademarks	Count number of trademarks in the overseas target firms	Orbis database
Independent variables		
LocalSOEdummy	Dummy variables where the ultimate owner of the investors is Chinese local state owned enterprises = 1, and 0 or not.	Orbis database; Thomson one database; Firms' website
Localdummy	Dummy variables where the ultimate owner of the investors is Chinese local owned enterprises = 1, and 0 or not.	Orbis database; Thomson one database; Firms' website
SOEdummy	Dummy variables where the ultimate owner of the investors is Chinese state owned enterprises = 1, and 0 or not.	Orbis database; Thomson one database; Firms' website
Control variables		
ACpatents	Count number of patents that possessed by Chinese parent firms.	Orbis database
ACtrademarks	Count number of trademarks that possessed by Chinese parent firms.	Orbis database
Operate revenue	Operate revenue value of Chinese investors' profitability.	Orbis database
Size	Count number of global incorporate firms.	Orbis database
Subsidiaries	Count number of global owned subsidiaries.	Orbis database
Employees	Count number of world-wide employees.	Orbis database
Age	Count number of years since Chinese parent firms' incorporation to 2016.	Orbis database
Hightech	Dummy variable where manufacturing industrial firms are quoted by NACE 2 digit codes as: 21 and 26 = 1, and 0 if not.	Orbis database; NACE code from the Eurostat
Mediumtech	Dummy variable where manufacturing industrial firms are quoted by NACE 2 digit codes as: 19; 20; 22; 23; 24; 25; 27; 28; 29; 30; and 33 = 1, and 1 if not.	Orbis database; NACE code from the Eurostat
Lowtech	Dummy variable where manufacturing industrial firms are quoted by NACE 2 digit codes as: 10; 11; 12; 13; 14; 15; 16; 17; 18; 31; 32 = 1, and 2 if not.	Orbis database; NACE code from the Eurostat
Industrial dummy	Dummy variables are accounted ranging from high tech manufacture industries to low tech service industries.	Orbis database; Thomson one database; Firms' website; NACE code from the Eurostat
Year dummy	Dummy variables are accounted since 2006 to 2016	Orbis database; Thomson one database; Firms' website

We define Chinese firms' ownership of ultimate decision making rights as holding more than 50.01% shares of foreign ownership, because a higher share of ultimate ownership is beneficial to maximize and accelerate the leveraging of assets from acquired subsidiaries. The initial search yielded a total of 30,002 OFDI deals. After pooling deals with the same Chinese parents together as one, our research observation data was finalized as 1124 pairs of samples between Chinese parent and foreign target subsidiary, which as shown in Table 5.1. These 1124 CMNE OFDI deals cover 80 countries; their distributions and characteristics are shown in Table 5.1 as well. We further grouped the total observed M&A deals according to their ownership nature through setting a dummy, local state ownership, and its two dimensions of local ownership and state ownership are adopted as the main variables to be explored in our research.

5.3.3. Dependent variables

Our dependent variables, strategic assets acquired from target foreign firms for enriching FSA, are categorized into patents and trademarks of foreign subsidiaries in order to test their respective effectiveness to attract CMNEs of different ownership backgrounds that are pursuing foreign acquisition. Compared with cumulative self-expansion, M&A is a more effective way for CMNEs to access and gain resources rapidly.

According to the resource based view, strategic assets can be defined as 'resources and capabilities that bestow the firm's competitive advantages', which include

knowledge, reputation, R&D capacities, proprietary techniques, and brand name. Those intangible assets have been argued as having different impacts on MNEs' FSA in terms of internal and external driving forces for OFDI. However, to date there is very little literature that attempts to identify clearly and empirically the different types of strategic assets. According to their different cross-border transformative features and effectiveness to the manufacturing products, patents and trademarks are considered as distinct characteristics needed by investors considering OFDI. Therefore, the counted numbers of patents and trademarks from foreign target firms are fixed as our major dependent variables for investigation.

5.3.4. Variables

5.3.4.1. Main explanatory variables

We set 3 dummy variables as our key target explanation variables, in order to discover their roles in patent and trademark seeking oriented OFDI, namely local state ownership and its unpacked dimensions of 'local' and 'state' ownership. First, we set the local state ownership dummy (local state ownership = 1 / other ownership = 0) to highlight its role in distinguishing Chinese local SOEs as the most aggressive strategic assets seekers through OFDI. Secondly, for the 'local' and 'state' dimensions, we code the 'local' ownership dummy (local ownership = 1/ non-local ownership = 0) and 'state' ownership dummy (state ownership firms = 1 and private ownership firms = 0). Thirdly, as well as running the 'local' and 'state' terms individually, we also regress them together to discover the effectiveness of interaction.

5.3.4.2. Control variables

Other variables that would be likely to drive and influence CMNEs' foreign OFDI are controlled by our negative binomial regression. For the parent firms, first of all, size and performance of the corporate group, which take into account incorporated companies, number of employees and operating revenues, which provide fundamental resources and guarantees to drive CMNEs' pursuit of OFDI, together comprise a highly relevant control variable. Secondly, age of firms' incorporation and number of running subsidiaries indicate firms' experience of operating a multi-background organization and potential to coordinate a wider overseas asset base. Thirdly, the existence of intangible assets, such as patents and trademarks owned by the Chinese parent firms, could show their accumulated technical and brand capacity, which would be a basis for their capturing and handover of strategic assets from overseas through foreign acquisition. We count the number of patents and trademarks owned by parent firms as our empirical observations.

In addition, under a more macro view of industrial level, parent firms' industrial position would affect their foreign acquisition orientations and strategic assets preferences. In terms of seeking strategic patent assets, firms that are located in high tech and medium tech industries will be more aggressive than those in lower tech industries. Moreover, manufacturing firms would be more likely to transfer obtained patents into re-production than would service industry firms. We categorize firms into six groups according to their technical level and manufacturing/service natures,

specifically into groups of high, medium and low tech manufacturing industry, and high, medium and low tech service industry. Furthermore, given the rapidly changing nature of Chinese economic development, our statistical analysis also adopts a year dummy control variable. Table 5.2 lists all variables, with detailed descriptions on measurement, definition and sources.

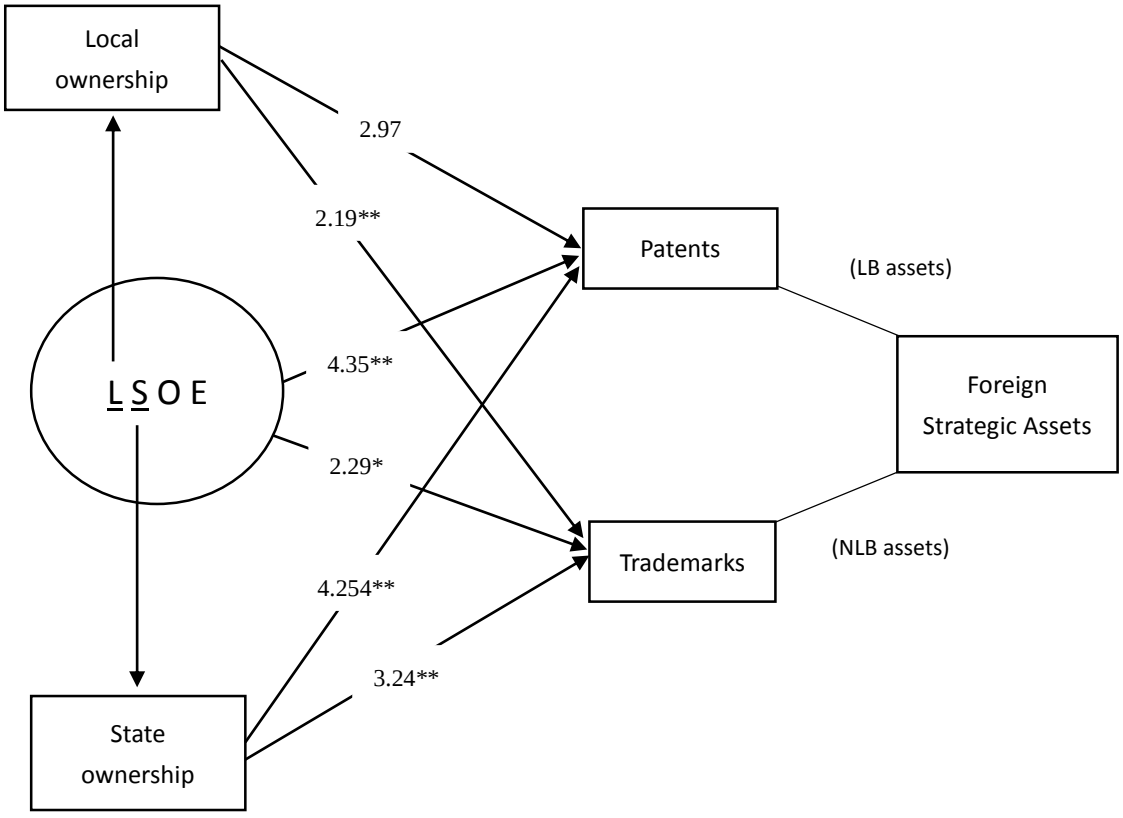
5.4. Empirical results

Tables 5.3 and 5.4 provide statistical description and correlation matrix of all observed variables. We first scan through means, standard deviation, and minimum and maximum value of each variable in order to understand the distribution situation of all observations. The total number of observations is 1124, but owing to missing information of some variables, models 1, 2, 8 & 9, which include all independent variables, have fewer observations. Therefore, to ensure robustness, it is necessary to run multiple regressions with different models with imbalanced control variables.

The descriptive statistical outcome shows that there is a negative profit value of Chinese parent firms, which might indicate that firms in financial deficit would still take action in OFDI. The first impression from this is that external support, such as local government or policy banks, would offer effective assistance. From the correlations matrix, we diagnose that there is no serious multi-collinearity among the main exploration variables, while there exist higher correlations between size variables (e.g. number of corporate firms, employees, and subsidiaries), industrial dummies, and year dummy variables. This research adopts appropriate alternative treatment by

running different regression models in order to control potential multi-collinearity issues.

Figure 5. 1 Emerging model of the empirical quantitative study



The results of negative binomial regression are reported in Tables 5.5, and 5.6, which show whether and how local state ownership of CMNEs impacts on patents and trademarks seeking oriented OFDI. Columns 1 and 2 of Table 5.5 report the results for the main models of motivated patents seeking M&A, whereas the results reported in Columns 9 and 10 in Table 5.6 reflect the determinants of local state ownership in trademarks seeking driven OFDI. The first two columns of both Tables 5.5 and 5.6 include all the control variables, but shrink their number of observations to 692, which serve as the base model. Other columns attempt to show robustness by controlling

variables through running different models with different sizes of sample. Highlighted regression outcomes are reported and discussed in the following paragraphs.

This empirical study emerge a conceptual model as shown as Figure 5.1, which maps our key logic and arguments of the quantitative research outcomes in three aspects: (1) Local state ownership has a stronger positive effect than other types of Chinese MNE ownership for pursuing SAS oriented OFDI. (2) State ownership matters more than local ownership when controlling for the year of the deal, and local ownership is more sensitive to year changes for driving OFDI. (3) Patents from foreign targets are more attractive than trademarks to Chinese local SOE investors, which could indicate their long-term oriented business strategy for OFDI.

5.4.1. Local state ownership: the most significant driving force

In general, our empirical results strongly confirm Hypothesis 1, that local state ownership of CMNEs is positively related to their strategic asset seeking oriented OFDI. Specifically, binomial negative regression results from models 1 and 2 and models 9 and 10, with all variables included but a smaller observation sample, confirm the strong effects of state ownership on seeking patents and trademarks respectively through acquiring foreign firms to gain FSA. Columns 2 & 10 report the results for the interaction effects of the unpacked dimensions, namely local dummy and SOE dummy, on determining SAS OFDI preference. Both dimensions show significantly positive coefficients.

As discussed with regard to our previous case studies, the economic reform and decentralization that began in the 1990s led to a gradual decline in the institutional

position of Chinese local SOEs and weakened their competitive abilities in the domestic market, hence those local SOEs prefer to absorb competitive capacity rapidly from foreign externals rather than to develop slowly by internal self-accumulation.

In addition to the SAS motivation for catching up, their state-owned nature allows them to acquire foreign enterprises with policy priority and financial support from their local governments. These empirical outcomes prove our findings from the case studies and offer the potential to upgrade emerging understanding to the status of generalized theories.

Our robustness tests conducted through running models 3 to 8 and models 11 to 16 use alternative sample numbers and control different independent variables for econometric regression. The robust results prove the stability of our initial finds from the main models, while also highlighting the year and industrial dummy as significant influential factors.

Firms in the medium and high tech manufacturing industries are more active in OFDI driven by SAS perspectives than are those in low tech manufacturing industries and service industries. Furthermore, medium tech manufacturing firms are the most aggressive economic bodies for pursuing outward acquisition, which indicates that local SOEs, where we find the highest concentration of medium tech manufacturers, are the central drivers of Chinese foreign M&A.

Table 5. 5 Descriptive statistics of variables samples.

Variable	Obs	Mean	Std. Dev.	Min	Max
Dependent variables					
tarpatents	1,124	9.22	115.17	0	3322
tartrademarks	1,124	2.38	22.82	0	651
Independent variables					
localsoedummy	1,124	0.09	0.28	0	1
localdummy	1,124	0.93	0.24	0	1
soedummy	1,124	0.15	0.36	0	1
Control variables					
acpatents	1,124	245.63	2093.81	0	48296
actrademarks	1,124	2.04	16.34	0	509
operating revenue	939	1527129	4117512	-127.30	5.95E+07
size	1,123	36.38	363.79	0	12053
employees	869	7015.12	16654.91	5	300000
subsidiaries	1,124	33.86	70.43	0	1299
age	822	18.63	7.10	3	119
hightm	1,124	0.14	0.35	0	1
mediumtm	1,124	0.34	0.47	0	1
lowtm	1,124	0.11	0.31	0	1

Notes: (1) Robust standard errors in parentheses; (2) Significance levels: * p < 0.1., ** p < 0.05., *** p < 0.01.

Table 5. 6 Correlation matrix of variables.

	tarpat~s	tartra~s	locals~y	locald~y	soedummy	acpate~s	actrad~s	operat~e	size	employ~s	subsid~s	age	hightm	mediumtm	lowtm
tarpatents	1														
tartradema~s	0.06	1													
localsoedu~y	0.11	0.01	1												
localdummy	0.02	0.01	0.08	1											
soedummy	0.07	0.00	0.73	-0.61	1										
acpatents	0.01	-0.00	-0.00	0.02	-0.02	1									
actrademarks	0.00	-0.01	-0.01	0.02	-0.02	0.83	1								
operating_~e	-0.00	0.07	-0.03	0.05	-0.06	0.14	0.04	1							
size	-0.00	0.00	-0.01	0.01	-0.01	0.00	-0.00	0.03	1						
employees	-0.01	0.04	-0.04	0.04	-0.06	0.06	0.02	0.49	0.74	1					
subsidiaries	-0.02	0.04	0.02	-0.03	0.03	0.07	0.02	0.47	0.06	0.27	1				
age	-0.01	0.04	0.08	-0.03	0.08	0.01	-0.01	0.17	0.04	0.13	0.15	1			
hightm	0.02	-0.00	-0.03	0.07	-0.07	-0.03	-0.01	0.09	-0.01	0.04	0.10	-0.02	1		
mediumtm	0.08	-0.03	0.07	0.06	0.02	0.05	0.04	-0.04	-0.03	-0.01	-0.02	0.02	-0.28	1	
lowtm	-0.04	-0.02	-0.10	0.09	-0.14	0.04	0.00	0.09	0.11	0.08	0.04	0.01	-0.14	-0.24	1

Notes: (1) Robust standard errors in parentheses; (2) Significance levels: * p < 0.1., ** p < 0.05., *** p < 0.01.

Table 5. 7 Negative binomial regression tests for the counts of patents seeking.

Models	Model-1	Model-2	Model-3	Model-4	Model-5	Model-6	Model-7	Model-8
Sample	M&A	M&A	OFDI	OFDI	OFDI	OFDI	Full	Full
Dependent variables	TARpatents	TARpatents	TARpatents	TARpatents	TARpatents	TARpatents	TARpatents	TARpatents
Independent variables								
LocalSOEdummy	4.352**(1.622)		2.806***(.680)				1.665**(.534)	
Localdummy		2.974(2.393)		4.073***(.965)	1.848**(.776)			2.442**(.897)
SOEdummy		4.254**(1.537)		2.687***(.677)		2.155**(.669)		1.576**(.528)
Control variables								
ACpatents	-.000(.001)	-.000(.001)	-.000(.000)	-.000(.000)	.001(.001)	-.000(.000)	.000(.000)	.000(.000)
ACtrademarks	-.165(.201)	-.177(.192)	-.002(.021)	-.004(.021)	-.057(.057)	-.007(.025)	-.061(.078)	-.061(.078)
Operate revenues	-1.39e-07(2.60e)	-1.61e-07 (2.40e)	2.38e-07**(1.09e)	2.37e-07**(1.10e)	7.91e-08(1.016e)	2.05e-07**(1.03e)		
Size	-.016(.060)	.120(.056)	.000(.001)	.000(.001)	-.000(.010)	.000(.001)		
Subsidiaries	-.011(.048)	-.004(.044)	.000(.007)	.000(.007)	.002(.012)	.001(.007)		
Employees	.000(.000)	-5.43e-06 (.000)	-.000(.000)	-.000(.000)	-.000(.000)	-.000(.000)		
Age	-.140(.099)	-.184*(.000)	-.126(.036)	-.124**(.036)	-.010(.044)	-.104**(.035)		
Hightech	1.078(1.483)	4.569**(2.024)	1.465**(.664)	1.460**(.660)	1.135*(.629)	1.251**(.589)	.126(.936)	.345(.907)
Mediumtech	3.071**(.946)	6.202***(1.448)	2.249***(.652)	2.284***(.645)	1.591**(.558)	1.931***(.524)	-.277(.928)	-.256(.915)
Lowtech	-1.963(1.778)	1.164(1.978)	-1.570**(.728)	-1.586**(.726)	-.28***(.591)	-1.966**(.577)	-3.25**(1.109)	-3.263**(1.104)
Industrial dummy	Included	Included	Included	Included	Included	Included	Included	Included
Year Dummy	Included	Included	Non-included	Non-included	Non-included	Non-included	Non-included	Non-included
No. of observation	328	328	722	722	722	722	1124	1124
Pseudo R2	0.093	0.114	0.033	0.034	0.019	0.023	0.011	0.012
Log pseudolikelihood	-254.610	-248.728	-617.165	-616.449	-626.109	-623.328	-945.163	-944.811

Notes: (1) Robust standard errors in parentheses; (2) Significance levels: * p < 0.1., ** p < 0.05., *** p < 0.01.

Table 5. 8 Negative binomial regression tests for the counts of trademarks seeking.

Models	Model-9	Model-10	Model-11	Model-12	Model-13	Model-14	Model-15	Model-16
Sample	M&A	M&A	OFDI	OFDI	OFDI	OFDI	Full	Full
Dependent variables	TARtrademarks	TARtrademarks	TARtrademarks	TARtrademarks	TARtrademarks	TARtrademarks	TARtrademarks	TARtrademarks
Independent variables								
LocalSOEdummy	2.29*(1.37)		1.178**(.491)				1.042**(.401)	
Localdummy		3.238**(1.181)		1.733**(.771)	.440(.797)			1.361**(.611)
SOEdummy		2.199**(.684)		1.143**(.496)		.278(.571)		1.018**(.407)
Control variables								
ACpatents	.00**(.00)	.001**(.000)	.001**(.000)	.001**(.000)	.001**(.000)	.001**(.000)	.000**(.000)	
ACtrademarks	-.15(.17)	-.147(.096)	-.229***(.056)	-.224***(.055)	-.271**(.000)	-.271***(.066)	-.189***(.041)	.000**(.000)
Operate revenues	-1.03e-07 (2.10e)	-1.19e-07 (1.08e)	-9.24e-08(1.06e)	-8.46e-08(1.03e)	-5.00e-08(1.33e)	-5.93e-08(1.39e)		
Size	.046(.023)	.033(.027)	-.003***(.001)	-.003***(.001)	-.001(.001)	-.001*(.001)		
Subsidiaries	-.042(.053)	-.033(.020)	-.003(.005)	-.003(.004)	.001(.008)	.002(.009)		
Employees	.000(.000)	.000(.000)	.000**(.000)	.000**(.000)	.000(.000)	.000(.000)		
Age	-.063(.100)	-.062(.061)	-.038(.031)	-.038(.031)	.023(.029)	.017(.031)		
Hightech	6.077**(1.913)	6.024***(.989)	1.998**(.732)	1.985**(.727)	-.314(.743)	-.295(.712)	-.307(.577)	-.302(.565)
Mediumtech	5.120**(1.798)	4.997***(.827)	1.762**(.590)	1.788**(.585)	-.547(.640)	-.576(-.585)	-.907*(.510)	-.918*(.508)
Lowtech	6.957**(2.204)	6.668***(1.132)	1.232(.728)	1.22*(.725)	-1.426*(.750)	-1.360*(.766)	-1.389**(.476)	-1.414**(.619)
Industrial dummy	Included	Included	Included	Included	Included	Included	Included	Included
Year Dummy	Included	Included	Non-included	Non-included	Non-included	Non-included	Non-included	Non-included
No. of observation	328	328	722	722	722	722	1124	1124
Pseudo R2	0.096	0.096	0.034	0.034	0.015	0.016	0.012	0.012
Log pseudolikelihood	-251.214	-251.040	-587.208	-586.989	-598.123	-598.133	-927.010	-926.887

Notes: (1) Robust standard errors in parentheses; (2) Significance levels: * p < 0.1., ** p < 0.05., *** p < 0.01.

Moreover, we find a significant linkage between ownership of intangible assets by parent firms and assets from targeted foreign markets. Owing to the accumulated capacity gained by possessing patents and trademarks, intangible property provides the necessary basis and experience for seeking potential strategic assets.

5.4.1. The stronger internal driving dimension: local-ownership or state-ownership?

We unpack our initial exploration variable, local state ownership, into two dimensions: local ownership and state ownership. This is in order to test the impact of each on CMNEs' strategic asset seeking orientation. Not only do we run the two dimensions' dummy variables, the local and the SOE, separately, but we also regress both together to screen how the effects of these two unpacked dimensions interact with each other. An interesting and important finding is that to be a state-owned CMNE is more significant than to be in local ownership for pursuing foreign intangible assets seeking OFDI.

Empirical regression results support our Hypothesis 2 in general, while more specifically, for different models with various control variables, there exist small differences in the results. When the year dummy is left out, local ownership is shown as more significant and with a higher coefficient to influence SAS oriented OFDI positively than state ownership. In contrast, when we control for year dummy, local ownership is shown as less relevant than state ownership. This is the case for both patents and trademarks models, while patents seeking OFDI behaviour is shown as more sensitive to year changes. Therefore, it is clear that local dummy is impacted by year with regard to its effect as a driver of strategic asset seeking foreign acquisition. Moreover, if we run the local dummy and SOE together in a model, we can see that the interacting variables appear more significant and relevant than when regressing them separately.

5.4.2. Which external assets are more attractive: patents or trademarks?

A comparison of the results of the two tables with different dependent variables indicates that local SOEs' preference in strategic assets seeking varies according to different types of the targeted intangible assets. Chinese local SOEs are more eager to pursue patents than trademarks, as reflected both by the high significant coefficient in the empirical results and the larger number of patents in the descriptive statistics. Local state ownership is always positively related to both patents and trademarks of target foreign firms, but the interaction with patents shows a higher level of statistical significance of the coefficient than does that with trademarks.

Hence Hypothesis 3 is partially supported, since on the one hand patents are shown to be the major targets, while on the other hand, trademarks are discovered to be less attractive for foreign investment by Chinese local SOEs. These statistical results not only show Chinese local SOEs' preference among different types of foreign strategic assets, but also imply their long-term business orientation in OFDI strategy.

5.5. Concluding remarks

This empirical study seeks to discover whether and how local state ownership influences Chinese local SOEs' SAS OFDI behaviours, and to bring new insights to IB theories. By adopting a negative binomial model and regressing firm-level cross-sectional OFDI data of Chinese parents and foreign targets, we highlight that local state ownership has driven Chinese local SOEs to become the most aggressive and active seekers of strategic assets from overseas. We also illustrate that the 'state' and 'local' dimensions of local state ownership matter in different ways and to different degrees in driving OFDI. Moreover, patents are more significant strategic assets than trademarks for Chinese investors, which could also reflect their long-term oriented business strategy for OFDI.

Drawing on the theories regarding SAS OFDI of CMNEs, this chapter is the first empirical

study to recognize and explore the heterogeneity of CMNEs with different ownership backgrounds. We examined whether and how local state ownership positively affects Chinese local SOEs' foreign acquisition with strategic asset seeking orientation. The findings indicate how the Chinese domestic institutional and market environment shapes the OFDI behaviours of decentralized local SOEs into a unique 'catching up' style. We also show the preference of Chinese local SOEs for seeking a particular type of foreign intangible assets, namely patents, reflecting a long-term business orientation of OFDI. These findings provide implications for theory, which will be discussed in the following paragraphs.

Chapter 6: Study II – Determinants of Chinese local State Owned Enterprises foreign direct investment: decentralized state ownership, institution, and strategic assets

In previous Chapter 5, study I has deductively examine that local state ownership is positively significant to Chinese LSOEs to be as most aggressive foreign acquisition pursuer with strong SAS motivation of the Chinese OFDI. The quantitative empirical research also provide proper examination to prove previous strategic asset seeking and Buckley's theories. It brings specification and diversity to enrich EMNE concepts for explaining more specific IB phenomenon on the rising LSOEs in China. Furthermore, in order to shed more lights on our understanding to the empirical results, qualitative case studies, with based on 'reasoning' perspective, is designed as following up research after the empirical study I.

Through case studies of the Chinese NHI group and its domestic peer companies' foreign acquisition activities from 2007 to 2016, the study II of this chapter discover the cause reasons of the explorative empirical study results via case study approach and improve our understanding to be more in-depth and in-detail. Firstly, decentralized local state ownership shapes Chinese LSOEs' organization structures, internal resources, as well as external relationships, which determine their strong SAS motivation in order to be domestic success. Local state ownership also accelerate LSOEs' OFDI progression in terms of making strategy and taking action. Secondly, comparative institutional advantages of today's China allow Chinese SOEs to guarantee sufficient capital for acquired foreign subsidiaries, which attracts foreign firms from developed countries to seek Chinese buyers. Thirdly, compared with central SOEs, sub-national SOEs' outward foreign direct investment behaviours, in terms of OFDI motivation, location choice, and entry mode, are more likely determined and influenced by their strategic asset seeking orientation.

6.1. Introduction

In the Chapter 5, empirical study, the first stage of this PhD research, acknowledge us that CMNEs with different ownership backgrounds appears as different OFDI strategy and different

preference of foreign strategic assets types. Previous literatures also mentioned heterogeneity of CMNEs, which is an outcome of multiple institutional reform processes, including decentralization, market restructuring, and market liberalization (Aulakh and Kotabe, 2008; Dacin et al., 2002; Li et al., 2014), could be a potential reasons of causing the discovered different OFDI behaviours among CMNEs. On the one hand, in terms of government, Chinese reform trajectories have been shaped by regional decentralization (Xu, 2006), whereby central government has delegated more autonomous power and provided incentives to local governments (Jin, et al., 2005; Z. Wang, 2014; X. Zhang, 2006). Regional governments now have more rights with regard to the use of natural resources, firm governance and fiscal arrangements. On the other hand, for firm level perspectives, in contrast to central SOEs play a role as 'national champions' and are subject to stronger institutional pressures from home and host countries, local SOEs have more autonomy, and fewer government obligations for their business activities.

Earlier EMNE literatures generally indicates them as latecomers from emerging markets, which were suffered from underdeveloped domestic institutions, and weak of firm specific advantage in running internationalized business (Cuervo-Cazurra & Rui, 2016; Peng, et al., 2008; Khanna & Palepu, 1997, 2010). Furthermore, for these CMNEs' OFDI behaviours, Buckley et al. (2007) nest three special explanations into general IB theories as key determining factors, with considering Chinese specific political economy, which are in terms of capital market imperfections, ownership advantages, and institution factors. However, as a result of decentralization and ownership reforms (including some privatization), in line with ongoing economic and political reform, the SOE category of businesses has become more diversified and complex. Decentralized LSOEs, which are regionally grounded and owned or influenced by local governments, have matured considerably. As relevant weak competitiveness in domestic market, LSOEs OFDI strategy and actions would be more strongly motivated by SAS

orientations in order to obtain FSA and remedy disadvantages from foreign advanced counterparts and to catching up with DMNEs (Matthews, 2006; Luo & Tung, 2007). It calls for digging into LSOEs cases in order to receive further details and more evidences.

In 2012, share in China's total OFDI flows of the LSOEs was around 34 percent (Chen, 2013) and by 2014 this number is reported to have increased to about 50 percent (MOFCOM, 2014). Yet these sub-national MNEs have also contributed greatly to Chinese regional development and regional government, as well as experiencing unusual and non-incremental internationalization processes that are worthy of consideration. It has been empirically approved by study I that local state ownership's positive relevant to foreign acquirer's patents and trademarks, which imply their stronger SAS orientation. While there is no discussions and answers contributed to discover cause reasons of these highlighted phenomenon, which enhancing the necessary of further researches by accessing actual cases in reaching more in-depth and comprehensive understanding and discovering cause reasons.

Moreover, the extent of diversity is much more complicated than between central and local. Even at the same government level, differences in geographical location, population, economic development level, state assets weight, and government policy impact on firms' behaviours. Therefore, there is a need for accessing more backgrounds in different ways to know why and how these heterogeneity aspects impact on OFDI actions by CMNE with different background. Given that local SOEs play the roles of 'profit maker' and 'policy tool' of regional provincial government, while they are not 'national champions', they might nevertheless be 'provincial champions', a different but no less important role. Certainly, such regional government impact would much different with the role of the central government. However, there is currently a lack of literature focusing specifically on this. In this chapter, I investigate into cases from North-eastern provinces of China, where there are large swathes of formerly centrally controlled industry that been devolved to the local level – presenting these provinces with

particular challenges in dealing with the legacy of central planning. It is a Chinese MNE from China's Liaoning province that is the focus of this study, the Northern Heavy Industry (NHI) Group. This topic is of both theoretical and practical importance. That is, as well as contributing to the IB literature, it takes account of the fact that local provincial MNEs' strongest SAS perspectives, and are becoming ever larger contributors to Chinese OFDI.

By digging into practical OFDI cases by Chinese LSOEs, this chapter adopting qualitative study, on the one hand, would provide more vivid insights and evidence to support 'LLL' theory, 'Springboard' perspectives, and also bring specific cases to extend and diversify Buckley's determination theory of CMNE's OFDI. On the other hand, as a following study of the empirical research, the case study would shed more lights on identifying motivations and backgrounds of Chinese LSOEs' OFDI. This study is organized as follows. By sections 6.2, the theoretical framework will be discussed, followed by introducing research methodology and describing three different cases on NHI's and other Chinese local SOEs' foreign acquisition by the 6.3. Then in section 6.4, three themes on Chinese LSOEs' OFDI determination will emerge as research findings of this chapter, with followed by discussing contributions to the theory and implication to practice. Finally in 6.5, a brief concluding remarks will be presented.

6.2. Theoretical framework

In early studies, main stream of literatures theorizing CMNEs' OFDI from 'strategic asset seeking' perspectives. As these 'latecomers' determined by domestic ownership and institution (Buckley et al., 2007), with weak in FSA, they have to invest overseas to 'catching up' and to strengthen competitiveness in domestic market (Matthews, 2006). Previous study I of this thesis, with considering feature of ownership heterogeneity, start to brings more diversified insights to understanding CMNEs' internationalization, it has highlighted the local state ownership as significant positive related to patents and trademarks that possessed by foreign

targeted enterprises, which indicates LSOEs are as more aggressive than central SOEs and other private owned firms for implementing SAS oriented foreign acquisition. The different types of ownership exhibit distinct motivation, strategic resources and adaptive capabilities for penetrating foreign markets, which calls for further discussions to find more stories and to enrich IB theories. For this purpose, this chapter research is proposed to go details on specific OFDI strategies and actions, such as foreign subsidiary establishment, ownership modes, and overseas location preferences, to answer these questions. Thus, the theoretical framework of this study, are constructed by three literature areas, which are (1) determination of CMNEs' OFDI that is shaped by imperfect market, state ownership and institution of China, (2) strategic asset seeking perspective that is centred by EMNE theories, and (3) key OFDI pathways in terms of location choice and entry modes.

6.2.1. Determination of CMNEs' OFDI: institution and state ownership

6.2.1.1. Theories on CMNEs' OFDI determination

Buckley et al. (2007) first introduced the determinants of Chinese OFDI, and extended the IB theory with considering China's specific political economy. They highlight capital market imperfections, ownership advantages and institutional factors as determinants of Chinese OFDI, which requires theory nested within the general IB theory. Buckley et al. (2012) also state that CMNEs, especially SOEs, benefit from special ownership advantages, receiving financial support from government through export tax rebates, foreign exchange assistance and direct financial support for implementing the 'going global' or 'zou chu qu (走出去)' directive. One target of government financial support is to offset capital market imperfections and latecomer disadvantages, which 'may be transformed into ownership advantages' (Buckley et al., 2007, p. 501) by emerging economy firms. Following Buckley et al. (2007), some researchers have started to explain various types of CMNEs' OFDI behaviour in terms of their ownership

backgrounds. Ramasamy et al. (2012) show the importance of state ownership, which allows CMNEs to receive support from government. More specifically, central SOEs that are controlled by the State-owned Asset Supervision and Administration Commission (SASAC) receive the greatest benefits from government in terms of policy priority and financial support (Chen et al., 2009); however, their business activities are also restrained by government orientations.

Research also shows that SOEs that are financially supported by the state engage in more SAS than private firms (Hennart, 2012; Huang et al., 2016). Hennart (2012) indicates that CMNEs have preferential domestic market positions, and use such monopoly power to finance intangible asset seeking investment in developed countries. Huang et al. (2016) argue the dark side of state ownership, whereby there exists a negative relationship between the percentages of state owned shares and CMNEs' OFDI. However, although decentralization and the diversification of state capitalism has led to the lower level local state-owned enterprises being weak in terms of monopoly control and receiving lower policy priority, these conditions have not hindered their becoming the central force of Chinese OFDI.

6.2.1.2. Chinese institutions: to 'escape' or to 'attract'?

Cross-border issues have been mentioned above as boundaries that set restricted gateways for controlling communications and transfer of resources, such as LB and NLB strategic assets, between different sovereign countries or non-sovereign regions. In IB theory, cross-border restriction shapes a variety of distinct features of institutions among different countries, in terms of 'regulative, normative, and cognitive structures' (Wu & Chen, 2014), which cause and drive foreign investment motivation and implementation between home and host country MNEs (Scott, 1995; North, 1990). From an institutional based perspective there are two common motivations that drive EMNEs' OFDI action, namely 'institutional escape' and

'institutional arbitrage'.

Crucial to these concerns is the level of institutional development. Underdeveloped institutions such as 'lack of legal protection for property rights, poor enforcement of commercial laws, non-transparent judicial and litigation systems, underdeveloped factors markets, and inefficient market intermediaries (Luo & Tung, 2007, p. 486)' all increase transaction and market costs and severely erode the competitiveness of the firms. Lower institutional development pushes emerging market firms to 'escape' from the domestic market environment and invest in better developed foreign markets to seek 'institutional arbitrage', a significant element motivating EMNEs to engage in OFDI (Peng, 2003; North, 1990; Wu & Chen, 2014; Park & Luo, 2001; Chen & Wu, 2011). The level of institutional stability is also vitally important to both EMNEs and DMNEs (Williams et al., 2017; Globerman, & Shapiro, 2003). Lower institutional stability could be reflected by rapid institutional change within a country in a particular time period. The faster the institutional change, the higher the level of uncertainty and instability of the domestic market, which causes higher risk and raises transaction costs of business activities. Foreign expansion would be an escape response to domestic institutional instability (Witt & Lewin, 2007), where firms are forced to go abroad to seek more opportunities and security for investment (Henisz & Swaminathan, 2008).

Over the past three decades, China has experienced rapid and extensive change and diversification; in an institutional environment that has experienced such fast transition, it is difficult to screen Chinese local SOEs' OFDI behaviours according to static and narrow views, and to do so would lead inevitably to biased results. For example, with regard to government intervention, conventional theories assert that more developed institutional environments are normally characterized by a more efficient and self-adjusting market, less government intervention and reduced transaction cost (Peng, 2003; Gao et al., 2009), while more recent theory argues that government intervention acts 'as a double-edged sword, … , to promote

outward foreign direct investment, offset competitive disadvantages of EMNEs and stimulate them to expand into the global market' (Wu & Chen, 2014; Luo et al., 2010). Further exploration of Chinese diverse and dynamic institutions will be beneficial to extend IB theories to explain the new phenomenon of Chinese local SOEs as rising multinational powers.

6.2.2. Seeking strategic assets for obtaining FSA and OFDI pathway choices

Strategic assets have been highlighted as a central target of EMNEs' outward investment. This is because EMNEs are normally considered not to own advanced firm specific advantage (e.g. leading edge technology, or reputable brand) and relevant weak in competitive advantage, hence they would undertake OFDI for linking, leveraging, and learning knowledge from foreign targets, and absorb this knowledge as FSA for improved competitiveness.(Anderson et al., 2015b; Sutherland, 2009). Moreover, some EMNEs are confirmed as being more aggressive and more willing than DMNEs to bear higher risk when seeking strategic assets, as EMNEs are more driven by their relative lack of strategic assets compared to DMNEs and thus keen to 'offset weakness' and 'catch up' (Rui & Yip, 2008).

Strategic assets are also frequently mentioned as significant in various aspects of outward foreign investment, as are the roles of home and host governments in promoting their firms' OFDI and protecting domestic strategic assets. For example, host country strategic assets are also transacted with local complementary resources from home country as negation matters (Hennart, 2012). They are an important concern when considering location choice and entry mode, as psychic distance and ownership type would determine how accessible the strategic assets would be, and how easily they could be transferred in the post-OFDI period. Moreover, local protection of strategic assets by the host country government also impacts on the legitimacy of investors in the host country, and emerging economy host governments would promote their firms' SAS oriented OFDI by providing support (Meyer et al., 2014; Wang et al.,

2012). With regard to absorptive capacity, ability to learn from foreign rivals would determine how efficiently EMNEs could transfer knowledge from foreign targets (Child & Rodrigues, 2005).

Thus, according to the SAS perspective as mentioned, firms would favour locations with rich assets regardless of the psychic distance from the home country. Moreover, the SAS orientation would also affect the choice of entry mode; in particular, M&A in the host country would help firms to acquire strategic assets. Table 2 lists the exist researches that indicate the SAS orientation of CMNEs and their location choices for targeting OFDI (Sutherland, forthcoming).

6.2.1.4. Location choices and targeting to rich strategic assets

The motivation of OFDI is always highly relevant to the location choice strategy of the CMNEs. Conventional theories, such as Dunning's eclectic paradigm, assert that seeking markets, reducing human resources costs, and pursuing natural resources are the major motivations of DMNEs; hence, their OFDI always targets locations in developing countries. EMNEs, in line with their aggressive strategic asset seeking perspectives and risk-taking orientations, would choose 'leapfrog' modes (Wang et al., 2014) of investing in developed countries to add FSA (Child & Rodrigues, 2005; Yiu et al., 2007; Luo & Tung, 2007). In addition, some EMNEs, especially CMNEs, given that they are obliged to their home country government and take benefits from their ownership advantage, would target locations with natural resources and potential for enhancing political networks (Mathews, 2006; Cui & Jiang, 2008).

In fact, given the diverse nature of the Chinese economy (e.g. keeping public ownership as the mainstay of the economy and allowing diverse forms of ownership to develop side by side), different OFDI motivation causes different location choices among firms with different backgrounds. Ownership is a major factor for reflecting diversity. For example, state ownership

is always positively related to destinations that can supply rich natural resources, and SOEs can bear more risk in investment. This is because SOEs have obligations to the home government, and must carry out their business activities in line with state policy, while at the same time they can benefit from government support. Firms under private ownership, on the other hand, are more market seeking and more risk averse (Ramasamy et al., 2012). The greater market orientation and managerial autonomy, and fewer home institutional pressures and government obligations, mean that investors with a lower level of state involvement or fewer shares in state ownership would be more flexible in their choice of investment locations and pathways (Li, et al., 2014).

In addition to location choice, previous studies have indicated that home country institutions and investors' ownership mode also impact on OFDI entry mode choices and foreign establishment types.

6.2.1.5. Entry mode strategies: for maximizing foreign strategic assets seeking

Conventional studies argue that institutional and cultural contexts and transaction costs jointly determine MNEs' selection of entry mode for OFDI implementation (Brouthers, 2002). Institutional and cultural context can 'undermine property rights and increase risks in exchange… and tend to influence managerial cost and uncertainty evaluation in target markets' (Brouthers, 2002: p. 204), and hence have an impact on transaction cost in OFDI. Thus, transaction cost would be considered a significant concern with regard to the choice between a wholly owned or joint venture mode entry strategy, or between Greenfield investment and M&A (Brouthers, et al., 2003; Anderson & Gatignon, 1986). However, the conventional transaction cost based entry model theories cannot provide appropriate or sufficient explanation for the distinct aggressive and high-risk OFDI behaviours of EMNEs (Brouthers, 2012), and more specifically for the purposes of this research, Chinese local SOEs.

Updated EMNE theories, as set out in the following paragraphs, argue that because they

are driven by 'springboard' perspectives and motivations of 'catching up' to add FSA to enhance competitive capacity, EMNEs would pursue OFDI with a strategic asset seeking orientation. Therefore, in order to maximize possibility of access and transfer performance to the targeted foreign assets, investors' mode of entry to the host country market becomes a crucial concern. Anderson and Sutherland (2015) provide insights on this issue by investigating Chinese OFDI in the United States, and find that EMNEs prefer to use acquisition as establishment mode rather than Greenfield investment, in order to access more strategic assets. Moreover, greater psychic distance, such as institutional and cultural conflicts between host and home, as well as protective orientation of the host government, would influence investors' decision making on the choice of entry mode. This will be explained in detail in section *3.3.3.2*.

6.3. Methodology: qualitative case study research

6.3.1. From core case to more follow-up cases

In order to explain phenomena and to build up conceptual and theoretical frameworks, it is crucial to select appropriate cases. A suitable case will cover essential characteristics of the research topic in a representative and detailed way (Yin, 1994) and will provide valuable insights to answer the research questions. This research explores the new business phenomenon whereby, since the early 2000s, many Chinese local firms have grown to become significant global players. Following five criteria have been considered for selecting the appropriate industry and firms as my research case sample.

Firstly, the selected TBM industry should be globally competitive, dynamic and asymmetric. It is also undergoing rapid changes and restructuring, given the over-development of advanced countries and the rapid urbanization of China. Since 2007, there have been at least five foreign acquisition deals undertaken by Chinese TBM firms, which provide good samples to research this phenomenon. Secondly, in order to reflect dynamic nature of Chinese economy

and compare OFDI behaviour changes of the same firm, the selected case company should have different M&A deals in different periods. The targeted case company, the NHI group, has pursuing two deals of acquisition with French NFM in 2007 and American's Robbins by 2016 respectively. Thirdly, the acquirers in the selected case companies should have also different ownership backgrounds for comparison. As outlined in previous sections, the TBM industry does provide firms with different types of ownership. Finally, in order to realize the research project the researcher should have access to observe firms and interview people within the industry. This researcher has been allowed such access by the key case companies, thus making it possible to conduct interviews, collect resources and do field observation on site.

6.3.2. Core case 1: Outward foreign M&A for survival - NHI acquiring French NFM in 2007

With the increasing demand for basic infrastructure and urban underground construction projects in China, NHI's management discovered the great potential of their emerging domestic TBM market. However, previously Chinese construction projects had been dependent on imported TBM equipment, as Chinese firms lacked TBM manufacturing experience. For example, in 2005 Germany's Herrenknecht AG supplied over 75 percent of Chinese TBM equipment, while no Chinese native TBM manufacturers were able to provide the right kind of machinery. In a situation where Chinese construction teams had to pay very high prices to buy such imported TBM equipment, domestic manufacturing firms was encouraged to catch up with foreign firms and finally to take over the supply of relevant products. However, as noted above, in common with other Chinese native industrial firms in the early 2000s the NHI Group faced restructuring difficulties; moreover, it had no previous experience in making high-tech TBM equipment. Therefore, the company sought government loans in order to buy technical know-how from foreign advanced firms, and thus grow in strength.

NFM (Neyrpic Framatome Mécanique) Technology was founded in France in 1988, following the merger of the Creusot Loire mechanical engineering division of Framatome with

the Neyrpic nuclear and mechanical engineering division (Grenoble) (Nfm-technologies.com, 2016). The company's most successful period was during the 1990s, with operations concentrated on nuclear engineering as a part of the Framatome Company, predecessor of the Areva Group, France's largest state owned nuclear company. In the early 1990s NFM extended its business to tunnelling machines, and manufactured equipment for the British Channel Tunnel project. It obtained the Mitsubishi Heavy Industries license for soft ground TBM technology, which allowed it to become a TBM manufacturer with the most advanced soft ground techniques. Needless to say, supplying TBM equipment for the British channel tunnel was a boon for NFM.

However, as Europe's TBM equipment market was shrinking due to decreased demand (post channel tunnel construction), Framatome decided to re-centre its business activity to the nuclear market and streamline its organization. In the late 1990s NFM was among the branches sold off as irrelevant to the nuclear field, and the company entered its most difficult period. Acquired by Germany's Wirth Group it received limited support from the German government, but both NFM and Wirth experienced losses owing to a severe lack of business orders from the European market. As indicated by the NFM sales director interviewed for this research: 'Only one unit of TBM was being produced each year, and such small profits were not enough for a high-tech company to survive. (NFM sales director, November 2016)' In order to survive, NFM had to change their business strategy accordingly. The company considered two ways forward, namely receiving more business orders from the global market, and finding an acquirer firm to provide sufficient financial capital to support business operations. Hence they transferred their commercial concentration to the Chinese market, as the rapid economic growth of the region, with consequent high demand for tunnelling projects, called for large-scale TBM manufacturing orders. In addition, they sought Chinese SOEs with strong financial power, which could inject sufficient capital into NFM and allow the company access to the Chinese

market. Fortunately, this survival strategy proved a good fit with the catch-up strategy of the Chinese NHI Group.

6.3.3. Core case 2: Domestic competition and NHI acquiring Robbins from the US in 2016

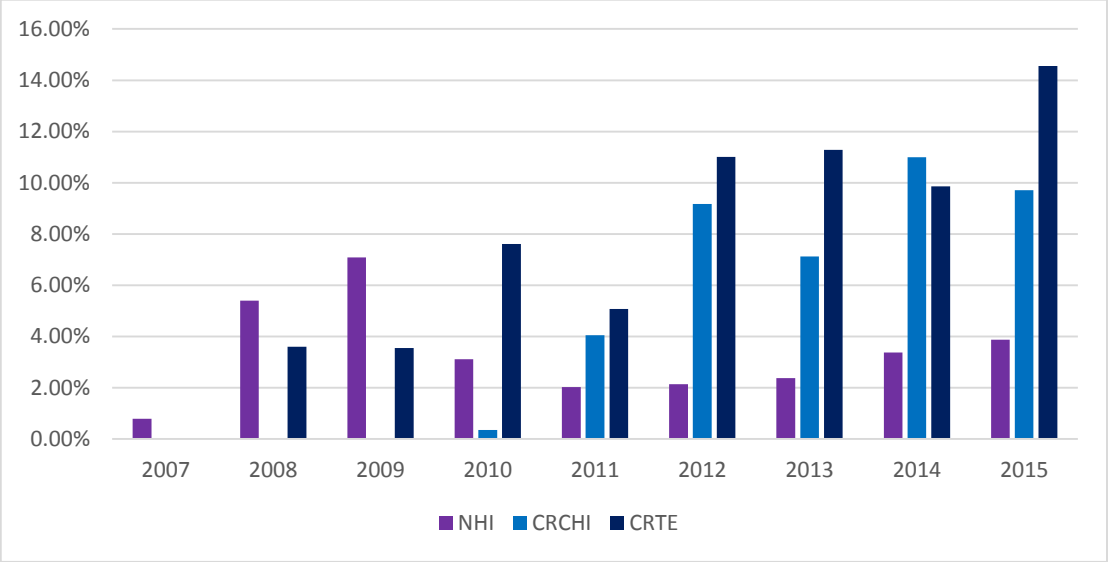
Almost all underground and rail construction projects in China are owned by two main central SOEs, China Railway Group Limited (CRG) and the China Railway Construction Corporation (CRCC) respectively. Both are Global 500 Chinese central state-owned construction business groups supervised by the State-owned Assets Supervision and Administration Commission of the State Council (SASAC). Since 2004, these two firms have embarked upon underground construction projects in 25 cities in China. Following its acquisition of the French firm NFM Technology, the NHI Group became the most advanced native manufacturer of soft ground TBM for underground projects. Revenue increased dramatically, from 17.83 million USD in 2007 to 236.92 million USD in 2009. However, after the two central railway construction SOEs founded their own TBM manufacturer factories, the local SOE, NHI Group, faced a decline in sales performance to only 73.88 million USD. Clearly, while NHI Group was a pioneer in the internationalization race by adopting a first mover strategy, the other central SOEs were in strong position to imitate its strategy.

The Chinese Railway Engineering Equipment Group (CREEG) and Chinese Railway Construction Heavy Industry Co., Ltd (CRCHI) were established in Zhengzhou and Changsha in 2008 and 2007 respectively, as subsidiary firms of CRG and CRCC to produce TBM equipment for their own construction projects (www.21-sun.com, 2016). Although latecomers to TBM equipment manufacturing, owing to their great advantage in the domestic construction market they became the top two Chinese TBM suppliers in terms of sales units of the machines. Within only two years, they occupied almost 90% of Chinese overall domestic TBM supplies.

Since the CRTE (Crectbm.com, 2016) and CRCHI started their business making TBMs in the 2010s, and now occupy 90 percent of domestic TBM equipment supplies, it is very

difficult for other manufacturers to compete with them in the domestic TBM equipment market. As a local SOE, the NHI Group, enjoys privileges only with regard to its local markets in Liaoning province, but faces great difficulties entering other provinces' markets within the domestic area. Compared with its compelling domestic competitors that are affiliated and supervised by central SOEs, the NHI's position in domestic institution and market become as less important, with declined resources accessing and limited government support. Thus, as shown by the Figure 6.1, since 2010, the NHI's sales performance was overtaken and left far behind by the CRCHI and CRTE in 2015.

Figure 6. 1 Global production share of Chinese main TBM manufacturers, 2007-2015.



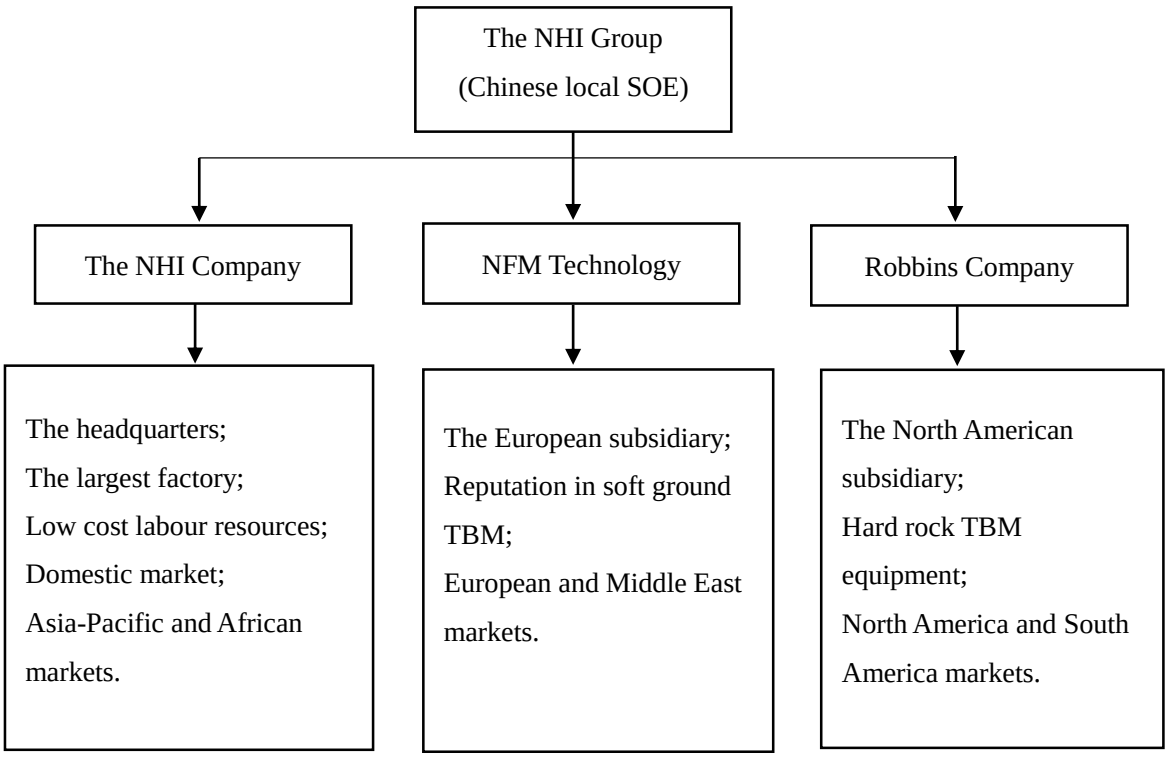
Source: TBM industry report (2016)

Thus, the present case 2, by horizontally comparing the local NHI with its aggressive central SOE competitor, we will try to extend and in-depth our knowledge which has been tested as significant determination variables by our previous empirical study I in the 4th chapter. Roles of ownership heterogeneity and institutional position will be highlighted as shaping various CMNEs' OFDI behaviours, and effect as important consideration of making strategy by Chinese local SOEs.

As rapid raising of CRTE and CRCHI, the domestic market space for the NHI Group is

getting ever smaller. As indicated by the legal manager of NFM Technology, since 2010 almost all business contracts have been signed with *international* clients from outside China, with no orders from Chinese clients. They faced a decline in sales performance from 236.92 million USD in 2009 to only 73.88 million USD. Therefore, as a local SOE, the NHI Group has interestingly had to concentrate its strategy of leapfrog from domestic to the broader global market. For such further leapfrog perspectives, the NHI Group launched its second foreign acquisition deal with the Robbins Company from the United States in the 2016.

Figure 6. 2 The NHI Group's mission on building global TBM value chain.



There are two main reasons back of such further leapfrog action, firstly, for bypassing the domestic market and to become as a global competitor, it is necessary to complete its product series. As its first M&A target NFM is only sophisticated in soft ground TBM, there leaves a blank of hard rock TBM manufacturing for the NHI. Such unbalanced capacity cause its comparative weakly competitive in hard rock-specific market, such as demand in mountain tunnel projects. On the other hand, acquiring Robbins is a key step of landing market of

American continent, which would enable the connection of completing its value chain up to a global perspective.

The Robbins Company, founded in Ohio in the United States in the 1950s, is a world leader in hard rock TBM techniques. Its advanced position and high reputation has helped it to maintain its share in the global market for such TBM equipment (Globaltimes.cn, 2016). However, although advanced in special skills, the fact that it was not 'diversified and completed' restricted further expansion. The demand for hard rock construction projects is much lower than that for soft ground projects, accounting for only 20 percent of the total TBM demand. Moreover, that demand has decreased over the last two decades both in America and globally, with a corresponding reduction in the market space available to the Robbins Company. In terms of global production, the Robbins' market share declined from 8.70% in 2007 to 3.67% in 2012 (Therobbinscompany.com, 2016).

In order to improve business performance and expand market share, the Robbins Company targeted China as their new area of concentration. In order to develop appropriate expansion and diversification strategies, the company applied a number of criteria. First, they sought a Chinese buyer lacking the advanced soft ground TBM technologies offered by Robbins. Product diversification and filling the gap with regard to manufacturing techniques would bring more opportunities from the broader soft ground TBM market. Secondly, the buyer would take them into China, the largest TBM consumption market in the world. Thirdly, the acquirer would provide sufficient financial support for their further expansion. In China, SOEs can receive fiscal loans from the government, which provide sufficient operating capital to support foreign M&A. Finally, the acquirer firm should be multinational and already have experience of running foreign acquired subsidiaries. According to these criteria, the NHI Group, a local SOE in northeast China, proved to be a good match to Robbins' requirements, and thus there was motivation on both sides to merge.

It has taken 10 years since the 1st deal of foreign M&A with French NFM in 2007. NHI's acquisition with Robbins in 2016 provides us an appropriate case to vertically compare its foreign M&A behaviours between different time scales. Within such one decade period from 2007 to 2016, China's rapid economic growth brings diversification to the domestic market and rapid changing to the enterprises, which would re-shape firm's external environment and internal behaviour for pursuing OFDI. Thus, within the case 3, we will try to answer whether the discovered variables of determining Chinese local SOEs' OFDI strategy are sensitive to the 10 year changes, as well as whether there is any new knowledge that brings to us.

6.3.4. Follow-up cases 3: Accessing to various cases of LSOEs' foreign acquisition

The pursuit of foreign acquisition by NHI, a provincial owned SOE, is not an isolated case in China. Over the last two decades, Chinese LSOEs have become aggressive SAS seekers, and have engaged in major foreign merger and acquisition deals, especially in certain industries such as machinery and construction equipment. This section provides an overview of more representative cases of foreign acquisition deals by LSOEs throughout the country, which will be investigated in detail later in order to examine further the findings of the previous single case and to generalize these to a national scope. The following figure maps the distribution of the more follow-up case companies across the Chinese regions.

Even within Liaoning, the same province in the northeast region where the single case company NHI is based, several similar important foreign M&A deals have been completed by machinery firms under provincial or city level government ownership. For example, Shenyang Machine Tools Co., Ltd (SMTCL) and Dalian Machine Tools Group (DLTG) have completed foreign acquisitions that represent important milestones in the development and internationalization of China's machine tool industry, entering into deals with world-leading machine tools manufacturers in Germany and the US in 2002 and 2004 respectively. Before pursuing OFDI, they had encountered transition and decentralization difficulties similar to

those faced by NHI in the 1990s, and were on the verge of bankruptcy. Their acquisitions of advanced firms from foreign developed countries were part of a strategy to survive and succeed in domestic competition during that particular reform period.

There are some important similarities among SMTCL, DLTC and NHI in their foreign acquisition strategy making and implementation. Firstly, in the early stages of their OFDI, they all received strong support and finance from the provincial government and policy banks, such as the China Development Bank and the Export-Import Bank of China. In each case, their state owned status offered advantages in terms of priority access to loans from the government banks, with very low interest rates. Such support allowed the successful implementation of their 'snake swallowing elephant' (蛇吞象)[2] foreign acquisition of advanced country firms.

Such foreign acquisition activities by LSOEs are not confined to the northeast region, nor to the equipment manufacturing market. Similar cases of OFDI can be found in many industries, and in regions across China. For example, the economically developed east coast region is home to large numbers of LSOEs with diverse ownership styles, and for these firms foreign acquisition actions can result in excellent competitive advantages.

Among all industries, construction machinery manufacturing has seen a particularly high level of OFDI activity. Against a background of high demand for Chinese infrastructure construction, this sector has seen fierce domestic competition among evenly matched powerful players, such as Sany, Zoomline, and XCMG. Consequently, these key players have strong motivation to strengthen FSA and expand product series in order to outperform their competitors, while acquiring foreign high-tech enterprises, and thus gaining leveraging and learning benefits, offers a short-cut method to achieve this. In this regard, this study uses as

[2] 'Snake swallowing elephant' (蛇吞象): A vivid descriptive phrase used by some Chinese social media to describe foreign acquisition behaviours over the last 10 years. Like a thin snake swallowing a huge elephant, it is a brave and challenging feat for a Chinese local firm to acquire a foreign advanced firm; moreover, after swallowing, the new merged CMNE faces difficulties in digestion and absorption.

representative cases the acquisition of the German company SCHWING by Jiangsu's Xuzhou Construction Machinery Group Co., Ltd. (XCMG), and the deal completed by Shandong's Weichai Power Co., Ltd to acquire the German firm KION. These foreign M&A deals allowed the Chinese companies to upgrade their production ability and extend their product lines, thus enhancing their domestic market competition advantage and raising them to the status of competitive global players. It is worth mentioning that the China Development Bank played a crucial role in these deals by providing funds through specific 'policy bank to SOE' loans.

Similarly to their counterparts on the east coast, LSOEs in southern provinces, such as Guangdong and Guangxi, are characterized by successful economic performance and diversified ownership styles, and operate in an environment of intense competition. Obtaining and developing FSA that is first leveraged from acquired foreign firms, and then enhanced through further innovation, has become a common pathway followed by the LSOEs in this area. Moreover, Guangxi Province, known as the 'South Gate' of China, shares a border with ASEAN (Association of Southeast Asian Nations) countries, and owns the port to the South China Sea.

These location advantages mean that the province is likely to play an important role in the current 'Belt and Road' and 'Go Overseas' national strategies for boosting outward international investment, cooperation and trade. Consequently, the local government and local firms of Guangxi receive additional policy advantages and financial support from the central government. For example, the Guangxi branch of the CBD has granted credit to the value of 80 billion Chinese Yuan to local enterprises to promote their foreign acquisition activities and overseas construction projects, with provincial SOEs, such as Liugong Machinery Co., Ltd and Guangxi state farms, receiving the highest priority of support. Indeed, at a value of 330 million Yuan, Liugong's M&A deal with the Polish HSW company, the largest bulldozer manufacturer in Eastern Europe, was the largest foreign acquisition deal ever completed in Guangxi Province,

and the most successful in terms of profitability in post-acquisition operation.

The central and western regions of China are less developed economically than their eastern counterparts. Although some provinces, for example Hubei and Henan, have large total GDP, they have very low per capita income levels and their institutions are not well developed. The provinces in the northwest, such as Gansu and Shanxi, face an even less promising situation: although some provinces in the region possess rich natural resources, they also have lower GDP both in total and per capita. However, although the total volume of state owned assets in central and western areas is much smaller than those in eastern and southern China, the western provincial SOEs make a major contribution to economic growth, and are the main engine of the region's OFDI activities.

Moreover, western China is rich in natural resources, such as coal, minerals, and petroleum, and the region is home to many SOEs in mining relevant sectors. For example, Taiyuan Heavy Industry Co., Ltd (TYHI) in Shanxi Province has a very long history and rich experience in coal mining machinery. In 2011, TYHI bid RMB 0.88 billion to buy the world-leading Australian coal mining machinery producer, Valley Longwall International, an outward foreign acquisition deal that remains the largest ever completed by a firm based in Shanxi Province. In the same year, Xiangtan Electric Manufacturing Co Ltd (XEMC), located in Xiangtan in Hunan Province, which already enjoyed an advantage given its position in the relatively less competitive industrial area of wind power machinery, acquired the world-leading Dutch wind turbine manufacturer Darwind, thus completing the city's first and, to date, largest foreign acquisition deal. At the time of the merger between XEMC and Darwind, the China Development Bank signed a 5 year contract and granted RMB 20 billion in finance to support the international operation and post-acquisition integration.

The above cases indicate that although LSOEs can face serious financial difficulties, they always target foreign firms with established history and reputation, and rich technology.

Consequently the two parties in the transaction are complementary to each other, and there is considerable potential for each to gain advantages from the merger (Brennan, 2011). In order to enhance such complementary advantage, the roles played by the local government and policy banks in these foreign acquisition activities are crucial. Firstly, almost all the LSOE acquirers mentioned here received large-scale financial support and loans from China's policy banks, which represent the major funding source for LSOEs launching foreign acquisitions. Secondly, these LSOEs' OFDI deals are significantly influenced by and echo national or regional strategic policy; indeed, there is always a surge in foreign acquisition activity following the formulation and announcement of new national or regional strategy. Thirdly, given that LSOEs are owned by the regional government, their corporate structure, governance and HRM regimes are shaped by that government, which would affect their OFDI decision making and operation.

The discussion in this section has provided an overview of the LSOE foreign M&A deals used by this study as representative cases. The basic information of these OFDI deals, for both the home and host sides, is listed in detail in Table 6.1 to 6.5. By accessing these follow-up cases from across China, this research will gather more evidence to examine the findings of the longitudinal single case, to generalize those findings to a national scope, and to uncover more detail to expand our understanding of the role of institutions and local government in LSOEs' OFDI strategy.

6.3.5. Data Collection

This qualitative case study firstly concentrates on the Tunnel Boring Machinery Industry, and in particular on the case company, Northern Heavy Industry (NHI) group's two deals foreign acquisition with NFM Technology (France) in 2007 and Robbins Company (USA) in 2006, and then moving to extend its scope to the NHI's other domestic peer companies in various regions and industries of China. The researcher collected primary data through in-depth interviews and on-site observations, and obtained relevant documents by accessing the case

sites. Over the months from September 2016 to January 2017, I conducted 60 hours of semi-structured interviews with 40 people, ranging from senior executives to front line workers, from both the Chinese parent firm and the foreign subsidiaries. In order to gain a complete picture of the situation of the industry and the position of the case company, the researcher gained access to competitor firms, industry consultants, and the relevant industrial association. Moreover, for studying into more follow-up cases of local Chinese SOEs' foreign acquisition behaviours, social media and on-line information are as important datasets for sourcing information.

As shown in Table 6.6, the interviewees were categorized as senior strategy makers, middle management positions, specific technology staff, and external stakeholders. In addition, interviews with former employees allowed the researcher to gain a fuller understanding of the changes in Chinese local SOEs' foreign acquisition behaviours in response to the changing conditions brought about by the dynamic nature of today's China.

The researcher visited offices and factory plants in Shenyang, Beijing, and Zhengzhou (China), Lyon and Creusot (France), and Cologne (Germany). This involved a total of 50 flight hours. Most of the interviews were conducted in English or Mandarin Chinese, while a few were conducted in French, and the average length of each session was between one and two hours. A record was made of each interview, either through video recording, or by taking notes. In order to avoid bias, the researcher followed up interviews and tracked conversations through email and WeChat. In addition to in-depth interviews, the investigation used supporting archival documentation, including corporate annual reports, industrial publications, web sites, newspapers and magazines, and materials from social media for supporting more cases access. On-site observations, such as factory tours, provided further direct insights to inform the research propositions.

Table 6. 1 Details of follow-up case company – SMTCL

Representative LSOEs OFDI acquirers	Provincial location, sub-national region and Targeted acquisition industry	Details of the LSOE acquirer, pre-OFDI situation, strategy, and et al.	Backgrounds of the targeted foreign enterprises, and M&A transaction details	Role of the local government and policy banks
Shenyang Machine Tool Co., Ltd. (SMTCL) - Total assets (2016): 5.35 billion USD; - Operating revenue (2016): 1.14 billion USD	- Liaoning Province, - Northeast China, - Machine Tool	- The largest machine tool manufacturer, which producing over 10,000 units of machine tools annually; - Majority of products are small and medium sized with low technique sophistication; - Facing transformation difficulties in late 1990s and early 2000s. - Complementary acquisition strategy as 'made in Germany, sold in China' and 'made in China, sold in Europe'.	- Schiess, one of the oldest machine tool manufacturing firms, founded in 1857 and based in Germany (Brennan, 2011); - Good reputation in producing machine tool; - Declared Bankruptcy in August 2004, owing to several restructuring failures, which allows the SMTCL could take over this deal in very low price as 80 million yuan (US$9.67 million). - This includes the cost for all of the former company's land, buildings, machinery and equipment, patents and other intellectual property.	- China's 'Going Global' strategy encourage SOEs play as pioneers of OFDI; - Under the national strategy of 'Revitalize the old Northeast Industrial bases', the northeast regions' provincial government exploit new programmes and economic engines; - The Liaoning branch of national development bank play as a most crucial role in financial support, since 1994, loans from the CBD to SMTCL has reached RMB 7.1 billion Yuan. (Cdb.com.cn, 2018)

Table 6. 2 Details of follow-up case company – Weichai Power Co., Ltd

Representative LSOEs OFDI acquirers	Provincial location, sub-national region and Targeted acquisition industry	Details of the LSOE acquirer, pre-OFDI situation, strategy, and et al.	Backgrounds of the targeted foreign enterprises, and M&A transaction details	Role of the local government and policy banks
Weichai Power Co., Ltd - Total assets (2017): 29.12 billion USD; - Operating revenue (2017): 23.2 billion USD	- Shandong Province, - East coast of China, - Construction Machinery (Especially in Forklift and Hydraulic pressure equipment)	- Located in Chinese 3rd tier city, while become as one of leading Chinese automotive and equipment manufacturing group. - Needs to upgrade its producing capacity and enhance its domestic competitive advantage - Core of the strategic partnership is a close cooperation in the field of material handling and hydraulic drive technology, which could extend its producing line and diversify its product series (Nachrichten, 2017).	- KION, one of the world's leading manufacturers of industrial trucks and a global leader in hydraulic technology, was signed today in Wiesbaden, Germany (Kiongroup.com, 2017). - Weichai Power invest a total of EUR 738 million: EUR 467 million to acquire a 25 percent stake in KION via a capital increase and EUR 271 million for a 70 percent majority stake in KION's hydraulics business. (Globaltimes.cn, 2017) KION will use the proceeds to further strengthen its capital structure. - A landmark transaction as it is the largest Chinese direct investment in Germany to date.	- One of the key subsidiary of the 'Provincial team', the Shandong Heavy Industry Group, which founded in 2009 and established together with Weichai Holding Group, Shandong Construction Machinery Group and Shandong Automobile Industry Group. - Its founding was facilitated by the Shandong Party Committee and the provincial government, which raise total assets of RMB 94 billion (Reuters, 2017). - With low interest rate financial loan from the Policy bank, the CBD, accelerates its foreign acquisition and integration.

Table 6. 3 Details of follow-up case company – XCMG

Representative LSOEs OFDI acquirers	Provincial location, sub-national region and Targeted acquisition industry	Details of the LSOE acquirer, pre-OFDI situation, strategy, and et al.	Backgrounds of the targeted foreign enterprises, and M&A transaction details	Role of the local government and policy banks
Xuzhou Construction Machinery Group (XCMG) - Total assets (2016): 10.26 billion USD; - Operating revenue (2016): 3.18 billion USD	- Jiangsu Province, - Xuzhou city, a 3rd tier Chinese local city. - East coast of China, - Construction Machinery (concrete equipment)	- About half of the 105.3 billion yuan market value of the concrete machinery industry was generated by SANY and Zoomlion in 2011, while XCMG only contributed some 1.97 billion Yuan (Chinadaily, 2017). - The concrete machinery industry had a profit margin of some 30 percent last year, overtaking all other construction machinery related industries. - The acquisition of Schwing will allow it to 'make inroads into the international markets for brand concrete equipment (Constructionweekonline.com, 2017)' with XCMG wishing to rapidly develop its concrete equipment. - SCHWING will gain access to the Chinese growth market and XCMG will benefit from improved market coverage outside of China and extend its product range.	- The Schwing, was established in 1934 and a family holding German concrete pump maker, which is one of the world's leading suppliers in its field. - It employs about 3,300 staff, but is cutting 160 jobs after its sales dropped by 30 percent amid the economic crisis. - XCMG acquire a majority shares in the Schwing, which acquisition of a 52 percent was completed in July 2012. (Frankfurt.china-consulate.org, 2017)	- Since 1989 when founded, the XCMG play roles as a traditional strong contingent and 'provincial team' of the Jiangsu government. - Owned by SASAC of Xuzhou Municipal government. - Since 2011, the Policy bank CBD has provided loans nearly 40 billion Yuan to support XCMG's development and overseas expansion.

Table 6. 4 Details of follow-up case company – TZ

Representative LSOEs OFDI acquirers	Provincial location, sub-national region and Targeted acquisition industry	Details of the LSOE acquirer, pre-OFDI situation, strategy, and et al.	Backgrounds of the targeted foreign enterprises, and M&A transaction details	Role of the local government and policy banks
Taiyuan Heavy Industry Co., Ltd. (TZ) - Total assets (2016): 6.26 billion USD; - Operating revenue (2016): 1.98 billion USD	- Shanxi Province, - Taiyuan, the capital city of the province, - Central or West region of China, - Mining Machinery (Coal and Crusher equipment)	- A State Owned Enterprise based in the Shanxi Province and is primarily engaged in the manufacture of integrated mining excavation equipment, including shearers and roadheaders. - Key shareholders of the mining machinery company include seven of the largest coal mining companies operating in the Shanxi Province. - Seeking 'Valley Longwall' brand, and provides a unique platform to promote and grow VLI's business in the Chinese market. (News.sohu.com, 2017) - Valley Longwall's focus on safety and high standards of technology will greatly enhance TZ's competitive strength in China.	- Valley Longwall International, from the Australia, is a market leader in the supply of specialised equipment and allied services to coal mining and bulk materials handling industries. (Investinaustralia.com, 2017) - The firm's team of over 450 specialist personnel, employed throughout Australia and China, have access to the best technologies available in the world today.	- Owned by Shanxi state-owned asset supervision & management committee. - Safety is being increasingly emphasised and safety standards enforced as a priority by the Chinese government in the mining sector.

Table 6. 5 Details of follow-up case company – LiuGong

Representative LSOEs OFDI acquirers	Provincial location, sub-national region and Targeted acquisition industry	Details of the LSOE acquirer, pre-OFDI situation, strategy, and et al.	Backgrounds of the targeted foreign enterprises, and M&A transaction details	Role of the local government and policy banks
Guangxi LiuGong Machinery Co., Ltd (LiuGong Group)	- Guangxi Province; - Based in Liuzhou, which is the largest city and always ranks 1st on GDP; - South or South west of China, a strategic crossroad area of the 'belt and road' investment. - Construction Machinery (wheel loaders, bulldozers, excavator, etc).	- was founded in 1958 in Liuzhou, Guangxi Province, manufactured China's first modernized wheel loader in 1966; - In 1993, it became China's first publicly traded construction equipment company; - One of the largest wheel loader manufacturers in the world with a 15% global market share and is ranked as the15thlargest construction equipment manufacturer in the world in 2010; - will acquire all the patents for technology and designs, in order to add and complete product series (People.com.cn, 2017); - Ambitious of being as global leader of the construction machinery sector, which is encouraged by the 'belt and road' national strategy.	- Poland's Huta Stalowa Wola (HSW) was established in 1937, which is a well-known brand for large dozers and wheel loaders used in mining (People.com.cn, 2017); - It is one of only seven manufacturers worldwide producing a complete line of bulldozers, from 74 hp to 520 hp; - The Polish government was the primary owner of HSW.	- Owned by the Guangxi SASAC; LiuGong Group is the largest SOE in the Guangxi Province; - Signed long term agreement with the CDB's Guangxi branch, which much enhance its financial ability of foreign acquisition, operation, and expansion; - Not only play as 'provincial team', but also preferred by the central government under 'belt and road' strategy, which is benefit from its great geographical advantage.

6.3.6. Data analysis

Data analysis procedure was based on Yin (2010)'s multiple case study approaches, which has been divided into two steps. To begin with, the analysis has concentrated on single case (NHI merged with NFM), which the researchers are more familiar with, to create key concepts and generating basic theories by analysing collected primary data through 'open – axial – selective' coding paradigm (Corbin & Strauss, 1990). By the second step, with considering dynamic nature of business phenomenon in China economy, longitudinal case study has been designed, which is followed by comparing logic to investigate different foreign acquisition deals among 10 years of time scale. The longitudinal cases has been adopted to compare firms OFDI behaviours varies owing to their different particular conditions (e.g. local vs. central, past and present). Thirdly, the final step research will access to various representative foreign M&A cases cross the country in past two decades, which are designed as follow-up case study with proving and extending perspectives. The follow-up case study will be helpful to develop a rich and theoretical framework that either predicts similar results or produces contrasting results (Yin, 1994).

6.3.3.1. Coding and theoretical construction

Coding procedure was based on the qualitative 'open-axial-selective' coding process suggested by Corbin and Strauss (1990). First, the interview transcripts and memos were open coded for labelling and categorization into separate preliminary concepts through line-by-line text analysis and constant comparison (Charmaz, 2006). In the second step, axial coding, categorized concepts were related in new ways under a coding paradigm of causal condition, action interaction and consequence.

The selective coding procedure concentrates on relationships between core categories to construct the theoretical model. For example, 'the firm was owned by local government, which

was decentralized from central government' and 'large numbers of industrial workers laid off' can be labelled as 'degraded state ownership' and 'labour surplus'. There is a causal relationship between these two concepts, both of which could be aggregated into the 'Decentralization dilemma' category under the theme 'Decentralized state ownership drives local SOEs' OFDI'. An outcome framework has been built up basing on the 'selective coding' process as presented by the Figure 6.3.

6.3.3.2. Follow-up case studies: literal & theoretical replication

Different cases selected from follow-up case studies vary both vertically and horizontally, thus reflecting the changing and diverse nature of the Chinese economy and institutions. In line with replication logic, the 'open-axial-selective' coding procedure is utilized in each case, while new concepts and relationships between them will emerge from the different cases, which as listed as Table 6.7. The replication logic is used to develop a rich theoretical framework, which can 'state the conditions under which a particular phenomenon is likely to be found (a literal replication) as well as the conditions when it is not likely to be found (a theoretical replication)' (Yin, 1994). As shown by the Figure 6.4, a conceptual framework has been developed which will describe the determinants and pathway of Chinese local SOEs' OFDI.

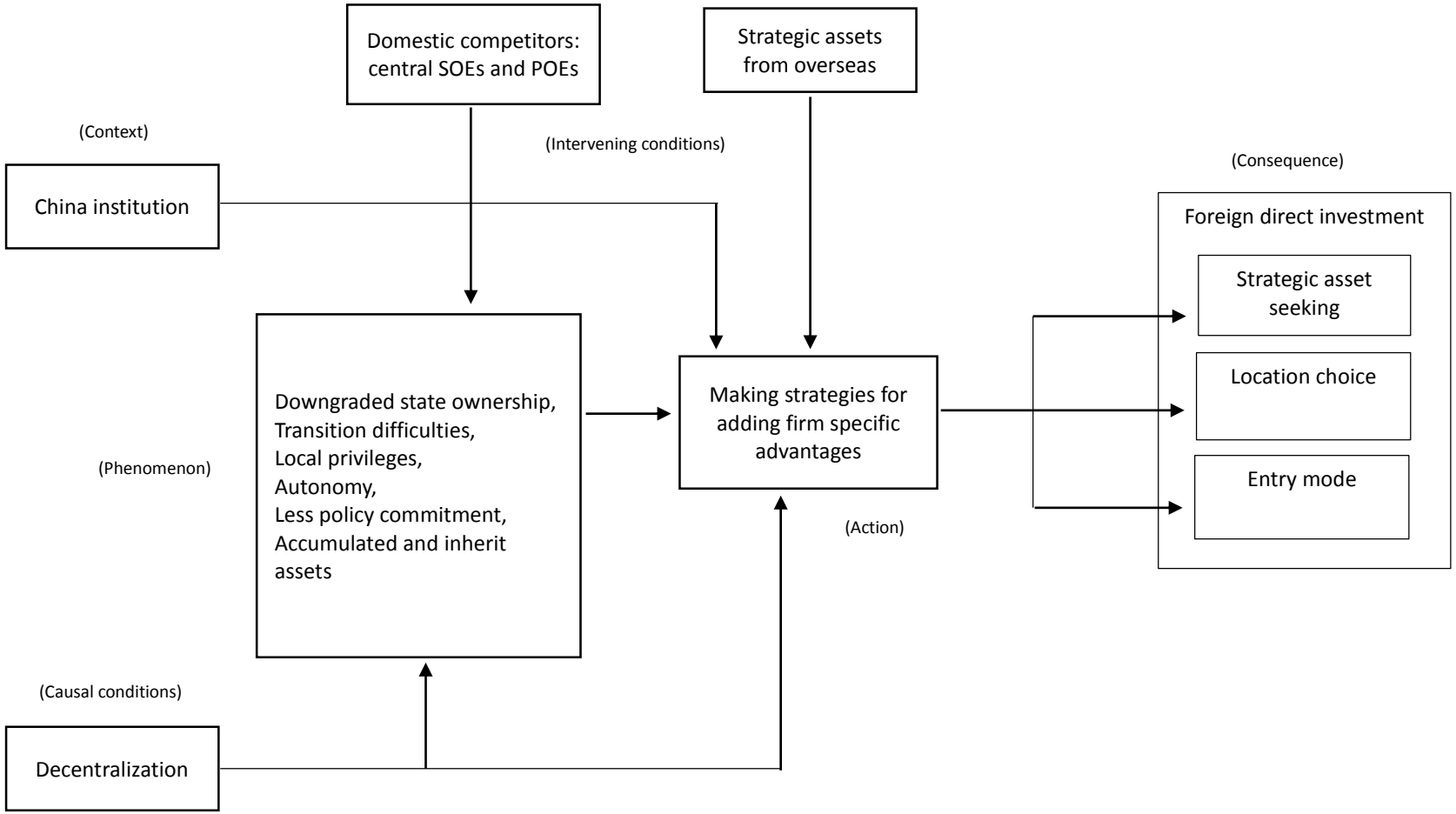
The collected qualitative data, including the recorded interviews and observation notes, as well as obtained materials, were all transcribed into text documents. In order to present the content authentically, transcriptions are in the original language of the data sources (mainly English and Mandarin Chinese). The majority of the transcription work was completed within 48 hours of each session of data collection, so as to avoid the loss of important information. The data were checked and cross-checked repeatedly for ensuring the accuracy and reliability.

Table 6. 6 List of firms participating and interviews conducted.

Interviewee	Date (dd/mm/yyyy)	Venue	Length (hours)
The NHI group (Headquarter, China)			
A Board Chairman, NHI TBM firm	25/10/2016	NHI European company main building, Lyon, France	1.5
B Former President, the NHI group	12/01/2017	Via telephone interview	1
C Former vice president, the NHI group	15/01/2017	Meeting room, Shenyang, China	1.5
D CEO, NHI TBM firm	01/08/2016 - 08/01/2017	The NHI TBM building, Shenyang, China	1 & WeChat discussion
E Former CEO, NHI TBM firm	06/01/2017	Meeting room, Shenyang, China	2
F Marketing director, NHI TBM firm	21/10/2017	NHI European company main building, Lyon, France	2
G CTO, NHI TBM firm	25/10/2017	Same as above	1
H General manager assistant, NHI TBM firm	25/06/2016 - 16/01/2017	Via email and WeChat	WeChat discussion
I Manager, Dept. of Sales	08/08/2016	Via telephone interview	1
J Manager, Dept. of project management	09/08/2016	Via telephone interview	1
K Designer, Dept. of mechanical design	24/10/2016	NHI Design sector, Shenyang, China	1
L Designer, Dept. of mechanical design	15/10/2016 - 24/10/2016	NHI Design sector, Shenyang, China	1.5 & WeChat discussion
The NFM technology (Acquired subsidiary (2007), France)			
M CEO, NFM	16/11/2016	CEO office, NFM technology, Lyon, France	1
N Marketing director, NFM	15/11/2016	Dept. of marketing, NFM technology, Lyon, France	2
O Secretary-general, NFM	10/10/2016 - 17/11/2016	Secretary office, NFM technology, Lyon, France	1 & Several emails
P Legal Manager, Dept. of Legal, NFM	15/11/2016	Meeting room, NFM technology, Lyon, France	1
Q Operational manager, Dept. of operation, NFM	14/11/2016	Meeting room, NFM technology, Lyon, France	1

R Factory manager, NFM	10/11/2016	Factory Plant, NFM, Creusot, France	1
S Manager, Dept. of sales, NFM	08/11/2016	Dept. of marketing, NFM technology, Lyon, France	0.5
T Manager, NFM factory	10/11/2016	Factory Plant, NFM, Creusot, France	0.5
O Designer, Dept. of mechanical design, NFM	07/11/2016	Design sector, NFM, Lyon France	1
The Robbins company (Acquired subsidiary (2016), USA)			
P Vice president, Robbins	16/11/2016	NHI European company main building, Lyon, France	1
Q Vice president that accredit by NHI, Robbins	05/01/2017	Meeting room, Shenyang, China	1.5
The CREG (Competitor, China)			
R Director, Dept. of overseas business, CREG	23/12/2016	Dept. of overseas business, CREG, Zhengzhou, China	1.5
S Manager, Dept. of public relations, CREG	23/12/2016	Public relations office, CREG, Zhengzhou, China	1
Other stakeholders			
T Vice president, Temax GmbH, Consulting, Germany	01/12/2016	Meeting room, Temax, Cologne, Germany	2
U Manager, Temax GmbH, Consulting, Germany	01/12/2016	Meeting room, Temax, Cologne, Germany	0.5
V Chairman, CHMIA, Industrial association, China	27/12/2016	CHMIA, Beijing, China	1
W Staff, CHMIA, Industrial association, China	01/09/2016 - 27/12/2016	CHMIA, Beijing, China & Via telephone discussion	2

Figure 6. 3 Outcome framework of 'selective coding'.



6.4. Results and Theory development

The theoretical insights and development of propositions are based on a review of previous literature and qualitative case studies. A theoretical framework has been constructed as shown by the Figure 6.4 as below. We propose that owing to the diverse and dynamic nature of the Chinese economy, Chinese firms vary in their foreign acquisition motivation and strategies.

6.4.1. Theme 1: Decentralized local state ownership

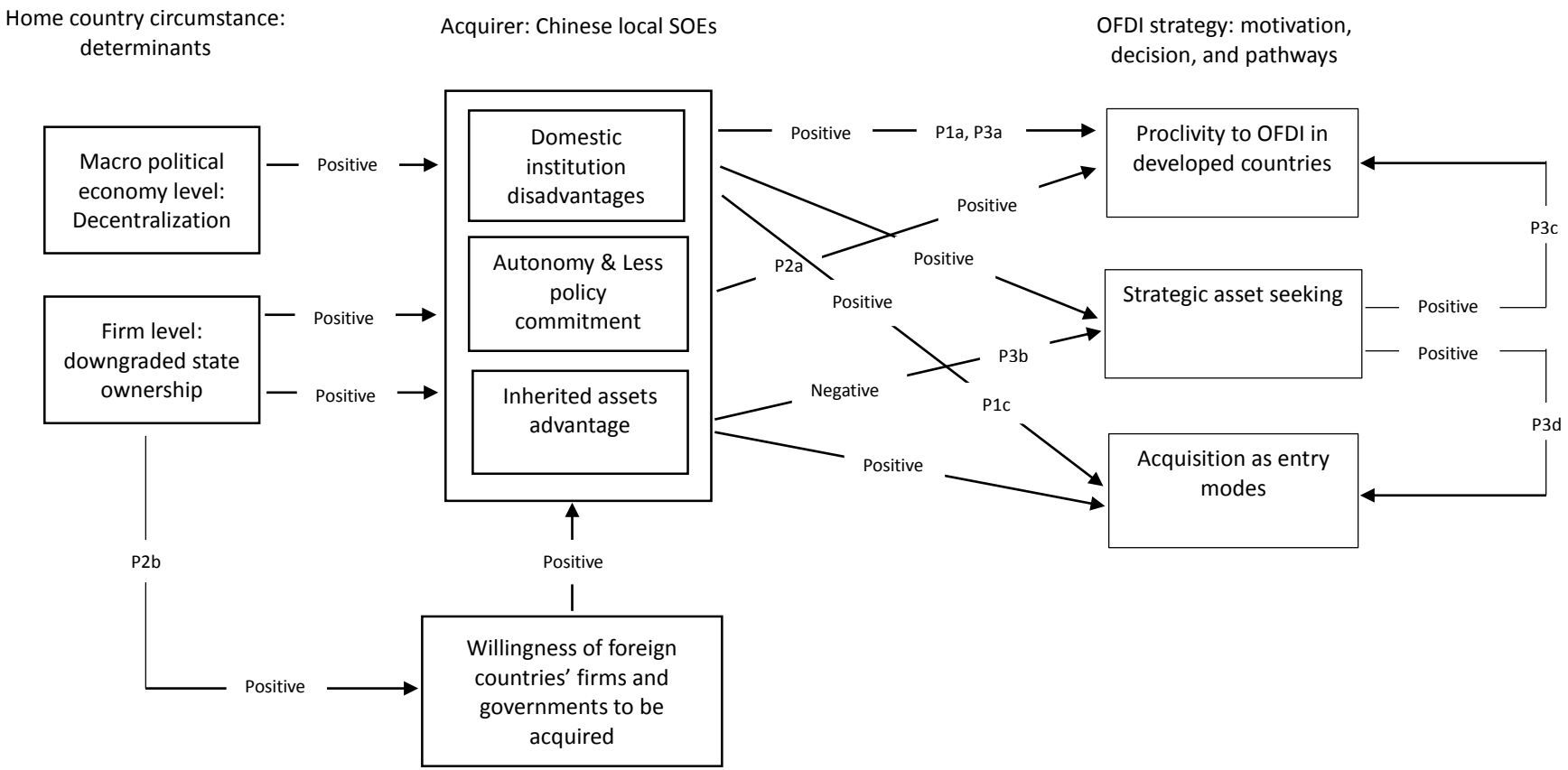
6.4.1.1. Downgraded local government intervention

Special ownership and institutional advantages have been indicated as determinants of Chinese firms' foreign direct investment (Buckley et al., 2007). Government intervention also creates coercive, normative and mimetic pressures upon firms' OFDI behaviours (Peng et al., 2008; Wang et al., 2012). However, in China, ownership and institutional regimes are not unified and stationary, but diverse and dynamic, which results in various different levels and types of government intervention (Wang et al., 2012). Such heterogeneity is considered to impact on emerging market firms' willingness and ability to engage in foreign direct investment (Peng et al., 2008). Central SOEs, which benefit from stronger government background and support, might be expected to be more capable and willing to make overseas investments than local SOEs (Wang et al., 2012). However, as noted by Huang et al. (2017), the dynamic nature of institutional development would undermine the 'dark side' of state ownership and provide a better market competition environment for local SOEs to pursue OFDI.

Table 6. 7 Emerging themes of the Study II.

Emerging theme	Direct consequence to Chinese local SOEs	Impact on pre-OFDI strategic decision making
Downgraded state ownership	Decentralized from the central government, then to be owned by the sub-national level governments.	On the one hand, decentralization motivates local governments to improve the performance of their owned SOEs to maximize profits; while on the other hand, they face more restrictions in the resources and budget they can provide to local SOEs for pursuing OFDI.
	Less government obligation and intervention.	The decentralization of state-capitalism in China led to a diverse situation in which the newly emerged local SOEs are characterized by more managerial autonomy, less institutional support, less monopoly power, and greater market orientation.
	Gain more managerial autonomy, and more flexible in business activities.	Decentralized local SOEs have more autonomy and are responsible for their own decisions, which provides an incentive to prioritize profitability and the reduction of risk when setting their business strategy.
Comparative institutional advantages	Limited government commitment and ideological intervention.	Lower level of government influence will shorten the 'psychic distance' between home and host country firms, and make it more likely for home country local SOEs to earn trust from host countries' governments, and facilitate legitimation in the host country.
	Comparatively more priority in accessing complementary resources in the local wide.	LSOEs earns priority in local areas, receive support from local government and policy banks to enrich their financial capacities, advanced infrastructure base and obtain cheaper local resources.
Overseas strategic assets	Strategic assets from foreign developed countries provide potential opportunities for adding FSA to Chinese local SOEs for enhance domestic competitive capacity.	Compared with central SOEs, local SOEs are more likely to pursue strategic assets through foreign direct investment in order to catch up with domestic competition. And also local government support allows SOEs to overcome the 'latecomer disadvantage' and to engage aggressively in acquisition, compensating for their competitive weakness by seeking strategic assets from mature MNEs.
	Transferrable assets and capital guarantees help to persuade foreign target firms to merge with Chinese firms.	Accumulated manufacturing plants and inherited capital provides Chinese local SOEs with basic infrastructures for pursuing SAS oriented OFDI, and also wins trust from foreign firms to merge with.
	Advanced countries are rich in strategic assets, but with strong protection rules in order to prevent outflow of domestic advanced technologies.	Given their strategic asset seeking orientation, Chinese local SOEs are more likely to acquire advanced country firms with accumulated technologies and reputable brands, and more likely than central SOEs to pursue merger and acquisition as mode of entry.

Figure 6. 4 Theoretical framework of Chinese local SOEs OFDI determination.



However, these theoretical explanations of the relationships between state ownership and Chinese SOEs' OFDI strategy are based on quantitative analysis; there is a lack of qualitative investigation that seeks out the views of key stakeholders (Luo & Zhang, 2016).

By using in-depth interviews with decision makers in the NHI group, a Chinese decentralized local SOE, we get significant outcomes that could expand and refine the existing theories. For example, as pointed out by a former general manager of NHI, the difficult conditions in the early stages of decentralization were a driving force of local SOEs' OFDI:

> Problems adapting to new institutions and lack of government financial support were main difficulties in that transition era. Our business order was no longer arranged by government, but had to attend to fierce domestic competition … being unemployment and being at the edge of bankruptcy were unavoidable … competitive advantages had to be obtained from overseas.

Moreover, the coding and analysing of interview content and obtained qualitative materials revealed that the terms 'decentralization difficulties' and 'seeking comparative advantages from overseas' occurred with high frequency, and there exists a high causal relationship between them. This is because of the decline in government intervention to the decentralized local SOEs. Fiscal decentralization motivates local governments to improve the performance of their owned SOEs to maximize profits, and they face more restrictions in the resources and budget they can provide to local SOEs (Li et al., 2014). Changing ownership status causes relatively weak status, transition difficulties and reduced government support, thus creating pressures for local SOEs to engage in an OFDI strategy to obtain resources from overseas for self-rescue. Therefore, we propose:

Proposition 1a: Downgraded local government intervention will positively impact on Chinese local SOEs' decision to make outward foreign direct investment.

6.4.1.2. Weak domestic competitive advantage

Local SOEs are more market orientated, rather than operating as policy tools, and

therefore have less central government support (Li et al., 2014; C. Wang et al., 2012). Unlike central SOEs, local SOEs are no longer obligated to fulfil government mandates. Hence they have access to fewer institutional resources and government bank loans, and are thus less able to operate competitively within the domestic market. Moreover, in an improved domestic institutional environment, central SOEs are becoming more active in engaging in domestic competition (Huang et al., 2017) and are able to make rapid progress in occupying the domestic market. Although local SOEs benefit from advantages in manufacturing competence and market experience, their lower status in the domestic market makes it difficult for them to access projects that have a strong government background, or to compete on price.

As pointed out by the current president and market director of NHI, the company's second foreign M&A deal, with Robbins of America, took place under pressure from central SOEs entering and occupying the domestic TBM market. From 2010, when this situation began to develop, NHI faced the necessity of expanding overseas and seeking more opportunities outside China. As stated by the market director:

> The big two [China Railway Engineering Corporation (CREC) and China Railway Construction Corporation (CRCC), two central SOEs supervised by the State-owned Asset Supervision Admission Committee] are so powerful. They possess all Chinese underground construction projects … From 2010 they founded their own TBM firms, which could provide TBM machine for themselves at very low price. Their total share in the Chinese soft ground TBM market rose rapidly from zero to 90% within only three years. The NHI's domestic living space became smaller and smaller, so we had to explore the hard rock market and try to become a global TBM manufacturer.

As shown by the qualitative case study on NHI's merger with Robbins, the concepts coded as 'central SOEs entering', 'price disadvantages' and 'loss of domestic market' occur with high frequency. The growing intensity of domestic competition led to the loss of attractive advantages for local SOEs' current products, and their weak domestic competitive status meant that they also lost market share. Consequently, they needed to introduce new products and seek

new markets (Giachetti & Dagnino, 2014; Huang et al., 2017; Shankar, 2006). Our qualitative data reveals that the relatively weaker position in the domestic market pressures local SOEs to 'escape domestic institutions', 'seek advantages through OFDI' and 'leapfrog to be global manufacturers'. Therefore, we propose that:

Proposition 1b: Decentralization of state ownership undermines local SOEs' domestic competitive advantage, which makes them more motivated than central SOEs to acquire competitive advantages through overseas strategic asset seeking by foreign acquisition.

Proposition 1c: Decentralization of state ownership undermines local SOEs' domestic competitive advantage, so that they are under more pressure than central SOEs to escape from the domestic market to overseas, to become global competitors by foreign M&A, and thus seek more markets.

6.4.2. Theme 2: Comparative institutional advantages

6.4.2.1. Autonomy and less institutional shadow

When state owned firms invest overseas, especially to those countries that are advanced in terms of technology and institutions, they not only situate in unfamiliar competitive markets, but must also conform to a different regulatory environment (Li et al., 2014; Meyer et al., 2014; Wang et al., 2012). As advanced countries' legitimation systems are facilitated by strict rule of law, as well as strong protection of domestic technology and shareholders, SOEs from emerging markets normally use greenfield entry modes and gain small proportions of acquisition ownership (Brouthers, 2002; Meyer et al., 2014). Hence, in the post-FDI period, Chinese SOEs face obstacles in terms of access to resources and market integration performance.

The decentralization of state-capitalism in China led to a diverse situation in which the newly emerged local SOEs are characterized by more managerial autonomy, less institutional

support, less monopoly power, and greater market orientation (Li et al., 2014). They have greater self-responsibility, which provides an incentive to prioritize profitability and the reduction of risk when setting their business strategy. Interviews with top management provide strong evidence on this point; for example, as noted by the current president of the NHI:

> It is true that we face difficulties in transition periods and less support from the central government, but fortunately we get more autonomy and flexibility to make our own decisions. There is almost no government intervention in our general business activities. In the next step, we will also implement a pilot test on ownership innovation and operating as a private firm to adapt to our new role as global competitor.

As highlighted by our investigation results, in terms of OFDI activities, unlike central SOEs, local SOEs have more autonomy and are responsible for their own decisions. They have been pressured to invest overseas, and need to negotiate with and adapt to host countries' legitimation systems in order to obtain greater shares and higher performance. Therefore, we propose:

Proposition 2a: Local SOEs gain greater autonomy than central SOEs in the domestic institutional environment and obtain more legitimacy from host countries, which would positively impact on their pursuing foreign direct investment.

6.4.2.2. Comparative institutional advantage as transferrable assets

Although some SOEs have been downgraded to local firms, they are still owned by the government and operate accordingly. Limited government commitment and ideological intervention can contribute to earning trust from host countries' governments, and facilitate legitimation in the host country. Technology intensive and reputable firms need approval from their native governments to corporate with foreign firms. A lower level of government influence will shorten the 'psychic distance' between home and host country firms, and make it more likely for home country local SOEs to gain host country government approval when

they invest overseas.

Moreover, there is a trend for foreign firms to seek Chinese firms with 'appropriate' government intervention for merger. As pointed out by a NFM Technology financial director,

> Chinese SOEs will inject immediate funding and guarantee sufficient capital to make them survive. That's what we are very interested in and strongly seeking … to obtain that, normally we would contribute our technical drawings and share our brands…

Such 'appropriate' government intervention, in the form of local state ownership, represents a 'comparative institutional advantage', and stands in contrast to the 'absolute institutional advantage' that exists in western developed countries, in the form of fair and free market, perfect legal system, and transparent government. In recent years this 'comparative institutional advantage' has been attracting foreign firms to enter China, and has been used by Chinese home country firms as transferrable assets, in order to obtain strategic assets from their host country partners. Therefore, we formulate the following proposition:

Proposition 2b: Appropriate government intervention in Chinese local SOEs shapes their special comparative institutional advantages, which attract foreign firms to undergo merger with Chinese SOEs.

6.4.3. Theme 3: Stronger strategic asset seeking orientation

Strategic asset seeking has been founded as strong motivation behind Chinese MNEs' decision to implement OFDI in order to exploit pre-existing firm-specific advantages in new markets (Anderson et al., 2015b; Sutherland, 2009). Therefore, SAS is a crucial determinant of the CMNE OFDI decision.

6.4.3.1. Stronger patents & trademarks seeking orientation

Recent findings show that CMNEs would have a stronger orientation towards investing

in psychically distant locations with rich assets to acquire strategic assets (Alon et al., 2011; Amighini et al., 2013; Buckley et al., 2007; Hurst, 2011; Ramasamy et al., 2012). Furthermore, government support allows SOEs to overcome the 'latecomer disadvantage' and to engage aggressively in acquisition, compensating for their competitive weakness by seeking strategic assets from mature MNEs (Luo & Tung, 2007; Sutherland, 2009). Given the heterogeneous nature of the Chinese economy, there is much variation between economic bodies as to the extent, motivations and pathways of their strategic asset seeking. As shown from our research results, local SOEs have a positive attitude as to their patents and trademarks oriented foreign investment. The selected coding concept 'decentralized local state ownership' reveals a more serious 'reform dilemma' for local SOEs than for central SOEs; consequently, local SOEs are more likely than central SOEs to adopt a foreign acquisition strategy, which will allow them access to the patents and reputable trademarks possessed by developed country foreign firms.
Proposition 3a: Compared with central SOEs, local SOEs are more likely to pursue strategic assets through foreign direct investment in order to catch up with domestic competition.

6.4.3.2. Role of possessed inherited assets

Possessed assets are found to be significant factors that influence the likelihood of pursuing strategic asset seeking OFDI; in particular transferrable assets and capital guarantees help to persuade foreign target firms to merge with Chinese firms. Local SOEs, which previously played a significant role in the Chinese planned economy, are more sophisticated and experienced than private firms in terms of getting overseas intangible assets. As indicated by a previous vice-CEO of NHI:

> Thanks to accumulated manufacturing plants and experienced trained workers under the previous institution, although we decentralized as local, the inherited capital provides us with basic infrastructures for absorbing knowledge, and also wins trust from foreign firms to merge with us.

Moreover, a market director from the French side, NFM Technology, also pointed out:

> They [the NHI group] have world leading factory plants and equipment, their government also provides essential fundamental support. Our advanced intangible technology and their accumulated tangible assets will fit well together and create maximum value.

In contrast, Chinese private firms, especially new entrepreneurs, would be relatively weak in fundamental equipment compared with SOEs, and therefore less attractive to host country firms seeking merger. Therefore, we state the following proposition:

Proposition 3b: The likelihood of successfully pursuing a deal of strategic asset seeking foreign acquisition is positively related to the inherited assets that possessed by the local SOEs.

6.4.3.3. Location choice and entry modes

According to the SAS perspective, firms would favour locations with rich assets regardless of the psychic distance from the home country. The SAS orientation would also affect the choice of entry mode; in particular, M&A in the host country would help firms to acquire strategic assets. Given the dynamic and diversified nature of the Chinese economy, our research finds that the strategic asset seeking OFDI behaviours of Chinese local firms, especially local SOEs, differ from those of central SOEs and private firms. These local firms are driven by particular motivations and choose distinct pathways. First, in terms of location choice, relatively weak domestic competitive advantage motivates them to merge with high-tech firms from advanced countries in order to gain firm specific advantages. In contrast, central SOEs would tend to implement more developing country investment deals with less attention to business logic, owing to their strong central government background. Secondly, with regard to entry mode, given the stronger strategic asset seeking orientation of local SOEs, foreign acquisition would be a more direct and easier route than Greenfield investment to acquire foreign firms' knowledge. Hence, we list the following propositions:

Proposition 3c: Given their strategic asset seeking orientation, Chinese local SOEs are more likely to acquire advanced country firms with accumulated technologies and reputable brands.

Proposition 3d: Given their strategic asset seeking orientation, Chinese local SOEs are more likely than central SOEs to pursue merger and acquisition as mode of entry.

6.5. Concluding remarks

The present case study adopts qualitative data investigation in order to test the results of previous literature; it is also the first attempt to focus on and offer a thorough explanation of local SOEs' OFDI behaviours, the results of which will nest into and enrich mainstream IB theory on emerging country firms' ODFI strategy. We build a theoretical framework that sheds light on the determinants of Chinese local SOEs' foreign direct investment behaviours. Extending the work of Buckley (2007), this case study highlights in particular the nature of decentralized local state ownership, comparative institutional advantages, and strategic assets as crucial emerging variables of local firms' OFDI decision. Key arguments of this study conclude as follows: (1) Chinese local SOEs, owing to their decentralization and the difficulties experienced as a result of reform, have been pressured to acquire advanced technical knowledge and experience through foreign acquisition in order to compete and survive in the domestic market. Furthermore, special local state ownership advantages accelerate their foreign M&A progression in terms of strategy towards technology and knowledge acquisition. (2) Comparative institutional advantages, somewhat perversely, also drive developed market firms (in this case French) seeking institutional arbitrage in China. Whereas, 20 years ago, Chinese firms would wish to 'escape' from Chinese institutions and find opportunities overseas to free themselves of the barriers they faced at home, today special comparative institutional advantages allow Chinese local SOEs to provide guarantees to acquired foreign subsidiaries, attracting foreign firms from developed countries to seek Chinese buyers. (3) Chinese local SOEs' OFDI are more likely driven by strategic asset seeking orientation then their central SOEs counterparts, which also influence their location choice and entry mode in larger extent.

Chapter 7: Study III – Chinese local state owned enterprise post-acquisition knowledge integration from foreign markets: An explorative case study

We explore the antecedents of post-acquisition knowledge integration in Chinese local state-owned enterprises (LSOEs). In previous chapters, seeking strategic asset from foreign targeted acquisition firms has been highlighted as major motivation of Chinese LSOEs' foreign M&A pursuing, thus performance of post-acquisition shows as significant criteria to evaluate whether their acquisition is success or not, and whether they reach their original expectations. The truth is that, as introduced by the Chapter 1 and 6, different LSOE acquirers experience different integration pathways, face various difficulties, receive distinct performances, and features as different stories. This chapter, as a followed step of the study I and II, will try to shed more lights on and bring more insights to how internal and external circumstance impact on firms' absorptive capacity, and then determine their OFDI post-acquisition integration performances. We conduct an explorative case study across three key phases of one Chinese LSOEs international strategy and find: (1) domestic institutional disadvantages of LSOEs compared to central SOEs lead to out-flow of intangible assets, such as elite human resources and brand reputation, which have negative impacts on their post-acquisition knowledge integration; (2) the nature of local (as opposed to central) state ownership plays an important role in allowing Chinese LSOEs to obtain tangible assets in terms of R&D equipment and access to foreign clusters, and priority in utilizing local complementary resources, which have positive effects on local SOEs' post-acquisition knowledge integration; (3) both formal and informal psychic distance between LSOEs and their foreign subsidiaries, such as legal system and language differences respectively, have a negative impact on post-acquisition knowledge integration. We discuss the emerging model and propositions in light of recent theoretical advances and managerial implications on Chinese firm internationalization.

7.1. Introduction

Knowledge acquisition from and integration with the acquired foreign subsidiaries are

crucial criteria to evaluate the post-acquisition performance of Chinese multinational enterprises (CMNEs), especially local SOEs. Previous research has noted that many EMNEs struggle, or even fail altogether, to incorporate external technology (Cuervo-Cazurra & Rui, 2017). According to data reported by Deloitte (2013) on 147 transnational merger and acquisition (M&A) transactions in the years from 2001 to 2008, among which 70 percent of buyer firms were LSOEs, three years after the deals had been closed only 23% were rated by buyers as performing well in the post-acquisition period, while 47% were considered as remaining at roughly the same level and 30% were assessed as underperforming. Such just passable integration performance should trigger alarm bells for EMNE acquirers, which have made huge investment in their SAS motivated 'catching up' foreign acquisition, in terms of both finance and high expectations.

The extensive literature on knowledge transfer in international acquisition and post-acquisition performance is mainly rooted in conventional IB theory. In seeking to explain how parent firms learn from foreign subsidiaries, scholars have highlighted the existence of networks in reverse knowledge transfer (Ambos et al., 2006; Frost & Zhou, 2005; Nair et al., 2015; Rabbiosi, 2011). Bresman et al. (2009) argue that interaction, time elapsed since acquisition, and tangible assets are significant in facilitating and shaping knowledge know-how and transfer capacities. Meanwhile, various theoretical lenses have been applied to explain the potential antecedents or contingencies that impact on post-acquisition performance (Popli et al., 2017), such as similarity and complementarity of perceived resources (Chatterjee, 2009; Cartwright, 2006), prior experience of acquisition (Popli et al., 2016), possessed R&D expenditure (Le et al., 2014), culture and power distance issues (Huang et al., 2017; Stahl & Voigt, 2008), and managerial cooperation and complementation (Bauer & Matzler, 2014). In terms of EMNE theory, learning behaviours, sometimes called leveraging and transferring, are always considered as crucial with regard to the 'catching up' strategy, and set as basic

requirements for post-acquisition strategic assets integration. However, EMNE scholars also argue that the relative lack of FSA and the long psychic distance from the foreign target hosts will always have a negative impact on EMNEs' post-acquisition performance.

Yet while Chinese LSOEs have become a significant force of Chinese SAS oriented OFDI, and while their external and internal circumstances are not only distinct from those of DMNEs, but also undergoing rapid change, to date there has been very little research to identify the unique features that shape their post-acquisition knowledge integration and operational performance. Previous eclectic and incremental theories have focused on MNEs with parent firms originating in the developed markets, and would therefore not be applicable to evaluate EMNEs' post-acquisition performance. Indeed, there is a lack of literature concentrating on EMNEs, especially local SOEs, that play a parent role (Delios & Beamish, 2001; Luo, 2003; Ortmant, 2016; Rabbiosi, 2011). Moreover, previous EMNE theories such as 'springboard' perspectives and 'linkage, leverage and learning' (LLL) framework (Mathews, 2006), which treat Chinese firms as acquirer parents, provide only general concepts on pre-acquisition motivations, and lack detailed investigation of actual post-acquisition knowledge learning and leveraging practices. Moreover, there has been very little discussion of the post-acquisition knowledge transfer and management know-how behaviours of SOEs whose ownership is at the provincial or local level.

To date, most IB studies in the field of EMNEs' post-OFDI integration behaviours have been based on conceptual and theoretical discussions; there is a lack of empirical research that accesses real data. In this thesis, following on from the quantitative empirical study, which has yielded new insights regarding LSOEs' role as a driving force of Chinese SAS oriented OFDI, the case study research will access and analyse primary data to explore post-event stories in greater depth and detail. Focusing on the acquisition by the Chinese firm NHI of the French company NFM, and the 10 year period since that transaction was completed in 2007, the

researcher has investigated hand-collected data of three parallel post-acquisition case topics, namely managerial arrangements, knowledge transfer, and parent-subsidiary interaction. The results show that local state ownership, domestic institutional disadvantage, and parent-subsidiary psychic distance are main determinants of LSOEs' post-acquisition knowledge integration. These findings enrich our understanding to the theoretical and empirical highlights on the one hand, while also providing valuable implications for future pre-acquisition strategy.

The rest of Chapter 7 is organized as follows. Section 7.2 presents a review of the previous literature on post-acquisition integration behaviours, identifies gaps in the existing theory, and positions the present research in the theoretical framework. Section 7.3 investigates in depth three sub-topics of NHI's post-acquisition managerial and transfer issues, analysing primary data in a qualitative manner and thus shedding new light on these questions. In section 7.4, three themes emerge as key aspects that determine Chinese LSOEs' post-acquisition integration and performance, namely external institutional environment, intra-organization interaction, and internal capacity. These provide the frame for the conceptual model shown in Figure 7.2. Section 7.5 summarizes and provides concluding remarks to the chapter.

7.2. Theoretical framework

7.2.1. Knowledge learning and influential factors

As noted in section 7.1, conventional IB literature, such as that based on IPM and OLI theories, argues that organizational learning is a significant aspect of MNEs' internationalization process, and a crucial requirement for internalizing external advantages (Johanson and Vahlne, 1977; Zhong et al., 2013). Knowledge learning behaviour is considered a key OFDI task among parents and subsidiaries where the host and home countries have assignable psychic distance (Johanson and Vahlne, 2003). In the early stages, knowledge normally flows from developed parents to developing subsidiaries; then, as the R&D capacity

in the emerging markets increases, there emerges the phenomenon of reverse knowledge transfer, in which knowledge flows back from developing country subsidiaries to developed home market firms (Ambos et al., 2006; Frost and Zhou, 2005; Nair et al., 2015; Rabbiosi, 2011; Williams & Lee, 2016). Scholars have described this process in terms of inter-organizational learning capacity in DMNEs' business group operation, and the parent-subsidiary relationship (Ambos et al., 2006; Nair et al., 2015; Rabbiosi, 2011).

With regard to the parent-subsidiary relationship, recent studies within the international process model (IPM) have attempted to extend the current incremental theory by taking account of the role of psychic distance in parent-subsidiary networks (Johanson and Vahlne, 2003; Meyer et al., 2011; Meyer and Thaijongrak, 2013) in determining post-acquisition knowledge integration performance. The relationship between the parent and subsidiary firm is an important moderator to influence knowledge absorption and business operation performance in the post-acquisition period. However, it is difficult to measure psychic distance by a uniform approach, while official psychic distance (e.g. legal system) and non-official psychic distance (e.g. culture, language) impact on the parent-subsidiary relationship in very different ways and to different extent. Moreover, in this research, it is necessary to include direction of flow of knowledge transfer, such as upwards from subsidiaries to parents, or downwards from parents to subsidiaries, because EMNEs' strategic asset seeking OFDI requires their capacity to integrate assets from foreign target subsidiaries (Luo & Tung, 2007). Therefore, in this study, I investigate the effect of different types of psychic distance on networks among Chinese LSOEs and their foreign subsidiaries.

Furthermore, in view of the fact that previous EMNE theories consider leveraging strategic assets and learning knowledge from foreign acquired firms as central to EMNEs' post-acquisition integration and performance (Mathews, 2006; Luo et al., 2010; Buckley et al., 2014), firm assets or advantages possessed by both parent and subsidiary would be important

variables to affect integration performance. As mentioned previously, strategic assets are not uniform: they can be categorized as location bound (e.g. brands, trademarks) or non-location bound (e.g. patents, knowledge), as tangible or intangible assets (Buckley et al., 2014), and as home country parent possessed assets or host country subsidiary possessed assets. Thus, any discussion of the impact of assets on performance should be in depth and in detail, because different types of assets will have different effects on the type, speed and quality of knowledge transfer and managerial integration between parent acquirers and foreign acquired firms. By going into the detail of the three parallel post-acquisition cases, this chapter will attempt to improve the knowledge and understanding regarding LSOEs' post M&A integration behaviours.

With regard to the case study presented in this chapter, emerging market conditions, psychic distance, and assets are considered as potentially highly relevant variables that would affect post-acquisition performance, especially for the LSOE acquirer. Knowledge transfer and managerial integration are dynamic operation processes, in which absorptive capacity plays a core determining role. In my view, the indicated external circumstances (market and institutional environment; psychic distance) and internal conditions (possessed firm tangible and intangible assets) would impact directly and primarily on firms' absorptive capacity, rather than on other elements of the business running processes.

7.2.2. Absorptive capacity: advantages vs. barriers

Absorptive capacity, defined as 'the ability of a firm to recognize the value of new external information, assimilate it, and apply it to commercial ends' (Cohen & Levinthal, 1990: 218), has been identified as a core ability that enables leveraging and integration of strategic assets (Witt & Lewin, 2007; Cohen and Levinthal, 1990). Cohen and Levinthal (1990) proposed three components of absorptive capacity, namely ability to understand new external

knowledge, ability to assimilate external knowledge, and ability to apply new knowledge to new commercial ends. Lane et al. (2001) extend and add new approaches to this 'understand – assimilate – apply' model for international joint venture firms (IJV), arguing that trust between IJV partners, cognitive structure of the receiver, and strategy and training competence are the three basic requirements that impact positively on the absorptive capacity of an organization. Similarly, Hamel (1991) asserted that bargaining power, learning intent, and self-sustaining ability of learning are determinants of inter-partner knowledge transfer from international strategic alliances. It is necessary to include direction of flow of knowledge transfer, such as upwards from subsidiaries to parents, or downwards from parents to subsidiaries, because EMNEs' strategic asset seeking OFDI requires their capacity to integrate assets from foreign target subsidiaries (Luo & Tung, 2007). Therefore, the concept of 'reverse knowledge transfer' is important, and will be described further below.

Moreover, 'the extent to which a firm may exploit these external sources of knowledge is determined by its absorptive capacity, … however, most EM MNEs lack the considerable innovative and absorptive capacity required to positively exploit externally acquired sources of knowledge' (Anderson et al., 2015: 2); consequently, EMNEs are unlikely to achieve success in integration performance.

Cuervo-Cazurra and Rui (2017) note that the particular conditions of emerging markets, including higher restraints on incentives, higher information asymmetries, and weaker construct conditions, heighten the barriers to EMNEs' absorptive capacity. Moreover, compared with DMNEs, where the parent company is located in a developed market and builds subsidiaries in less developed countries, multinational firms based in the emerging markets face very different external institutional circumstances, internal characteristics, and ways of group operation in connection with their foreign subsidiaries. Therefore, in this PhD research, it is assumed that the specific external and internal circumstances of the Chinese LSOEs exert

a direct moderating effect on their absorptive capacity, which in turn impacts on their capacity to exploit and leverage advantages from overseas.

Furthermore, given the diverse nature of the Chinese context, there is great variation among enterprises, and their differing characteristics have a great effect on the particular features of their post-M&A performance. LSOEs in China represent a growing force of SAS oriented OFDI, and their post-acquisition performance is a very important criterion to evaluate success. However, to date literature focused specifically on this question is scarce. This thesis will contribute to filling that research gap.

Therefore, this research is positioned in both EMNE theory (e.g. with regard to SAS, institution, psychic distance) and organizational behaviour theory (e.g. absorptive capacity), and these two aspects are used to construct the basic theoretical framework. By investigating various aspects of post-acquisition integration behaviours, this case study research will add to the existing knowledge and bring new insights to enrich our understanding as to how, within the dynamic and diverse Chinese political economy, different external and internal conditions impact on Chinese LSOEs' absorptive capacities, and thus determine their knowledge transfer performance and management know-how integration.

7.3. Qualitative research methods

7.3.1. Linking and comparing with pre-studies

In line with the previous study II, this chapter still adopt a parallel case study on the NHI Group's three management issues. By 'explanatory reasoning' logic, this study will try to shed light of post-acquisition behaviours of the Chinese local SOEs and bring more detailed evidence to adding previous studies. Compared with the study II, which three sub-cases are designed for comparing various CMNEs' OFDI behaviours horizontally among firms with different backgrounds and vertically the core case company – the NHI's acquisition actions

ranging by different time period, this study III will concentrate on three separate sub-cases that reflecting three issues or changes that experienced by the NHI Group in post-acquisition period. The study III will try to discover how external circumstance impact on Chinese local SOEs' internal capacity, as well as how intra-organizational relationship impact on such new merged group's operation and performance.

7.3.2. Parallel Case 4: NHI's post-acquisition managerial practice for integration: challenge and opportunities

Given that different types of resources are associated with different degrees of difficulty and complexity, they require separate and specific treatment by managers in the process of post-acquisition integration. In the early stages of the post-acquisition period, sufficient financial capital is the most important resource expected by the NFM and Robbins, while for the Chinese SOE it is the strategic asset owned by the NFM, namely the intangible brand, that is the most necessary element and also the easiest to integrate. Thus, financial management and brand management constitute the first tier of successful managerial adoption in the early post-acquisition stage. At the next stage, however, as the deepening integration requires elite human capital, population outflow from the local regions poses a huge challenge for the NHI's human resources management. Also an EMNE with acquiring subsidiaries faces transfer of employment policies challenges between developing home country parents to its developed host country subsidiaries (Aguzzoli & Geary, 2014).

In more detail, first of all, the acquired French company, NFM, needed injections of finance capital in order to survive, which was their initial motivation to seek foreign buyers. The NHI Group, which is a local SOE owned by the Shenyang government, have access to loans from the government's policy oriented investment banks as guarantees of financial support. So, in the early post-acquisition stage, the NHI was capable of providing sufficient

capital to ensure the survival of its foreign acquired subsidiary. Secondly, as the sharing of basic infrastructure among intra-organizational sites is required for cross-border working collaboration in the post-acquisition period, the integration of tangible capital such as equipment and factory plants is a basic management issue, necessary in order to connect the international production line and value chain. Fortunately, on the one hand, NHI had already constructed the largest and most advanced TBM factory workshop in the world, and thus were in a position to offer NFM the basic factor of production. On the other hand, NFM was able to provide cutting-edge equipment facilities for manufacturing soft ground TBM, thus responding to NHI's SAS perspectives for adding FSA. Consequently, high performance tangible resources integration was expected and welcomed by both sides. Moreover, under the 'Revitalize' national strategy, the NHI obtained extra support to expand its workshop size and upgrade its equipment. Therefore, the capital management aspect of tangible assets integration was implemented smoothly and achieved its purpose in the early integration stage.

With regard to intangible assets management, while technical expertise and management require a longer period of integration, brand and reputation, which are normally registered as trademarks, can be integrated more easily and directly. Using their joint brand NHI-NFM, the newly merged company achieved better performance in both the domestic and international markets; hence it is clear that managerial integration was highly successful in the early post-acquisition stage. However, as the company progressed to further stages, business operation became more complex, bringing significant challenges for integration. In particular, international human resources management was to become a challenge for the NHI in the post-acquisition period.

As explained in Chapter 4, economic recession has led to a severe outflow of population from Liaoning province, where the case company NHI is based. The area has become less and less attractive to elite human resources, while young people born and brought up there are eager

to escape and seek opportunities elsewhere. Consequently, the NHI Group has been seriously impacted both by negative economic growth and by loss of human resources. Meanwhile, the company has completed two foreign acquisition deals: one with France in 2007 and one with the United States in 2016. The human aspects of M&A deals always exert significant impacts in facilitating the pre-M&A pursuing process and post-M&A outcomes (Cartwright & Cooper, 1992; Xing & Liu, 2016). Especially in the post-acquisition phase, experience and intangible assets owned by firms, such as elite staff with international backgrounds rich in foreign experience, and possession of advanced manufacturing techniques created by such elite workers, have been indicated as significant factors in influencing MNEs' knowledge integration and management performance (Buckley et al., 2014). However, as highly educated people would prefer to seek job positions in more prestigious and better-located firms, such as any central SOE in Beijing or global top MNE in Shanghai, rather than remain in a local SOE, hiring suitably qualified employees becomes ever more difficult. Consequently, the NHI Group faces the loss of intangible assets caused by the outflow of talented employees, which has a detrimental impact on international human resources management to support cross-country business operation and integration (Simonin & Özsomer, 2009).

The previous studies I and II have highlighted institution and ownership as basic factors shaping Chinese local SOEs' OFDI behaviours and determining pre-acquisition strategy making. This case study will investigate a range of management practices, in order to discover whether and how they have a similar impact on various post-acquisition managerial behaviours.

7.3.3. Parallel Case 5: NHI's post-acquisition knowledge integration: absorptive capacity and knowledge friendly organizational re-structuring

As Chinese local SOEs' OFDI actions have been shown to be driven primarily by a strategic asset seeking motivation, measurement of the transfer and integration of knowledge

from foreign targets is crucial to evaluate whether they achieve their initial purpose of adding FSA. In the case of NHI, in order to improve absorptive capacity and integration efficiency, the company launched a re-structuring process across the organization to adapt to the post-acquisition circumstance and requirements. The present case 5 is based on key transformation issues of knowledge integration, with specific reference to changes in learning mode, R&D team developments, and joint-design behaviours, in order to shed light on the key reasons for these changes and to bring more insights regarding knowledge integration activities.

Previously, it was very difficult to obtain advanced techniques and skills directly from external sites; instead, the main pathway for learning high-edge knowledge was via the import of final products or the purchase of equipment from overseas. Product-based learning runs the risk of being limited and superficial: it is difficult for the learner to grasp the fundamental logic; the amount and quality of knowledge transferred will be low, while the process is likely to take a long time and to involve extra costs. In contrast to this 'learning by products', 'learning by projects' is a smart and appropriate way to absorb knowledge from foreign targets, and it is this approach that has been adopted by the newly merged NHI.

The vice-CEO of Genertec Europe Temax GmbH, a Chinese consulting firm based in Germany, argues that learning by project would help Chinese firms to gain solid theoretical foundations for manufacturing high-tech products. In an interview for this research, he described the process as follows: 'If the whole TBM equipment manufacture is a process from A to Z, the previous learning by products is a reverse pathway that could get technique capacity from Z to H, while learning by project would make it the whole knowledge from A to Z.' Foreign M&A with NFM make it possible for the NHI to connect with foreign advanced techniques and working mode from processing project together in order to learn and transfer knowledge more effectively.

However, although the Chinese firm was able to obtain large percentage of the domestic

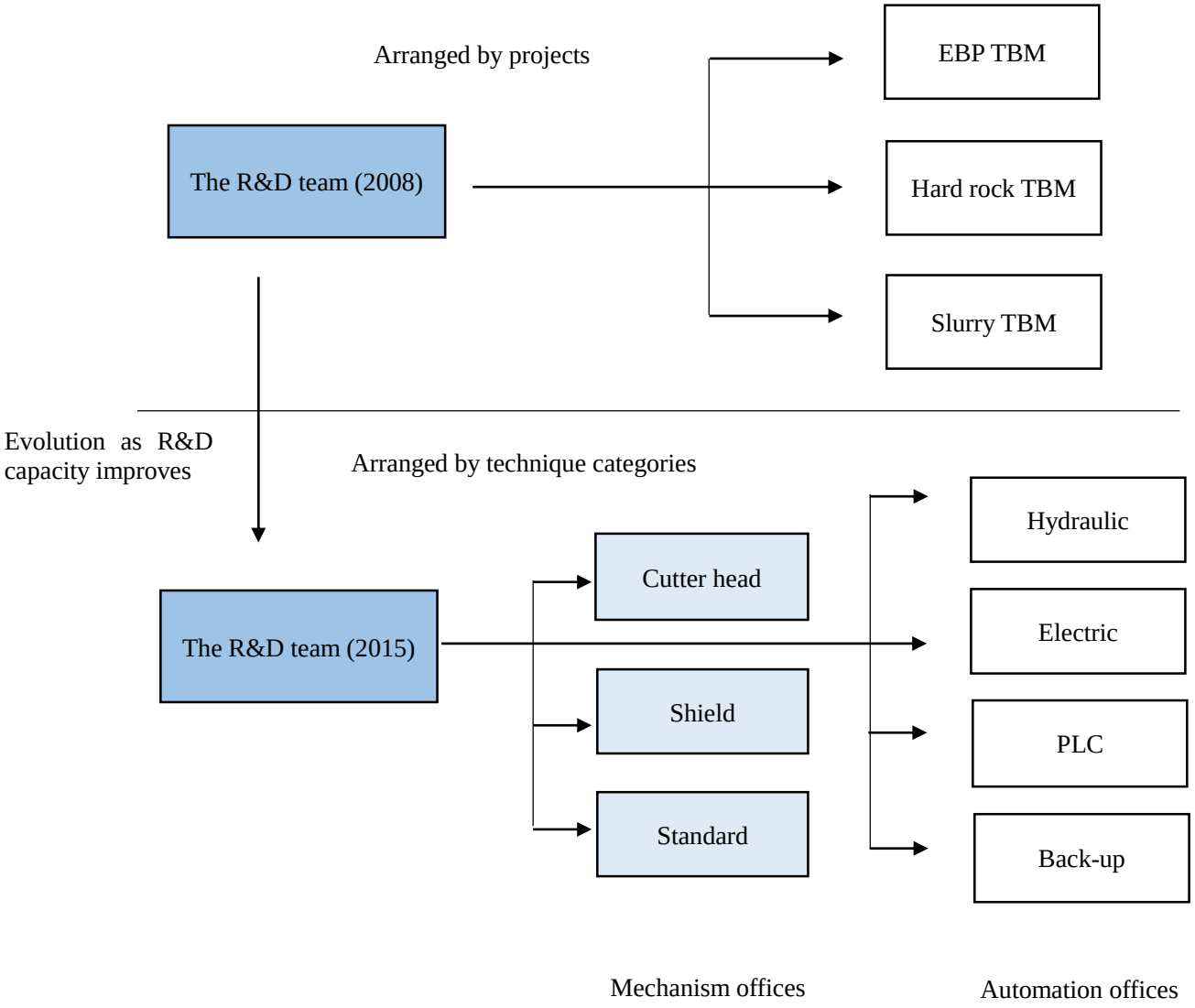
market share by using their foreign subsidiaries' advanced technologies, the strategic asset seeking performance was not fully achieved at the initial stage. Core techniques cannot be transmitted directly through engineering drawing sheets or explanatory booklets alone, since they are accumulated through experience and exist in the minds of design office technical staff and first line workshop workers (Cárdenas et al., 2012). They are largely tacit in nature. Therefore, the efficiency of acquiring techniques is always determined and restricted by foreign staffs' preference with regard to sharing experiences. This brings difficulties and challenges to the NHI's post-acquisition knowledge transfer performances.

In order to solve these problems and improve strategic asset seeking efficiency, in 2008 the NHI Group established its own TBM R&D team in Shenyang, supervised by both NHI Group headquarters and its acquired French subsidiaries. At the initial stage, the R&D team was organized according to the 'learning by project' perspective, whereby sub-sectors were categorized into EBR office, Slurry office, and Hard rock office. Each of the offices are taking the technique learning responsible for the whole projects process of their focused areas, which much more improves their absorptive capacity and accelerate their speed of knowledge transfer. As TBM equipment manufacturing techniques were transferred and absorbed effectively, the NHI Group gradually accumulated experience on each part of the whole process of making TBM machines and start to try exploit product innovation individually by themselves.

However, the level of learning efficiency differs among different types of skills. For example, machinery design is a more difficult skill than automation, as it requires more practical experience, which takes longer to accumulate. Therefore, the NHI Group restructured its R&D team according to the specific characteristics of different types of work. Mechanism design for cutter head and shield, hydraulic and electrical programmes, the machinery PLC automation system, and back-up and standard offices are key sectors of the R&D office established in 2015. Such segmentation by technique categories means that learning behaviours

can be more focused and specialized.

Figure 7. 1 Evolution of the R&D team from 2008 to 2015.



Sources: In-depth interviews and on-site observations

With regard to practical techniques accumulated in the post-acquisition period, the NHI staff have obtained relevant professional manufacturing skills in order to catch up with their foreign colleagues. Compared to the high salaries in Europe's labour market, Chinese staff can provide similar technical support but at much lower cost. Therefore, in 2015, the Chinese design office of the NHI Group started to send its newly-trained native mechanical designers to provide supplementary help to their overseas subsidiaries. Not only do such cross-country

joint-design behaviours dramatically improve working efficiency at much lower cost, but the frequency of labour exchange is very beneficial to cross-culture communication and global operation integration between the NHI Group and its foreign merged subsidiaries.

Compared with the difficulties experienced in management integration, NHI's knowledge transfer has achieved better success in the post-acquisition period. Consequently, this Chinese local SOE has been able to put in place a world competitive R&D team, to develop its self-innovation ability, and to increase its ability to manufacture high-edge technique TBM. This sub-case 5 will seek to discover the reasons for this early success in knowledge learning, and to identify the determinant variables behind it.

7.3.4. Parallel Case 6: NHI Group's intra-organizational management**:** Communication and cooperation issues

As has been noted in the discussion of cases 4 and 5, management integration is more difficult than knowledge integration for Chinese local SOEs that engage in foreign M&A. Also, through studying the answers given in pilot interviews and reading archival materials, we know that communication and cooperation issues are basic and highly relevant to the post-OFDI managerial operation and integration performance in cross-culture intra-organizational management. However, NHI's weakness in communication and cooperation capacity resulted in a lack of management control over its foreign acquired subsidiaries.

Language was the first big communication problem faced by the Chinese acquirer firm and its French acquired subsidiary. Both China and France implement a high degree of protection of their home languages, and people are not encouraged to speak a second language. The Mandarin-speaking personnel of the NHI Group could not understand the French-speaking staff of NFM Technology, and there was no common language such as English. This represented a huge barrier to communication. As noted by a staff member involved in the whole

process of foreign M&A between the NHI Group and NFM Technology, the translation office was one of the largest departments of the newly merged firm, and played a crucial role. Each conversation between Chinese and French personnel would depend on translators, which was both costly and inefficient. Ultimately, however, with the implementation of English language courses for both sides, the situation improved (Heikkilä and Smale, 2011), but still not yet be satisfied for a better managerial integration. Furthermore, in addition to language problems, culture and institutional difference prolong the parent-subsidiary psychic distance, and add more difficulties to their post-acquisition integration.

As the psychic distance between home and host country increases, so firms' capacity to operate efficiently will decrease as the two sides' heterogeneity result in misunderstanding and add transaction cost between each other (Vasilaki, 2011). In general, such issues are caused by differences in terms of institutions and could be divided by different sub-categories, social orders and legal systems. In strategic assets seeking cross-border M&A between Chinese and advanced western countries' firms, the culture distance between host and home countries is large and significant. For example, China is the largest developing country in the world. Confucius, communism and capitalism jointly shape the Chinese social institutions that influence Chinese firms' behaviours. On the other hand, the western advanced countries have a well-established free market economy, healthy social welfare, and efficient legal systems. Culture conflict is thus an unavoidable issue for a Chinese MNE seeking to integrate with a foreign acquired firm. Consequently, in the first five years after acquisition, Chinese headquarters and the foreign subsidiaries operated almost entirely separately, and the extent of managerial integration was very limited.

Therefore, in case 6, we will focus on intra-organizational interactive behaviours, which will shed light on cross-culture communication and cooperation issues as important variables impacting on Chinese local SOEs' integration with their foreign acquired companies in the

post-OFDI period. In doing so, further categorization of variable terms will be helpful to give a more detailed and in-depth understanding.

7.3.5. Data collection and analysis

The researcher conducted field study over a period of 8 weeks in 2016 to access the case enterprises in both home and host countries, which is as similarly as the previous case study. The major case companies, the NHI Group, in the technology-intensive global tunnel boring machinery industry and have experienced 10 years of post-acquisition integration activities. The fieldwork included 50 hours of interviews with highlighting roles of technique and general operating staffs. Moreover, visits to R&D offices and observation of front line production are appropriate actions when seeking to understand behaviours. In addition, the researcher hand collected relevant documents and visual materials in order to gain more complete information.

Unlike study II, which investigated pre-acquisition decision making from a strategic perspective, the present study III will concentrate more on actual operation behaviours in terms of managerial and knowledge integration in the post-acquisition period. Therefore, the relevant interviewees are middle level managers and first line operating staff, rather than the senior position decision makers interviewed for study II. The interview questions in this study focus on managerial and integration difficulties, and approaches and skills applied to resolve these problems. As the issue of behaviour change is significant in post-acquisition performance, this study III uses more on-site observations of actual working behaviour in general day-to-day operations. Moreover, social media information and historical materials are employed to contribute to understanding the wider dynamic external circumstances and the changing internal framework and capacity. In line with the methodology of study II, this study adopts a similar ‘open-axial-selective’ coding process for arranging and analysing the qualitative data. As shown by the following Figure 7.2, key concepts and categories have been summarized as

‘open coding’ outcomes.

7.4. Results and Emerging Model

Qualitative coding and content analysis reveal that domestic institutional disadvantage, local state ownership and parent-subsidiaries psychic distance are decisive factors in post-acquisition performance. These factors are then integrated into previous theories on assets leverage and performance to explain Chinese local SOEs’ post-acquisition knowledge integration behaviours. It is found that, as shown by Figure 7.3, by exerting effects on firms’ intangible and tangible assets and interaction with foreign subsidiaries, these factors greatly impact on the speed and quality of Chinese local SOEs’ post-acquisition knowledge integration and performance improvement.

7.4.1. Theme 4: Domestic institutional disadvantage and intangible assets loss

Institutional advantages have been indicated as determinants of Chinese firms’ foreign direct investment (Buckley et al., 2007). However, in China, ownership and institutional regimes are not unified and stationary, but diverse and dynamic, which results in different level of institutional positions and variations in competence within the domestic institutional regime (Wang et al., 2012). Central and local are two basic institutional concepts used to define SOEs at different levels, and such heterogeneity of domestic market position is considered as impacting on emerging market firms’ differing ability in their post-acquisition period (Peng et al., 2008).

In the post-acquisition period, acquirers transfer and utilize different types of resources, develop new opportunities, and take advantage of potential synergies and complementarities (Lavie, 2006). However, given the diverse and unequal nature of the Chinese domestic market, the direction of flow of resources is toward those enterprises positioned at the priority

institutional level, that is, the central SOEs. The local SOEs, unfortunately, are invariably in a position in which intangible assets flow out. As explained by the general manager of the NHI group:

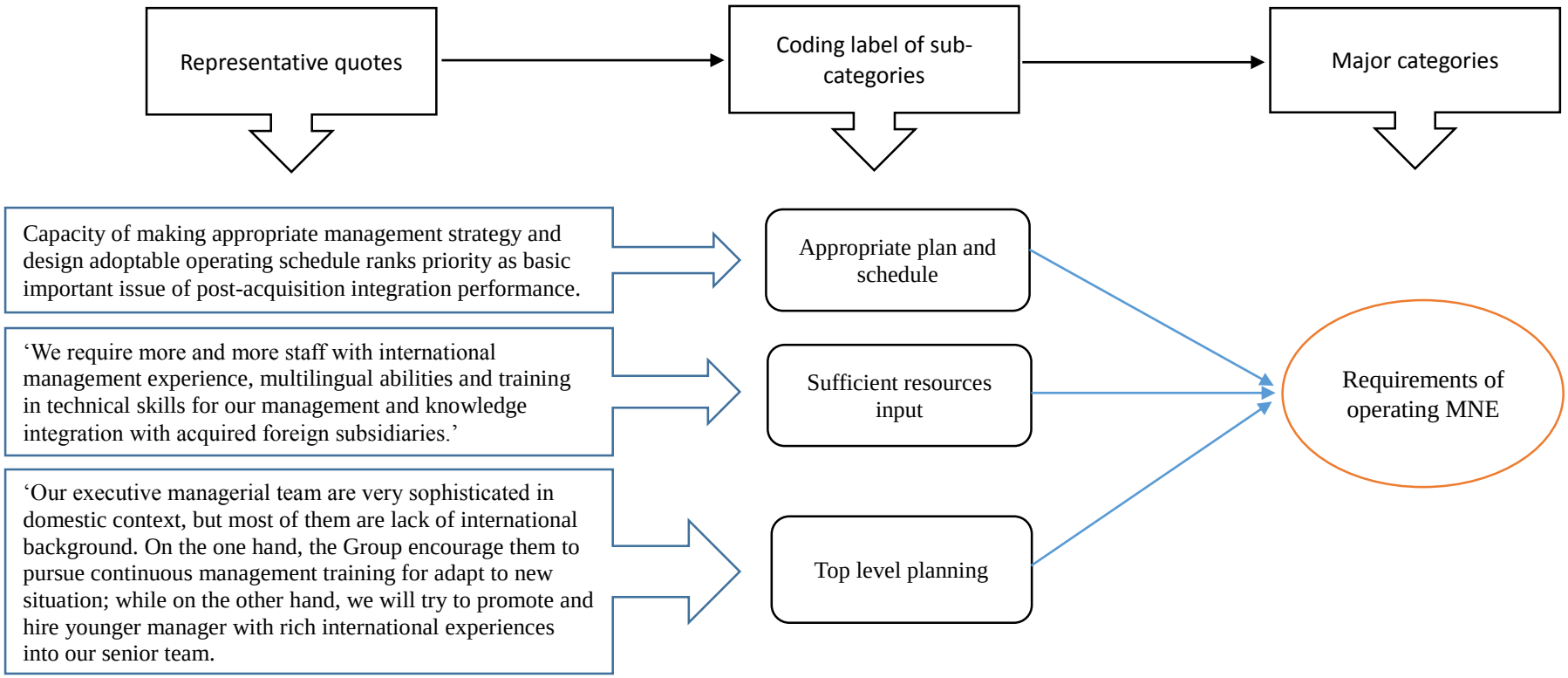
> Those entering employment would prefer to choose higher tier enterprises located in the first tier cities, which are imagined as the best place to start their careers. For example, in China, major central SOEs and foreign multinational firms in Beijing and Shanghai are more attractive for those higher educated employees and well trained skilled workers. A decent social status and handsome salary make them sought after by those pursuing a position.

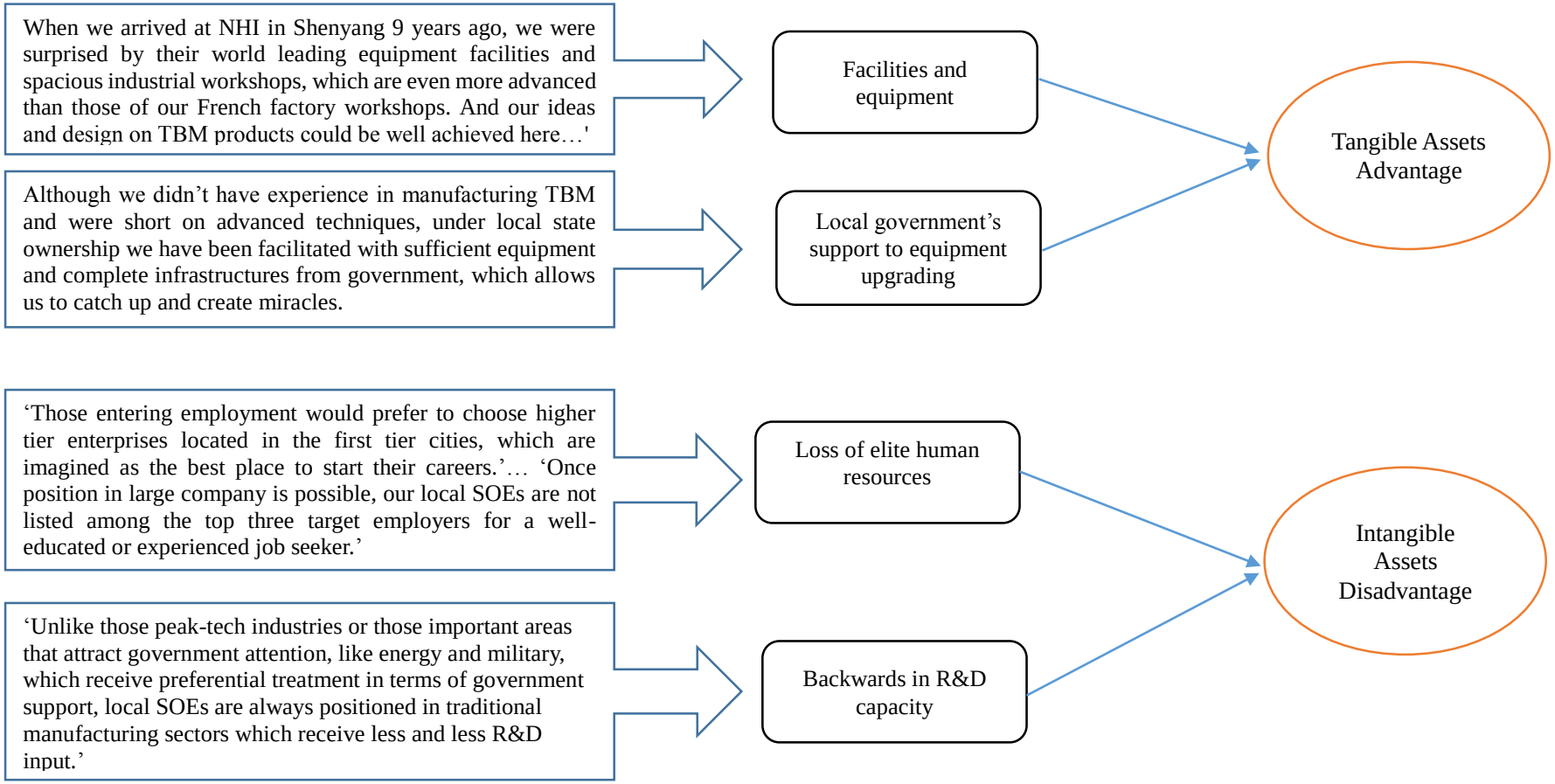
With regard to the outflow of elite staff as a domestic institutional disadvantage, NHI's director of HRM highlights their post-acquisition difficulties as follows:

> Once position in large company is possible, our local SOEs are not listed among the top three target employers for a well-educated or experienced job seeker. Since acquiring NFM in 2007, we require more and more staff with international management experience, multilingual abilities and training in technical skills for our management and knowledge integration with acquired foreign subsidiaries. However, in many circumstances, we have to run hard campaigns to recruit these competent employees from good universities.

As shown by our coding outcomes, there exist strong causal effects between concepts of local SOEs' 'weak domestic priority', 'elite human resources losses' and 'less efficiency of integration performances'. Taking educational background as the criterion to evaluate the level of human resources of the CMNEs, on the one hand, only 5% of NHI Group employees possess foreign degrees, while for any central SOE in Beijing this number is already over 20%, and is rising year by year. As noted by a Chinese international student who study for a master degree in England, 'My first career targets after graduating from overseas, similar to my classmates, Chinese central SOEs or foreign companies. Chinese headquarters in Beijing or Shanghai are circulated as our primary destination. If we can't be enrolled, we will wait for the next recruitment sessions the following year.'

Figure 7. 2 Example of the 'open coding' of field study into post-acquisition behaviours.




When we arrived at NHI in Shenyang 9 years ago, we were surprised by their world leading equipment facilities and spacious industrial workshops, which are even more advanced than those of our French factory workshops. And our ideas and design on TBM products could be well achieved here…'
Although we didn't have experience in manufacturing TBM and were short on advanced techniques, under local state ownership we have been facilitated with sufficient equipment and complete infrastructures from government, which allows us to catch up and create miracles.
'Those entering employment would prefer to choose higher tier enterprises located in the first tier cities, which are imagined as the best place to start their careers.'… 'Once position in large company is possible, our local SOEs are not listed among the top three target employers for a well-educated or experienced job seeker.'
'Unlike those peak-tech industries or those important areas that attract government attention, like energy and military, which receive preferential treatment in terms of government support, local SOEs are always positioned in traditional manufacturing sectors which receive less and less R&D input.'
Facilities and equipment
Local government's support to equipment upgrading
Loss of elite human resources
Backwards in R&D capacity
Tangible Assets Advantage
Intangible Assets Disadvantage

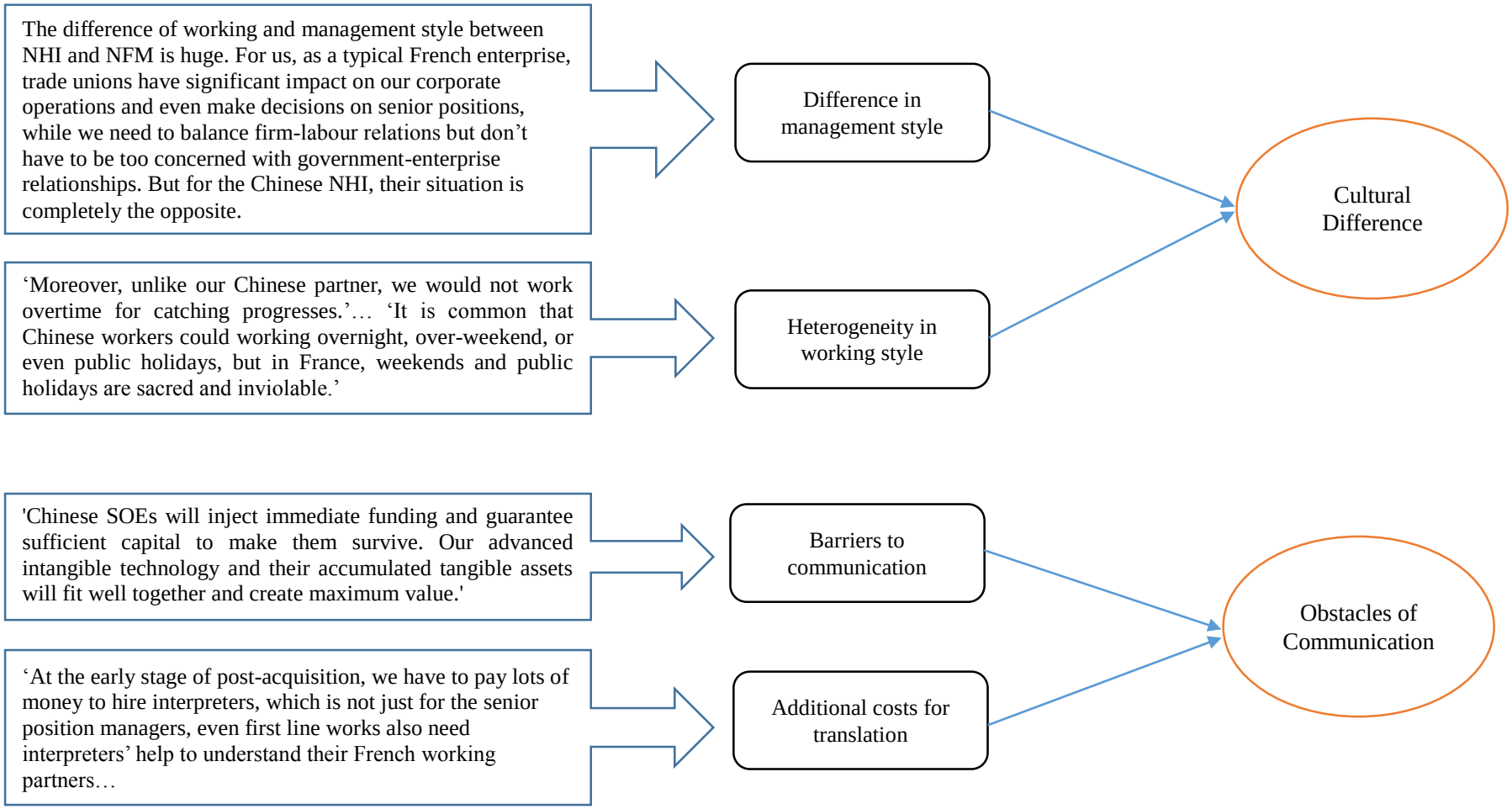
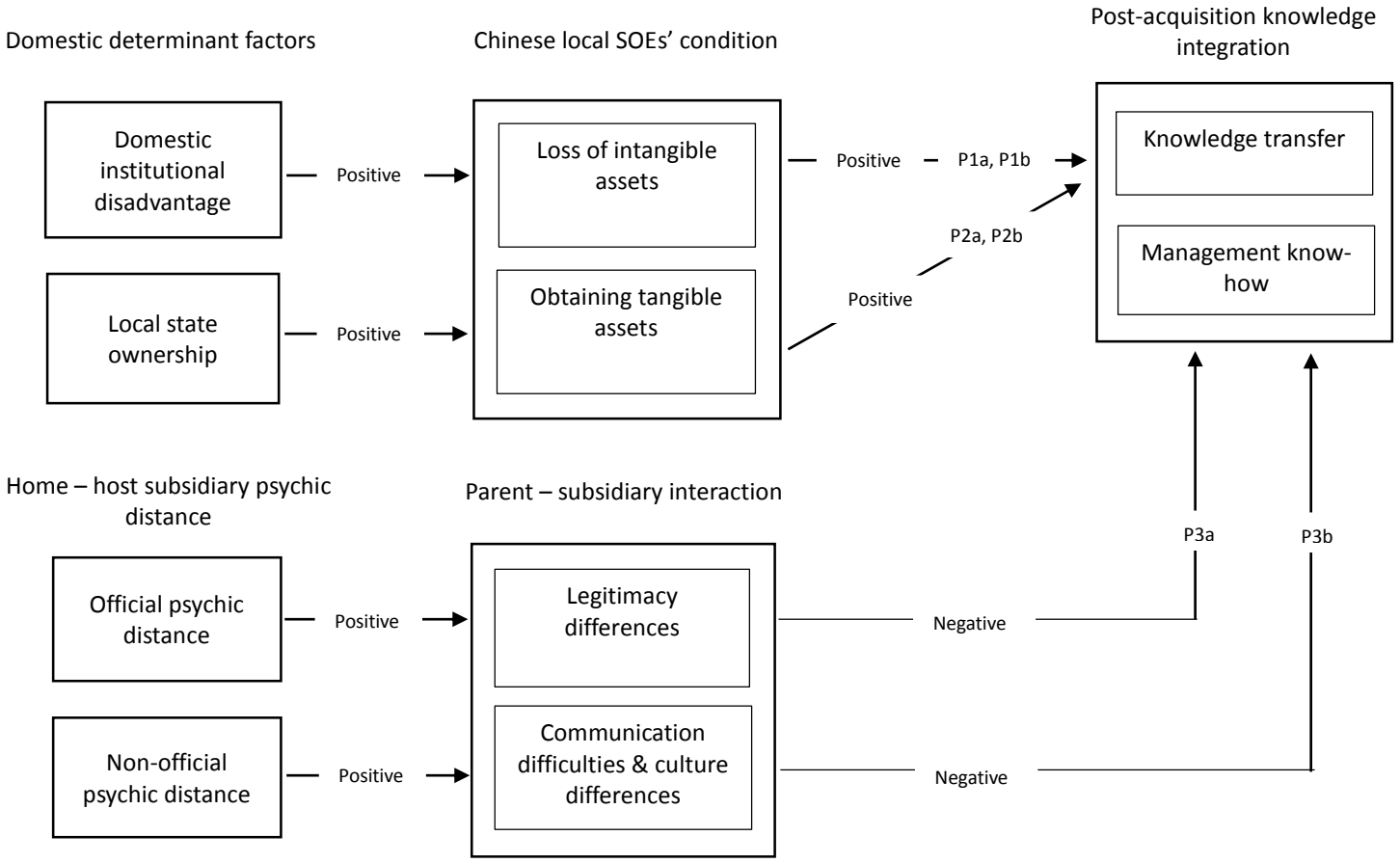

The difference of working and management style between NHI and NFM is huge. For us, as a typical French enterprise, trade unions have significant impact on our corporate operations and even make decisions on senior positions, while we need to balance firm-labour relations but don't have to be too concerned with government-enterprise relationships. But for the Chinese NHI, their situation is completely the opposite.
'Moreover, unlike our Chinese partner, we would not work overtime for catching progresses.'… 'It is common that Chinese workers could working overnight, over-weekend, or even public holidays, but in France, weekends and public holidays are sacred and inviolable.'
'Chinese SOEs will inject immediate funding and guarantee sufficient capital to make them survive. Our advanced intangible technology and their accumulated tangible assets will fit well together and create maximum value.'
'At the early stage of post-acquisition, we have to pay lots of money to hire interpreters, which is not just for the senior position managers, even first line works also need interpreters' help to understand their French working partners…
Difference in management style
Heterogeneity in working style
Barriers to communication
Additional costs for translation
Cultural Difference
Obstacles of Communication

Figure 7. 3 Emerging model – determinants of Chinese LSOEs' post-acquisition integration.



As regards the level of education, most NHI employees have qualifications from vocational technical schools or sub-tier bachelor degrees from the non-985 and non-211 Chinese Universities. In contrast, a majority of central SOEs' recent employees hold a competitive first degree of a 985 or 211 University, and many have master or PhD degrees. This imbalance means that there is a shortage of elite human resources to support local SOEs' post-acquisition operations, which in turn leads to further difficulties in international management and the control of foreign acquired subsidiaries.

Therefore, the outflow of elite intangible human assets from local SOEs owing to their domestic institutional disadvantages is detrimental to their post-acquisition knowledge and management integration. Hence, we propose:

Proposition 1a: Domestic institutional disadvantages of Chinese local SOEs cause the loss of elite human resources, such as experienced managers and highly-skilled workers, which has a negative effect on post-acquisition knowledge transfer and management know-how ability.

Moreover, in addition to the loss of intangible human resources assets, decentralization has led to local SOEs receiving lower R&D policy preference from the government, and to the degradation of their domestic brand reputation. As indicated by the CTO of the NHI TBM company:

> Unlike those peak-tech industries or those important areas that attract government attention, like energy and military, which receive preferential treatment in terms of government support, local SOEs are always positioned in traditional manufacturing sectors which receive less and less R&D input. We lack sufficient funding and feel great pressure to absorb knowledge from NFM and Robbins.

Table 7. 1 Emerging themes of the Study III.

Emerging theme		Direct consequence		Impact on post-acquisition knowledge integration
Domestic institutional disadvantage		Intangible assets	Loss of elite human resources	Outflow of intangible human assets from local SOEs owing to their domestic institutional disadvantages is detrimental to their post-acquisition knowledge integration.
			Less R&D investment	Decentralization has led to LSOEs receiving lower R&D policy preference from the government for supporting knowledge transfer.
			Degraded domestic brand reputation	Decentralization also led to degradation of LSOEs domestic brand reputation, which is negative to their post-acquisition knowledge integration.
Local state ownership		Tangible assets	Access to R&D equipment and clusters	Owing to world leading equipment facilities and spacious industrial workshops that offered by government, advanced ideas on TBM products could be well achieved.
			Access to local complementary resources	To access cheaper local intermediate materials and raw materials, local priority could be helpful to LSOEs to decrease the transaction cost of knowledge transfer, and to save costs for better business performance.
Parent-subsidiary psychic distance	Formal	Legitimacy conflicts		LSOEs would face greater institutional pressures from the host country than would incoming private firms. Therefore, state-owned MNEs are more likely than private firms to show local adaptation in terms of their establishment mode and level of control over their foreign operations.
	Informal	Communication barriers		Translation office was one of the largest departments of the newly merged firm, and played a crucial role. Each conversation between Chinese and French personnel would depend on translators, which was both costly and inefficient.

With regard to the brand assets, the CTO stated that: 'Local brands are weaker than those of central SOEs to attract co-operators in the areas of technology and skills, so we can't get the best resources of what we want for our post-acquisition integration when competing with central SOEs.' Local SOEs in the northeast region are concentrated in the traditional heavy industries, such as mining, metals, and equipment manufacturing, which are not highly relevant to the nation's long-term development strategy, have only limited importance to national security, and are unlikely to bring new growth to the country's economy. Following their decentralization to provincial or city level, and given their relatively low importance in the national mission to develop high-tech industry, these local SOEs have seen the gradual withdrawal of government policy support and financial investment. Moreover, as the emergence of private high-tech industry firms located along the southeast coast has caused the domestic market to become more diverse, competition has increased, pushing the local SOEs to the side lines. As a legacy of the previous planned economy, the 'wait, rely, request' logic is deeply ingrained into the mind set and economic growth mode of the northeast SOEs, which has resulted in the northeast region falling far behind the rest of the country, and especially the south coast.

Consequently, we can extend our proposition on the negative effect of domestic institutional disadvantage on post-acquisition integration as follows:

Proposition 1b: Domestic institutional disadvantages of local SOEs lead to the downgrading of government support and domestic reputation, which result in less R&D investment and degraded domestic brand reputation, which have negative impacts on

their post-acquisition knowledge transfer.

7.4.2. Theme 5: Local state ownership and tangible assets allocation

As mentioned by Buckley et al. (2014), EMNEs are usually considered as possessing strong tangible assets owing to home country specific advantages such as government support, access to cheap resources and oligopolistic market position (Buckley et al., 2007; Deng, 2009; Luo & Tung, 2007). Given the diverse nature of the Chinese economy, there exists great heterogeneity among firms with different types of ownership in terms of ability to access and utilize local raw resources and cheap intermediate materials, and in their manufacturing plants and facilities. Unlike local private firms, not only can local SOEs access basic production materials and resources in the local region, but since decentralization they have also benefited from having significant tangible assets, such as factory plants and manufacturing infrastructures, re-assigned to them by government. As noted by the NHI TBM factory director:

> Although we didn't have experience in manufacturing TBM and were short on advanced techniques, under local state ownership we have been facilitated with sufficient equipment and complete infrastructures from government, which allows us to catch up and create miracles.

A NFM exchange technical staff member from the French acquired subsidiary also indicated that:

> When we arrived at NHI in Shenyang 9 years ago, we were surprised by their world leading equipment facilities and spacious industrial workshops, which are even

more advanced than those of our French factory workshops. And our ideas and design on TBM products could be well achieved here…

As shown by our coding analysis outcomes, the high frequency concepts 'equipment' and 'facilities' assigned by government have positive causal effects on Chinese local SOEs' knowledge transfer from their acquired foreign subsidiaries. This could indicate the importance of tangible resources, a benefit of local state ownership, in local SOEs' post-acquisition integration performance. Therefore, we propose that:

Proposition 2a: Local state ownership allows Chinese local SOEs to obtain tangible assets from central government. These provide basic production equipment and R&D clusters that have positive effects on local SOEs' post-acquisition knowledge transfer.

Not only does local state ownership provide local SOEs with sufficient tangible equipment to enhance their post foreign acquisition performance; it also allows them to take a priority position in the local area, and to access cheaper local intermediate materials and raw materials. Such local priority could be helpful to local SOEs to decrease the transaction cost of knowledge transfer, and to save costs for better business performance. Therefore, we propose that there exist positive relationships among local state ownership, tangible local resources and post-acquisition performance, as follows:

Proposition 2b: Local state ownership offers Chinese local SOEs higher priority of access to local complementary resources, which is beneficial for them to improve post-acquisition knowledge transfer.

7.4.3. Theme 6: Parent-subsidiary psychic distance and knowledge transfer

Psychic distance has been highlighted by international process theories (Johanson and Vahlne, 2003; Zhong et al., 2013) as a significant variable to influence organization learning performance and efficiency of FDI. Our research extends the IPM theory and divides the psychic distance concept into official and non-official, which would impact on different aspects of local SOEs' post-acquisition integration behaviours.

With regard to the official psychic distance, our coding results show that, given the combination of 'ideological conflicts, perceived threats to national security, and claimed unfair competitive advantage due to support by the home country government' (Meyer et al., 2014: 1005), Chinese local SOEs would face greater institutional pressures from the host country than would incoming private firms. Therefore, state-owned MNEs are more likely than private firms to show local adaptation in terms of their establishment mode and level of control over their foreign operations (Brouthers, 2002; Meyer et al., 2014; Meyer, 2001; Slangen and Hennart, 2007). Meanwhile, at the firm level, there exists great heterogeneity between parents and subsidiaries. As explained by the NFM operating director:

> The difference of working and management style between NHI and NFM is huge. For us, as a typical French enterprise, trade unions have significant impact on our corporate operations and even make decisions on senior positions, while we need to balance firm-labour relations but don't have to be too concerned with government-enterprise relationships. But for the Chinese NHI, their situation is completely the opposite. Moreover, unlike our Chinese partner, we would not work overtime for

catching progresses.

Such contradicted firm-labour relationship issue causes great challenge to , on the one hand,

This official psychic distance increases transaction costs and extends the time needed for knowledge transfer and management integration. Therefore, we propose that:

Proposition 3a: Official psychic distance between local SOEs and their foreign subsidiaries, for example with regard to legitimacy system and corporate operating mode, has a negative impact on their post-acquisition knowledge transfer and management know-how ability.

When comes to the non-official psychic distance, the impact would be more direct and appearing everywhere. Language was the first big communication problem faced by the Chinese acquirer firm and its French acquired subsidiary. As shown by our coding analysis to the interviewed data, both China and France implement a high degree of protection of their home languages, and people are not encouraged to speak a second language. The Mandarin-speaking personnel of the NHI Group could not understand the French-speaking staff of NFM Technology, and there was no common language such as English. This represented a huge barrier to communication. As noted by a staff member involved in the whole process of foreign M&A between the NHI Group and NFM Technology, the translation office was one of the largest departments of the newly merged firm, and played a crucial role. Each conversation between Chinese and French personnel would depend on translators, which was both costly and inefficient. (Heikkil ä and Smale, 2011).

Moreover, for strategic assets seeking cross-border M&A between Chinese and advanced western countries' firms, the culture distance between host and home countries is large and significant. China is the largest developing country in the world. Confucius, communism and capitalism jointly shape the Chinese social institutions that influence Chinese firms' behaviours. On the other hand, the western advanced countries have a well-established free market economy, healthy social welfare, and efficient legal systems. Culture conflict is thus an unavoidable issue for a Chinese MNE seeking to integrate with a foreign acquired firm. Consequently, in the first five years after acquisition, Chinese headquarters and the foreign subsidiaries operated almost entirely separately, and the extent of integration was very limited. Therefore, we propose the effect of Non-official psychic distance on local SOEs' post-acquisition performance as follows:

Proposition 3b: Non-official psychic distance between local SOEs and their foreign subsidiaries, such as culture and language differences, has a negative impact on knowledge transfer and management know-how ability.

7.5. Concluding remarks

This chapter is the first attempt to focus on and offer a thorough explanation of local SOEs' post OFDI behaviours. The data analysis yields an explanatory model that sheds light on the determinants of Chinese LSOEs' post-acquisition knowledge integration.

Extending the work of Buckley et al (2014) and bringing more insights to EMNEs'

absorptive capacity, our analysis extends recent work on the special theory of Chinese firm internationalization by highlighting domestic institutional disadvantages, local state ownership, and parent-subsidiary psychic distances as salient factors influencing Chinese LSOEs' post-acquisition knowledge integration. As a result of decentralization reforms, Chinese LSOEs are subject to domestic institutional disadvantage; they have experienced a significant outflow of intangible assets which reduces their absorptive capacity and which has a negative impact on post-acquisition knowledge integration. However, local state ownership allows Chinese LSOEs to enrich their tangible assets, such as advanced infrastructure base and cheaper complementary local resources, and these home region-specific advantages have a positive impact on post-acquisition knowledge integration. Finally, formal and informal psychic distances impact management adaption and communication interaction between local parents and foreign subsidiaries, with a detrimental impact on post-acquisition integration. These findings highlight the need for the special theory of Chinese firm internationalization to account for dynamics at provincial level.

Chapter 8 Discussion and Conclusion

Although the separate researches of studies I, II, and III, as presented in the previous chapters, are beneficial to develop our knowledge in a detailed, categorized and steadily progressive manner, these sub-studies are not isolated, because this PhD thesis is an organic whole with one research topic, focusing on Chinese local SOEs' pre- and post-OFDI behaviours. Hence, finally, the research calls for integrative thinking and an overall vision in order to engage in discussion and draw comprehensive conclusions.

This chapter, in the section 8.1, will begin by attempting to figure out its position in the whole 'theoretical novelty' Hernandez and Guillen (2018) of this PhD thesis, and by highlighting the core contributions of this research to the IB theories. The paragraphs in section 8.2 answer the question 'Do the local SOEs that engage in OFDI achieve success?' This is one of the significant contributions of this PhD research, as the success or otherwise of local SOEs' OFDI has not been clearly evaluated or discussed by previous literature. The section 8.3, will list and discussion these contribution. Next, as the research approach of this thesis is designed to follow a 'quantitative to qualitative' procedure with the adoption of multiple sources of data, section 8.4 will highlight the methodological innovation brought to the IB field by this PhD research. Thirdly, section 8.5 will provide practical implications and advice for improving behaviours from horizontal (host and home market sides), macro-to-micro (policy-managerial-operation pathway) and vertical processing (pre- and post-OFDI periods) perspectives. Finally, sections 8.6 and 8.7 will offer suggestions for future research and indicate conclusions to be drawn from the whole thesis.

8.1. Positioning this PhD research in the IB theoretical literature

In line with the trend in IB research of responding to changes and developments in the EMNEs and home countries, as introduced by the front paragraphs in the Chapter 1, this PhD research, which base its basic advocate and premise hypothesis on specific feature of China's political economy, will bring new insights and detailed evidence to enrich our understanding of how these changes and developments make the EMNE research distinct from studies in the developed markets. Moreover, throughout this PhD research, the fact of diversity is recognized and explored. The study identifies the diversity of ownership backgrounds (e.g. local state ownership, central state ownership, private ownership) of CMNEs and consequently the variety of OFDI motivations and pathways, and re-defines Chinese institutions to explore in depth their advantages and disadvantages, and the effects of these particular circumstances. In addition, the researcher anatomizes various EMNE concepts in order to reach a more detailed understanding, for example by dividing strategic assets into location bounded and non-location bounded, and categorizing psychic distance into official psychic distance and non-official psychic distance. Thus, on the one hand, this PhD research extends the EMNE theories to offer explanations for specific Chinese LSOE OFDI behaviours, while on the other hand, through its adoption of case studies, it also provides detailed and in-depth evidence.

One issue currently under discussion among IB academics is whether the classic DMNE theory could be used to explain the EMNEs' behaviours, or whether new theories are necessary and could modify the classic theory (Hernandez and Guillen,

2018). For example, Matthews (2018) compares the dragon multinational's LLL model with Dunning's OLI model, and argues that he does 'not see LLL as a strategic framework displacing microeconomic reasoning of OLI, but rather as a way of complementing the timeless insights of OLI with the strategic necessities of latecomer firms that were seeking to become players in the globalized economy' (Mathews, 2017: 774).

Hernandez and Guillen (2018) highlight the core question asked by Buckley et al. (2007), that is, whether the new EMNE theories challenge the conventional IB theories on the DMNEs. To answer this question they suggest two criteria, namely whether the EMNE theories (1) establish appropriate theoretical reference points, and (2) distinguish between theoretical constructs end empirical variables. They introduce four possibility points of how the EMNEs research could make the IB theories different and how they modify the conventional IB theories, which are: (1) The classic paradigm accounts for EMNES; (2) EMNES create boundary conditions for the classic paradigm; (3) EMNES require modifying underlying assumptions in the classic paradigm; (4) EMNEs require a new paradigm altogether. This PhD research, would be more appropriately to position in Hernandez and Guillen's (2018) claims on possibility (2) and (3), which are as contribution points to support that the EMNEs are different from DMNEs, and it brings new insights and evidence to enrich the IB theoretical literature. The study extends the IB literature by highlighting the roles of diversity and of 'local state ownership', by providing a typology to explain various EMNE concepts, and by enlarging the boundary of MNE theories to explain in detail specific OFDI behaviours

of Chinese LSOEs. In addition, it re-visits and re-evaluates the issues of the Chinese institutional environment and the role played by government: by introducing the concept of comparative institutional advantage, and scrutinizing the role of local government, it shows how EMNEs raise questions about and demand modifications to the underlying assumptions of the conventional IB theories.

Figure 8.1 shows an overall model of the research findings. Integrating Studies I, II, and III, the model maps the logic and summarizes the results of this PhD study. With regard to the pre-acquisition strategic decision, on the one hand, home-country domestic effects shape institutional position, exert competitive pressure, and provide stimulation and support to local SOEs' aggressive SAS and institutional arbitrage motivation for pursuing OFDI. On the other hand, as foreign developed countries own strategic assets and institution opportunities that are needed by the local CMNEs, they become major targets of these companies' foreign M&A. Hence, one important research outcome of this PhD study can be summarized as follows: Domestic and foreign effects from the home and host country sides converge and combine to make local SOEs the most aggressive pursuer of foreign M&A. Owing to their different ownership and institution backgrounds, Chinese local SOEs have stronger SAS and institutional arbitrage motivations for OFDI than do all other CMNEs. Their unique features, such as lower domestic institutional position, relationship with local government, possessed assets, and distances from foreign host countries, shape their different logic of pre-acquisition strategic decision and pathways and post-acquisition integration performance. The qualitative studies II and III explore the background, and interpret in

more detail and depth the story of local SOEs and their significance among all CMNEs, as summarized below:

(1) Domestic survival and competition purpose

Compared with central SOEs, local SOEs occupy a relatively lower institutional position in the domestic market, characterized by low national level policy priority, a shrinking domestic market, shortage of firm specific advantage, and weak competitive capacity. These weaknesses mean that LSOEs become marginalized, and struggle in domestic competition. Consequently, in order to survive and to become more competitive in the domestic market, they go overseas to seek more institutional arbitrage and enhance FSA through foreign acquisition.

The NHI's acquisition of NFM, the key case in this M&A research, ensured the survival of both firms in their home construction machinery markets, China and France respectively. Other cases mentioned, such as the acquisition of the German firm KION by Shandong's Weichai Power, and the Jiangsu firm XCMG's acquisition of Schwing, enabled the new merged multinationals to complete their product series and to become leaders in their specific industrial areas, both domestically and globally.

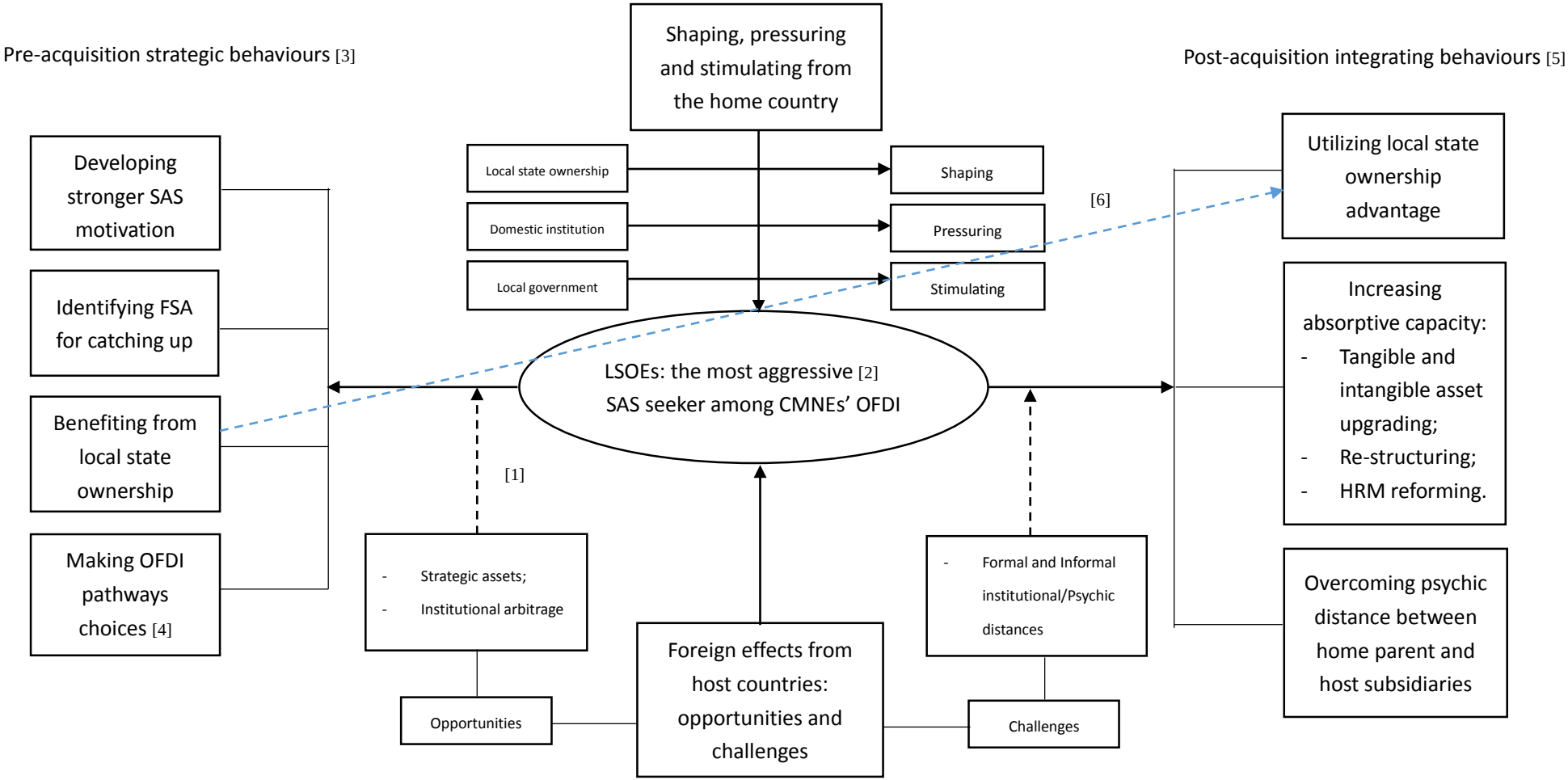
(2) Local political relevance

Local SOEs' foreign M&A actions are highly relevant to local politics, in terms of maintaining close networks, perceived social and economic obligations to the local region, and the support and protection received from local government. Firstly, when local SOEs' acquire foreign firms, local government leaders are credited with the achievement, which enhances their political prospects and increases the likelihood of

their future promotion. Secondly, major local SOEs always account for a large amount of employment in their region, and are expected to make a profit for the province and local government. Thirdly, local state ownership allows local SOEs to access long-term government loans from the policy bank at low interest rates, which guarantees them sufficient finance for pre-acquisition foreign investment implementation, and for the provision of equipment and facilities to carry out post-acquisition integration.

Not only the case companies in this PhD research, but almost all Chinese local SOEs launching foreign OFDI, require financial support from the policy banks, such as CDB and EXIM bank of China. Taking as examples the companies discussed in this research, local champions Liugong, Weichai, XEMC, XCMG, TYHI and NHI all signed long-term collaborative contracts or memoranda of cooperation with policy banks' provincial branches in their respective provinces in order to obtain the first, indispensable, injection of funding for foreign acquisition and integration. These first 'pots of gold' from the local government enabled these SOEs, which would usually be considered as weaker and given lower domestic priority than central SOEs, to chase their dream and seek opportunities overseas. Then, with the tangible assets (e.g., equipment, facilities, and factory plants) obtained from local government, and through the use of local complementary resources and priority market rights in the local provincial region, these local SOEs were able to lay firm foundations and enhance their basic capacities in order to facilitate and upgrade their post-acquisition integration, operation, and performance.

Figure 8. 1 Emerging Framework Integrating Study I, II, and III for Understanding Chinese LSOE OFDI.



Notes:

[1] Arrows shown as black dotted arrows emanating from foreign country opportunities and challenges are triggers that were identified as triggering the pre- and post-acquisition behaviours respectively.
[2] I use the term “most aggressive” because this is the empirical result from Study I.
[3] These 4 pre-acquisition strategic behaviours are the principal ones identified in Study II.
[4] These pathway choices were exclusively acquisitions in the cases studied.
[5] These 3 categories of post-acquisition strategic behaviours are the principal ones identified in Study III.
[6] I identified this in Study III as a way of obtaining tangible assets to assist in the post-acquisition integration. The pre-acquisition liaising with local government allowed these assets to be identified and for social capital to be formed with the local government to assist in post-acquisition process; I indicate this with the dotted blue line.

(3) Flexibility and Autonomy

Local SOEs have more business flexibility and management autonomy than central SOEs, whose business strategy and operation are expected to be more closely aligned to national political and ideological priorities. Such flexibility and autonomy are important when making decisions about OFDI location and entry mode, and when establishing legitimacy in the host countries. Local SOEs would prefer to invest in developed country technology and in reputable firms, and to make acquisitions through becoming major shareholders in order to maximize decision and transfer rights. Their relatively low political involvement helps to ease host countries' sense of distrust and restriction of technology outflow, which will be beneficial to the knowledge transfer and integration.

(4) Industrial distribution advantage

Chinese local SOEs tend to be concentrated in low risk industries that are not highly relevant to national security, for example machinery manufacturing in construction and civil engineering. The relatively low risk burden and lack of national security responsibilities not only make it easier for local SOEs to 'go overseas' for institutional arbitrage, but also makes it more likely that they will be accepted by the host developed countries, and allowed to enter their markets. Moreover, industrial advantages help LSOEs to win trust from and establish legitimacy with the host market firms and governments, which are beneficial to their post-acquisition operation and integration.

(5) Complementary advantages between home and host

While local CMNEs with aggressive SAS and 'catching up' motivation to pursue

foreign acquisition are attracted by foreign host country firms' advanced technology and reputable brands, so too those host country firms are interested in LSOEs' comparative institutional advantages and priority position in the local region. Such complementary advantages (Hennart, 2012) increase the possibility of and accelerate M&A actions between home and host sides separated by long psychic distance and huge heterogeneity.

(6) Previous foreign business experiences

LSOEs were early pioneers among Chinese SOEs in running business with foreign firms through, for example, joint-venture, outsourcing, and acting factory. These previous foreign business experiences make LSOEs more open to the world outside China, while allowing them to accumulate basic knowledge, and establish useful networks for their next-step foreign acquisition and further expansion.

For the host country target firms, previous experience and greater familiarity with the home country are important to accelerate their progress after merger and acquisition. For example, manufacturing firms from France and Germany are keen to collaborate with or be acquired by Chinese SOEs. On the one hand, state ownership and trade unions are significant aspects of the French and German economies, which reduces the psychic distance from China and Chinese SOEs. On the other hand, high-tech manufacturing firms from western developed countries, such as Robbins from the United States, and Wirth from Germany, have been involved in the Chinese market for more than two decades, during which time the networks built and market experiences accumulated have increased their confidence for further collaboration and acquisition.

8.2. CMNEs' OFDI success: 'Dragon' or 'Snake'; 'Springboard' or 'Belly flop'?

The EMNEs theories introduced in previous chapters (e.g., Mathews' dragon multinationals' LLL framework; SIP perspectives by Rui and Yip; Luo and Tung's Springboard perspective; CLR theories by Hennart) provide a basic conceptual framework for initial discussion on the rationale of EMNEs' OFDI strategic choices in the pre-acquisition phase, and list the major tasks and challenges (e.g., barriers to absorptive capacities, learning styles) in the post-acquisition period. However, while those EMNEs that entered into foreign acquisition deals in the early 2000's have already experienced more than a decade of post-acquisition multinational operation, to date no study has provided an accurate assessment as to the success of their OFDI actions. This PhD research seeks not only to explore reasons (answering 'why' questions) and approaches (answering 'how' questions) with regard to local CMNEs' involvement in foreign OFDI strategy and implementation, but also to assess and discuss their post-acquisition performance, in order to answer the question 'are they successful?'

The criteria to measure and evaluate success include, but are not limited to, increased profitability, greater market share, input of transferred techniques to products, and enhanced reputation through acquisition of brands. Performance can be expected to fluctuate according to the different stages of foreign acquisition, and is also influenced by fierce competition and a rapidly changing external environment. By interpreting primary interview data, secondary level firm data from Orbis, and social media information, this PhD seeks to provide a basic and general evaluation on a range of aspects of local CMNEs' foreign acquisition success.

Firstly, with regard to the integration of strategic assets, most of the local Chinese SOE foreign acquirers have achieved significant success, which are as positive and satisfying respond to 'LLL' (Mathew, 2006) and 'SAS' (Rui & Yip, 2008) EMNE theories. Nevertheless, it should be noted that such success came only after facing great challenges (e.g. communication barriers, loss of elite human resources), and not in the early stage of post-acquisition, as discussed in more detail in study III. Mathews (2006) uses the term 'dragon' to describe aggressive EMNE investors, but that term seems inappropriate for these local SOEs, given their specific features and circumstances. Compared with the 'dragon' central SOEs, in my view the foreign acquisition behaviour of local SOEs can be better characterized as 'snake swallows elephant'. This is particularly so in the early stages, when the Chinese firm needs to overcome the difficulties of digesting and internalizing. Through time and effort, these 'snakes' can learn, grow, and ultimately become 'dragons'.

Secondly, according to the 'Springboard' perspective suggested by Luo and Tung (2007), foreign expansion is a smart way to acquire strategic resources, and to reduce home country institutional and market constraints. At the same time, EMNEs should overcome latecomer disadvantages, obtain FSA, and become more competitive and profitable in the domestic market. However, if they do badly, the 'springboard' would end up as a 'belly flop' failure.

Chinese LSOEs have entered aggressively and bravely into foreign acquisition actions, and have invested a great deal in order to achieve and maintain success. The case studies undertaken by this PhD research reveal that, owing to good SAS

performance, these local CMNEs did achieve success in terms of increased sales revenue and enlarged market share in the early stage of post-acquisition. Almost all of the case companies saw a large boost to their profit following foreign acquisition, and improved their competitiveness in the domestic market; some even became global market leaders. However, institutional disadvantages still restrict and challenge these local CMNEs, which face shrinking domestic living space, and struggle to maintain profit growth. Taking NHI's acquisition of NFM as an example, during the first five years of M&A, both the parent and the subsidiary sides achieved good profitability. However, owing to the entry of central SOEs into the TBM market, and the consequent shrinking of available space in that market, the local SOE, the NHI, has had to seek new opportunities to avoid a 'belly flop' failure, and to maintain its 'springboard' success.

8.3. Theoretical contribution

8.3.1. Highlighting the role of 'local state ownership' in SAS motivated OFDI

Previous research has argued that different types of state ownership drive different OFDI behaviours among SOEs in emerging economies (Cui & Jiang, 2012; Li et al., 2014; C. Wang et al., 2012). Both dark and bright sides of state ownership have been mentioned as impacting on OFDI strategy of the EMNEs. On the positive side, some discussions indicate that government could provide strong financial support and institutional priority for their foreign investment action, while on the negative side, some studies argue that firms with a higher percentage of shares of state ownership

would be less likely to engage in OFDI than would private enterprises, owing to their greater dependence on governments and ideological restraints. While for the CMNEs circumstances, majority arguments tends to believe that substantial state ownership would always play a negative role in SOEs' OFDI (Huang et al., 2017).

Among the main outcomes of this PhD research, we find that decentralized local state ownership has strongly shaped Chinese local SOEs' OFDI behaviours. Owing to decentralization and the difficulties experienced as a result of reform, local SOEs came under pressure to acquire advanced technical knowledge and experience through foreign acquisition in order to compete in the domestic market. Therefore, compared with central SOEs, which engage in significant market seeking and politically oriented foreign investment, local SOEs' OFDI is motivated more by strategic asset from overseas to enhance their firm specific advantage in the domestic market, which would bring extension and more diversified understanding to 'SAS', 'SIP' and 'catching up' concepts. Furthermore, special local state ownership advantages accelerate their strategy of using foreign M&A to acquire technology and knowledge. We find that, compared with private firms, local SOEs benefit from specific local state ownership factors, which can guarantee them sufficient capital to acquire foreign enterprises.

Secondly, by the empirical quantitative study I, local state ownership has been unpacked into two dimensions, local ownership and state ownership, to screen the influential factors in more detail. Such separate investigation allows us to expand comparison among CMNEs more widely and to explain international business behaviours through different perspectives. From one perspective, investigation of the

local ownership dimension makes it possible to compare all local owned firms and central owned firms to understand how different levels of domestic institution influence the decision to choose foreign markets as strategic asset seeking targets. From the other perspective, by distinguishing between SOEs and POEs, the state-owned dimension helps us to understand whether and how government shapes CMNEs' OFDI behaviours. Moreover, we also try to set the two separate dummies together into one regression model to discover the difference when they operate interactively. We find that when the local dummy and SOE dummy run separately, their SAS OFDI motivations are more sensitive to the changes of control variables, while when they operate jointly, the influences will be exerted in a more stable manner and with more significance than when working individually. This provides strong support for one of my arguments, which is that local SOEs in China are among the most aggressive strategic asset seekers when using OFDI.

In brief, local state ownership extends IB theories and allows us to understand the reasons behind Chinese local SOEs' SAS oriented OFDI strategy and actions. First of all, with regard to enriching the conventional IB theories, local state ownership means that firms lack FSA, and increases the cross-region transaction cost in the domestic market. Therefore, local-owned firms are forced to choose foreign developed markets as target investment locations, and to select entry modes that allow them to maximize strategic assets. With regard to adding knowledge to the existing EMNE and CMNE literature, we find that, compared with central SOEs, the autonomy obtained by local SOEs owing to their downgraded local state ownership lowers their policy commitment

to government, so easing their institutional burden and allowing them easier entry into host countries from different cultures, where they can benefit from enhanced legitimacy and trust, and reduced psychic distance.

8.3.2. Re-visiting and re-evaluating Chinese institution

When considering the driving factors for EMNEs' and CMNEs' OFDI actions, previous literature has relied heavily on the institutional based view. On the one hand, the Chinese institutions provide the framework for the country's macro regime, which distributes firms among different domestic political economic levels, which directly impact on CMNEs' business behaviours and then indirectly drive them to pursue OFDI implementations with different orientations. On the other hand, taking into account both the home and host sides of the OFDI deals, institutional differences shape heterogeneity and stretch psychic distance between different countries, which is highly relevant to CMNEs' pre-OFDI strategy making and post-OFDI integration performance. Importantly, previous research has always argued that the Chinese institutional regime is a negative driving force, which motivates CMNEs to escape from domestic institutions and seek arbitrage from foreign institutions (Boisot & Meyer, 2008; Morck, et al., 2008; Meyer et al., 2011; Meyer & Peng, 2016). This PhD thesis re-visits and re-evaluates the Chinese institutional regime by distinguishing its positive aspects as comparative institutional advantage.

Comparative institutional advantage is found to be a significant factor in determining local SOEs' OFDI, and also attracts French firms to seek institutional

arbitrage in China. Whereas, 20 years ago, Chinese firms would wish to 'escape' from Chinese institutions and find opportunities overseas, today special comparative institutional advantages allow Chinese local SOEs to provide guarantees to acquire foreign subsidiaries, attracting foreign firms from developed countries to seek Chinese buyers. Among Chinese institutions, CMNEs, especially those with state ownership backgrounds, have higher priority of access to the domestic market, receive more complementary local resources, and are able to take more risks, secure in the knowledge of guaranteed government support. These advantages are all highly attractive to host country targeted firms. This argument and insight with regard to comparative institutional advantage advances the knowledge in this field and furthers our understanding of the roles of emerging market home country institutions in motivating OFDI, showing that Chinese institutions and government intervention exert positive effects on promoting OFDI deals and contribute to their success, rather than imposing restrictions and pushing firms to 'escape' as argued by previous institutional based views. Furthermore, the Chinese institutional regime not only brings advantages in terms of pre-OFDI strategic considerations, but also offers benefits with regard to privileged use of local resources and government support for post-OFDI business operation.

8.3.3. Typology explanation into diversified SAS oriented OFDI behaviours

To date most empirical studies have remarked on the strong SAS orientation of EMNEs, especially CMNEs. Based on the observation of firm-level data on patents and

trademarks, previous research has identified that CMNEs are more aggressive asset seekers than DMNEs in driving foreign acquisition (Sutherland & Anderson, forthcoming; Buckley, et al., 2007; Rui & Yip, 2008). Such consideration would also determine their investment location choice and entry mode. However, given the diverse and dynamic nature of China's economy, in order to understand CMNEs' behaviours it is necessary to see them not as a single united whole, but as a heterogeneous group with diverse backgrounds and characteristics. One strand of previous literature has noticed such internal heterogeneity and discussed the role of different institutional levels in CMNEs' OFDI determination. Moreover, to date there has been very little research that attempts to combine those two main streams of studies, the institutional based and strategic asset seeking based theories of CMNEs' OFDI behaviours, although there exist strong causal linkage relationships between them. This empirical study is the first attempt to merge these two perspectives in order to fill in the international business theoretical blanks.

Our research reveals the diversity of CMNEs' behaviours, and provides more typological explanations for their OFDI strategy preference. Chinese local SOEs prefer to target developed countries as sites for investment, and are more likely to choose merger and acquisition as main entry modes than are central SOEs. Moreover, for the OFDI targeted foreign strategic assets, Chinese local SOEs target mainly intangible assets than tangible assets, such as advanced manufacturing techniques and reputable brands, in order to gain the firm specific advantages needed to compete in the domestic market.

Specifically, in study I, categorizing the dependent variables into patents and trademarks is helpful to understand Chinese local investors' preference with regard to strategic assets from foreign markets. Further, distinguishing between different types of assets (e.g. tangible assets vs. intangible assets) also provides further insights into CMNEs' orientation in OFDI strategy making. As shown by our empirical results, the coefficient of the main exploration variables is more significant and more highly positive to the dependent variable of patents than to that of trademarks from foreign targets. This result indicates that Chinese local SOEs prioritize patents when considering foreign M&A strategy. Trademarks, which are the registered form of brands allowing products to be distinguished in the market, always refer to a local reputation, which is hard to transfer between different markets. Such location-bounded nature reduces the attractiveness of trademarks as a target of OFDI; moreover, Chinese local SOEs, most of which have been decentralized from central SOEs, have developed well-respected domestic reputations over many years, so have little need to acquire foreign brands for domestic competition. In contrast, patents, which normally exist as codified knowledge, are more transferable and could impact directly on product innovation. Although it takes longer to transfer intellectual knowledge into manufacturing tangible products, Chinese local SOEs would still prefer to follow this path to gain firm specific advantages to compete in the domestic market. Moreover, a further contribution of this research to IB theory is its highlighting of a long-term business orientation style of Chinese local SOEs, as reflected by the preference for patents seeking in OFDI.

The investigation into taxonomy also extends knowledge and enhances

understanding of the concept of psychic distance, which has been claimed as a significant variable in incremental IPM and EMNE theories with regard to internationalization expansion, location choice and entry mode. As a research outcome of study II of this PhD thesis, it is suggested that the concept of psychic distance should be sub-divided into two categories, as official psychic distance (e.g., legitimacy and institutional differences), and non-official psychic distance (e.g., culture and language differences), which are highly relevant to impact post-acquisition behaviours and performance. This is the first attempt to diversify and segment the concept of psychic distance in the IB theories, or to give specific discussion to each sub-group.

8.4. Methodological innovation

With regard to contributions to methodological aspects of the IB literature, this doctoral research is the first study in the IB field to implement in a real-world context the 'exploration to explanation' or 'quantitative to qualitative' process introduced by Bryman (1988). Moreover, this PhD thesis not only introduces a new econometric model and adopts new data in its quantitative aspect, but also engages in interview based qualitative case studies, which are rarely utilized by previous IB researches. As noted by Luo and Zhang (2016), among 114 quantitative studies, 88 rely mainly on continuous linear regression, logistic regression, or mixed regression models as econometric models, rather than counted regression models. Among the much smaller number of qualitative case study researches, 55% adopt archival data, 31% use survey data, and others use no data, rather than employing interviews to access vivid first-hand materials. Therefore, by introducing the counted model, defining and setting new

variables, as well as accessing large amounts of first-hand data, this study offers an alternative perspective on CMNE OFDI researches.

First of all, in the quantitative empirical model of study I, as inspired by Anderson et al. (forthcoming), this thesis offers the first attempt to discover the causal effects between ownership of strategic assets by targeted foreign firms and ownership types of the CMNEs, using a counted negative binomial regression model. The regression results will indicate whether Chinese local SOEs are motivated to pursue OFDI by a SAS orientation. A further innovation regards our major dummy independent variable, 'local state ownership', where this thesis unpacks the concept into two dimensions, local ownership and state ownership, in order to screen the variable segmentally and offer a comprehensive explanation.

Secondly, with regard to the 'explanatory reasoning' perspective of the second research step, studies II and III of this research are among the first case study researches to adopt a qualitative grounded approach to model the determinants of Chinese local firms', especially local SOEs', OFDI strategy, and their post-OFDI outcomes. Previous studies have attempted to discover the varieties of Chinese SOEs' OFDI behaviours and the role played by state ownership (Cui & Jiang, 2012; Huang et al., 2017; Li et al., 2014; Liang et al., 2015; Wang et al., 2012), but these theoretical and empirical researches have not accessed the actual sites of acquisition companies to investigate the first hand data and resources. Even among the relatively few qualitative case studies, the data for analysis are still based on insufficient and static archival materials. However, as a new emerging power of the CMNEs' OFDI, Chinese local SOEs possess unique

features that cannot be interpreted and explained by previous methods, and there is a need for methodological development by accessing more primary data sources in order to shed light on this new phenomenon in a qualitative way. Therefore, for the case study in this research, the data for qualitative analysis are mainly collected from face to face interviews and discussions with highly relevant stakeholders. This is a further methodological innovation in the IB research field to discover Chinese local SOEs' OFDI behaviours.

8.5. Practical implications

Our findings provide implications for policy makers and business decision makers, as well as ordinary operating staff members on both the home country sub-national level CMNEs and host country market sides. The mission and contributions of this research are to transfer gained knowledge into practice, to assist in the resolution of problems and to help create more wealth from CMNEs' OFDI actions.

8.5.1. Advices for policy makers

The results of my research have implications not only for home country government policy advisors at different institutional levels (local and central government), but also for host country policymakers, especially those from developed countries, who will be interested in our findings on specific characteristics of Chinese local SOEs' foreign investment strategy. The findings of the study II indicates significant heterogeneity of Chinese firms' post-OFDI behaviours and highlight the positive aspects of local state ownership, negative effect of domestic institutional

disadvantage and psychic distance. These findings will enlighten home country government policymakers as to how host countries treat different types of SOE, and enable them cautiously to adapt their ownership, control, and supervision policy design in order to maximize positive aspects and minimize drawbacks.

First, conventional literature suggests that home country governments exert both positive and negative impact on CMNEs' OFDI behaviours. However, the research to date still lacks adequate wisdom or in-depth knowledge to provide intelligent guidance for Chinese policy makers on appropriate policy support to foster the strengths and circumvent the weaknesses of CMNEs' OFDI. This research, through considering the diversity of the Chinese economy, finds that local state ownership pushes Chinese local SOEs to become the most aggressive Chinese foreign asset seekers, which extends our understanding and should prompt government to exert more precise and specific policy influence for CMNEs' OFDI implementation. For policy makers in host countries, this research provides a more in-depth and complete picture on CMNEs than do earlier studies, which treat China as one homogenous economic body. Host country governments ought to know foreign investors' backgrounds in more detail in terms of ownership type, level of institutional position, and the role of government in the home country. Improved understanding would lead to better policy making through balancing between protections to avoid incoming risks and chasing potential benefits, in order to adopt inward foreign investment from Chinese investors with different backgrounds and thus promote the domestic economy.

Table 8. 1 Implications for policy makers.

Categorizing policy makers	Policy implications and advice
Home country policy makers	- Adapt their ownership, control, and supervision policy design according to host countries' preference; - Appropriate policy support to foster the strengths and circumvent the weaknesses of CMNEs' OFDI; - Prompt government to exert more precise and specific policy influence for CMNEs' OFDI implementation; - Pursue further institutional reform to reduce political influence on SOEs' business behaviours and distribute more autonomy to local SOEs.
Host country policy makers	- Ought to know foreign investors' backgrounds in more detail in terms of ownership type, level of institutional position, and the role of government in the home country; - Balancing between protections to avoid incoming risks and chasing potential benefits, in order to adopt inward foreign investment from Chinese investors with different backgrounds and thus promote the domestic economy; - To review SOE investors from China and make specific and updated policy design accordingly; - To encourage high-tech domestic firms to merge with foreign investors in order to seek institutional arbitrage.

Previous wisdom has argued that different types of state ownership drive different OFDI behaviours among SOEs in emerging economies (Cui & Jiang, 2012; Li et al., 2014; C. Wang et al., 2012), and that substantial state ownership would always play a negative role in SOEs' OFDI (Huang et al., 2017). The findings of this research indicate significant heterogeneity in Chinese firms' OFDI motivation and highlight the positive

aspects of local state ownership and comparative institutional advantage. As the Chinese government national strategies, such as 'One belt, One road' (一带一路) 'revitalizing the Northeast' (振兴东北), 'Western Great Development' (西部大开发), and 'Rise of Central China Plan' (中部崛起), encourage domestic sub-national level firms to boost economic development and invest abroad, decentralized local SOEs with stronger foreign M&A motivation and advantages should be identified as a driving power of foreign investment, and be facilitated with more government policy and financial support to fulfil the country mission. Moreover, central government should pursue further institutional reform to reduce political influence on SOEs' business behaviours and distribute more autonomy to local SOEs, especially to those industries not closely connected to national security, as such decentralization action could shorten psychic distance and enhance legitimacy with host countries seeking strategic assets from them.

From a protection perspective, developed economy host countries always maintain a conservative attitude to, or even distrust, foreign country firms, especially SOEs, which bring with them different cultures and institutional structures. Hence they set restrictive rules and policies to put pressure on foreign firms. However, such bureaucratic barriers would also obstruct potential opportunities from overseas to help the domestic economy. Given the heterogeneity of state ownership and rapid changes in the home country economy, host country policymakers should review SOE investors from China and make specific and updated policy design accordingly. Moreover, comparative institutional advantage is a transferrable capital owned by the home

country and used to seek strategic assets from advanced host countries. Host country policymakers should encourage high-tech domestic firms to merge with foreign investors in order to seek institutional arbitrage.

8.5.2. For firm level managerial stakeholders

With regard to the managerial practice of emerging market firms' decision makers, especially those of local SOEs, downgrading to local status does not represent an institutional liability, but should be exploited and transferred as firm specific advantages, in terms of less ideological influence and more autonomy, in order to attract foreign partners. Shrewd use of the benefits of local state ownership and comparative institutional advantage will maximize the likelihood of foreign acquisition success. First of all, a better quality of corporate-government networks, or 'guanxi' (关系), will be helpful to integrate resources from government support. Secondly, managers of Chinese SOEs should, carefully and appropriately, demonstrate their government background to host country partners and governments, as foreign firms seek to merge with SOEs that enjoy institutional privilege in order to stand firmly in the home country, while in order to win trust from the host country government, the level of home country government influence should not be too great.

The empirical results of this research also provide a reference for managerial practices of Chinese local SOEs in terms of making pre-acquisition strategic OFDI decisions and post-acquisition strategic assets leverage behaviours. As there are significant positive relationships between local state ownership and patents from

foreign target firms, managers of the Chinese investor would try to cultivate as much policy and financial advantage as possible from their local governments in order to maximize OFDI benefits. It would also be better for Chinese acquirers to take benefits from institutional advantages to attract foreign partners and decrease entry resistance. Furthermore, as patents are targeted more than trademarks by Chinese local SOEs' OFDI, in the post-acquisition periods it will take more time and supporting elements to leverage the external intangible assets as internal firm specific advantages. Hence this study offers useful hints to managers of Chinese local acquirers to help them benefit from their local state ownership to enhance support facilities, such as by upgrading local tangible equipment, increasing technical materials investment, and arranging training to enhance the skills of human resources.

The communication capacity and learning skills of mid-level staff and front line management personnel are crucial to the success of post-acquisition integration. The case of NHI's acquisition of NFM shows that lack of a shared language, and heterogeneity of working culture, between home parents and host subsidiaries increase cost and hinder efficient communication, then impact negatively on knowledge transfer and efficient managerial integration. Moreover, owing to longer psychic distance (e.g. formal legitimacy difference and informal culture difference) between local parents in home countries and acquired subsidiaries in host advanced countries, and to the outflow of elite human resources from the new local MNEs, there can arise distrust, barriers, and even conflict, which will present serious challenges to post-acquisition integration and performance.

Table 8. 2 Managerial implications.

Categorizing of managerial stakeholders	Managerial implications and advice
Manager of the parent side of investors	- Shrewd use of the benefits of local state ownership and comparative institutional advantage; - local status does not represent an institutional liability, but should be exploited and transferred as firm specific advantages; - Build up a better quality of corporate-government networks, or 'guanxi' (关系), will be helpful to integrate resources from government support; - Managers of Chinese SOEs should, carefully and appropriately, demonstrate their government background to host country partners and governments; - Try to cultivate as much policy and financial advantage as possible from their local governments in order to maximize OFDI benefits; - Specific training on cross-culture communication and learning skills are required by post-acquisition parent-subsidiary inter-active and integration performance; - It is important to absorb and retain elite and well trained employees for post-acquisition integration practice.
Manager of the target subsidiaries side	- More specific knowledge on Chinese investors with different backgrounds and motivation will be helpful to choose more appropriate co-operators; - Rather than using a unified standard to evaluate foreign investors with different profiles. - Additional training for staffs from host subsidiary firm sides to familiar and acknowledge more about China, in terms of how their Chinese counterparts operating, and how their Chinese colleague works, etc.

Therefore, it is crucial that newly merged CMNEs invest in staff training to develop foreign language capacities and cross-cultural communication skills. Among the case companies that provide the focus for this PhD research, the approaches already adopted include paying for English language courses for mid-level management personnel, funding overseas study for promising young employees, and enhancing cross-border exchanges between the home and host country firm sides.

Furthermore, many young and elite staff complain about the lower salaries offered by the LSOEs and the huge differences compared with their foreign nationality colleagues, a dissatisfaction that leads to 'job-hopping' and loss of human resources. In order to recruit new employees and retain existing staff, and to encourage personnel to engage with and contribute to post-acquisition operation and integration, it will be necessary to reform the system of remuneration.

For decision makers on the foreign target side, more specific knowledge on Chinese investors with different backgrounds and motivation will be helpful to choose more appropriate co-operators, rather than using a unified standard to evaluate foreign investors with different profiles. Moreover, additional training on language and international collaboration for the host country staff, and the elimination of distrust of their parent firm colleagues from a different culture, will be helpful to smooth communication and boost profitability of the new merged MNE.

8.6. Limitations and future research

As mentioned in Chapter 4, the reason this PhD research adopts a specially designed

mixed research method is to eliminate the potential negative impact of using any one single approach. However, this combination pathway requires fitted matching and consistency of variables among the different sub-methods. Due to limited space and data, some of the detailed qualitative concepts could not be made to correspond one hundred percent with the quantitative variables. Consequently, there is a need for further research that achieves more integrated matching and conducts empirical tests to prove and extend the case study findings.

As to improve quality of the upcoming quantitative IB studies on CMNEs, future research should address some unavoidable limitations of this study in terms of defining variables, data qualities, as well as generalizing the outcome theories. First, the major exploration dummy variables, local and state-owned dummy, are hand coded according to whether a CMNE is registered and supervised by local SASAC, without considering the number of shares owned by the local government. Therefore, it will be useful for future research to explore whether different extent of local state ownership of firm shares has an effect on SAS oriented OFDI behaviours. Moreover, defining the concept of local state ownership by alternative approaches through diverse perspectives would give new insights for future research. Secondly, our sample merged spreadsheets from two different databases. Because some control variables lack information and are difficult to match between two data spreadsheets, the sample size involving all variables is smaller than the original datasets, which would affect generalizability of the empirical findings. Thirdly, our study is based on China and specific to the understanding of CMNEs. However, discussions of ‘local’ and ‘state’ ownership need not be limited to

investigation into CMNEs, and it will be worthwhile for future researches to expand 'diversification' concepts to other EMNEs and DMNEs with consideration of cross-country differences.

When comes to the qualitative aspects, although this research has adopted a specific design case study approach, made horizontal and vertical comparison and accessed primary data from various sources to avoid bias and make the results more generalized, the nature of qualitative case study is such that it is possible to dig deep into the selected case, but difficult to abstract the case phenomenon as generalized theory. Moreover, our research mainly focuses on manufacturing industry firms from specific locations, and while they provide a good sample of M&A between Chinese acquirers and foreign partners, they cannot represent the overall picture. Therefore, future research could attempt to access more cases and data sources from various dimensions to improve the universality and reliability of the research. In addition, empirical approaches that utilize quantitative methods by accessing data from large numbers of firms are called for, and these should be coordinated with the case study approach. This will provide a pathway to access much larger samples, even the whole population, to test the case study results and improve reliability and generalizability.

8.7. Final conclusion

This PhD thesis provides specific and adequate answers to the questions of 'what and whether' and 'why and how' the highly relevant internal and external factors drive and shape the emergence of Chinese local SOEs as significant forces of Chinese OFDI.

A mixed method research with an 'explorative verifying to explanatory reasoning' logic that combines empirical examination and case studies allows our investigation to implement proper, going deeper and further. By regressing large amounts of firm-level patents and trademarks data, coding local state ownership variables, and accessing CMNEs in the TBM industry through case studies, this research yields results that add knowledge in the field of IB theory. This research enriches the area of IB theory as regards the emergence of core themes such as the double-edged sword of local state ownership; the re-evaluation and re-definition of institutional matters; and the sub-division of variables such as psychic distance and FSA in determining and influencing Chinese local SOEs' OFDI motivation (SAS orientation), pre-OFDI strategic decisions (e.g., location choice, entry mode, government support), and post-OFDI integration and performance (e.g., absorptive capacity, host country legitimacy). The research outcomes also yield insights to guide practical policy making and managerial implementation for the Chinese local SOEs' OFDI.

Finally, diversification issues as they relate to MNEs worldwide are significant variables leading to change and heterogeneity in MNEs' OFDI behaviours. However, because this PhD research concentrates on a specific industry and case companies in China only, and because there exists room to better organize and measure the quantitative data, future researchers are encouraged to improve and generalize the results by expanding the case scope and improving the data quality. The author of this PhD thesis is very much looking forward to hearing valuable comments and advice for improving and extending the research.

Appendices

Appendix 1 Semi-structured interview syllabus: Theme Topic 1

Interviewer: Interviewee: (Name, Nationality, Affiliation, Position) Place of Interview: Date of Interview:	
Theme Topic 1: Decision making behaviour of Chinese SOEs' foreign M&A	
Interview Questions: a. What were the initial motivations of the NHI Company for implementing foreign M&A? b. What were the internal situation and external environment faced by NHI (NFM) when making the foreign M&A decision? c. Why did NHI (NFM) choose the NFM (NHI)? What are the strategic importance and meaning of this choice? d. Within 10 years, the NHI group made two M&A actions, the first in 2007, with NFM (France), and the second in 2016 with Robbins (USA). What were the differences and similarities between these two deals? e. What are the main drivers for and barriers to such foreign M&A actions?	Notes: ---

Appendix 2 Semi-structured interview syllabus: Theme Topic 2

<table>
<tr><td colspan="2">Interviewer:
Interviewee: (Name, Nationality, Affiliation, Position)
Place of Interview:
Date of Interview:</td></tr>
<tr><td colspan="2">Theme Topic 2: The role of the government in SOEs' foreign M&A</td></tr>
<tr><td>Interview Questions:
a. Please describe the background and history of NHI/NFM Technology.

b. What is the relationship between the NHI group and local government?

c. What role does local government play in the NHI group's foreign M&A, and what support does it provide?

d. What role does local government play in the business operation and technology cooperation in the post-acquisition period?</td><td>Notes:

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</table>

Appendix 3 Semi-structured interview syllabus: Theme Topic 3

Interviewer: Interviewee: (Name, Nationality, Affiliation, Position) Place of Interview: Date of Interview:	
Theme Topic 3: Managerial operation and performance after foreign M&A	
Interview Questions: a. What are the main difficulties in cooperating with foreign firms with different legitimation and social systems? b. How does a provincial Chinese SOE operate its newly acquired foreign subsidiaries? c. What is the approach to international human resources management? d. Since merging with NHI/NFM/Robbins, what are the key changes that have resulted from such international cooperation? e. Following the M&A, has the NHI group fulfilled its initial motivation and achieved its target? Have performance and competitive ability improved?	Notes: ---

Appendix 4 Semi-structured interview syllabus: Theme Topic 4

Interviewer: Interviewee: (Name, Nationality, Affiliation, Position) Place of Interview: Date of Interview:	
Theme Topic 4: Post-acquisition period knowledge transfer	
Interview Questions: a. How does the NHI group access and obtain their foreign subsidiaries' technology? b. What are the main advantages of and obstacles to acquiring foreign strategic assets? How does the company take benefits from the advantages and how does it deal with difficulties? c. What role does local government play in post-acquisition knowledge transfer? What do they provide, and do they enrolled? d. How is the NHI group maximizing the value of its acquired strategic assets?	Notes: ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------

Appendix 5 Semi-structured interview syllabus: Theme Topic 5

Interviewer: Interviewee: (Name, Nationality, Affiliation, Position) Place of Interview: Date of Interview:	
Theme Topic 5: Communication and cooperation	
Interview Questions: a. Do you experience language difficulties when you communicate with your foreign counterpart colleagues? b. Do misunderstandings occur between personnel in the two countries? c. Do you receive additional training in languages and cross culture issues? d. Have you made exchange trips to the parent (subsidiaries side)? If so, how frequently and for how long have you worked in the foreign country?	Notes: ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------

Appendix 6 Semi-structured interview syllabus: Theme Topic 6

Interviewer: Interviewee: (Name, Nationality, Affiliation, Position) Place of Interview: Date of Interview:	
Theme Topic 6: Feeling and satisfaction level of the employees	
Interview Questions: a. Are you satisfied with your salary and working status? b. Have you noticed any 'job-hopping' behaviour by colleagues? Could you give some comments about this? And what is your view of your own position? Would you be tempted to move to another job in another firm? c. What was your expectation regarding work in this new merged MNE? To what extent has that expectation been satisfied? d. What would you most like to say to your foreign colleagues? e. What would you most like to say to your employer? (Question to sub-senior level staff) f. What would you most like to say to your employees? (Question to senior personnel)	Notes: ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ---------- ----------

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