A Critical Analysis of Springboard Theory via an International Comparative Analysis of the Strategic Asset Seeking Foreign Direct Investments of Emerging and Developed Market MNEs

WU, LUDAN

A Critical Analysis of Springboard Theory via an International Comparative Analysis of the Strategic Asset Seeking Foreign Direct Investments of Emerging and Developed Market MNEs

Ludan Wu

Abstract

The aim of this thesis was to revisit the current International Business theories of emerging market MNEs (EMNEs), with the primary focus on 'Springboard Theory' (Luo & Tung, 2018) which contrasts EMNEs with developed market MNEs (DMNEs). Few empirical studies have systematically compared EMNEs with DMNEs, although the FDI strategies of EMNEs in asset-seeking, has been examined in the literature. In the present study, advanced empirical methodologies using datasets from Zephyr/BVD Orbis and fDi Markets were employed to undertake an international comparative analysis based on large samples. The focus of the analysis concerned the shifts in FDI establishment modes: the decline in strategic asset seeking cross-border mergers and acquisitions (SAS CBMAs), and the rise in greenfield FDI related to R&D offshoring by EMNEs, as well as the outcomes of such FDI strategies.

The results show that Springboard Theory omits a now crucial aspect of EMNE catch-up strategy, namely the use of greenfield FDI to establish foreign R&D hubs in global innovation centres. Springboard Theory assumes that acquired strategic assets residing in target firms are largely non-location bounded, and that these strategic assets are portable, however, the findings also indicate that *location boundedness* (i.e., 'stickiness') of strategic assets may be more common than is generally recognised. As such, the SAS CBMAs process is arguably more complex, and the evidence suggests that Springboard EMNE acquirers, expend considerable efforts to grow such location-bound foreign target intangible assets in situ. Contrary to the idea of SAS involving a 'looting' process, the findings suggest that EMNEs bring considerable resources and market opportunities to target firms, and when conditions for Intellectual Property Rights (IPR) protection are strong, the EMNEs commitment to the target's intangible asset performance is stronger. This supports 'institutional arbitrage' as an important strategy for EMNEs hoping to catch-up. Institutions are, however, location bounded and cannot be transferred to the EMNEs home market, which is an inconsistency in Springboard Theory, which assumes EMNE seek better institutions (which may facilitate innovation, for example) when, in fact, they also transfer strategic assets home. The capability to generate strategic assets in the longer term, however, is tied to these location bounded institutions, leading to the need for significant investments in the target firm.

The results also show that EMNE' parent firms engaging in greenfield SAS related FDI, actually outperform those doing SAS CMBAs, which casts further doubt on another underlying premise of Springboard Theory, that CBMAs are used as the main means of accelerated catch-up for EMNEs. The findings clearly evidence that greenfield SAS related FDI projects are more common in EMNEs than DMNEs, pointing towards alternative, possibly more viable, routes for EMNE catch-up in the current geopolitical climate dominated by strong techno-nationalist policies and shaped by economic confrontation between the US, Europe and China.

Durham University
Business School

A Critical Analysis of Springboard Theory via an International Comparative Analysis of the Strategic Asset Seeking Foreign Direct Investments of Emerging and Developed Market MNEs

A Thesis Submitted in Fulfilment of the Requirements for

the Degree of Doctor of Philosophy in International Business at

Durham University Business School

PhD candidate: Miss Ludan Wu

Supervisors: Prof Dylan Sutherland, Prof Chris Williams, and Prof Zach Lee

Durham University Business School

Durham University

Mill Hill Lane, DH1 3LB, United Kingdom

September 2023

Extended Abstract

The aim of this thesis was to investigate mainstream International Business theories of emerging market (E)MNEs, which has gained much momentum since Buckley et al. (2007) who looked at the location choices of Chinese (C)MNEs. More recently, 'Springboard Theory' (Luo & Tung, 2018), which contrasts EMNEs with developed market (D)MNEs, has risen to prominence as a popular theoretical lens through which EMNEs have been analysed (Luo & Tung, 2018). The research questions were inspired by the surrounding debate, which concerns, among other things, a comparison of the firm-level catch-up 'strategic asset-seeking' (SAS) related knowledge seeking/capability behaviours employed to build the outward foreign direct investment (FDI) strategies of EMNEs, compared to DMNEs.

A fundamental question raised in the extant literature concerns whether a new theory (i.e., such as 'Springboard theory') is required to explain the phenomenon of EMNEs (Arikan et al., 2021; Cuervo-Cazurra, 2012). To date, however, there is limited empirical research comparing EMNEs with DMNEs, leaving an empirical void concerning the answer to this question (Buckley et al., 2023). The aim of this research therefore is to update and push forward earlier conceptual contributions and apply them to the current geopolitical/global economic situation. Specifically, cross-border mergers and acquisitions (CBMAs), the dominant mode of SAS 'springboard' related FDI pre-2016, have reduced considerably. Greenfield (GF) FDI related to R&D related innovation offshoring from EMNEs, however, has increased (Rosenbusch et al., 2019). and these two different FDI establishment modes that have been used for SAS purposes (CBMAs and GF FDI) are examined. A large-scale empirical analysis using large datasets (taken from Zephyr/BVD Orbis and fDi Markets datasets) and cutting-edge empirical methodologies (i.e., logistic regression, propensity score matching, difference in differences) was undertaken.

The findings show how Springboard Theory omits a crucial aspect of EMNE catch-up strategy, namely the use of greenfield FDI to establish foreign R&D hubs in global innovation centres. Springboard Theory assumes that acquired strategic assets residing in target firms are largely non-location bounded and that these strategic assets are largely portable, however, the findings indicate that location boundedness of strategic assets may be more common than is generally recognised in Springboard Theory. As such, the CBMA process is arguably more complex. This indicates that Springboard EMNE Acquirers make considerable efforts to grow such location bounded foreign target intangible assets in situ. Contrary to the idea of strategic asset seeking behaviours involving a 'looting' process, the findings underscore that EMNEs allocate substantial capital and unlock market potential for their target firms. They also suggest that when conditions for Intellectual Property Rights protection are strong, the EMNEs commitment to the target's intangible asset performance is also stronger, lending support to an associated idea of institutional arbitrage as an

important strategy for EMNEs hoping to catch-up. Since institutions, are location bounded they cannot be transferred to the EMNEs home market, representing an inconsistency or contradiction in Springboard Theory, which assumes EMNE seek better institutions (which may facilitate innovation, for example) while also acknowledging that it transfers strategic assets home.

The capability to generate strategic assets in the longer term, however, is tied to these location bounded institutions, leading to the need for significant investments in the target firm as supported by the results. The findings also show that EMNE parents engaging in greenfield SAS FDI outperform those doing SAS CMBAs, which casts further doubt on the underlying premise of Springboard Theory, that CBMAs are used as the main means of accelerated catch-up for EMNEs. In fact, greenfield SAS FDI is also more common in EMNEs than DMNEs, pointing towards alternative, more viable, routes to catching up in the current geopolitical climate.

Table of Contents

List of Tables

List of Figures

List of Appendix

List of Abbreviations

AIC: Akaike Information Criterion……22
ATT: Average Treatment effect on the Treated ……54
CMNEs: Chinese Multinationals…… 3
CBMAs: Cross-border Mergers and Acquisitions ……1
DDT: Design Development and Testing ……3
DID: Difference in Differences ……2
DMNEs: Developed market Multinationals ……1
EMNEs: Emerging market Multinationals ……1
FDI: Foreign Direct Investment ……1
GF: Greenfield ……1
GaWC: Globalization and World Cities ……82
HDI: Human development index ……16
IB: International Business ……7
IAS: International Accounting Standard ……15
IMF: International Monetary Fund ……14
IPR: Intellectual Property Rights ……5
LLL: Link-leverage- learning ……4
LOF: Liability of Foreignness ……33
MERICS: Mercator Institute for China Studies ……97
OECD: Organisation for Economic Cooperation and Development……4
PSM: Propensity Score Matching ……2
R&D: Research and Development ……3
SAS: Strategic Asset Seeking ……1
UNDP: United Nations Development Programme ……16
WIPO: World Intellectual Property Organization ……86

Declaration

I declare that the thesis was composed by myself and that the work has not be submitted for any other degree or professional qualification. I confirm that the work submitted is my own, except where work which has formed part of jointly authored publications has been included. My contribution and those of the other authors to this work have been explicitly indicated below.

Are emerging market MNEs more attracted towards better patent enforcement regimes when undertaking greenfield R&D-focused FDI? Wu, L., Sutherland, D., & Anderson, J. R. (2023). *Transnational Corporations*, *30*(2), 1-36. (See chapter 3 of thesis, which expands upon this research by focusing on the comparison of EMNE and DMNE GF SAS FDI and Patent Enforcement).

Are Chinese MNEs more strongly attracted to global cities and knowledge intensive city clusters than developed market MNEs when undertaking greenfield strategic asset seeking related FDI? Wu, L., Sutherland, D., Peng, X., & Anderson, J. (2023). *Competitiveness Review: An International Business Journal*, *33*(3), 534-556. (See chapter 3 of thesis, which builds upon this research by focusing on China and global cities/knowledge centres).

Exploring the Impact of Establishment Mode on Intangible Strategic Asset Creation in Chinese MNEs: Springboard Cross-border Strategic Asset Seeking M&As Versus Greenfield R&D Related FDI Projects. Sutherland, D., Anderson, J., Wu, L., & Severe, S. (2023). *Asian Business & Management*. (See chapter 4: I undertook all empirical work for this study).

Exploring the use of offshore intermediary jurisdictions by Chinese MNEs for the purposes of 'onward-journey'transit FDI: implications for measuring and understanding Chinese MNE activity. Sutherland, D., Hurst, J., Peng, X., & Wu, L. (2022). *Asia Pacific Business Review, 28*(2), 214-234. (Serves as general background for research on Chinese MNEs).

Statement of Copyright

Acknowledgements

Due to the outbreak of COVID-19, the initial phase of my PhD had to be conducted online. Despite this unexpected shift, my principal supervisor, Prof. Dylan Sutherland, continued to guide me attentively, ensuring that my doctoral research progressed with clarity of direction. I am deeply grateful to Dylan for his devoted guidance during my pursuit of a doctoral degree. He generously spent a significant amount of time providing insightful advice for my thesis and unreservedly shared his invaluable knowledge with me. Without his unwavering support, my doctoral journey would have been an unimaginable challenge. His professional guidance, patient mentorship, and consistent support for my research have been pivotal in the completion of my PhD work. I would also like to extend my sincere thanks to my second supervisors, Professor Chris Williams and Professor Lee Zach. They provided great encouragement and offered many insightful suggestions.

To my family: your love and unwavering belief in me have been the pillars of my strength and resilience. Special acknowledgment goes to my grandfather-in-law, Professor DEAN CHEN. His dedication to academia has profoundly influenced my own aspirations and drive. My appreciation also extends to my husband. Thank you for the encouragement, comfort, and understanding. You have always been there for me through every challenge I have faced, always ready to help without hesitation. Additionally, I wish to extend a heartfelt thank you to my doctoral colleagues and friends; their encouragement and enduring friendship were invaluable to me during this journey.

Introduction

The aim of this thesis is to investigate mainstream International Business theories of emerging market (E)MNEs, which have gained much momentum since the Buckley et al. (2007) seminal JIBs decade award winning paper looking at the location choices of Chinese (C)MNEs. More recently, 'Springboard Theory' (Luo & Tung, 2018), which contrasts EMNEs with developed market (D)MNEs, has risen to prominence as a popular theoretical lens through which EMNEs have been analysed (Luo & Tung, 2018). The research questions were inspired by the surrounding debate, concerning a comparison of the firm-level catch-up 'strategic asset-seeking' (SAS) knowledge seeking/capability for building outward foreign direct investment (FDI) strategies of EMNEs when compared to DMNEs.

A fundamental question raised in the literature concerns whether a new theory (i.e., such as 'Springboard Theory') is required to explain the phenomenon of EMNEs. To date, however, there is limited empirical research comparing EMNEs with DMNEs (Buckley, Cavusgil, et al., 2023). The aim of this research is therefore to update and push forward earlier conceptual contributions and apply them to the current geopolitical/global economic situation by comparing EMNEs with DMNEs using advanced quantitative methods. EMNE investment strategies have evolved considerably. Specifically, the number of cross-border mergers and acquisitions (CBMAs), the dominant mode of SAS 'springboard' related FDI pre-2016, has reduced dramatically. The number of greenfield (GF) FDIs, related to innovation offshoring from EMNEs has however, increased (Rosenbusch et al., 2019). The two different FDI establishment modes used for SAS purposes (CBMAs and GF FDI) are therefore considered for comparative analysis using large-scale empirical analysis and large datasets (taken from Zephyr/BVD Orbis and fDi Markets datasets) and cutting-edge empirical methodologies (i.e., logistic regression, propensity score matching, difference in differences). This resulted in an

international comparative analysis of EMNEs versus DMNEs and specifically their SAS firm-level catch-up related FDI activities.

To this end, in the *first chapter,* a comparative empirical analysis is conducted using logistic modelling of EMNEs versus DMNEs of 19,347 CBMA deals completed between 2010 and 2019, to ascertain the likelihood of undertaking SAS CBMAs. Specifically, the research question was: Do EMNEs have a greater likelihood of undertaking SAS CBMAs? While it is widely assumed that this is the case, convincing large-scale empirical evidence to support this hypothesis is still lacking. The results confirmed that EMNEs did have a stronger likelihood of acquiring intangible asset rich target firms, confirming their comparative SAS orientation. In the *second chapter*, this was taken this a step further by looking empirically at the outcomes of SAS CBMAs to test assumptions found in Springboard Theory, aimed to answer the research question: How well do such deals perform? The performance criteria for comparative growth were measured in terms of intangible assets in the target firms acquired by the EMNEs/DMNEs. Intangible assets (embodied by patented technologies, brands and the like) are key outcome metrics of SAS behaviours. Employing propensity score matching (PSM) and difference-in-differences (DID) to mitigate endogeneity concerns, the dataset comprised 1,975 target firms rich in intangible assets and 1,373 acquiring MNEs, from the period 2010 to 2019. Using time invariant PSM and DID approaches (to control for endogeneity), the findings show that EMNEs' SAS acquisitions contributed significantly more to enhancing the intangible asset value of target firms when compared to those targets acquired by DMNEs. Furthermore, the influence of boundary conditions on post-acquisition intangible asset outcomes was identified, showing that EMNE target outperformance (versus DMNEs) was positively moderated by host country institutional quality, as well the previous international acquisition experience. These findings are somewhat in line with Springboard Theory, which suggests an 'institutional arbitrage' motive for EMNEs engaged in springboard acts. Specifically, it could be argued that EMNEs use foreign targets as key offshore innovation hubs, in their bids to catch-up, and typically invest significant resources

in them. Using their amalgamation, ambidexterity and adaption capabilities (Luo & Tung, 2018), they are able to extract significant value from their targets. These findings emphasize the role that targets themselves play in fostering the long-term innovation capabilities of EMNE acquiring firms. Acquiring targets with intangibles assets, and more importantly the capability to develop and create additional intangibles going forward, does appear to be a distinctive approach used by EMNEs. Using triangulation approaches, these findings were shown to be supported by a broad range of qualitative case study evidence (He et al., 2018). Springboard Theory is comparatively silent on the role of the target firm in the catch-up strategy of EMNEs, suggesting that non-location bounded strategic assets are often transferred to the acquirer's domestic market (Luo & Tung, 2007, 2018; Mathews, 2006, 2017). In reality, the continued growth of the target's intangible assets is crucial to long-term technological capability catch-up in EMNEs. These findings point towards the significant investments and opportunities that EMNEs bring to acquired targets, which has important implications for the theoretical understanding of EMNEs, as well policy-makers searching to create jobs and investment via FDI.

The *third* and *fourth* chapters somewhat mirror chapters two and three, where the focus is on *greenfield* SAS related FDI (i.e., research & development (R&D) and design, development and testing (DDT) FDI), the exploitation of the FT fDi Markets database and how this applies (for empirical reasons) in the Chinese context. An important omission of Springboard Theory is its lack of coverage of GF SAS related FDI. This, however, has become vastly more important over the past decade i.e., Huawei does not engage in CBMAs but has over 22,000 R&D staff working overseas in dozens of greenfield R&D subsidiaries and has been one of the most successful firm-level catch-up stories – and hit with unprecedented sanctions as a result. In the *third chapter*, based on 97,163 worldwide greenfield FDI projects, the relative likelihood (using logit models) of undertaking R&D/DDT related greenfield investments is again explored, focusing specifically on an EMNE sub-sample, and comparing Chinese (C) MNEs to DMNEs. The focus on CMNEs rather than the entirety of EMNEs in chapters three

and four, was driven largely by the challenges found in matching the fDi Markets database to the firm-level database (Orbis), a necessary step in this research. In comparison to their counterparts in other emerging markets, Chinese MNEs are arguably more susceptible to the geopolitical issues that are increasingly salient in the global business environment (Cui et al., 2023; Fjellström et al., 2023; Luo & Witt, 2021). The particular status and global influence of Chinese MNEs exposes them to a complex array of problems and pressures (Luo & Witt, 2021), so caution was required in inferring too much about EMNEs as a whole from this sample. Mirroring chapter two, the findings revealed a stronger inclination of CMNEs to pursue GF SAS FDI than DMNEs. Further research questions were then examined: What are the impacts of global cities and scientific research clusters and how do these positively or negatively moderate the location choice of these investments? The findings suggest for example, that CMNEs are more strongly motivated (than DMNEs) to established scientific research clusters when undertaking R&D/DDT related greenfield FDI. This suggests that firm-level catch-up, as well as historically employing CBMAs, has also relied upon greenfield (and more incremental but equally successful) approaches. Springboard theory (and other related literature, i.e., the 'Link-leverage- learning' (LLL) model) have not yet considered the role of alternative establishment modes such as greenfield FDI. These findings point towards locational determinants (i.e., high-tech research clusters) as having an influence on EMNE GF FDI strategies, a point that that Springboard Theory fails to stress.

To build upon the *third chapter*, propensity score matching (PSM) and difference in difference (DID) approaches were used to investigate the performance *outcomes* of GF SAS FDI are again used in the *fourth chapter*, however owing to methodological reasons this analysis does not have an international comparative perspective. Instead, the outcome on Chinese parent firms of GF SAS FDI was compared with other similar Chinese firms that have not undertaken GF SAS FDI. In addition, GF SAS FDI is compared with Chinese parent firms that have undertaken CBMA SAS FDI, focusing again on the creation of intangible assets as the dependent variable, but now acting as the parent as opposed to the target

subsidiary level (the focus of earlier chapters). This allows for comparisons of outcomes for CMNEs that use different establishment modes. Interestingly, based on 178 GF SAS FDI, 108 SAS CBMAs, and 1863 SAS non-OFDI investments, it was found that GF SAS FDI generate greater long-term growth of parent' intangible assets when compared to non-SAS greenfield investments. In addition, outperformance of GF SAS FDI was found *vis a vis* SAS related CBMAs. This stands somewhat in contradiction to the ideas behind Springboard Theory, suggesting there are alternative ways to achieve rapid firm-level catch-up than 'springboard' acts.

In the conclusion, the main findings and theoretical contributions are summarised. Springboard Theory provides a useful context/lens through which to analyse EMNEs, as it embodies a number of widespread ideas commonly held in the EMNE literature. Nonetheless, it has several blind-spots, at both conceptual and empirical levels. It is increasingly being questioned, owing to the changing geopolitical climate (and downturn in CBMAs). Springboard Theory originally suggested EMNEs were more inclined towards SAS related CBMAs than DMNEs. It did so, however, without systematic empirical evidence. These findings provide such evidence for the period up until 2016 in Chapter 1, suggesting that EMNEs may have been different to DMNEs in this regard for this period. Springboard Theory also implicitly (but not explicitly), suggests that target firms in strong institutional environments are used as key resources/capabilities for firm-level catch-up. As such, when acquired by EMNEs, they might be expected to receive significant investments from EMNE parents which allow them to develop as offshore innovation hubs. The present findings do indeed suggest this is the case (in line with existing case study evidence, i.e., Geely and Volvo, CRRC and Dynex) (Liang et al., 2022). The results thus provide evidence to support, buttress and extend Springboard Theory, which remains silent on the way in which acquirer and target interact. Springboard Theory also overlooks the location bounded nature of key strategic assets, since not all SA can be transported to the home market, as the theory suggests. Indeed, the very institutions springboard EMNEs seek (such as strong IPR environments) are

by definition location bounded – and the capabilities EMNEs need to innovate (for example) are in turn often geographically bounded. EMNEs, therefore, invest heavily in their targets, but help open opportunities for them in their (often protected) domestic markets (e.g. China) and look to develop their acquisitions as key foreign innovation hubs (to generate intangibles for eventual exploitation within the MNEs network). These findings therefore emphasise the location bounded characteristics of the target firms that EMNEs acquire and the way in which EMNEs seek to embed themselves in stronger institutional environments than those found in home markets. It can be argued that IPR is likely one of the more important institutional advantages sought by EMNEs. The present findings provide empirical evidence for EMNE greenfield R&D related FDI that supports this argument.

In the final part of the conclusions an important but growing component of EMNE catch-up strategy is discussed, through an exploration of how and why EMNEs are more predisposed towards GF SAS related FDI than DMNEs and what the outcomes of these investments are. EMNEs are more predisposed towards creating R&D subsidiaries in technologically intensive research clusters, showing an increased tendency vis a vis DMNEs to do so. Using PSM/DID approaches which take account of endogeneity, the findings suggest that such R&D innovation offshoring has a more positive impact upon intangible asset creation than CBMA for EMNEs. This, again, somewhat contradicts the notion in Springboard Theory that CBMA is the main means of firm-level accelerated catch-up for EMNEs. Greenfield FDI is arguably becoming a key strategy for EMNEs in their bid to catch-up, and the evidence suggests this may even be a more viable one. The findings therefore point towards the limitations of Springboard Theory which currently over-emphasises the importance of the M&A establishment mode as a means of catching-up and underestimates how location boundedness affects EMNE FDI strategy.

Chapter 1: An International Comparative Analysis of Strategic Asset Seeking Cross-border M&A Choices in Emerging and Developed Market MNEs

1.1 Introduction

The rapid overseas expansion of MNEs from emerging markets (hereafter EMNEs) has been a noticeable feature of recent decades. Some international business (IB) scholars believe conventional IB theories do not explain the activities of EMNEs well (e.g., OLI theory, Dunning, 1977; Dunning & Lundan, 2008), particularly owing to their alleged tendency to seek strategic assets (i.e., patented technologies and other intangible assets) via aggressive international M&As, for the purposes of firm-level catch up (Arikan et al., 2021; Cuervo-Cazurra, 2012; Cuervo-Cazurra & Ramamurti, 2014). This has sparked various attempts to explain the EMNE phenomenon, mostly based on popular theories/models including early ones such as the 'LLL' model (Mathews, 2006, 2017), and the 'springboard' perspective (Luo & Tung, 2007), recently upgraded to 'Springboard Theory' (Luo & Tung, 2018). A basic underlying tenet of these conceptualizations of EMNEs is that they are different to DMNEs owing to their acquisition of assets for the purpose of technological catch-up. A strong motivation behind EMNEs' overseas investment (i.e., FDI) is that of 'strategic asset seeking' (Buckley et al., 2017; Meyer, 2015). EMNEs, in short, engage more strongly in cross-border transactions to acquire foreign know-how, technology and international brands (Sutherland et al., 2020). Acquisitions are considered a faster approach (and time is considered to be short), despite the fact that the challenges involved in integrating foreign targets are considerable (cultural, technological, political and so on). To date, the comparative strategic asset-seeking orientation of cross-border M&As between EMNEs and DMNEs has been seldom studied (Sutherland et al., 2020). The aim of this chapter, is to

address this gap by comparing EMNEs with DMNEs and their choices to engage in strategic asset-seeking cross border M&As.

MNE SAS OFDI strategies are assumed to be influenced by the absence of strong ownership advantages and their desire to 'catch up' with MNE acquiring assets from the developed market. There is a general consensus in the literature that the home emerging market plays a crucial role. For example, Du and Zhao (2023) argued that EMNEs possess notable competitive strengths in their home countries, which is attributed to their advantages in market size, growth prospects, and a precise understanding of local demands. In line with this, Li et al. (2021) also highlighted that EMNEs have unique access certain local resources (such as licensing of proprietary technologies and procurement of key components). This further enhances their efficiency and superiority in utilizing strategic resources compared to DMNEs. Hennart (2012) considered wider country-specific advantages and suggested that the control of complementary local resources provides EMNEs with stronger bargaining power than outsiders. EMNEs can, however, acquire resources that are not accessible in the domestic countries and make use of those assets complementarily (Cui et al., 2014). In line with this argument, when EMNEs extend their interests abroad can acquire and innovatively amalgamate the critical internal and external resources, and develop networks that can help them to achieve the objective of catching up with technologies and enabling them to compete successfully with their global rivals (Luo & Tung, 2018). Since SAS M&As are high-risk strategies, they are therefore subject to comparatively rapid investment in physically distant markets, and therefore this need for EMNE's international behaviour would suggest that SAS may be driven by firm-level catch-up (Luo & Tung, 2018).

To address this issue, the following research question was raised: Do EMNEs, compared with DMNEs, have a greater likelihood of acquiring a foreign target firm that owns intangible assets? In this chapter the recent literature on the SAS inclinations of EMNEs is reviewed. Logistic regression modelling is then undertaken of 19,347 cross-border M&A deals between

2010 and 2019, to test whether EMNEs have a greater likelihood of acquiring firms that own (i) registered intangible assets (ii) patents. The findings confirm, in line with the 'Springboard' theory, 'LLL' models and updated 'Goldilocks debates' that: that EMNEs are more likely to acquire intangible asset rich targets. This research is among the first to systematically compare emerging versus developed market MNE strategic asset seeking orientation, addressing a crucial gap in the current International Business literature.

1.2 Background

Mainstream International Business theory assumes that MNEs invest abroad in order to take advantage of pre-existing FSAs when they enter into the new markets, however, the rise of EMNEs international investment has resulted in a 'goldilocks debate' with regards to underlying theory (Cuervo-Cazurra, 2012). Despite ownership advantage before they become involved in OFDI activities, there is a strong argument that despite lacking the pre-existing FSAs to be exploited in the foreign market, EMNEs still conducted OFDI (Hashai & Buckley, 2014; Luo & Tung, 2018; Mathews, 2017; Ramamurti, 2012). There is a general consensus in the literature that the EMNEs' OFDI strategy is justified by employing catching-up strategies which are more strongly motivated by SAS than DMNEs, such as those embodied in the 'springboard perspective' (Luo & Tung, 2007, 2018) and the 'LLL' model (Mathews, 2006, 2017).

The reason for EMNEs OFDI was to explore the strategic assets that they needed to build up the competitive advantages rather than exploiting pre-existing ownership advantages as is the case for DMNEs (Luo & Tung, 2007, 2018; Mathews, 2006, 2017). This SAS approach has been acknowledged as an established means by which latecomers can acquire know-how, technologies, brands, etc., with the aim of making competitive advantages and catching up with DMNEs (Meyer, 2015).

Some scholars have pointed out that conventional theories pertaining to MNEs and FDI fail to accurately elucidate the trend of rising investment flows from emerging markets in the context of foreign direct investment. The study of the behaviour and strategies employed by firms in emerging economies, when undertaking SAS CBMAs, has sparked substantial academic debate and concern, particularly in comparison to their developed economy counterparts (Arikan et al., 2021; Awate et al., 2015; Buckley et al., 2023; Cuervo-Cazurra, 2012; Li et al., 2018; Ramamurti & Williamson, 2019; Sutherland et al., 2020; Tang & Zhao, 2023).

Specifically, a form of foreign direct investment known as "Strategic Asset Seeking" is found to be prevalent among MNEs. However, some have argued mainstream theoretical frameworks, such as the OLI paradigm, do not offer a clear explanation for this phenomenon (Cuervo-Cazurra, 2012). In recent years, novel theories have emerged to address SAS behaviour, including the renowned Learn-Link-Leverage (LLL) and Springboard Theory (Luo & Tung, 2018; Mathews, 2017).

Some scholars, however, have argued that the utility of concepts, such as the strategy of catching-up, is necessary to further refine the explanations for the EMNEs' SAS behaviour (Li et al., 2021; Ramamurti & Williamson, 2019). Enderwick and Buckley (2021), for example, argue that catch-up is a heterogeneous process and emphasized the influence of home market conditions. They highlighted that the role of government connections is useful in providing permission to undertake SAS investments, such as in offering financial and other support and in facilitating the acquired asset return to their domestic market.

The latter point was supported by Hertenstein and Alon (2021), who suggested that the springboard process requires EMNEs to be connected with the strengthening of the home market, in order to create and strengthen the learning portal via FDI & export, and enable the transfer of the acquired strategic assets home, thereby enabling them to catch up with

DMNEs. Similarly, Chen et al. (2021) extended the 'LLL' framework and claimed that the heterogeneous nature of EMNEs and firms are not equal to augment their assets, since an imperfect home market generates the need for EMNEs to learn from the location with greater technological knowledge and utilize the complementary technologies for catching-up.

Although Luo and Tung's suggested that EMNEs are more proactive in SAS FDI, various studies still indicate that they may face challenges in key stage 3, implementing reverse transfers of such embedded intangible assets within MNEs (Arikan et al., 2021). For instance, unlike DMNEs, research demonstrates that it appears difficult in practice for MNEs to engage in the reverse transfer these intangible assets from targets (Arikan et al., 2021; Meyer et al., 2014; Narula, 2012). Such a process may entail complexities, involving situations where the acquiring party's technological level falls short of that of the target firm's, leading to management practice difficulties arising from cultural disparities (Meyer, 2015).

Considering that excessive integration might diminish the core competitiveness and unique value of the target firm, many parent firms, in contrast, many EMNEs have opted for strategies that do not entirely conform to conventional management theories (Liu & Woywode, 2013; Tang & Zhao, 2023). They have strongly advocated for the target firm's independent development to foster overall corporate growth.

Moreover, despite SAS CBMAs are more prevalent among EMNEs, other firms, such as DMNEs, also engage in similar investment activities (Luo & Tung, 2018). In response to calls in the literature for a comparative analysis of SAS investments between EMNEs and DMNEs (Buckley, Cui, et al., 2023) and consider the local embeddedness of the acquired intangibles the first half of this research, rooted in the perspective of the target, contemplates changes in intangible asset values to explore how SAS CBMAs influence the technological strategy of EMNEs.

The aim of this chapter is to address this gap by first testing whether EMNEs have a stronger SAS-related acquisition tendency than DMNEs in CBMAs because there is still controversy in EMNE's SAS OFDI strategy, and Enderwick and Buckley (2021) stressed that purely looking at EMNEs leads to an unanchored theory. Compared with DMNEs, the purpose of EMNEs is to explore the strategic assets rather than exploit the pre-existing ownership advantages (Meyer, 2015). EMNEs seem to have some characteristics, such as imperfect market and government support, promoting their international strategy (Bai et al., 2021), however, no comparisons between EMNE and DMNE SAS orientation, from the firm-level perspective, and the factors that influence such tendencies, have yet been made.

1.3 Hypothesis development: EMNEs' SAS orientation

The difference between the asset-augmentation approach in EMNEs and asset-exploitation strategies in DMNEs promotes a need for a new, or the considered extension of, established theories to explain the OFDI behaviour in the global market (Cuervo-Cazurra, 2012; Ramamurti, 2012). Research on SAS cross-border M&As has been restricted to limited comparisons between EMNEs and DMNEs, and to date, only a few studies have considered the comparisons from empirical perspectives (Estrin et al., 2018; Jindra et al., 2016; Sutherland et al., 2018; Sutherland et al., 2020). Sutherland et al. (2020) compare the different types of strategic assets (SA), location-bounded SA (i.e., Trademarks) and non-location-bounded SA (i.e., patents), between EMNEs and DMNEs, indicating that EMNEs have strong non-location-bounded SA orientation for catching up and building competitiveness. Focusing on greenfield investment data, Jindra et al. (2016) used a logit model and found that knowledge externalities and agglomeration positively influence an EMNE's location choices as potential sources for catching up using OFDI. Similarity, Estrin et al. (2018) compared the location choice in DEs by DMNEs and EMNEs and claim that EMNEs as SAS investors are more motivated by pursuing catching-up strategies and attracted by the protection of IPR.

The above studies are to empirically compare EMNEs and DMNEs OFDI strategies, however, they mainly focus on location choice rather than the SAS M&As orientation. Based on those conceptual controversies against EMNEs versus DMNEs (Arikan et al., 2021; Cuervo-Cazurra, 2012; Ramamurti, 2012), and the results from the empirical studies to date (Estrin et al., 2018; Jindra et al., 2016; Sutherland et al., 2018; Sutherland et al., 2020), it is argued that EMNEs will likely have a stronger motivation to undertake SAS M&As, either from the perspective of the FSA framework or the view of home markets. These theories argue that EMNEs, as latecomers, are in a rush to catch-up and undertake 'aggressive' strategic asset seeking cross-border acquisitions so as to build technological, management and brand assets (as well as other intangibles) that they lack. therefore, although an EMNE is still facing challenges in the process of CBMA, especially the acquisition of intangible asset rich target, due to the drive of SA, an EMNE is still more inclined to use CBMA to acquire intangible asset rich target than DMNEs. The first hypothesis (H1), which is very much in line with what is predicted in mainstream IB literature, including the 'springboard perspective' and 'Springboard Theory' (Luo & Tung, 2007, 2018) as well as the Link Leverage and Learn model (Mathews, 2006, 2017; Thite et al., 2016) can therefore be defined as follows:

Hypothesis 1*: EMNEs have a greater likelihood of acquiring intangible asset rich target firms compared to DMNEs when undertaking cross-border M&As.*

1.4 Methodology

1.4.1 Data and sample

The data for the sample was compiled from several different data sources, including: the firm-level Zephyr database, Orbis (Bureau van Dijk), which provides detailed firm-level data;

Globe for cultural-distance, and the World Bank which provided macro-level country data. The international M&As deals were initially taken from Zephyr database[1], using a sample of completed cross-border mergers and acquisitions that occurred between 2010 and 2019. Based on the cross-border deals in the Zephyr database, acquirer firms and target firms were then matched with available financial data from Bureau van Dijk's Orbis database. The BvD ID codes for firms from Zephyr were matched to obtain the dependent variable and firm-level control variables in Orbis. The Orbis data contains specific financial statements and parent-affiliate data on over 100 million firms. Its use was appropriate to gather the source of the firm-level variable data for global ultimate acquirers and targets (Leydesdorff & Zhou, 2014). Variables on the target and acquirer nation's cultural distance were retrieved using the Globe project culture measures (House et al., 2004). In addition, country-level variables such as Human Development Index, world government index were collected from the World Bank (World Development Indicator). The sample for this study comprises the various emerging economies from China, Brazil, Russia, and India, and developed economies from Organization of Economic Co-operation and Development (OECD) countries.

Sample restrictions were imposed according to similar procedures as in previous studies (Chakrabarti et al., 2009; Gubbi et al., 2010; Sun et al., 2012; Zhou et al., 2016). First, based on the benchmark definition of FDI in the International Monetary Fund (IMF) and OECD, deals were identified where the acquirers owned at least 10% of the stake of the targets. However, although there was a high volume of cross-border M&As, a high percentage of the deals were incomplete, and these were discarded, and all other incomplete observations were eliminated Completed M&As transactions, and the deal status with pending, withdrawn, or at the stage of the announcement were not include from the sample. In addition, where both

[1] The details of worldwide cross-border M&As deals were taken from the Zephyr database, which records more than 1.8 million global M&A transactions and details on the acquirers' ultimate owners and their country's internationally recognized ISO codes.

the global ultimate owner acquirer and the target's nation, were unknown these too were discarded. This left a final sample of 19,347 international M&A deals derived from the list of OECD countries (around 95%) and four major emerging economies (around 5%).

1.4.2 Measures

1.4.2.1 Dependent variable

Strategic asset seeking orientation. The dependent variable was a binary variable: a strategic asset acquisition is givens the value of one, if the target had registered firm-level intangible fixed assets, and zero for no assets, since the recording of intangible assets in the balance of a firm implies that they are of significant value to acquiring firms. An additional binary dependent variable was also employed as a robustness test, namely if the target firm owned at least one patent. For strategic asset seeking, the intent to acquire key strategic assets (e.g., technology, brands, and management skills) was also considered and measured with reference to consensus in the literature (Contractor et al., 2016; Delgado et al., 2023; Yang & Driffield, 2022).

Intangible assets as strategic assets were quantified in terms of the firm balance (Cozza et al., 2015; Hashai & Buckley, 2014) and considered as "*valuable, inimitable, rare and best transferrable within the MNC's network of affiliates*" (Contractor et al., 2016, p. 951). The intangible assets in Orbis have been widely used in academic research (Buckley et al., 2014; Contractor et al., 2016; Cozza et al., 2015), which include patent technology, copyright, trademark, marketing rights, franchise rights, goodwill, etc. Intangible assets in Orbis follow the international accounting standard (IAS), which comprised the identified resource without the physical features, Ribeiro et al. (2010). According to the regulations (IAS38.8), assets refer to the purchase or self-creation of the entity in past events. Such controlled resources can bring future economic benefits in the form of capital inflow or other assets (Mandják et al., 2009). The aim of this research was to examine strategic asset-orientation, which includes

various types of assets in intangible nature (Demmou et al., 2019), therefore, intangible fixed assets are a good proxy of the value of strategic assets, and the strategic asset orientation dummy was set based on intangible fixed assets in the Orbis database.

1.4.2.2 Independent variables

EMNEs and DMNEs. To define EMNEs and DMNEs it was first necessary to focus on the various emerging economies and developed economies to examine the strategic asset-seeking orientation that determined outward foreign direct investment through CBAs. For the explanatory variables that capture the DMNEs and EMNEs, the dummy was set to one if the global ultimate owner acquirer was from the BRIC country, and zero if the acquirer was from an OECD country. The appropriate empirical context for the present study required the combination of first usage-various EMNEs and DMNEs because most EMNEs' OFDI focused on few countries (e.g., China, India) (Elia et al., 2020; Liu & Woywode, 2013), or DMNEs from single developed economies. Whether the recent theory on a few countries could be explained for other MNEs from the emerging (developed) economy is, however, still controversial (Zhang et al., 2019). The focus was therefore on EMNEs from different countries such as China, Brazil, Russia, and India, and DMNEs from Organization for Economic Cooperation and Development (OECD) countries to explore the strategic asset seeking orientation between EMNEs and DMNEs.

Human development index. In addition, for robustness check, the following continuous variables were used, the United Nations development programme (UNDP) Human development index (HDI), to capture the MNEs from developed countries (>0.8) and least developed countries (<0.8). HDI is one of the indicators to present the overall development of the countries from three basic aspects, knowledge, life expectancy and a decent standard of living using GNP per capita (adjusted to purchasing power parity standard) (Roser, 2014). United Nations introduced fixed cutoff points for the development of the countries: for

countries with a score of 0.8–1 HDI means very high human development, an HDI larger than 0.8 means the most developed countries, and nearly all of the OECD countries are above 0.8 (UNDP, 2018). The worldwide sample was therefore used to examine the strategic related orientation between most developed MNEs and the later comer (Other MNEs).

1.4.2.3 Control variables

The various variables that may influence the MNEs' strategic assets orientation were controlled, including the firm-level, deal-level, and country-level characteristics, of the global ultimate owner acquirer firms and the target firms. Firm size was included because large firms have greater orientation and advantages to accumulate the intangible fixed assets and achieve economies of scale. Following Pereira et al. (2021), the firm size was measured by the worldwide numbers of employees. Firm age, as the proxy of experience, was included (Shi et al., 2021; Sutherland et al., 2020). The younger firm may have had less experience and were less likely to buy the intangible asset rich target firm when undertaking M&As. Firm age was based on the number of acquisition years since the firm's incorporation. Public firms have a strong risk tolerance than private firms and therefore more likely to undertake international acquisitions (Malhotra & Gaur, 2014). The variable public firms were employed, which were denoted as one if the acquirer was listing firms and zero otherwise. The target from the developed market was also controlled. In many emerging economies, they tend to acquire intangible asset rich target firms in advanced countries (Thite et al., 2016). Hence, one was used to denote the firms from the developed market and zero otherwise. In addition, acquiring ownership may influence asset-seeking orientation as it represents the level of control for target firms. As such, the percentage of the stake of the deal was also added and the business group size (the number of firms) in the corporate group, which may affect the SAS-related deals to a certain extent (Yiu et al., 2005) was also added.

Host country-specific variables and home-host country variables were also introduced. The quality of institutions in the host country may have an impact on the international M&As orientation. The host country's institutional quality may lead to a great deal of complexity in implementing international M&As (Zhang et al., 2011). To measure this, the quality of institutions, combined several key dimensions (i.e., the rule of law, government effectiveness, voice and accountability; political stability; control of corruption; regulatory quality) together and standardized them into a composite variable using World Bank's Worldwide Indicators (Castaldi et al., 2019). Data presented in this database ranging from 0 to 100 for different countries, where the lowest-ranked institution is 0 (Kaufmann et al., 2011). It seems to be a good proxy to use the method of principal component analysis to measure the institutional quality because the level of correlations between these variables is very high (Beugelsdijk, Ambos, & Nell, 2018).

Apart from the institutional quality, cultural differences, and the institutional distance between global ultimate owners' countries and that of the target's country may also influence the international M&As. Based on the institutional quality within countries, the Kogut and Sigh formula has been widely applied to calculate the institutional distance followed the previous papers (Beugelsdijk, Ambos, & Nell, 2018; Campbell et al., 2012; Dikova, 2009; Malhotra & Gaur, 2014). The institutional distance between global ultimate owners' acquirer and target was calculated based on the same formula.

$$ID_j = \sum_{i=1}^{6} \frac{(I_{ij} - I_{iu})^2 / V_i}{6}$$

Where ID_j is the Institutional distance between acquirer and country j, I_{ij} is country j's score on the i^{th} institutional dimension, I_{iu} is acquirer's institutional score on the i^{th} dimension. V_i is the variance on the institutional dimensions.

In terms of the cultural distance, the composite index from the nine dimensions of the Globe project was used for the measurement (Ahammad et al., 2016). The formula for the above variables was as fellows.

$$CD_j = \sqrt{\sum_{i=1}^{9} (I_{ij} - I_{iu})^2}$$

Where CD_j is the cultural distance between acquirer and country j, I_{ij} is country j's score on the i^{th} cultural dimension, I_{iu} is acquirer's cultural score on the i^{th} dimension.

1.4.3 Model specification

A logit model was used to estimate the log odds ratios of a strategic asset-related acquisition for an MNE acquirer, considering how firm characteristics affect the choice. Binary choice was specified, namely whether the target firm holds strategic assets, and the target has not strategic assets, as measured by intangible asset holdings being recorded on the targets balance sheet. The baseline model is as below:

$$\text{Probability (SAS)} =$$
$$f(EMNE, IQ, AGE, GROUP\_SIZE, EMPL, STAKE, \text{PUBLIC}, SOE, DEVELOPED,$$
$$CD, ID, INDUSTRY, YEAR)$$

Table 1.1 presents all the variable descriptions and their sources. The results of the pairwise correlations and descriptive statistics for Model 1 are presented in Table 1.2.

Table 1.1 Variable descriptions and data source

Variables	Full name	Measurement	Data source
SAS	Strategic asset seeking orientation	1: if the target has strategic assets 0: others	Orbis Database
SASPAT	Patent orientation	1: if the target has granted patents 0: others	Orbis Database
EMNE	Emerging market multinationals	1: if the acquirer from the emerging market 0: if the acquirer from the developed market	Zephyr Database; Orbis Database;
CMNE	Chinese market multinationals	1: if the acquirer from the Chinese market 0: if the acquirer from the developed market	Zephyr Database; Orbis Database;
HDI	Human Development index	The development of the acquirer's country	United Nations Development Programme
ID	Institutional distance	Institutional distance between acquirer firm's and target firm's country	Would Governance Indicator (Six) (World Bank)
CD	Cultural distance	Cultural distance between acquirer firm's and target firm's country	Globe Project
IQ	Institutional quality	Host country Institutional quality	Would Governance Indicator (Six) (World Bank)
SOE	State-owned enterprise	1: the acquirer's firms are a stated-owned enterprise 0: Otherwise	Orbis database; Government website; Firm websites
AGE	Firm age	Acquirer Firm's Age	Zephyr Database; Orbis Database
STAKE	Ownership percentage	Ownership percentage after M&As	Zephyr database
EMPL	Numbers of Employees	Log (numbers of employees from acquirer firms)	Orbis database
GROUP_SIZE	GROUP_SIZE	The numbers of firms in the acquirer's corporate group	Orbis database
PUBLIC	Public firm	1: if the acquirer firm is public 0: otherwise	Zephyr database; Orbis database
DEVELOPED	Developed country	1: if the target firm from a developed country 0: otherwise	Zephyr database; Orbis database
INDUSTRY	INDUSTRY	Dummy variables	Zephyr Database; Orbis database
YEAR	YEAR	Dummy variables	Zephyr Database

Table 1.2 Correlation matrix and descriptive statistics

Variable	Obs	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
SAS	19347	0.29	0.45	1													
SASPAT	19347	0.05	0.22	0.15***	1												
LNEMPL	19347	7.97	3.08	-0.00	0.09***	1											
PUBLIC	19347	0.67	0.47	-0.03***	0.07***	0.56***	1										
DEVELOPED	19347	0.83	0.38	0.06***	0.05***	-0.08***	-0.075***	1									
FIRMAGE	19347	38.75	39.79	0.02***	0.07***	0.34***	0.25***	-0.06***	1								
CD	19347	1.58	0.61	0.155***	0.019***	0.048***	0.002	-0.29***	0.090***	1							
ID	19347	0.60	1.03	-0.00	-0.01	0.07***	0.04***	-0.63***	0.03***	0.50***	1						
IQ	19347	1.20	0.62	-0.03***	0.05***	-0.08***	-0.06***	0.80***	-0.07***	-0.35***	-0.67***	1					
GROUP_SIZE	19347	768.88	5003.75	0.01*	0.03***	0.09***	-0.10***	-0.04***	-0.02***	0.07***	0.19***	-0.01	1				
STAKE	19347	92.28	18.75	-0.13***	-0.02***	-0.04***	-0.02***	0.23***	-0.05***	-0.14***	-0.20***	0.23***	-0.03***	1			
SOE	19347	0.02	0.14	0.03***	0.01	0.04***	-0.19***	-0.03***	-0.03***	0.09***	0.18***	-0.01	0.65***	-0.04***	1		
EMNE	19347	0.05	0.22	0.01*	0.04***	0.01*	-0.00	-0.09***	-0.09***	0.19***	0.43***	-0.02**	0.38***	-0.07***	0.34***	1	
HDI	19347	0.91	0.05	0.00	-0.02***	-0.06***	-0.04***	0.11***	0.07***	-0.15***	-0.39***	0.06***	-0.29***	0.08***	-0.26***	-0.88***	1

**** p<0.01, ** p<0.05, * p<0.10*

1.4.4 Results

Table 1.2 presents the descriptive statistics and pairwise correlations matrix for all variables of targets acquired by EMNEs and DMNEs. Based on the result, the correlation between SAS and EMNE is 0.01(SASPAT and EMNE is 0.04), suggesting a positive relationship between EMNE and strategic asset orientation. Further, because the multicollinearity problem will affect the regression results, the variance inflation factors (VIF) for the models was then examined. The VIF indicated that multi-collinearity was deemed not to be a problem for this data as the value of all independent variables was less than 10 at the acceptable level (Cohen et al., 2013).

The analysis began by using a Logit regression of the SAS choice between EMNEs and DMNEs. Based on Bowen and Wiersema (2004), estimated coefficients in the logit model do not determine the direction and the probability of the relationship between variables. Instead, Wulff (2015) suggested that predicted probabilities and margin effects could be used to identify valid relationships. As such, in the following models, the estimated coefficients, odds ratios, and average marginal effects are reported.

Considering the model fit statistics, the values of likelihood ratio and Pseudo R2 in Models 2-3 are all greater than the base model. The value of log pseudolikelihood and Akaike information criterion (AIC) in Models 2-3 are less than that in Model 1, which indicates that the model's explanatory power is increased even though the country of origin was added. Moreover, the AIC in Model 5 and 7-8 decreases and less than the value of the base model as well, suggesting that the explanatory power has increased despite the model becomes complex (Wulff, 2015).

Table 1.3 presents the preliminary results. In terms of the control variables, host developed countries ($\beta = 1.451$, $p < 0.01$ in Model 1) were found to positively influence the strategic-

asset intent acquisitions. The odds ratio (ORs = 4.267, $p < 0.01$) is larger than 1, indicating that MNEs are more likely to acquire strategic assets if the host country is from developed economics. For the institutional quality (β = -0.729, $p < 0.01$ in Model 1), the ownership (β = -0.016, $p < 0.01$ in Model 2) and institutional distance (β = -0.281, $p < 0.01$ in Model 3), all model is negative significant, and the odds ratio is less than 1.

In terms of comparing EMNEs and DMNEs, EMNEs positively affect strategic asset-seeking orientation (β = 0.214, $p < 0.05$ in Model 5). The variable has an odds ratio of 1.238, which is larger than one and significant. This implies that the probability of acquiring an intangible asset rich target firm will increase if the acquisitions were undertaken by EMNEs. The average marginal effects for Model 2 in Table 1.4 show the probability of implementing the strategic asset orientation deal is 0.04 higher. This suggests that if an EMNE acquires a target that holds strategic assets, the likelihood of the acquisition is increased by 4% (at the 5% significance level). Thus, on average, EMNEs are more likely to acquire intangible asset rich target firms than DMNEs, thus supporting hypothesis 1 (H1).

Additionally, the results provide some interesting evidence on Chinese MNEs because Chinese MNEs showed some unique characteristics (Ramamurti & Hillemann, 2018). Model 3 showed that a positive and statistical coefficient of CMNE (β = 0.43, $p < 0.01$) with a 1.538 odds ratio (significant at the 1% level), indicating that CMNEs prefer to undertake strategic asset-related acquisitions than DMNEs. The margins coefficient (0.081 in Table 1.4) at the 1% level of significance shows a significant effect on the extent to which Chinese MNEs have a stronger tendency towards intangible asset rich target firms than DMNEs.

Robustness checks

Human Development Index. The human development index to test the home country development on the strategic asset-seeking orientation is presented in Table 1.5. Based on fixed cut-off points for the development of the countries (for countries with a 0.8–1 HDI score means very high human development), if the index is larger than 0.8 this indicates the most developed countries, and nearly all OECD countries are above 0.8. In model 5, the coefficient of HDI is negative and significant ($\beta = -0.791$, $p < 0.05$), and the odds ratio is less than one at the 5% level. The negative significant margin effects indicated that the more developed countries in which the MNE is located, the less likely the MNEs are to undertake strategic asset-seeking acquisitions. In contrast, the results for MNEs from developed countries are not significant. The results support H1 that MNEs from the least developed countries (i.e., EMNEs), regarded as latecomers, prefer to use M&As to acquire strategic assets.

Patents-seeking orientation. The models were then re-estimated using other proxies of dependent variables. Unlike the previous study of the proxy of the value of strategic assets, some scholars have used the numbers of patents to estimate intangibles (e.g., Choi et al., 2011; Desyllas & Hughes, 2010). Following those studies, the binomial dummy was set based on the patent as the dependent variable and then the models were re-estimated using the new measurement and presented in Table 1.6. If the target has a patent, it was denoted as 1; otherwise, it was set to 0. The results showed that the results are still the same when the alternative variables were used. EMNEs and CMNEs were positive and significant in model 6 and model 7, which indicates hypothesis 1 (H1) is supported. The statistical significance suggest that the results appear are robust, suggesting that EMNEs have a strong asset-seeking orientation than DMNEs.

Table 1.3 Results of Logit models predicting the probability of EMNE and CMNE M&A' strategic asset orientation

	Model 1	Model 2	Model 3	Model 1-ORs	Model 2-ORs	Model 3-ORs
LNEMPL	0.012*	0.012*	0.014**	1.012*	1.013*	1.014**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
PUBLIC	-0.13***	-0.136***	-.143***	.878***	.873***	.867***
	(0.05)	(0.05)	(0.05)	(0.04)	(0.04)	(0.04)
DEVELOPED	1.451***	1.439***	1.429***	4.267***	4.218***	4.175***
	(0.08)	(0.08)	(0.09)	(0.36)	(0.35)	(0.35)
FIRMAGE	0.00	0.00	0.00	1.00	1.00	1.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
ID	-0.242***	-0.272***	-0.281***	0.785***	0.762***	0.755***
	(0.03)	(0.03)	(0.03)	(0.02)	(0.02)	(0.03)
CD	0.671***	0.672***	0.676***	1.956***	1.958***	1.966***
	(0.03)	(0.03)	(0.03)	(0.06)	(0.06)	(0.06)
IQ	-0.729***	-0.755***	-0.759***	0.482***	0.47***	0.468***
	(0.05)	(0.05)	(0.06)	(0.02)	(0.02)	(0.03)
GROUP_SIZE	0.00	0.00	0.00	1.00	1.00	1.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
STAKE	-0.016***	-0.016***	-0.016***	0.984***	0.984***	0.985***
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
SOE	0.487***	0.454***	0.385**	1.628***	1.574***	1.47**
	(0.16)	(0.16)	(0.16)	(0.26)	(0.25)	(0.24)
EMNE		0.214**			1.238**	
		(0.10)			(0.12)	
CMNE			0.43***			1.538***
			(0.14)			(0.21)
_cons	-1.295***	-1.254***	-1.287***	0.274***	0.285***	0.276***
	(0.17)	(0.17)	(0.18)	(0.05)	(0.05)	(0.05)
YEAR	YES	YES	YES	YES	YES	YES
INDUSTRY	YES	YES	YES	YES	YES	YES
Observations	19347	19347	18950	19347	19347	18950
LR chi2	1681.73***	1686.54***	1658.82***	1681.73***	1686.54***	1658.82***
Log likelihood	-10815.558	-10813.151	-10588.968	-10815.558	-10813.151	-10588.968
AIC	21687.1	21684.3	21235.9	21687.1	21684.3	21235.9
Pseudo R^2	0.072	0.072	0.073	0.072	0.072	0.073
Mean VIF	2.63	2.73	2.69	2.63	2.73	2.69

*Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.10*

Table 1.4 Average marginal effects

	Models	dy/dx	
EMNE	Model2	4%**	(0.018)
CMNE	Model3	8.1%***	(0.025)

***** p<0.01, ** p<0.05, * p<0.10*

Table 1.5 Results of Logit models predicting the probability of acquirers' overall development on strategic asset orientation

	Model 4	Model 5	Model 4-ORs	Model 5-ORs
LNEMPL	0.014**	0.014**	1.014**	1.015**
	(0.01)	(0.01)	(0.01)	(0.01)
PUBLIC	-0.138***	-0.143***	0.871***	0.867***
	(0.05)	(0.05)	(0.04)	(0.04)
DEVELOPED	1.486***	1.478***	4.419***	4.386***
	(0.08)	(0.08)	(0.35)	(0.35)
FIRMAGE	0.00	0.00	1.00	1.00
	(0.00)	(0.00)	(0.00)	(0.00)
ID	-0.204***	-0.226***	0.815***	0.797***
	(0.02)	(0.03)	(0.02)	(0.02)
CD	0.666***	0.67***	1.947***	1.954***
	(0.03)	(0.03)	(0.06)	(0.06)
IQ	-0.677***	-0.693***	0.508***	0.5***
	(0.05)	(0.05)	(0.02)	(0.02)
GROUP_SIZE	0.00	0.00	1.00	1.00
	(0.00)	(0.00)	(0.00)	(0.00)
STAKE	-0.016***	-0.015***	0.985***	0.985***
	(0.00)	(0.00)	(0.00)	(0.00)
SOE	0.452***	0.429***	1.571***	1.535***
	(0.16)	(0.16)	(0.25)	(0.24)
HDI		-0.791**		0.453**
		(0.33)		(0.15)
_cons	-1.395***	-0.667*	0.248***	0.513*
	(0.16)	(0.35)	(0.04)	(0.18)
Observations	20019	20019	20019	20019
YEAR	YES	YES	YES	YES
INDUSTRY	YES	YES	YES	YES
LR chi2	1714.78***	1720.34***	1714.78***	1720.34***
Log likelihood	-11166.039	-11163.261	-11166.039	-11163.261
AIC	22388.1	22384.5	22388.1	22384.5
Pseudo R^2	0.071	0.072	0.071	0.072
Mean VIF	2.63	2.59	2.63	2.59

*Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.10*

Table 1.6 Results of Logit models predicting the probability of EMNEs on patent-seeking orientation.

	Model 6	Model 7	Model 8
LNEMPL	1.115***	1.117***	1.118***
	(0.02)	(0.02)	(0.02)
PUBLIC	1.05	1.04	1.03
	(0.11)	(0.11)	(0.11)
DEVELOPED	2.607***	2.507***	2.487***
	(0.46)	(0.44)	(0.43)
FIRMAGE	1.00	1.00	1.00
	(0.00)	(0.00)	(0.00)
ID	1.05	0.97	0.93
	(0.05)	(0.06)	(0.06)
CD	1.168**	1.169**	1.2***
	(0.07)	(0.08)	(0.08)
IQ	1.252**	1.189*	1.15
	(0.13)	(0.12)	(0.12)
GROUP_SIZE	1.00	1.00	1.00
	(0.00)	(0.00)	(0.00)
STAKE	0.992***	0.992***	0.991***
	(0.00)	(0.00)	(0.00)
SOE	0.96	0.90	0.70
	(0.38)	(0.36)	(0.29)
EMNE	H1	1.468**	
		(0.28)	
CNNE			2.666***
			(0.60)
_cons	0.002***	0.002***	0.002***
	(0.00)	(0.00)	(0.00)
YEAR	YES	YES	YES
INDUSTRY	YES	YES	YES
Observations	19347	19347	18905
LR chi2	787.56***	791.49***	799.68***
Log pseudolikelihood	-3600.4342	-3598.4691	-3541.4587
AIC	7256.9	7254.9	7138.9
Pseudo R^2	0.099	0.099	0.101
Mean VIF	2.63	2.72	2.68

*Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.10*

1.5 Discussion

Some IB scholars believe traditional IB theories do not explain the activities of EMNEs very well, particularly owing to their alleged tendency towards SAS through aggressive international M&As, with the aim of firm-level catch up (i.e., absorbing patented technologies and other intangible assets) (Arikan et al., 2021). Logistic regression modelling of 19,347 CBMA deals between 2010 and 2019, was used to test whether EMNEs have a greater likelihood of acquiring firms that own (i) registered intangible assets (ii) patents. According to the quantitative results, the EMNEs have a stronger orientation on acquiring intangible asset rich target firms via CBMAs compared with DMNEs. Although the results of the model in this chapter cannot verify the mechanism of the effects path of SAS on EMNEs' decision due to the limitation of empirical modelling, it provides supporting evidence for those theoretical papers which support the interaction between EMNEs and SAS international activities (Buckley et al., 2023; Buckley et al., 2017; Luo & Tung, 2018; Mathews, 2017). In the next chapter, the mechanism behind EMNEs' SAS CBMAs will be examined, and various factors, on target intangible value creation compared to DMNEs will be taken into consideration.

SAS orientation in EMNEs vis a vis DMNEs

The catching-up strategies may need to be extended further as EMNEs face more challenges to execute 'springboard' or 'LLL' strategies. Luo and Witt (2021) argued that most western countries enacted laws to hinder foreign acquisitions of key domestic firms with respect to decoupling. For example, the US has put lots of Chinese MNEs into the "entity lists" to block the transactions from the EMNEs. In dealing with such issues, they suggested the double-loop springboard strategies, which included inward internationalization (e.g., technological and organizational learning, upgrading, and augmenting) and outward internationalization (e.g., radical OFDI, capability development, and global player). Additionally, Li et al. (2021) broke with tradition by raising the question of why some EMNEs have succeeded in pursuing

springboard strategies but other EMNEs have failed. In combining compositional and springboarding logics, they emphasized that the interaction and integration between the above two logics are unique for EMNEs when compared with DMNEs.

EMNEs are still likely to conduct CBMAs, although they are faced with various pressures in implementing M&As, driven by SAS EMNEs' home market's dynamics strongly influence their interest in target firms that possess strategic assets. To secure their position in the vast and intensely competitive domestic markets, EMNEs might find it necessary to acquire patents and technology from foreign sources (Li et al., 2021; Luo & Tung, 2018). The strategic interaction of domestic ordinary resources (e.g., licensing applied technology and obtaining key components) with strategic assets (e.g., advanced technologies, patents, and branding) acquired from host nations not only creates a unique value chain for EMNEs, but also defines a growth and competitive strategy significantly different from DMNEs (Li et al., 2021). Since these assets may be scarce in their home country, however, they may be more inclined to use SAS CBMAs as a means of acquiring these pivotal assets aggressively (Meyer, 2015). Elia et al. (2020) point out that such acquisition projects can foster a deeper level of collaboration between EMNEs, acquired targets, and local communities, thus contributing to long-term learning and innovation. Through the consolidation and collaboration of ideas, EMNEs are therefore able to enhance their technological and innovative capabilities over time, and might be more inclined to acquire intangible asset rich target firms in order to navigate challenges and opportunities in their markets.

As mentioned earlier, recent academic work argues that the strategic assets have a strong attraction for EMNEs, such as the firm's reputation, technology, advanced management experience (Anderson & Sutherland, 2015; Lai et al., 2015; Meyer, 2015; Sutherland et al., 2018). Additionally, Hennart (2012) considers that SAS can improve the FSA potential, which promotes the firms' competitiveness. The results show, in line with the prediction of the 'Springboard Theory' and 'LLL' models, compared to DMNEs, EMNEs are more likely

to acquire targets that own strategic assets. This present study is, therefore, among the first to systematically compare emerging versus developed market MNE SAS orientation, addressing a crucial gap in the current International Business empirical literature. There are only a few studies that have considered this question from an empirical standpoint (Estrin et al., 2018; Jindra et al., 2016; Sutherland et al., 2020). Thich is surprising, given the extensive conceptual debate that surrounds the question of SAS in EMNEs versus DMNEs (Luo & Tung, 2018).

1.6 Conclusion

Some papers used location choice modelling to infer SAS behaviours from FDI locations (Estrin et al., 2018; Jindra et al., 2016; Sutherland et al., 2018; Sutherland et al., 2020), however, my approach and findings rely on the firm-level data that measures the target firm's actual SAS potentiality – including intangible assets and patents, which covers the worldwide EMNEs' cases of foreign investment. The present findings do recognize that a firm's heterogeneity not only concerns MNEs but also causes them to pay more attention to the different characteristic of targets. It is possible to argue that it might be worthwhile to reconsider certain aspects of the 'Springboard' theory and 'LLL' model, which predominantly emphasize EMNEs' investments in developed markets (Luo & Tung, 2007, 2018; Mathews, 2017). These theories often suggest that the primary motivations of EMNEs are centred on acquiring advanced technologies to enhance their distinct advantages, yet, it could be beneficial to also consider the potential implications of the target's intangible changes, especially viewing the intangible asset rich target firm as a key innovation hub, over the long term. Furthermore, Enderwick and Buckley (2021) indicate that the knowledge transfer is a great challenge in technical absorbing, which prevents the motives of SAS from achieve success in M&As, which implies that EMNEs' SAS are not as simple as implied in Springboard Theory. The preliminary findings suggest a tendency among EMNEs to adopt CBMAs when targeting intangible asset rich firms, yet the wider implications and the

influence of these investments on their intangible value remain somewhat unclear. It's noteworthy to mention that targets often serve as innovation hubs, and when viewed in the context of long-term strategic positioning and value creation, the landscape becomes even more complex. Consequently, in the subsequent chapter, the potential underlying factors that might influence the value of a target's intangible creation will be examined in greater depth. This examination will serve to further highlight the significance of continuous research in this field (Buckley et al., 2023).

Chapter 2: How do 'Springboard' International Acquisitions Impact Long Term Intangible Asset Growth in Target Firms? An International DID/PSM Comparative Analysis of Emerging Versus Developed Market MNE Acquirers

2.1 Introduction

EMNEs have received affirmative validation from the Springboard Theory in their springboard FDI. According to this theory, firms can enhance their core competencies through proactive SAS CBMA strategies (Luo & Tung, 2018). This equips EMNEs with a competitive advantage, while incorporating amalgamation, ambidexterity, and adaptability in an upward spiralling process (Luo & Tung, 2018). As this area gets further explored, the focus of empirical studies has gradually shifted to how SAS CBMA can affect the parent firm's domestic market with respect to: encompassing innovation (Liang et al., 2022; Piperopoulos et al., 2018), productivity enhancements (Guo & Clougherty, 2022; Li & Valentini, 2023), and shareholder value (De Beule & Sels, 2016). Relative to parent firms, however, research on target firms acquired by EMNEs is scant, and often limited to specific case studies (Awate et al., 2015; Hansen et al., 2016; He et al., 2018; Thite et al., 2016). To date, there remains a gap in the literature concerning the target firms' intangible asset value, and a notable lack of comparative analyses of the impact of SAS M&A strategies between EMNEs and DMNEs (Buckley et al., 2023). This reduces the chance of a comprehensive grasp of SAS CBM&A outcomes across different settings (Buckley et al., 2023), although despite their unique origins, both DMNE and EMNE strategies can be understood within the 'springboard' (S)MNE framework, with EMNEs forming a major subset of SMNEs (Luo & Tung, 2018).

It is important to establish such comparisons, particularly in light of doubts surrounding the EMNEs' proficiency in effectively integrating and maximising the acquisition of foreign assets, and in particular those target firms endowed with valuable intangible assets (Zhang et al., 2019). Cultural and psychological differences can heighten the Liability of Foreignness (LOF) challenges (Cui et al., 2022), however, the Springboard Theory posits that EMNEs can strategically leverage acquisitions, especially asset-abundant firms, to fuel innovation and intangible asset growth. Rooted in the Springboard Theory, EMNEs often grapple with limitations like innovation capability and look to bridge these gaps via CBMAs and institutional arbitrage (Arikan, 2021; Luo & Tung, 2018). By consistently investing in these acquired firms and ensuring top management's involvement, EMNEs are better positioned to realize their global aspirations (Luo & Tung, 2018). Luo and Tung (2018) further advocate that such sustained strategies can refine EMNEs' soft competencies, including international experience. In addition, a conducive institutional backdrop, especially one offering robust intellectual property rights protections is suitable, and necessary, for EMNEs pursuing catch-up FDI. Moving from nations with weaker institutions to those with stronger governance can foster enhanced intellectual property safeguards and the creation of intangible assets (Bruno et al., 2022). These considerations are likely to influence EMNEs' preference for nations with a strong institutional foundation.

In this chapter, the Propensity Score Matching (PSM) combined with the Difference-in-Differences (DID) approach was utilized to analyse panel data spanning 2010-2019. The dataset comprises 1,975 intangible asset rich target firms, and 1,373 MNE acquirers from both developed and emerging markets. The aim of this research was to examine the differences in post-acquisition intangible asset performance of target firms between EMNEs and DMNEs, and to evaluate the effects of three key moderating variables: institutional distance, international experience, and cultural distance.

Grounded in the Springboard Theory, the findings indicate that EMNEs have a positive effect on the post-acquisition intangible asset value of target firms compared to DMNEs, and while institutional distance and international experience amplify intangible asset creation in targets of EMNEs relative to DMNEs, cultural distance appears to negatively influence this outcome, particularly for EMNEs.

These findings contribute to the evolving dialogue on firm-level catch-up strategies and the Springboard Theory for EMNEs. Specifically, they offer insights into the potential influence of SAS CBMAs on target firms, an area that has received limited attention to date. The results indicate a pattern where EMNEs might show a preference for acquiring geographically constrained strategic intangible asset rich target firms than DMNEs. This observed behaviour could be linked to an intention to enhance the capabilities of these target firms, potentially establishing them as key hubs for overseas R&D and technological innovation, as discussed by He et al. (2018). Consistent with the Springboard Theory, factors such as institutional distances and international experience could serve as drivers for EMNEs to reinforce their capabilities, leading to growth in intangible assets, however the finding also suggest that DMNEs might navigate cultural distances with greater ease, presenting an underlying challenge for EMNEs.

2.2 Background

Conventionally, MNEs have been reluctant to make international acquisitions unless they possess a clear ownership advantage (Dunning, 1977). In recent years, the rapid growth of FDI from emerging markets has sparked academic interest, particularly regarding their unique approach to strategy, objectives, and standards. This shift in FDI has triggered intense debate within the international business community (Deng, 2012). Historically, the analysis of MNE's FDI was grounded in conventional ownership, location, and internationalization frameworks (Dunning, 1977).

Indeed, acquired intangible assets are arguably sticky and location-bounded in nature. Firms are not easily and simply replicate technologies or organizational models, but need to relocate resources and enhance their core capabilities within the constraints of the innovation system in which they are embedded (Anand et al., 2021). This oversight regarding the location-bounded intangible assets of target firms limits the comprehension of how SAS CBMAs influence the evolution of intangible asset values (Arikan et al., 2021). Nevertheless, some case studies indicate that changes in the value of a target's intangible assets can have long-term implications for a firm's innovative capability development, as these assets can either accelerate or inhibit innovation (Meyer, 2015; Yakob et al., 2018; Zheng et al., 2022).

Interestingly, when EMNEs engage in foreign acquisitions, they often lack the conventional ownership structures found in their counterparts. This observation led to a "*Goldilocks debate*" and resulted in the development of new theoretical frameworks (Arikan et al., 2021; Cuervo-Cazurra, 2012). Among these, the springboard perspective (Luo & Tung, 2007), the subsequent Springboard Theory (Luo & Tung, 2018), and the link-leverage-learn model (Mathews, 2006, 2017) are particularly notable.

On deeper analysis, the '*springboard*' perspective and the subsequent theory emphasize that, while EMNEs might lack conventional ownership advantages, they aggressively internationalize in an attempt to catch-up with MNEs from developed markets (Luo & Tung, 2007, 2018). To achieve this, they often engage in SAS cross-border M&As to acquire assets they currently lack, prioritizing the enhancement of their core competitiveness over the mere exploitation of existing resources (Deng, 2009). Assets of this type, including R&D capabilities, proprietary technology, branding, and distribution networks, have the potential to provide competitive advantages (Teece et al., 1997).

From the springboard perspective, Springboard MNEs, including EMNEs and other MNEs expanding through springboarding, can tap into vital intangible assets such as technology

and branding by engaging in key, radical acquisitions, thereby enhancing capabilities and global competitiveness through a reverse transfer process (Luo & Tung, 2007, 2018). The 'upward spiral' model, based on the Springboard Theory, outlines a five-stage progression aimed at achieving technological catching-up (Luo & Tung, 2018). These sequential stages are: inward internationalization, engaging in radical acquisitions, transferring capabilities to the home base, focusing on home-centred capability enhancement, and undertaking global catapulting bolstered by these enhanced capabilities (Luo & Tung, 2018).

In support of this view, some scholars showed that EMNEs acquires resources that are not accessible in their domestic home countries and make use of those assets' complementarity (Cui et al., 2014). As they internationalize, EMNEs strategically link, leverage, and learn critical resources to catch up technologically and enhance their competitive edge against global rivals (Mathews, 2006, 2017). For EMNEs, the pursuit and refinement of these strategic assets, especially when acquired through CBMAs, are key FDI drivers (Luo & Tung, 2018). As highlighted by Liang et al. (2022), these strategic assets improve EMNEs' competitiveness and, in the long term, can serve as pivotal "R&D centres" for technological advancements.

While the literature on EMNE M&As from a SAS perspective is extensive, there is a gap concerning their impact on intangible assets (Nelaeva & Nilssen, 2022). Zhu et al. (2019) underscore the importance of understanding how EMNE M&As influence intangible assets, noting that many such deals are targeted toward securing critical intangible assets. This focus on intangibles, especially the spillover of knowledge and technology, has been widely acknowledged and endorsed by academics. For instance, Yakob et al. (2018) posited that strategic assets can induce positive lock-in effects post-acquisition.

By integrating these top-tier strategic assets, (Papanastassiou et al., 2020) noted that EMNEs can weave intricate networks and facilitate R&D internationalization. Dynex Power's

acquisition of Zhuzhou Times Electric came at a premium of 160%, and Geely's takeover of Volvo that transformed the latter into a research hub are sound examples. This prompts the research questions: Given the emphasis on strategic assets, how do these acquisitions affect intangible asset creation for acquired EMNEs, especially in comparison to DMNE foreign targets? Post-acquisition, do the intangible assets of acquired EMNEs appreciate, depreciate, or stabilize when compared to the targets of the DMNEs?

2.3 Hypothesis development

2.3.1 Acquisition and investment in Location Bounded Firm-Specific Advantages: EMNEs versus DMNEs

EMNEs have been increasingly turning to international acquisitions to gain knowledge access. In contrast to DMNEs, where the headquarters predominantly relay knowledge to their R&D subsidiaries, EMNEs often draw knowledge from their R&D subsidiaries in advanced economies, aiming for an innovation catch-up (Awate et al., 2015). Within this dynamic, intangible asset rich target firms serve as key centres for EMNEs, helping them cultivate firm-specific advantages which are then leveraged across their broader network. This acquisition approach dovetails with the 'springboard' perspective, suggesting that diminishing the performance of a newly acquired foreign target would be undesirable (Luo & Tung, 2007, 2018).

There remains a research gap in the literature however: the post-acquisition of such investment remains under-explored (Buckley et al., 2023). Most insights into the influence of springboard acquisitions (where targets possess valuable intangibles like patents) on the growth of EMNE-acquired targets come from case studies (Hansen et al., 2016; He et al., 2018; Meyer, 2015; Torres de Oliveira & Rottig, 2018; Yang, 2022). These studies overwhelmingly echo the notion that upon acquisition, EMNEs channel significant resources

into their targets, enhancing their technological and brand assets[2]. Indeed, considering the inherent stickiness of intangible assets (Arikan et al., 2021), this investment often takes the form of direct financial infusions earmarked for intangible asset development. Yang (2022), for instance, underscores how acquired firms undergo a strategic transformation into advanced product research hubs, fuelled by hefty investment from the EMNE acquirer. This strategy results in the roll-out of novel products, many of which are customized for the EMNE's domestic market, leveraging the unique local market insights and resources of the acquired firms (Hennart, 2012; Li et al., 2021).

Due to the higher pressures on EMNEs (compared to DMNEs) to gain legitimacy from host countries, they may be under greater pressure to invest in acquired targets. Legitimacy refers to "*a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions*" (Suchman, 1995, p. 574). As Luo and Tung (2018, p. 147) note, "*building a positive image for both country of origin and EMNEs from these countries is a challenge".* EMNEs, in contrast to DMNEs, grapple with legitimacy issues in developed markets, attributed to their 'emerging' status (Zhang et al., 2018). This causes them to double down on their investments, striving to gain a foothold and local legitimacy. They are often proactive in ensuring continuous employment and bolstering R&D efforts in their acquired targets (Zheng et al., 2022). Furthermore, post-acquisition efforts often pivot towards internal legitimacy, exemplified by Zhang et al. (2018), where additional compensations to key personnel were seen as tools for fostering internal allegiance. Such investment helps them in seeking a favourable position within the business network and mitigating external risks

[2] In He et al.'s (2018) study, a UK semiconductor manufacturer acquired by a Chinese MNE felt prompted to enhance its products, driven by the EMNE parent's intent to tap into both markets' synergies. Similarly, Joyson, a Chinese auto components MNE, after acquiring a technologically superior German firm, allocated substantial funds, notably establishing a $54 million R&D centre in Germany. This strategy was termed a 'supportive partnering approach', marking a crucial innovation hub for the EMNE group (Torres de Oliveira & Rottig, 2018).

related to the liabilities of outsiders, while also fostering internal legitimacy within the acquired targets and reinforcing external legitimacy across the network (Li & Fleury, 2019).

To maximize the intrinsic value and organizational autonomy of their acquisitions, EMNEs often adopted a light-touch integration approach (Liu & Woywode, 2013; Tang & Zhao, 2023; Wu et al., 2023). This decision not only shielded Western brands from possible reputational challenges but also deepened their connections with international clients (Wu et al., 2023). Their combined competencies soon manifested in increased synergy, blending the target's design expertise with the EM acquirer's production capabilities. As the partnership developed, the acquired firm's leadership played a more integral role in the overall MNE's decision-making, particularly in R&D and international marketing (Wu et al., 2023). Alongside this evolution, their positioning crystallized: EMNE brands catered to the mid-to-lower market segments, while their Western counterparts targeted premium markets (Wu et al., 2023). This robust collaboration led to a significant enhancement of the acquired firm's intangible assets.

Finally, by elevating the growth trajectory and profitability of acquired firms, EMNEs set the stage for further intangible asset investments. Tapping into expansive emerging markets, such as China or India, these acquired targets experienced significant growth trends (Ai & Tan, 2020; He et al., 2018), and EMNEs, given their rooted understanding of local demands and access to exclusive local resources, are poised with a distinct advantage (Li et al., 2021). This interaction between EMNEs and their targets generates a virtuous cycle: the dynamics of the EMNEs' domestic markets coupled with the innovative prowess of the acquired firms drive hefty investments in acquired intangible assets.

Consistent with the Springboard Theory, EMNEs look to their foreign acquisitions as hubs for long-term intangible asset creation, including R&D and brand development. This entails financial backing for innovation (Hansen et al., 2016; He et al., 2018; Meyer, 2015; Torres

de Oliveira & Rottig, 2018; Yang, 2022), granting access to the EMNE's home market for the target's offerings, and fostering novel product developments (Li et al., 2021). The pressure to fortify local legitimacy further escalates their commitment post-acquisition (Zhang et al., 2018). These conditions, distributed asymmetrically, could lead to higher intangible asset investment and growth in EMNE-acquired targets compared to those acquired by DMNEs. This suggests the following hypothesis (H2.1):

Hypothesis 2.1*: The intangible asset growth of strategic asset target firms acquired by EMNEs outperforms similar target firms acquired by DMNEs.*

2.3.2 Institutional distance and target intangible asset growth

Following the work of North (1990), institutional distance was defined as a "*the extent of similarity or dissimilarity between the regulatory, cognitive, and normative institutions of two countries*" (Xu & Shenkar, 2002, p. 608). Since the quality of existing institutions (e.g., regulations) implies the support of effective economic activities, the difference between institutions in home and host countries will have an impact on economic transactions (Bruno et al., 2022; Gaur et al., 2022; Kostova et al., 2020). It is generally believed that greater distances are believed to increase challenges for MNEs doing business in foreign markets (Eden & Miller, 2004; Kostova & Zaheer, 1999; Zaheer, 1995). This is due to liabilities of foreignness (e.g., unfamiliar, relational, and discriminatory hazards) which act as barriers for MNEs trying to operate in host country, especially when compared to local businesses (Eden & Miller, 2004).

The strategic approach of springboard acquisitions offers a new perspective however, for rather than seeing foreign markets solely as challenges, MNEs actively seek beneficial institutions abroad while minimizing exposure to less favourable home institutions (Luo & Tung, 2018). The role of institutions for EMNEs arguably becomes of even greater

importance when driven by an SAS objective, especially when it pertains to the long-term development of intangible assets, such as engaging in R&D, fostering innovation, and securing patents. In this case, the strong IPR protection becomes paramount in these endeavours, which are more often assured in developed institutional frameworks (Estrin et al., 2018). Furthermore, stages 3 (capability transfer to home) and 4 (home centred capability upgrading) of the Springboard strategy suggest that transferring capabilities back home might not frictionless approach (Arikan et al., 2021). In fact, if home institutions are weak, the strategic emphasis may shift towards investing more in markets with stronger institutions (Nielsen et al., 2017). This suggests that stages 3 and 4 of the 'upward spiral' might overemphasize capability repatriation, and overlooks the potential benefits of investing in better-institutionalized target markets with unique, location-specific firm capabilities.

Interestingly, a growing body of research findings underscores the enhanced performance of EMNEs in intangible assets, especially when compared to DMNEs, upon entering more institutionally robust markets. For example, a recent study by Bruno et al. (2022) revealed superior innovation outcomes for EMNEs, especially when their R&D units were situated in areas with stringent IPR safeguards. Further supporting this, a meta-analysis by Rosenbusch et al. (2019) highlighted the important role of home institutional settings, pointing out that in cases of weaker institutional settings, advantages can be attained via ‘institutional arbitrage outcomes’. In support of this view, Wu et al. (2019) observed that MNEs originating from regions with lax protection tend to favour jurisdictions that offer enhanced protective measures to protect and improve intangibles. When EMNEs invest in advanced and robust institutions, they find it easier to operate in environments with established and predictable rules and regulations (Bilgili et al., 2016). Such distinct advanced institutions help EMNEs reduce transaction costs and stimulate further investment (Tang & Buckley, 2022). Through this engagement, EMNEs gain a clearer understanding of the intricate market mechanisms essential for building cutting-edge capabilities (Tang & Buckley, 2022). Both empirical data and theoretical insights therefore indicate EMNEs from weaker institutions appear to be more

inclined to invest in foreign targets within these advanced institution settings, which constitutes a more pronounced positive effect of strong institutions on the intangible growth of acquired firms for EMNEs over DMNEs in the context of springboard SAS M&As. This leads to the following hypothesis (H2.2a)

Hypothesis 2.2a*: In the post-acquisition period, institutional distance has a greater positive impact on intangible asset growth in intangible asset rich target firms for EMNE vis a vis comparable DMNE acquirers.*

2.3.3 International experience and target intangible asset growth

International experience refers to the ability of an MNE to gain knowledge about the host market and build a local knowledge base (Li et al., 2016; Lu et al., 2014). These capabilities include: the ability to build relationships with different stakeholder groups such as business partners, the government, and non-government organizations; a critical understanding of local norms and practices; and a general level of confidence in conducting business abroad (Gaur et al., 2022). Such firm-specific capabilities are hard to imitate (Meyer et al., 2009), but arguably vital when entering foreign markets (Lu et al., 2014). FDI experience may impact how well firms: identify the right targets; manage these targets by selecting the correct integration approach (i.e., 'Light-touch approach') and deal with challenging and physically distant foreign environments associated with liabilities of foreignness (Liu & Woywode, 2013; Tang & Zhao, 2023; Wu et al., 2023). As Luo and Tung (2018, p. 134) argued, "*it is incorrect to assume that organizational learning and foreign experience are not important for EMNEs*". Luo and Tung (2018) showed that "*international expansion supplies EMNEs...experience (soft skills) needed in international competition*" (Luo & Tung, 2018, p. 132). While this may be the case, Springboard Theory does not provide specifics regarding what happens after an acquisition has taken place.

For EMNEs that generally lack foreign experience, the potential returns to international experience are expected to be greater. As stressed by Xu et al. (2021, p. 5), "*International experience, both at the enterprise-level and individual-level, is more helpful to EMNEs' foreign investment. Because enterprises from emerging economies usually lack overseas investment experience, international experience has a more significant effect on improving overseas investment performance*". For EMNEs, international experience often serves as an indirect factor in the development of intangible assets (i.e., innovation) (Thakur-Wernz & Samant, 2019). As EMNEs tend to be relatively nascent in their overseas ventures, every international engagement they undertake assumes greater importance, and intensifies the impact on their innovation performance (Thakur-Wernz & Samant, 2019). For example, many EMNEs engaging in cross-border R&D activities improve the value of international exposure (Xu et al., 2021). Their collaboration with foreign entities, be it research institutions, industry competitors, or supply chain partners, opens the door to innovative knowledge. To operating within a specific country is viewed as a deep-dive strategy, which has been evidenced to facilitate EMNEs in effectively capturing external knowledge benefits, enhancing organizational learning, and improving oversea investment performance (Alon et al., 2020). Such interactions offer a window into pioneering technologies and managerial strategies, fostering not just the assimilation of this knowledge, but also accumulate international experiences thus catalysing innovation (Xu et al., 2021). Having prior experience may enable EMNEs to exploit intangible assets rich target firms more effectively. Given this, the impact of international experience on intangible asset growth is therefore hypothesised to be greater for EMNEs compared with DMNEs, thus H2.2b was defined as follows:

Hypothesis 2.2b: *In the post-acquisition period, international experience has a greater positive impact on intangible asset growth in intangible asset rich target firms for EMNE vis a vis comparable DMNE acquirers.*

2.3.4 Cultural distance and target intangible asset growth

Cultural distance has consistently been identified as an important factor in post-acquisition integration and performance in M&A outcomes (Minbaeva et al., 2021; Reus & Lamont, 2009). The concept has, however, also been described as a 'double-edged sword' that can be beneficial to some firms and detrimental to others (Minbaeva et al., 2021; Reus & Lamont, 2009). In the case of firms with a high absorption capacity (Li et al., 2016), a wealth of acquirer resources and managerial capabilities (Boateng et al., 2019), cultural distance may provide opportunities for improved outcomes since these differences may stimulate creativity and intra-MNE learning. Consequently, they may lead to improved innovation outcomes (and hence intangible asset growth) (Stahl & Tung, 2015). Others, however, argue that negative impacts have occurred. In Wang et al. (2022) study, for example, the moderating effects of cultural distance were found to exacerbate concerns regarding legitimacy. Similarly, Sears (2018) investigates factors that influence integrative and internal innovation after technological acquisition. They found that cultural distance slowed down knowledge sharing across borders and hindered innovation. In addition, Bauer et al. (2016) explored the moderating effects of cultural distance on innovation performance, and suggested that cultural similarities between central European targets and domestic markets were beneficial for innovation-driven acquisitions.

Springboard Theory suggests that EMNEs might navigate challenges associated with cultural distance through amalgamation, adaptation, and ambidexterity. Indeed, regarding the organizational and managerial competencies, Luo and Tung (2018) emphasized the under-researched nature of cultural distance in '*springboard*' M&A strategies. They posited that, "*EMNEs often struggle to assess, manage, and integrate culture with organizational compatibility due to their lack of cross-cultural management skills*" (Luo & Tung, 2018, p. 146). To date, however, EMNE-related research has yielded conflicting results regarding the

impact of M&As on target innovations (an important component of intangible asset valuation) (Li et al., 2017; Popli et al., 2016; Wang et al., 2022). Compared to DMNEs, EMNEs lack ownership advantages, which can potentially lead to a destruction of value due to organisational complexity and communication difficulties (Liu & Woywode, 2013; Tang & Zhao, 2023). Due to the fact that cultures do differ, a lack of knowledge of the foreign market increases the firms' liabilities (Cao & Alon, 2021; Petersen & Seifert, 2014). For EMNEs coming from complex cultural environments, managing an intangible asset rich target firm may therefore present greater challenges (Campagnolo & Vincenti, 2022; Lewis & Bozos, 2019). Given the inherent challenges EMNEs face, it is hypothesized that cultural distances exert a more pronounced negative influence on intangible assets for EMNE-acquired targets compared to DMNEs. This difference arises because EMNEs typically do not have the comparable ownership advantages that DMNEs possess, making cultural distances an additional hurdle for them. Thus H2.2c is defined as follows:

Hypothesis 2.2c: *In the post-acquisition period, cultural distances more negatively impact intangible asset growth for EMNE vis a vis DMNE' targets firms.*

2.4 Methodology

Propensity score matching (PSM) and Difference in Differences (DID) approaches have been used to address post-M&A target firm performance, and are increasingly used in International Business research (Cui & Xu, 2019; Du & Zhao, 2023). These approaches address key endogeneity concerns associated with using standard multiple regression analysis (i.e., related to selection biases and causality). Such methodology adopts a similar approach, one typically found in earlier studies exploring post CBM&A target outcomes (Chen, 2011). Specifically, endogeneity caused by selection biases are an inherent challenge in empirical research settings related to the questions under analysis (Cui et al., 2022). For example, EMNEs may preferentially cherry-pick targets predisposed towards intangible

asset growth. Thus, targets with the potential to perform well are not randomly distributed. To overcome such problems, propensity score matching is commonly used (Yang & Driffield, 2022). Using EMNE/DMNE target sample matching techniques allows for more accurate 'like-for-like' comparisons (Chang et al., 2013; Yang & Driffield, 2022). For the imbalance sample, a year-to-year PSM matching approach was used (rather than one-time matching), as the DID sample is time-variant (i.e., staggered). To do so, Stata's psmatch2 nearest-neighbour method was adopted, that matches acquiring EMNEs with DMNEs on the vector of control variables in Table 2.1. This included target and acquirer ROA, GUO ROA, slack, TOA, sales, and age, with year and firm fixed effects. Those DMNE deals for which no common support was found were then dropped (i.e., no weight was assigned to them). After matching, a two-way fixed effects DID estimations was then applied.

DID has been widely used to study the impacts of cross-border M&As on a variety of dependent variables, for both target and acquired firms (Liu et al., 2017; Szücs, 2014). Numerous studies, moreover, use DID to analyse acquisition performance between two or more groups (Bertrand, 2009; Chen, 2011; Gu et al., 2020; Schweizer et al., 2019). For example, Chen (2011) analysed the effects of investors' origins on employment and sales after acquisition in target firms, that used firms acquired by non-United States based developed industrialised countries as the treatment group and those acquired by US firms as the control group (to compare impacts of domestic versus international acquisitions). In a similar way, two groups were created in this present analysis, a treatment (target firms acquired by EMNEs) and a control group (target firms acquired by DMNEs), looking at the periods before and after the CBM&A event. After that, generalised DID estimations were employed to track changes in acquired intangible assets before and after the cross-border M&A.

2.4.1 Data and sample

The worldwide cross-border M&A deals was identified from the Zephyr database (which records more than 1.8 million global M&A transactions). Zephyr is compatible with the Bureau van Dijk' Orbis database, which contains detailed time series financial data/statements and parent-affiliate data on over 300 million firms, and provides longitudinal financial data for the ten most recent years (in this case from 2010 to 2019), including data on intangible asset valuations. Selection criteria for this analysis was focused, in the first instance, on: (a) completed acquisitions; (b) involving investments exceeding 50% equity purchase; (c) occurring between 2012 and 2017, thus providing a window of at least three years' worth of intangible asset data either side of the acquisition period (Orbis provides data for 10 years); (d) possessing unconsolidated financial data for the target firm thus allowing access to accurate target data; (e) Only target firms that reported positive intangible assets from 2010 to 2019 were included. Thus only intangible asset rich target firms (Erel et al., 2015) were considered as viable data. After screening, this left 2,002 CBM&As deals and 12,385 usable observations over a 10-year period from 2010 to 2019.

2.4.2 Measures

2.4.2.1 Dependent variable

Strategic asset growth. Cross country internationally reported balance sheet intangible assets are now quite widely used in IB research (Buckley et al., 2014; Contractor et al., 2016; Cozza et al., 2015). Intangible assets as reported in Orbis, follow the international accounting standard (IAS) (Ribeiro et al., 2010). Intangible assets include standardised accounting practises which place monetary valuations on intangibles such as patented technologies, copyrights, trademarks, marketing rights, franchise rights and goodwill. Intangible fixed assets are therefore an appropriate proxy for the value of the strategic assets that are held in target firms. Although other variables, such as R&D intensity or outputs are also widely

accepted in innovation and IB related research (Desyllas & Hughes, 2010; Papanastassiou et al., 2020), the purpose of this research was to examine broader strategic asset growth. Thus, using a variable which incorporates all types of assets that are intangible in nature (i.e., trademarks as well as patents), is highly appropriate for the dependent variable (Demmou et al., 2019). In addition, as this dependent variable is continuous in nature (i.e., a value), it lends itself to DID/PSM type models.

2.4.2.2 Independent variables

EMNEs versus DMNEs. A key variable is an indicator variable for whether the target firm was acquired by an EMNE or DMNE. In the sample selection, the focus was primarily on the BRIC nations (Brazil, Russia, India, China), which are often emphasized in emerging market literature (Bertrand et al., 2019; Bu et al., 2023; Hendriks et al., 2023; Tang & Zhao, 2023). In addition, the study incorporated emerging markets as identified in the world investment report (UNCTAD, 2021). DMNEs include those with a global ultimate owner in OECD nations in addition to new European Union member states. In general, this definition incorporates high-income/ high Human Development Index countries (see Appendices A and B), whereas the emerging market sample is the opposite.

Institutional distance. An institutional distance index was measured using the Kogut and Singh's approach (Beugelsdijk et al., 2018; Campbell et al., 2012; Dikova, 2009; Malhotra & Gaur, 2014). This involved using the six institutional dimensions (i.e., rule of law, government effectiveness, voice and accountability, political stability, control of corruption, and regulatory quality) combined and standardized (Castaldi et al., 2019), as such:

$$ID_j = \sum_{i=1}^{6} \frac{(I_{ij} - I_{iu})^2 / V_i}{6}$$

Where ID_j is the Institutional distance between acquirer and country j, I_{ij} is country j's score on the i^{th} institutional dimension, I_{iu} is acquirer's institutional score on the i^{th} dimension. V_i is the variance on the institutional dimensions.

International experience. This refers to the MNEs' prior cross border M&A experience, following previous studies (Malhotra & Gaur, 2014; Scalera et al., 2020), and takes the value of one if the MNEs had made a prior cross border M&A in the same target country in any year prior to the sample observation period, and 0 otherwise. The Zephyr database has been tracking cross-border M&As since 1997. In the present study the period from 1997 onward was used to capture experience in international deal-making in the host market.

Cultural distance. The difference in the target and acquirer nation's cultural distance (CD) was calculated using the Globe project's cultural distance measures. Specifically, the calculation of CD employed the commonly used Euclidean distance measure (House et al., 2004), which is based on the nine dimensions of the Globe project (House et al., 2004). This contains the following cultural dimensions: (1) uncertainty avoidance, (2) future orientation, (3) power distance, (4) institutional collectivism, (5) humane Orientation, (6) performance orientation, (7) in-group collectivism, (8) gender egalitarianism, and (9) assertiveness. Following the previous studies (Ahammad et al., 2016), the CD was calculated:

$$CD_j = \sqrt{\sum_{i=1}^{9} (I_{ij} - I_{iu})^2}$$

Where CD_j is the cultural distance between acquirer and country j, I_{ij} is country j's score on the i^{th} cultural dimension, I_{iu} is acquirer's cultural score on the i^{th} dimension.

2.4.2.3 Control variables

In addition, the analysis was also controlled for several factors that may affect strategic asset value after acquisition, including the characteristics of the target firm and the acquirer. This included: acquirer firm size (total assets), as larger acquirers possess the greater resources and capabilities to develop target intangible fixed assets (Yang & Driffield, 2022); acquirer firm ROA; experience, proxied by firm age (years since incorporation) (Shi et al., 2021; Sutherland et al., 2020); acquirer firm slack (the ratio of current assets to current liabilities (Cho & Arthurs, 2018; Cui & Xu, 2019), may also have an impact on target performance (Chen et al., 2021; Cui & Xu, 2019). Target firm controls included: profitability (return on assets) as it may have an impact on post-acquisition intangibles growth (Contractor et al., 2016); target slack; target sales (which have been found to be related to innovation (and thus intangibles growth) (Bruno et al., 2022; Chen, 2011); and target age. In addition, time-invariant variables such as SOE status, industrial relatedness, whether the target was in a high-tech industry, public status and the like were considered. Firm, country, industry, and year fixed effects were also included.

2.4.3 Model specification

To test hypothesis 2.1 (H2.1), the PSM and DID specification relates the acquired firm's strategic asset value with the event of the acquisition as follows:

$$Y_{it} = \beta_0 + \beta_1 DiD_{it} + Controls + Constant + \gamma_i + \delta_t + \varepsilon_{it}$$

Where Y_{it} is the strategic assets performance of the acquired firms i in year t, γ_i and δ_t are firm and year fixed effects. $EMNE_i * Post_{it}$, the key variable, equals to one for the years after acquisitions for firm i, if i was EMNE.

To test hypotheses 2.2a, 2.2b and 2.2c, the model was adapted to include the commonly used approach of Bruno et al. (2022) and others (Chang et al., 2013; Chen, 2011; Cui & Xu, 2019), creating subsample groups based on above and below median levels of cultural/institutional distance and experience (where 1 represented prior international experience, 0 otherwise). Fixed effect models were run within each subsample to examine the comparative impacts of cultural/ institutional distances and international experience on strategic asset creation between the two high and low groups. Table 2.1 below presents all the variables and their definitions and source, and the results of the pairwise correlations are presented in Table 2.2.

Table 2.1 Description of variables and data source

Variables	Full name	Measurement	Data source
IFAs	Strategic assets performance	Logarithm of target firms' intangible fixed assets	Oribis database
DiD	Difference-in-differences	1= EMNEs & post-acquisition 0= otherwise	World investment report; Zephyr database;
AGE	Target firms age	Number of years since the target firms have established	Orbis database; Zephyr database
G_AGE	GUO acquirer firms age	Number of years since the GUO acquirer firms have established	Orbis database; Zephyr database
TOA	Targets firm size	Logarithm of target firms' total assets	Orbis database
G_TOA	GUO acquirer firm size	Logarithm of GUO acquirer firms' total assets	Orbis database
SLACK	Target firm slack	Target firms' current ratio	Orbis database
G_SLACK	GUO acquirer slack	GUO acquirer firms' current ratio	Orbis database
ROAS	Target firms' profitability	Target firms' return on assets	Orbis database
G_ROAS	GUO acquirer firms' profitability	GUO acquirer firms' return on assets	Orbis database
SALES	Target firm sales	Logarithm of target firms' sales	Orbis database
G_SALES	GUO acquirer sales	Logarithm of GUO acquires firms' sales	Orbis database
CDs	Cultural distances	Cultural distances between targets and GUO acquirers' countries	Globe projects (Nine)
IDs	Institutional distances	Institutional distances between targets and GUO acquirers' countries	Worldwide governance indicators (Six)
IE	International experience	Prior CBM&A experience in the target country	Zephyr database
Year FE	Year fixed effect	Year dummy variables	Orbis database
Industry FE	Industry fixed effect	Industries covered by SIC	Orbis database; Zephyr database
Country FE	Country fixed effect	ISO country codes	Zephyr database

Table 2.2 Descriptive statistics and pairwise correlations (PSM plus DID)

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
IFAs	5.933	3.183	1														
DID	0.07	0.255	0.066***	1													
ROAS	4.374	20.248	-0.116***	-0.046***	1												
G_ROAS	5.842	10.299	-0.003	-0.022**	0.137***	1											
SLACK	2.276	3.547	-0.095***	-0.019**	0.092***	0.01	1										
G_SLACK	2.046	3.405	-0.032***	-0.018**	0.001	0.063***	0.027***	1									
TOA	10.177	2.015	0.653***	0.131***	-0.014	0.007	-0.018*	-0.059***	1								
G_TOA	14.612	2.426	0.234***	-0.005	-0.016*	0.043***	0.028***	-0.176***	0.407***	1							
SALES	9.904	2.373	0.503***	0.095***	0.101***	0.046***	-0.120***	-0.062***	0.711***	0.263***	1						
G_SALES	14.124	2.896	0.188***	-0.014	0.001	0.101***	0.017*	-0.261***	0.336***	0.879***	0.247***	1					
AGE	21.14	19.998	0.116***	-0.013	0.016*	0.010	-0.012	-0.006	0.284***	0.059***	0.243***	0.052***	1				
G_AGE	42.582	38.39	0.044***	-0.102***	0.014	0.082***	0.006	-0.069***	0.123***	0.332***	0.116***	0.346***	0.119***	1			
IE	0.434	0.496	0.212***	-0.024**	-0.012	0.006	-0.001	-0.077***	0.242***	0.282***	0.195***	0.245***	0.074***	0.063***	1		
CDs	1.846	0.584	-0.136***	0.018*	0.034***	0.011	-0.001	-0.024**	-0.101***	0.046***	-0.118***	0.070***	0.017*	0.088***	-0.129***	1	
IDs	0.67	0.972	0.013	0.306***	-0.035***	0.006	0.019**	0.000	0.110***	0.048***	0.082***	0.042***	-0.016*	-0.031***	-0.079***	0.245***	1

**** p<0.01, ** p<0.05, * p<0.10*

2.4.4 Results

Descriptive statistics and the pairwise correlation matrix are presented in Table 2.2. Table 2.3 considers the results of the DID estimates, and illustrates the differences between EMNEs and DMNEs in terms of intangible fixed asset growth pre and post M&A. The average treatment effect on the treated (ATT) measures the difference between the two groups regarding the improvement in intangible values after acquisition. This shows that EMNE-acquired targets experienced an average increase of 0.280 percentage points in intangible fixed asset creation over DMNE-acquired targets (Model A). The annual values were also analysed in Table 2.4, which presents the results of DID estimates for the first three years following the acquisition. Here ATT increased its intangible assets by 0.273 points in the year following the acquisition (Model 1), and a year after the acquisition, ATT increased to 0.329 percentage points, thus hypothesis 2.1 (H2.1) is supported.

Tables 2.3 and 2.4 show the intangible asset value creation differences between EMNE and DMNE targets for the subsamples of high/low institutional/cultural distances and international experience/non-international experience. When institutional distance is high (exceeding the median), ATT was fond to be positive and significant ($\beta = 0.296$, $p < 0.05$, model B). In the low institutional distance sample, ATT is lower ($\beta = 0.029$, model C) and not significant. According to table 2.4, in the first two years following the acquisition, high institutional distance' ATTs are 0.270 and 0.344 (5% significance level, model 2). Conversely, ATTs were not significant from in all three years post M&A in low institutional distance cases. This result confirms hypothesis 2.2a, which predicts that the creation of intangible assets will be greater when EMNEs invest in those countries with more advanced institutions.

Further, when the acquiring firm has prior international experience, ATT appears positive and significant ($\beta = 0.575$, $p < 0.05$, model D). At the 5% significant level, ATTs are 0.478%

and 0.541% at one year and one year after the acquisition in model 4, respectively. Two years after acquisition, ATTs are still positive and have increased to 0.577 percentage points. Conversely, when IE==0, the ATTs are much smaller and are not significant from time 0 to time 3 (Model 5). This supports hypothesis 2b regarding international experience and its positive impacts for EMNE acquirers.

Table 2.3 The effects of CBMAs on targets' strategic assets creation (EMNEs versus DMNEs) (PSM plus DID)

	Strategic asst value creation						
	Main effect	IDs>M	IDs<M	IE==1	IE==0	CDs>M	CDs<M
	A	B	C	D	E	F	G
DID	**0.280****	**0.296****	0.029	**0.575****	0.107	0.148	**0.813****
	(0.127)	(0.140)	(0.375)	(0.268)	(0.134)	(0.129)	(0.367)
Control Vars	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
_cons	-4.138	-8.915	-2.594	-2.819	-8.037	-13.502	1.537
	(5.225)	(7.401)	(7.611)	(7.587)	(6.445)	(8.536)	(6.517)
F statistic	32.96	20.66	13.64	19.07	13.55	27.20	10.10
Prob > F	0.000	0.000	0.000	0.000	0.000	0.000	0.000
R-squared	0.884	0.888	0.878	0.900	0.854	0.872	0.909
Observations	12385	7246	5139	4845	6314	9598	2787

*Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.10*

For the low cultural distance subsample (CDs < Means), ATT is positive and significant (β = 0.813, p < 0.05, model G). The results from table 2.4 remain positive and statistically significant at a level of at least 5% in the following 3 years after acquisition (Model 7). After

two years of the acquisition, ATT reaches a peak of 0.924%. As cultural distance between EMNE acquirers and targets increases, ATTs decrease in size and become largely non-significant (Model 6). In the third year after acquisition, the ATT in high cultural distance situations decreased below zero (β = -0.026). Accordingly, larger cultural distances are associated with a lower intangible asset growth after an EMNE acquisition. Hypothesis 2.2c is therefore accepted.

Table 2.4 Post-acquisition strategic asset creation between DM and EM acquired targets (PSM plus DID)

	Whole sample		**IDs>M**		IDs<M		**IE==1**		IE==0		CDs>M		**CDs<M**	
T		**(1)**		**(2)**		(3)		**(4)**		(5)		(6)		**(7)**
Post-acquisition estimates between EMNE (=1) and DMNE (=0) acquired targets														
0	0.**273****	(0.115)	**0.270****	(0.126)	0.306	(0.333)	**0.478****	(0.227)	0.181	(0.134)	**0.210***	(0.123)	**0.498***	(0.298)
1	**0.329****	(0.128)	**0.344****	(0.142)	-0.005	(0.392)	**0.541****	(0.251)	0.189	(0.145)	0.208	(0.136)	**0.817****	(0.343)
2	0.197	(0.144)	0.183	(0.161)	0.042	(0.412)	**0.577***	(0.298)	-0.039	(0.163)	0.039	(0.145)	**0.924****	(0.425)
3	0.135	(0.162)	0.119	(0.182)	0.016	(0.473)	0.444	(0.302)	0.019	(0.201)	-0.026	(0.178)	**0.888****	(0.350)

*Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.10*

Robustness checks

Time-varying Difference-in-differences. A prerequisite of using time-varying DID estimations is that 'parallel trends' exist between treatment and control groups and that they should have similar effects trends before the event (Baker et al., 2022; Goodman-Bacon, 2021). Following these assumptions, the approach of Autor (2003) was used to test if the change in the dependent variables were parallel between the EMNE and DMNE samples before the acquisition event (Baker et al., 2022; Goodman-Bacon, 2021).

$$Y_{it} = \beta_0 + \sum_{x=1}^{3} \beta\, Pre_{t-\sigma} + \sum_{x=1}^{3} \beta\, Post_{t+\sigma} + Controls + Constant + \gamma_i + \delta_t + \varepsilon_{it}$$

Where the $Pre_{t-\sigma}$ and $Post_{t+\sigma}$ represent the dummy variables in the year before and after the acquisitions, respectively. $\sigma < 4$, is allowed providing a window of 3 years both before and after the acquisition. β is the parameter to measure the pre-acquisitions time trend of the difference in acquired strategic asset growth. The results established that parallel common trends did exist (see Figure 2.1).

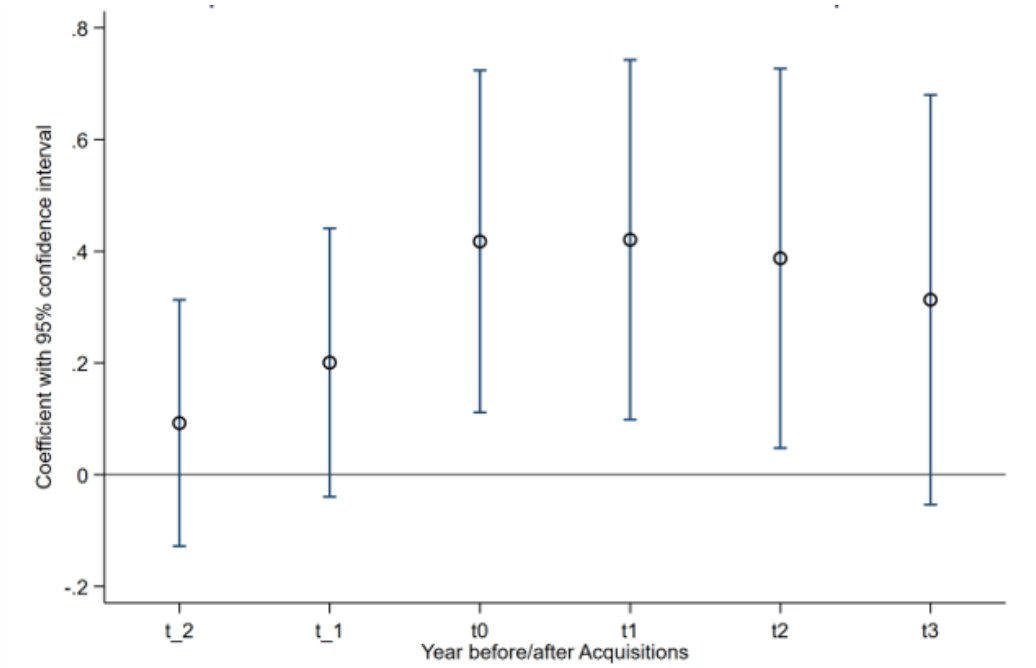

Figure 2.1 The common trends before and after acquisitions

Figure 2.1 represents the coefficients of the pre/post-acquisition year dummies in different periods. As the third pre-acquisition year is treated as the baseline year, the coefficient of t_1 is equal to 0. The figure shows that none of the coefficients was significantly different from the others during the pre-acquisition period, thus passing the parallel trends test. This means that DID estimations can be applied.

The results of Time-varying DID indicate that the main findings were confirmed by the robustness check. Table 2.5 provides descriptive statistics and correlations. Tables 2.6 and 2.7 indicate that the main DID (EMNE*POST) coefficient shows a significant and positive treatment effect. The results indicate that PSM plus DID are valid. Thus moderation terms were deemed to be related to cultural distance, institutional distance, and international experience are also robust: hypotheses 2.1, 2.2a, 2.2b and 2.2c can therefore be accepted.

Results based on sample of incomplete deals. The analysis was extended to include incomplete deals as a robustness check. This methodology is based on Chen (2011), which studied the impact of the source country on post-acquisition performance. This sample of uncompleted EMNE and DMNE transactions was examined in order to examine whether CBMAs have an impact on the development of intangible assets between EMNEs and DMNEs. In the set of incomplete deals, it would be reasonable to expect that there would be no difference in intangible asset wealth between EMNEs and DMNEs. This process consists of the following steps: 1) retrieve all incomplete deals from the Zephyr database: 2) collect the corresponding control variables: 3) apply the same methodology for both incomplete EMNE and DMNE targets. If they do, it might imply a self-selection bias (i.e., it was not the acquisition by the EMNE that caused the difference).

Table 2.8 Model A shows that the key variable, DID (EMNE*POST), was found to be insignificant for the incomplete deal sample. The comparison of intangible asset value growth over three years after the assumed completion date did not however reveal significant

differences between incomplete EMNE and DMNE target firms (Model B). For deals that did not reach completion, the EMNEs did not have an impact on the intangible asset value of their targets. These findings, support the finding of the research that the rise in intangible asset value is primarily attributed to completed deals by EMNEs.

Table 2.5 Descriptive statistics and pairwise correlations (Time varying DID)

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
IFAs	5.964	3.191	1														
DID	0.095	0.293	0.067***	1													
ROAS	4.293	20.310	-0.114***	-0.051***	1												
G_ROAS	5.879	10.192	0.001	-0.025***	0.141***	1											
SLACK	2.274	3.548	-0.093***	-0.023***	0.095***	0.011	1										
G_SLACK	2.029	3.336	-0.033***	-0.027***	0.004	0.062***	0.026***	1									
TOA	10.215	2.037	0.656***	0.157***	-0.012	0.006	-0.023***	-0.059***	1								
G_TOA	14.620	2.419	0.230***	-0.007	-0.005	0.043***	0.037***	-0.175***	0.390***	1							
SALES	9.941	2.388	0.509***	0.115***	0.104***	0.046***	-0.120***	-0.061***	0.718***	0.256***	1						
G_SALES	14.136	2.879	0.187***	-0.010	0.009	0.101***	0.025***	-0.258***	0.321***	0.881***	0.242***	1					
AGE	21.016	19.971	0.111***	-0.033***	0.021**	0.013	-0.014	-0.006	0.254***	0.059***	0.224***	0.049***	1				
G_AGE	43.219	39.360	0.026***	-0.112***	0.027***	0.078***	0.009	-0.066***	0.080***	0.331***	0.084***	0.342***	0.126***	1			
IE	0.430	0.495	0.205***	-0.041***	-0.005	0.000	0.005	-0.077***	0.229***	0.285***	0.190***	0.248***	0.072***	0.063***	1		
CDs	1.842	0.599	-0.139***	-0.023**	0.031***	0.014	0.006	-0.021**	-0.115***	0.052***	-0.125***	0.069***	0.026**	0.081***	-0.129***	1	
IDs	0.727	1.017	0.020**	0.354***	-0.043***	0.006	0.009	-0.009	0.126***	0.029***	0.093***	0.030***	-0.034***	-0.043***	-0.086***	0.195***	1

**** p<0.01, ** p<0.05, * p<0.10*

Table 2.6 The effects of CBMAs on targets' strategic assets creation (EMNEs versus DMNEs) (Time varying DID)

	Strategic asst value creation						
	Main effect	**IDs>M**	IDs<M	**IE==1**	IE==0	CDs>M	**CDs<M**
	A	B	C	**D**	E	F	**G**
DID	**0.325*****	**0.346*****	0.017	**0.655*****	0.154	0.167	**0.941*****
	(0.119)	(0.129)	(0.377)	(0.242)	(0.134)	(0.124)	(0.307)
Control Vars	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
_cons	-4.244	-8.853	-2.79	-3.093	-8.472	-13.215	0.332
	(5.265)	(7.348)	(7.861)	(7.603)	(6.499)	(8.528)	(6.603)
F	34.13	21.85	13.48	19.73	14.40	27.6	10.58
Prob > F	0.000	0.000	0.000	0.000	0.000	0.000	0.000
R-squared	0.887	0.892	0.88	0.902	0.859	0.878	0.907
Observations	13371	8017	5354	5192	6881	10317	3054

*Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.10*

Table 2.7 The post-acquisition strategic asset creation (Time varying DID, non PSM)

	Whole sample		**IDs>M**		IDs<M		**IE==1**		IE==0		CDs>M		**CDs<M**	
T	**(1)**		**(2)**		(3)		**(4)**		(5)		(6)		**(7)**	
EMNE (=1) and DMNE (=0)														
0	**0.316*** **	(0.112)	**0.318*** **	(0.122)	0.298	(0.334)	**0.505** **	(0.211)	**0.260***	(0.139)	**0.249** **	**(0.122)**	**0.530** **	(0.267)
1	**0.318*** **	(0.121)	**0.333** **	(0.131)	-0.006	(0.393)	**0.577** **	(0.225)	0.186	(0.145)	0.184	(0.133)	**0.874*** **	(0.279)
2	**0.271** **	(0.133)	**0.274***	(0.146)	0.016	(0.414)	**0.664** **	(0.260)	0.073	(0.156)	0.077	(0.139)	**1.070*** **	(0.325)
3	0.176	(0.147)	0.174	(0.163)	-0.001	(0.477)	**0.643** **	(0.272)	-0.071	(0.186)	-0.036	(0.163)	**1.057*** **	(0.313)

*Robust standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.10*

Table 2.8 The post-acquisition strategic asset creation: incomplete deals (EMNEs vs. DMNEs)

	Strategic asst value creation	
	A	B
DID	-0.145	
	(0.134)	
t0		-0.141
		(0.126)
t1		-0.113
		(0.147)
t2		-0.183
		(0.159)
t3		-0.179
		(0.183)
Control Vars	Yes	Yes
Firm FE	Yes	Yes
Year FE	Yes	Yes
Country FE	Yes	Yes
Industry FE	Yes	Yes
_cons	-14.544	-15.714
	(9.569)	(9.967)
F	2.92	2.29
Prob > F	0.000	0.000
R-squared	0.878	0.876
Observations	3933	3650

Robust standard errors are in parentheses.
**** p<0.01, ** p<0.05, * p<0.10*

2.5 Discussion

These results show that when EMNEs acquire other firms, they boost the growth of intangible assets (like brand and technology) in those targets, outperforming DMNEs and institutional factors and international experience amplify this effect, whereas cultural distance diminishes it. These findings also question the 'Springboard Theory' by considering how cross-border M&As in SMNEs impact the creation of strategic assets (EMNEs versus DMNEs). The findings underscore that intangible asset growth is central to the strategy of EMNEs by drawing from the Springboard Theory (Luo & Tung, 2018) and the Link-Learn-Leverage model (Mathews, 2017). EMNEs also enhance their acquired intangible assets by engaging in springboarding acquisitions, and thereby establish a robust foundation for increased global competitiveness.

2.5.1 Understanding the target's role in firm-level catch-up strategies: EMNEs versus DMNEs

The ongoing Goldilocks discussion has stirred the IB community to question the distinctiveness of EMNEs in comparison to DMNEs. This has led to further debate on whether new theories, such as the springboard theory, are needed to explain EMNEs' global expansions (Arikan et al., 2021; Cuervo-Cazurra, 2012). The propensity to engage in international acquisitions to catch up on intangible assets (i.e., technological, branding) is considered a key aspect of this debate (Li et al., 2021; Luo & Tung, 2018; Mathews, 2017), nevertheless, relatively few comparisons of acquisition outcomes have been conducted between EMNEs and DMNEs (Buckley et al., 2023; Zhang et al., 2019). It is also common for studies to focus on the performance of the parent MNE rather than that of the target firm (Cui & Xu, 2019). A number of these parent-focused studies have demonstrated that SAS-related FDI enhances the innovation capabilities of EMNEs within their domestic, home (Elia et al., 2020; Liang et al., 2022; Piperopoulos et al., 2018), however, these findings raise a

further research question: When the acquired target firms have not also performed well over the long term, how could such acquisitions constitute an effective catch-up strategy, by helping the parent's home country performance? It is unlikely that a one-time transfer of intangibles will constitute an effective strategy for catching up. As Buckley et al. (2023, p. 8) suggested, "*There are many actors, many contexts, and many empirical challenges in the way of comprehensive answers to the question of who ultimately benefits (and loses) from EMNE internationalization".* It may be argued that continued intangible asset creation within the target firm is a precondition for EMNEs to achieve their firm-level catch-up goals through springboard types of SAS CBMAs.

The empirical findings of the present study are strongly supported by the case study literature that examines EMNE integration after the acquisition of 'springboard' type SAS acquisitions (Hansen et al., 2016; He et al., 2018; Meyer, 2015; Torres de Oliveira & Rottig, 2018; Yang, 2022). Unlike DMNEs, foreign subsidiaries of EMNEs often develop beyond being mere extensions and become key innovation centres (Awate et al., 2015; He et al., 2018). Through the strategic allocation of enhanced resources, EMNE acquirers shape these subsidiaries into hubs of R&D and brand awareness, in turn strengthening innovation, branding, and networking (Cooke et al., 2018). EMNEs are thus able to maximize intangible assets through support from these studies in a number of ways as follows.

(a) EMNEs are attracted to knowledge-generating capabilities that are bounded by location, as well as institutional advantages that are tied to place (such as intellectual property protection). Indeed, in discussing the nature of strategic assets from a resource-based view (dynamic capabilities) perspective, Luo and Tung (2018, p. 138) recognized that "*many deeply embedded processes and routines associated with such capabilities within the firm are sticky, tacit, and nontransferable*". In contrast to the Springboard Theory and its proposed "*upward spiral*" model, under which these capabilities would be transferred to an EMNE's home market frictionlessly (Arikan et al., 2021), the present findings emphasize

their location bounded nature. In addition to firm-level benefits, there are also country-level benefits (e.g., superior institutions).

(b) The EMNE acquirer made high levels of investments in the target after the acquisition, which allows them to develop the location-based capabilities of the target firm when facing legitimacy issues, which may lead to the creation of further intangible assets. Indeed, when engaged in outward acquisitions, EMNEs often encounter greater legitimacy pressures than DMNEs (Luo & Tung, 2018). The challenges included in this regard include overcoming market discrimination and consolidating credibility (Zhang et al., 2018). EMNEs have further invested and adopted a dual-faceted approach to addressing these challenges: internally, they offer incentives to key employees, and externally, they increase R&D efforts following acquisition, reinforcing their position within the broader business environment (Li & Fleury, 2019; Zheng et al., 2022).

In correlation with (a) and (b), case evidence suggests that (c) relatively supportive 'light touch' integration strategies preserve the distinctive capabilities of the target firm (to avoid disruption). EMNEs employ a 'light-touch' integration strategy that preserves and enhances the intrinsic value of the acquired firms, especially their intangible assets (Liu & Woywode, 2013; Tang & Zhao, 2023; Wu et al., 2023). It also creates a harmonious atmosphere in which targets are encouraged to develop design and innovation capabilities following acquisitions by utilizing the facilities and financial support of the EMNE (Wu et al., 2023). Intangible assets of their acquired targets grow in value over time, and through this long-term development, the acquired firms gradually become important contributors to the development of the MNE's strategic directives, particularly in areas such as research and development and international marketing (Wu et al., 2023).

Finally, case studies also show that (d), according to Springboard Theory, the EMNE parent's home market is still important since it allows it to exploit a consistent ongoing (i.e., non-one-

off) stream of value from firm-level location bounded assets. Here the home market serves as a basis for maximizing value from acquisitions (Hennart, 2012; Li et al., 2021). EMNEs have distinct characteristics when it comes to their domestic markets, providing them with a competitive edge, and allowing acquired firms to integrate into emerging markets (Li et al., 2021), and based on Springboard Theory, these EMNEs would not be exposed to both firm-specific and country-specific advantages without such investments (Luo & Tung, 2018).

2.5.2 Location bounded strategic assets and institutional distance

The aim of the present study was to employ an institutional lens (Luo & Tung, 2018), enabling the examination of how variations in institutions across different geographic settings influence the growth of intangible value following acquisition. The results indicate that the Springboard Theory does not adequately capture how the location-specific nature of a target firm's strategic assets influences MNE springboard strategies. The 'upward spiral' model posited by the Springboard Theory occasionally presupposes that a target's intangibles, and crucially, its abilities to generate future intangibles, are not confined to location and are easily transferable between the target and the acquirer (Luo & Tung, 2018). EMNEs are, however, attracted to capabilities that generate knowledge that is inherently location-based combined with geographically tied institutional advantages like intellectual property rights protection (Estrin et al., 2018). Arikan et al. (2021) pointed out that it would be inaccurate to assume that the Springboard Theory holds that strategic assets can be brought back into the home market without friction once they are acquired (Arikan et al., 2021), and an in-depth geographical interpretation of EMNE expansion is advocated (Luo & Tung, 2018).

Expanding on this, it is important to recognize that the specific institutions that EMNEs aim to interface with (such as through 'positive' institutional arbitrage) are inherently local in nature. It must be recognized, however, that such institutional interfaces profoundly affect post-acquisition strategies. Some advantages of these institutions, such as rigorous protection

of intellectual property, are irreplicable in EMNEs' home markets (Wu et al., 2019). It has been demonstrated that optimal R&D investments relating to capability augmentation are better conducted in regions with strict IP regulation, rather than in the native markets of EMNEs, where there may be lax IP regulations, increasing the risk of such investments being unproductive (Wu et al., 2019). In markets with robust institutional frameworks, EMNEs notably outperform DMNEs in leveraging intangible assets. For instance, Bruno et al. (2022) found enhanced innovation results for EMNEs when their R&D facilities were located in regions with rigorous IPR mechanisms. The following insight might explain this finding: contrary to popular belief (where significant institutional differences are viewed as liabilities) (Bilgili et al., 2016; Tang & Buckley, 2022), a greater institutional distance benefits intangible asset growth for EMNE targets more than DMNE targets. This is because with M&As In superior institutional landscapes, EMNEs are able to acquire technologically advanced firms, as well as secure a favourable environment for additional investments in intangible assets, thereby amplifying the positive impact of institutional distance.

2.5.3 Location Bounded Strategic Assets and international experience

Conventionally, international experience has been considered an important factor when undertaking M&A transactions, particularly those involving technologically superior targets. As noted earlier, EMNEs stand to benefit more from international experience compared to DMNEs given the knowledge asymmetries between them and their targets, since they commit additional resources and effort to enhancing their targets' capabilities. The challenges of integration and absorption are great for EMNEs, and experience is therefore invaluable. Studies have shown, for example, that EMNE overseas innovation performance is indirectly influenced by their international experience (Thakur-Wernz & Samant, 2019). The international experience of EMNEs therefore plays a positive moderate role in influencing the target's post-acquisition intangible asset generation.

For EMNEs that generally lack foreign experience, the potential returns from international exposure are expected to be more substantial. For as noted by Luo and Tung (2018), it would be mistaken to overlook the importance of organizational learning and foreign experience for EMNEs. When EMNEs undertake springboard acquisitions, they pursue strategic assets not readily available in their domestic markets (Luo & Tung, 2018). They then benefit from this international exposure that helps them to gain a greater understanding of intangibles, and leads to a richer base of knowledge and experience. This iterative process, central to the Springboard Theory (Luo & Tung, 2018), suggests that an EMNE's innovative outcome on foreign shores is enriched by this international exposure. Initiatives like the Go Global Strategy highlight this approach, and this encourages EMNEs to integrate international insights, which, in turn, enhances their firm-level capability and future global ventures (Alon et al., 2020). With this evolution, EMNEs equipped with international proficiency are better poised to identify, acquire, and integrate firms rich in strategic assets, thereby strengthening their intangible asset value (Wu et al., 2023). Such overseas engagement allows EMNEs to gain invaluable international experiences (i.e., how to manage intangible asset rich target firms) (Xu et al., 2021), which has a greater effect on their commitments made to the foreign SAS target as well as the subsequent growth of the intangibles associated with that target.

2.5.4 Location Bounded Strategic Assets and cultural distance

Cultural distance is, however, consistently identified as an important factor shaping post-acquisition integration and performance in M&A outcomes (Minbaeva et al., 2021; Reus & Lamont, 2009). Interestingly, the role of cultural distance in M&As presents a paradox, for as characterized by Reus and Lamont (2009), cultural distance is a double-edged sword. Firms with strong absorption capacities (Li et al., 2016), rich acquirer resources and managerial capabilities (Boateng et al., 2019), may be able to exploit cultural differences as stimuli for creativity, resulting in intra-MNE learning that boosts the growth of intangible assets, however, the cultural distance may present barriers that outweigh the benefits for

some firms, such as exacerbating legitimacy concerns (Wang et al., 2022), disrupting the cohesion and satisfaction among experts (Bauer et al., 2016), and increasing information asymmetry, along with the complexity of organizational dynamics (Lewis & Bozos, 2019). To date, existing empirical research displays inconsistencies regarding the effects of CBMAs on target innovations, a key aspect of intangible asset valuation (Li et al., 2017; Popli et al., 2016; Wang et al., 2022).

According to Luo and Tung (2018), there is little research on the role of cultural distance in springboard M&A strategies, which emphasizes the difficulties faced by EMNEs. Although the Springboard Theory demonstrates a radical–- deviating from culture–- approach for EMNEs to acquiring strategically rich target firms, its ability to navigate the complexities of cultural integration remains controversial. Unlike DMNEs, EMNEs typically lack ownership advantages, which may result in organizational and communication challenges (Liu & Woywode, 2013; Wu et al., 2023). Luo and Tung (2018) argued that since EMNEs lack specific ownership advantages (i.e., limited expertise in cross-cultural management), they frequently have difficulty evaluating and integrating cultures upon acquisition. These challenges, combined with the complexities of diverse cultural backgrounds, may intensify the obstacles (i.e., incongruities in culture) faced by EMNEs, especially when targeting intangible asset rich firms (Campagnolo & Vincenti, 2022). Given this premise, EMNE-acquired targets may suffer a greater negative impact on their intangible assets due to cultural distances, as compared to those acquired by DMNEs. This disparity arises from the EMNEs' lack of ownership advantages, turning cultural differences into an obstacle following springboard acquisition.

2.6 Conclusion

Despite the fact that rapidly evolving geopolitical situations negate the possibility of aggressive acquisitions in many cases (Fjellström et al., 2023; Luo & Van Assche, 2023),

Springboard Theory has become a widely accepted lens for exploring the firm-level catch-up strategies of MNEs through FDI, specifically CBM&As. This theory has been considered particularly applicable to EMNEs, the 'major subsample' of springboard MNEs (Luo & Tung, 2018). In addition, it was originally developed to explain potential differences between EMNEs and DMNEs (Cuervo-Cazurra, 2012). Since EMNEs are considered more likely to engage in rapid firm-level catch-up via M&A, they are also more likely to acquire firms that are in more advanced markets institutionally (Luo & Tung, 2018). It should be noted, however, that Springboard Theory has remained relatively silent regarding the impact of cross-border M&As on target firms' outcomes. This remains a crucial question, however, since it is unclear how this type of deal-making could lead to the creation of capabilities and a technological/intangible asset catch-up in the MNE if the target firms' outcomes were disappointing. Meanwhile, EMNEs appear to face some seemingly insurmountable challenges when they acquire foreign firms compared to DMNEs. Among these challenges are a limited degree of international experience, a greater liability of foreignness carried by cultural and institutional distances, and a lower level of absorption.

It is assumed that strategic asset-seeking motives are inherent to springboard FDI and that target firms are rich in intangible assets. It is also not taking into account the portability (or location-bound nature) of such assets (Arikan et al., 2021). A target firm may, for example, be located in an area conducive to its success, for example, technology clusters with high standards of IPR enforcement and political stability (Estrin et al., 2018; Kerr & Robert-Nicoud, 2020). Additionally, they may possess location-bounded firm-specific advantages that cannot be easily transferred to another location. It is also possible that parent MNE firms, particularly those from emerging markets engaging in springboard activities, may desire to increase their exposure to such target firms via OFDI. Consequently, they may invest significantly in these foreign location-bound assets over time to develop key firm-level capabilities (e.g., overseas R&D hubs). The location-bound assets can be gradually integrated or internalized within the MNE network to facilitate firm-level catch-up throughout the

organization. In many cases, however, EMNEs acquire (but location bounded) firm-level capabilities and associated intangibles that are crucial to their growth and development plans–- which eventually enable them to become global competitors through an upward spiral of development (Wu et al., 2023).

Accordingly, Springboard Theory implies that EMNE targets outperform DMNE targets in terms of intangible asset growth since EMNEs use these acquired firms as their key hubs for intangible asset growth in the most suitable institutional environment. There are, however, few large-scale empirical studies available that support this idea, particularly in comparison to DMNEs (Buckley et al., 2023). Based on an analysis of large comparisons of DMNE/EMNE target firms, the present findings suggest that EMNE targets exhibit a higher rate of growth in intangible assets. This is consistent with Springboard Theory, though the theory needs to better incorporate the fact that some firm-specific advantages are location-bounded in nature (Luo & Tung, 2018).

To conclude, the results contribute to a better understanding of Springboard Theory and to EMNE's catch-up strategies at the firm level. Through strategic asset related M&As, EMNEs are extremely serious about increasing their international competitiveness (Luo & Tung, 2018). To accomplish this, however, they may need to acquire numerous assets tied to location, including exposure to superior institutional environments in foreign markets, enhance their soft skills (i.e., international experience) to navigate and adapt to varied business landscapes, and also to foster a positive corporate cultural environment to alleviate barriers that prevent EMNEs from tapping into the full potential of their acquired intangible assets.

Chapter 3: Are Chinese MNEs more Strongly Attracted to Knowledge Intensive City Clusters than Developed Market MNEs when Undertaking Greenfield Strategic Asset Seeking Related FDI?

3.1 Introduction

The international SAS behaviour of emerging market multinational enterprises has received considerable attention, partly due to theoretical controversies concerning the applicability of mainstream international business theory, as well as current international geopolitics (Luo & Witt, 2021; Shi et al., 2021). It has been noted that Chinese MNEs, sometimes supported by the government through various 'selective' industrial policies (i.e., 'China Manufacturing 2025'), are particularly active in acquiring foreign technologies, know-how and brands as a means of catching up with MNEs in DMNEs (Sutherland et al., 2020).

To achieve this, however, CMNEs may need to locate where the best human resources and knowledge are located, where having access to such locations may facilitate access to capabilities, knowledge networks, and supporting infrastructures and resources that enable them to engage in cutting-edge innovation (Lorenzen et al., 2020). Cities based on knowledge-intensive research clusters are likely to be among the most attractive locations for SAS, and CMNEs Huawei and ZTE stand out as noteworthy examples. A substantial number of foreign hires are made at international R&D centres (Schaefer & Liefner, 2017). Huawei (116) and ZTE (28) (China's largest MNEs investing in greenfield R&D) had established over 144 SAS-related investments by the year 2018. Of these, 34 were located within the top 100 most innovative and research-intensive city clusters in the world (Wipo,

2021)[3]. Indeed, the majority of Huawei's most cited patents originate from overseas R&D centres with non-Chinese technical experts (Schaefer, 2020), pointing to the strategic importance of these R&D hubs.

From a theoretical perspective, the springboard perspective and the link, leverage, and learn models have been widely accepted in the International Business theory community with a rank among the top five for EMNEs research (Buckley et al., 2023), and emphasize the importance of firm-level catch-up in EMNE strategy (Luo & Tung, 2007, 2018; Mathews, 2017). Thus, concepts such as 'accelerate' or 'springboard' internationalization have been mainly focused on strategic assets cross-border M&As (Luo & Tung, 2007, 2018; Tan & Mathews, 2015). It is argued that M&A deals can enable EMNEs to rapidly acquire the strategic resources they lack, often in repeated transactions in developed markets, resulting in rapid technological progress at the firm level. It is interesting, however, that many of the most innovative Chinese MNEs (such as Huawei) have consistently engaged in long-term greenfield FDI exposure to specific subnational regional clusters, and build and integrate their own international innovation networks based upon foreign hires over the years.

There are several research questions raised by this situation: Do CMNEs also pursue a more greenfield SAS approach than DMNEs to catch up with their competitors at the firm level? If knowledge is 'stick' and technological clusters and agglomerations are indeed important, are global cities or other technological clusters more attractive to CMNEs when undertaking greenfield FDI when compared to DMNEs? Thus, the aim of this chapter was to examine conceptually and empirically: (i) whether Chinese GF SAS FDI differs from DMNE foreign direct investment; and (ii) by examining sub-national location choice determinants – specifically the moderating effects of (a) global cities and (b) other research-intensive city

[3] Including: Amsterdam, Brussels, Grenoble, Helsinki, Istanbul, Lausanne, London, Lund, Milan, Moscow. Munich, Paris, Rome, Seoul, Singapore, Stockholm, Sydney, Tokyo, Yokohama, Zürich, Atlanta, GA, London, Stockholm and Tokyo.

clusters on foreign direct investment in CMNE R&D. To accomplish this, a logistic regression analysis was undertaken of the FDI GF choices of close to 100,000 projects worldwide (taken from the FDI Markets database), comparing CMNEs with MNEs from countries within the OECD.

The results indicate that research intensive city clusters are more likely to attract CMNE greenfield R&D investment. In contrast, global cities negatively moderate the relationship for CMNEs, while acting positively for DMNEs, suggesting that the two firms have somewhat different GF SAS-related FDI strategies. Specifically, the aim of the analysis was to explore how the findings align with and contribute to the ongoing debate regarding EMNE catch-up theory within International Business, particularly the Springboard Theory. In addition, building upon the emerging focus in literature on subnational studies (Belderbos et al., 2020; Chakravarty et al., 2021; Goerzen et al., 2013), these findings also contribute by shedding light on the strategies adopted by CMNE SAS at a subnational level.

3.2 Background

SAS CBM&As have traditionally been thought to offer substantial benefits to EMNEs, but recent trends indicate that the prevalence of such transactions is expected to decline, particularly for CMNEs, due to various challenges (e.g., geopolitical issues) (Cui et al., 2023; Fjellström et al., 2023; Luo & Witt, 2021). This is because that CMNEs may encounter increased foreign liabilities and face greater operational difficulties in countries where they struggled to operate (Bu et al., 2022; Luo & Witt, 2021). For example, Huawei, are placed on the US “Entity list”. Non-Chinese firms are prohibited from doing business with them. Although CMNEs can reduce geopolitical risks by adopting an inward internationalization approach to minimize exposure to hostile political forces abroad, this strategy may not be feasible for mature CMNEs such as Huawei and its overseas subsidiaries after more than 20 years of international operations (Fjellström et al., 2023). Instead, they can choose FDI that

is less visible, but equally effective, in the form of greenfield investments. The existing literature has proposed different forms of FDI, including greenfield investment, as alternative springboarding mechanisms to achieve technological catching-up (Kumar et al., 2020; Luo & Witt, 2021).

To extend the Springboard Theory, scholars such as Kumar et al. (2020) and Luo and Witt (2021) have called for more in-depth exploration of alternative SAS approaches and implied the potential of such investments in facilitating corporate catch-up, especially for CMNEs. Reflecting on these insights, CMNEs seem to prefer establishing subsidiaries in technology clusters through SAS greenfield investment, likely aiming to tap into specialized or tacit knowledge. CMNE's SAS-related greenfield investment strategies have garnered increasing attention in theoretical and practical domains. Numerous case studies also support this view that Chinese firms are increasingly setting up overseas R&D centres to enhance their competitive position (Awate et al., 2015; Chen et al., 2012; Fu et al., 2018; Nair et al., 2018). For example, Huawei and ZTE have successfully employed this strategy to establish R&D subsidiaries abroad, thereby creating strategic assets and generating value.

Some scholars argue that CMNEs do not possess the conventional forms of 'ownership advantage' that can be exploited in developed markets (Cuervo-Cazurra, 2012). This has led to calls for new or revised theoretical contributions to explain their outward FDI strategies (Luo & Tung, 2018). When compared to their DMNE competitors, CMNE SAS strategies are largely driven by the relatively low levels of strategic assets they possess (Luo & Tung, 2007, 2018; Rui & Yip, 2008). This is because they are striving to rapidly catch up to their DMNE counterparts (Rui & Yip, 2008), sometimes aided by a number of favourable conditions in the domestic home market as well as by state support (Wang et al., 2012). Among these are: access to complementary local resources which allow them to effectively exploit their home market (Hennart, 2012);imbalances in liabilities related to foreignness hinder foreign businesses from competing in China but do not inhibit Chinese firms from

going abroad (Petersen & Seifert, 2014); affiliation with business groups facilitate more efficient market exploitation (e.g., internal product, labour, and finance markets) (Yiu et al., 2007); and catching up with foreign competitors and learning from them (Child & Rodrigues, 2005; Mathews, 2006, 2017). Consequently, state-led institutional support (at different levels, particularly at the provincial level) may encourage SAS expansion abroad, among other things, by supporting the domestic financial markets (Wang et al., 2012). As part of this initiative, active industrial policies are implemented to assist nascent CMNEs in engaging in cross-border SAS investment (Cui & Jiang, 2012; Deng, 2009; Wang et al., 2012).

3.3 Hypothesis development

3.3.1 Greenfield FDI and strategic asset seeking orientation: CMNEs versus DMNEs

Despite the rise in the theoretical prominence of the SAS orientation of EMNEs in IB scholarship (Luo & Tung, 2018; Mathews, 2017; Sutherland et al., 2020), the role of greenfield establishment has been generally under-researched and downplayed in that literature (Schaefer, 2020). –This is because GF SAS approaches probably tend to be less "aggressive" and incremental, and so are less likely to result in "accelerate" catch-ups or leapfrogging. Greenfield foreign direct investment also tends to be less visible than large M&As, and often receives less media attention due to its lower political significance. There appears, however, to be some relevance to the case of GF SAS FDI in the underlying logic and rationale of the 'springboard' and 'LLL' perspectives (Luo & Tung, 2007; Mathews, 2006). For if EMNEs are engaged in firm-level catch-up and accelerated internationalization, as evidenced by 'aggressive' acquisitions into developed markets, it is probable that they would also engage in stimulating greenfield investments in research and development. The example of Huawei illustrates the great potential benefits to be gained from the development

of an intensive and highly committed greenfield strategy. As a whole, EMNEs have shown a great deal of interest in 'aggressive' springboard type M&As as a means to gain a competitive advantage. In response to this, several scholars have questioned whether existing theories are adequate to explain EMNEs (Arikan et al., 2021; Cuervo-Cazurra, 2012). Accompanying this, it is generally believed that EMNEs are more likely to engage in SAS-related mergers and acquisitions (Liu & Giroud, 2016). Considering the above, the research question arises: Does the same logic apply to greenfield FDIs? Thus H3.1 is proposed:

Hypothesis 3.1: *When undertaking greenfield FDI projects Chinese MNEs are more predisposed towards selecting SAS related projects than DMNEs.*

3.3.2 Global Cities and greenfield strategic asset seeking-related FDI

In line with hypothesis 3.1(H3.1), it may be worthwhile to examine sub-national geographic location factors that may be associated with GF SAS FDI. As for M&A deals (that is, non-greenfield FDI) already discussed, the current analysis has paid little attention to the subnational level. Since target firms are often large multinational enterprises with subsidiaries in multiple jurisdictions, it is understandable that the locational analysis of CBM&As can be complex. Rather, empirical studies of SAS tend to focus on the country level (Shi et al., 2021). There is however a paradox in globalization that, rather than increasing stability and even distribution of economic activity within a country, economic forces seem to unleash gravitational forces, which have led to the concentration of knowledge and intangible assets at specific locations, even at the subnational level, leading cities to increase in importance (Sassen, 1991, 1996). It has been observed that aggregations of firms tend to concentrate in particular geographic areas, allowing for positive spillovers, in particular the tapping of vital human capital and related networks (Kerr & Robert-Nicoud, 2020). As a result, innovation has often been regarded as a local process due to its reliance on tacit knowledge, which is embedded in social contexts (Li & Bathelt, 2018). For this

reason, certain geographical locations are considered highly attractive to CMNEs due to their 'sticky' nature (tangible physical assets, human resources, and other intangible assets). In addition, owing to the uneven distribution of knowledge, EMNEs, such as those from China, may need to locate themselves in the most suitable knowledge intensive regions for their own specific purposes.

What are the benefits that CMNEs hope to receive from greenfield SAS-related FDI? According to recent research, such FDI strategies aim to: (i) make use of the local R&D infrastructure (Schaefer, 2020; Zhang et al., 2017); (ii) undertake 'technological scanning' so that the latest technological developments in developed markets can be tracked and planned for future investment (Zhang et al., 2017); (iii) establish new technology partnerships/networks and use external technological assistance by developing, or enhancing, existing or new cooperative relationships with local communities. (including well-known large and less-known small businesses) (Zhang et al., 2017), and universities and research centres (Liefner et al., 2019); (iv) create an environment of interaction with the aforementioned technology leaders; (v) recruit highly qualified foreign researchers and integrate them into CMNEs organizational structure/fabric – creating a strong network of R&D-related human resources (Schaefer, 2020; Schaefer & Liefner, 2017) and; (vi) implement mechanisms to manage foreign R&D personnel, which often involve frequent meetings and exchanges (Schaefer, 2020). It is perhaps unsurprising that recruiting highly skilled personnel is one of the most important technology-driven motives for setting up overseas R&D facilities (Zhang et al., 2017). A detailed case study by Schaefer et al. (2020) of Huawei supports this assertion: Huawei "*turned abroad to access state-of-the-art knowledge"* because it *"had little left to learn in its home country*" (Schaefer, 2020, p. 1501). Further, Huawei's success can be attributed in large part to *'hiring non-locals who are culturally and professionally embedded in international industry networks*' (Schaefer, 2020, p. 1501).

Given the above motives, global cities may be argued to be appropriate target locations for foreign direct investment, based on the fact that they have: (a) some of the technological and human capital resources EMNEs require for catching up, as well as (b) a number of unique LOF reducing characteristics that would make undertaking these more complex foreign direct investment projects more feasible. In general, global cities are believed to have the following benefits: a higher level of cosmopolitanism within the general population, which is reflected in an increased level of acceptance of foreign firms; as well as fewer barriers to institutions and cultures (Chakravarty et al., 2021). Global cities are indeed attractive locations for knowledge seeking investments, as evidenced by recent studies that include SAS/knowledge seeking FDI (Chakravarty et al., 2021). In a study conducted by Goerzen et al. (2013), it was established, that knowledge acquisition and product development activities were associated with locations in global cities (based on an examination of 8,541 investments in 2000) (Goerzen et al., 2013).

Chakravarty (2018) examined a longitudinal time frame (1990-2014) of Japanese foreign subsidiaries in the United States and found similar results. According to Belderbos et al. (2020) in a more recent study, around 12,000 wholly owned foreign subsidiaries in over 50 countries participated in global city FDI between 2008 and 2012. They further discovered that R&D functions, knowledge intensive services, and headquarter functions were located more frequently in global cities. It has also been demonstrated that GF SAS related FDI of CMNEs is generally directed towards '*locations close to world centres of excellence with specific technological advantages'* (Zhang et al., 2017, p. 193). In order to bridge high levels of contextual distance (i.e., liabilities of foreignness) while engaging in technological catch-up through SAS, the following hypothesis (H3.2a) was defined to theorize that global cities will be more attractive to CMNEs than other locations.

Hypothesis 3.2a: *Global city locations positively moderate the likelihood of a Chinese MNE engaging in greenfield SAS related FDI projects when compared with DMNEs.*

3.3.3 City-based research-intensive clusters and greenfield strategic asset seeking-related FDI

In recent years, scholars of International Business have been focusing on the activities of MNEs in global cities. It is believed that they have done so in part owing to the fact that global cities are associated with a high concentration of advanced producer services and an increase in intercity connectivity (Chakravarty et al., 2021). For example, the development of the Globalization and World Cities (GaWC) rankings of global cities, which are commonly employed in empirical studies, that consider city connectivity in terms of four "advanced producer services": accountancy, advertising, banking and finance, and law. It is important to note, however, that these features of global cities may not necessarily be a key attraction for knowledge-seeking CMNEs. EMNE catch-up theory suggests that city-based technology clusters provide the strongest incentives for choosing the location of the MNEs, based on their knowledge-intensity. Patent-intensive urban city-based clusters that are associated with an innovation ecosystem (including educational institutions) are therefore likely to attract CMNEs. It appears that Chinese MNEs such as Huawei prioritize specific locations in which they can find the knowledge and personnel they require. Additionally, knowledge is confined by location, which drives CMNEs to operate in these specific locations. For example, they may be affiliated with universities and research centres.

It may be argued that these locations provide the most promising opportunities for catching up at the firm level due to the reasons described in hypothesis 3.1 (H3.1) (Schaefer, 2020). While global cities are able to lower liabilities due to foreignness (i.e., because they are more cosmopolitan and have more connectivity), they do not necessarily possess the knowledge assets that CMNEs are most concerned with acquiring. In addition, the additional costs associated with global cities may also make research intensive clusters more attractive to CMNEs in search of more affordable opportunities. It is also possible for EMNEs

participating in firm-level catch-up to concentrate on city locations in which the knowledge they seek is highly concentrated and easily accessible, but at an affordable price (such as Frankfurt, Grenoble, Eindhoven, Lund, Lyon, Malmo, Mannheim, Nagoya, Ann Arbor, Austin, Boston, Cambridge, and Oxford).

Clusters of cities with high levels of research are important locations for innovation networks and knowledge sourcing on a global scale. It is therefore recommended that they be a preferred destination for CMNEs seeking to catch up technologically by developing their own knowledge-based assets and capabilities. As a result, hypothesis 3.2b (H3.2b) below is derived partially from the Springboard Theory and its sub variants, suggesting that EMNEs are undertaking accelerated internationalisation to catch up with their competitors (Luo & Tung, 2018). Additionally, the literature in relation to knowledge networks and subnational FDI emphasizes the importance of localised clusters of knowledge intensive activities (Hutzschenreuter & Harhoff, 2020; Kerr & Robert-Nicoud, 2020).

Hypothesis 3.2b: *Research-intensive city clusters positively moderate the likelihood of a Chinese MNE engaging in a greenfield SAS related FDI project when compared with DMNEs.*

3.4 Methodology

3.4.1 Data and sample

The FT FDI greenfield markets database includes approximately 200,000 greenfield investments made worldwide between 2003 and 2021, based upon press releases, newspaper articles, information provided by local and national investment agencies, and information provided by the investing firms. It contains the name of the investing firm, its parent firm, the country, and city where the investment is being made, and the sector and type of activity for

each investment. This includes R&D, design, development, and testing; logistics, distribution and transportation; education & training; sales, marketing & support; customer contact centre; electricity; construction; manufacturing; extraction; technical support, maintenance & servicing; and recycling; business services; headquarters; ICT & Internet infrastructure. In addition, it provides information about job creation and capital investment. Numerous empirical studies have been conducted using this database, including those conducted by researchers and international organizations (De Beule & Somers, 2017; Yang & Bathelt, 2022). The present chapter is focussed on the period from 2003 to 2018. The initial screening excluded all investment projects related to real estate development and business and financial services.

A logistic regression analysis was utilized to explore the probability of an MNE undertaking a SAS type FDI project (i.e., research and development or design development and testing) in comparison to a non-SAS type FDI activity (i.e., all other FDI types, including: logistics, distribution and transportation; education and training; sales, marketing and support; customer contact centre; electricity; construction; manufacturing; extraction; technical support, maintenance and servicing; and recycling; headquarters; ICT and Internet infrastructure). To test whether CMNEs have a greater orientation towards greenfield SAS FDI projects than DMNEs, a dummy variable was set up for CMNEs (H3.1). In addition, dummy variables for global cities (H3.2a) and research-intensive city clusters (H3.2b) were included to examine their differential impacts on greenfield SAS choice.

3.4.2 Measures

3.4.2.1 Dependent variable

The binary dependent variable assumed the value one if the FDI project was classified as either ‘Research & Development’ (R&D) or ‘Design Development and Testing’ (DDT), and zero otherwise. This approach follows some previous studies utilizing the same data source (Castellani & Lavoratori, 2020; Guimón et al., 2018). Specifically, Castellani and Lavoratori

(2020) argue that R&D is viewed as the creation of competence, whereas DDT is the exploitation of competence, and DDT is frequently used to capture strategic asset-related activities (De Beule & Somers, 2017). DDT and R&D are thus considered appropriate proxy measures of innovation activity (Castellani & Lavoratori, 2020).

3.4.2.2 Independent variables

CMNE origin. The Chinese FDI project is encoded by a dummy variable (CMNE FDI project = 1, DMNE FDI project=0). Developed markets comparator DMNEs in this study correspond to the OECD, including Australia, Austria, Belgium, Canada, Chile, Colombia, Costa Rica, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Dem. People's Rep., Latvia, Lithuania, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

Global cities. A dummy variable was used to identify whether the city could be defined as a global city according to the GaWC research network (Department of Geography at the University of Loughborough). The GaWC lists have been regularly updated and were available for data between 2000 and 2018 (Chakravarty et al., 2021), which covers the period of interest for this chapter. In the GaWC lists, three types of cities are distinguished, including alpha cities, which are defined as major economic centres that are linked to major economic regions and states globally, beta cities, which are regarded as essential for integrating their region or state into the global economy, and gamma-cities are defined as typically smaller and are not considered global cities (Belderbos et al., 2020). The alpha and beta definitions were employed to define the dummy in the present study.

Research-Intensive High-Tech cluster cities. The importance of technological clusters to MNEs seeking knowledge has recently been highlighted (Lorenzen et al., 2020), including the access to valuable location-bound knowledge unique to particular areas (Bathelt et al., 2004; Lorenzen & Mudambi, 2013). The internationalization of R&D activity has resulted in an increase in the penetration of MNEs into technological cluster cities over the past few decades (Awate et al., 2015). Thus, the HITECH_CLUS_CITY dummy was set to 1 if a firm selected a specific high-tech cluster city according to the World Intellectual Property Organization's (WIPO) list of 100 major technological clusters (Wipo, 2020). A key component of the GII was the incorporation of the innovation ecosystem, which is measured in terms of both WIPO patents and educational attainment. Specifically, the clusters were ranked according to fractional counting based on both the number of patents issued by inventors as well as the scientific articles published by authors in the city. The WIPO GII ranking has been widely used as a proxy for high-tech clusters, as it includes education, infrastructure, and knowledge creation (Kerr & Robert-Nicoud, 2020; Rehman et al., 2020; Yu, 2021).

3.4.2.3 Control variables

Several factors were controlled for that may influence greenfield SAS investments. A dummy variable was employed to control for capital city, as proximity to a country's political centre may influence R&D investment (Kim et al., 2012). The FDI scale, measured as the number of employees in subsidiaries in the host country, was used as a scale control (Hu et al., 2021). The quality of institutions in the host country affects the attractiveness of foreign investors to invest in the country. In a poor institutional environment, investors may experience risk and additional costs (Nielsen et al., 2017; Yang, 2018). Following Marano et al. (2017), a first principal component of the six WGI measures was used to control for the institutional quality of the destination country: Voice, Accountability, Political stability, absence of violence, effectiveness of the government, regulatory quality, and absence of corruption. In

addition, capital investment was controlled for, which may affect the R&D investment decision (Lai et al., 2015). It is possible that the international experience in terms of the host city's specific experience may affect the FDI strategy, which is measured in terms of the firm's cumulative investments in destination cities from 2003 to 2018. Project type was also controlled for using a dummy variable to indicate whether the investment was an initial investment or an expansionary investment, and economic effects (GDP), in line with other studies (Castellani & Lavoratori, 2020). A larger domestic market provides more opportunities, so the natural logarithm of GDP was used to account for the size of the local market (Banalieva et al., 2018; Hutzschenreuter & Harhoff, 2020). Due to the focus of this chapter on the effect of city-level factors on R&D investment, observations without specific recorded locations were excluded. This left 97,163 FDI project observations involving 41,112 foreign subsidiaries (since some FDI projects are expansionary rather than initial) undertaken by 29,956 parent MNEs from 2003 to 2018.

3.4.3 Model specification

Binary logistic models with robust standard errors clustered by industry and year were used to test the hypotheses. The use of logistic models has been widely employed for estimating the likelihood of foreign investors choosing a particular investment (Belderbos et al., 2020). The model was based on the maximum likelihood method (Fischer, 1973), using:

$$\text{Probability}\ (R\&D_i/DDT_{it} = 1;\ Others_{it} = 0)$$
$$= f(EXP_{it}, LNEMPL_{it}, CAP\_CITY_{it}, LNCAP_{it}, EXPAN_{it}, IQ_{it}, LNGDP_{it}, HITECH\_CLU\_CITY_{it}$$
$$GLO\_CITY_{it}, CHINA_{it}, CHINA_{it} * GLO\_CITY_{it}, CHINA_{it} * HITECH\_CLU\_CITY_{it}$$
$$YEAR_{it}, INDUSTRY_{it})$$

Where i denotes the parent firms and t represent the investment year. According to the assumptions, an investor's potential to make an R&D investment is influenced by the country of origin of the firm i. In addition, we investigate interaction variables, including that on the

research intensive and global city binary variables. Table 3.1 below gives all the variables and their definitions and source, and the results of the descriptive statistics and pairwise correlations are given in Table 3.2,.

Table 3.1 Description of variables and data source

Variables	Full name	Measurement	Data source
RD	R&D investment	1=R&D investments; 0=other investments;	fDi Intelligence, fDi Markets project database, 2003-2018
DDT	Design, development, and testing	1=DDT investments; 0=other investments;	
RD/DDT	R&D and DDT investment	1= R&D and DDT investments; 0=other investments	
CHINA	Chinese dummy	1=if the parent firm is from China; 0=if the parent firm is from DMNE	fDi Intelligence, fDi Markets project database, 2003-2018; OECD.org
GLO_CITY	Global city	1=if the host city belongs to the global city; 0=other cities	Loughborough University, “Globalization and World Cities (GaWC)”
HTECH_CLU_CITY	Research intensive high tech-cluster city	1=top ranked technological cluster at city-level; 0=other cities	Cornell University, INSEAD and the WIPO, Global Innovation Index 2021
LNCAP	Capital investment	Logarithm of capital investment (Centred)	fDi Intelligence, fDi Markets project database, 2003-2018
LNEMPL	Numbers of employees	Logarithm of numbers of employees (Centred)	fDi Intelligence, fDi Markets project database, 2003-2018
EXP	Firm's prior experience	Parent firm's prior experience in the host city (Centred)	fDi Intelligence, fDi Markets project database, 2003-2018
EXPAN	Firm's expansion	1=project type is expansion; 0=others	fDi Intelligence, fDi Markets project database, 2003-2018
CAP_CITY	Capital city	1=if the host city is the national capital city; 0=other cites	WorldData.info, “All capitals in the world”
IQ	Institutional quality	Destination country's Institutional quality	World Bank, WDI Database
LNGDP	Gross domestic product per capita	Logarithm of gross domestic product (GDP) per capital	World Bank, WDI Database
INDUSTRY	Industry	Dummy variables	fDi Intelligence, fDi Markets project database, 2003-2018
YEAR	Year	Dummy variables	fDi Intelligence, fDi Markets project database, 2003-2018

Table 3.2 Descriptive statistics and pairwise correlations

Variable	Obs	Mean	S.D.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
DDT/RD	97163	0.104	0.305	1										
EXP	97163	0.008	2.238	0.095***	1									
LNEMPL	97163	0.001	1.359	0.090***	0.144***	1								
CAP_CITY	97163	0.236	0.425	-0.008***	-0.017***	-0.156***	1							
LNCAP	97163	0.017	1.388	0.033***	0.146***	0.737***	-0.130***	1						
EXPAN	97163	0.221	0.415	-0.002	0.248***	0.138***	-0.147***	0.143***	1					
IQ	97163	-0.005	0.852	-0.011***	-0.033***	-0.292***	0.071***	-0.186***	0.073***	1				
LNGDP	97163	-0.005	0.881	-0.055***	0.019***	-0.290***	0.098***	-0.159***	0.076***	0.826***	1			
HTECH_CLU_CITY	97163	0.307	0.461	0.014***	-0.004	-0.127***	0.303***	-0.111***	-0.164***	0.093***	0.101***	1		
GLO_CITY	97163	0.427	0.495	0.038***	0.014***	-0.151***	0.548***	-0.144***	-0.204***	-0.048***	-0.028***	0.603***	1	
CHINA	97163	0.032	0.175	0.013***	-0.029***	-0.021***	0.003	-0.020***	-0.046***	0.036***	0.043***	-0.008***	-0.014***	1

**** p<0.01, ** p<0.05, * p<0.10*

3.4.4 Results

Table 3.2 presents the correlation matrix and descriptive statistics. Some variables are likely to have large correlations when interaction terms are included, so mean-centring was adopted. The Variance Inflation Factor (VIF) for the models were less than the standard cut-off level of 10, indicating no issues with multicollinearity (Cohen et al., 2013). In addition, for logit models, interpreting variables using regression coefficients alone is insufficient. Following Bowen and Wiersema (2004), the log odds ratio was included. The likelihood ratio and pseudo-R2 values in Models B-E are all greater than those in the base model based on the model fit statistics. In addition, the log pseudolikelihood and Akaike information criterion (AIC) values decrease and are less than those in Model A, suggesting that the model has become more complex despite having more explanatory power (Wulff, 2015).

The results of the logistic estimates for hypotheses H3.1 and H3.2a and H3.2b are presented in Table 3.3 (reporting coefficients). Model A shows that most of the control variables are significant and have the expected sign. Interestingly, the capital city dummy variable coefficient is significant and negative at a 1% significance level, suggesting capital cities were actually less attractive to R&D investors in model A. The positive results for the variables international host city experience ($\beta = 0.106$, $p < 0.01$; $ORs = 1.112$, $p < 0.01$) and institutional quality ($\beta = 0.466$, $p < 0.01$; $ORs = 1.594$, $p < 0.01$) indicate that investors were attracted to GF SAS FDI by prior experience and advanced institutional environments. In terms of market size, LNGDP in the host country is negative ($\beta = -0.49$, $p < 0.01$; $ORs = 0.613$, $p < 0.01$), which implies that MNEs do not invest in R&D in order to access markets (market-seeking purpose). The results of the logistic regression or greenfield SAS investments for all models, are given in Table 3.3, and the log odds ratios are given in Table 3.4.

Table 3.3 logistic regression for greenfield SAS investments (Coefficients)

DDT/RD	**Model A**	**Model B**	**Model C**	**Model D**	**Model E**
EXP	0.106***	0.108***	0.108***	0.108***	0.108***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
LNEMPL	0.373***	0.372***	.372***	0.372***	0.372***
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)
CAP_CITY	-0.286***	-0.289***	-0.288***	-0.29***	-0.290***
	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)
LNCAP	-0.116***	-0.115***	-0.115***	-0.115***	-0.116***
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
EXPAN	-0.197***	-0.187***	-0.186***	-0.188***	-0.187***
	(0.031)	(0.031)	(0.031)	(0.031)	(0.031)
IQ	0.466***	0.462***	0.463***	0.461***	0.461***
	(0.027)	(0.027)	(0.027)	(0.027)	(0.027)
LNGDP	-0.490***	-0.488***	-0.488***	-0.488***	-0.488***
	(0.025)	(0.025)	(0.025)	(0.025)	(0.025)
HTECH_CLU_CITY	-0.172***	-0.170***	-0.171***	-0.179***	-0.188***
	(0.029)	(0.029)	(0.029)	(0.030)	(0.030)
GLO_CITY	0.211***	0.213***	0.220***	0.214***	0.230***
	(0.031)	(0.031)	(0.032)	(0.031)	(0.032)
CHINA (H1)		0.423***	0.495***	0.350***	0.446***
		(0.060)	(0.078)	(0.072)	(0.079)
CN_GLOBAL (H2a)			-0.179		-0.409***
			(0.121)		(0.145)
CN_TECHCUL (H2b)				0.240*	0.469***
				(0.129)	(0.154)
_cons	-2.751***	-2.749***	-2.752***	-2.747***	-2.751***
	(0.108)	(0.108)	(0.108)	(0.108)	(0.108)
Observations	97163	97163	97163	97163	97163
Industry	YES	YES	YES	YES	YES
Year	YES	YES	YES	YES	YES
Wald chi2	5646.17***	5660.76***	5661.83***	5666.93***	5673.95***
Log pseudolikelihood	-28073.193	-28050.059	-28048.944	-28048.284	-28044.083
AIC	56264.39	56220.12	56219.89	56218.57	56212.17
Pseudo R2	0.132	0.133	0.133	0.133	0.133
Mean VIF	1.69	1.68	1.69	1.68	1.71

*Robust standard errors are in parentheses, *** p<0.01, ** p<0.05, * p<0.10*

Table 3.4 Logistic regression for greenfield SAS investments, Log Odds Ratios

DDT/RD	**Model A**	**Model B**	**Model C**	**Model D**	**Model E**
EXP	1.112***	1.114***	1.114***	1.114***	1.114***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)
LNEMPL	1.452***	1.450***	1.450***	1.450***	1.451***
	(0.020)	(0.020)	(0.020)	(0.020)	(0.020)
CAP_CITY	0.751***	0.749***	0.749***	0.748***	0.748***
	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)
LNCAP	0.891***	0.891***	0.891***	0.891***	0.891***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
EXPAN	0.822***	0.829***	0.830***	0.829***	0.829***
	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)
IQ	1.594***	1.588***	1.589***	1.586***	1.586***
	(0.044)	(0.043)	(0.043)	(0.043)	(0.043)
LNGDP	0.613***	0.614***	0.614***	0.614***	0.614***
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)
HTECH_CLU_CITY	0.842***	0.844***	0.843***	0.837***	0.828***
	(0.025)	(0.025)	(0.025)	(0.025)	(0.025)
GLO_CITY	1.235***	1.238***	1.247***	1.239***	1.259***
	(0.039)	(0.039)	(0.040)	(0.039)	(0.040)
CHINA (H1)		1.527***	1.641***	1.419***	1.562***
		(0.092)	(0.128)	(0.103)	(0.124)
CN_GLOBAL (H2a)			0.836		0.664***
			(0.101)		(0.096)
CN_TECHCUL (H2b)				1.271*	1.598***
				(0.164)	(0.246)
_cons	0.188***	0.189***	0.188***	0.189***	0.189***
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Observations	97163	97163	97163	97163	97163
Industry	YES	YES	YES	YES	YES
Year	YES	YES	YES	YES	YES
Wald chi2	5646.17***	5660.76***	5661.83***	5666.93***	5673.95***
Log pseudolikelihood	-28073.193	-28050.059	-28048.944	-28048.284	-28044.083
AIC	56264.39	56220.12	56219.89	56218.57	56212.17
Pseudo R2	0.132	0.133	0.133	0.133	0.133
Mean VIF	1.69	1.68	1.69	1.68	1.71

*Robust standard errors are in parentheses, *** p<0.01, ** p<0.05, * p<0.10*

In Table 3.4, for H3.1, the CMNE (CN) dummy variable is significant and greater than one, suggesting CMNEs were more likely to choose a SAS related greenfield FDI project than DMNEs. This is supported by average marginal effects estimates in Table 3.5. An interaction term between 'global city' and the China dummy variable was also included, which was significant but negative in model E (β = -0.409, $p < 0.01$ in Table 3.3). The log odds ratio for the interaction term CN_GLOBAL (OR = 0.664, $p < 0.01$) in Table 3.4 is smaller than 1, which implies that the probability of undertaking FDI in greenfield SAS investment by Chinese investors is lower if their destination is a global city. Importantly, the average marginal effects for model E in Table 3.5, shown below, also show the probability of having an R&D orientation by CMNEs in global cities is -3.42% ($p < 0,01$) lower. Global cities, interestingly, therefore negatively moderate Chinese GF SAS FDI choices as shown in Figure 3.1.

Table 3.5 Average marginal effects

Term	Hypothesis	Models	RD/DDT
CHINA	H1	Model B	3.35%*** (0.000)
CN_GLOBAL	H2a	Model E	-3.42%*** (0.005)
CN_TECHCUL	H2b	Model E	3.91%*** (0.002)

*** $p<0.01$, ** $p<0.05$, * $p<0.10$

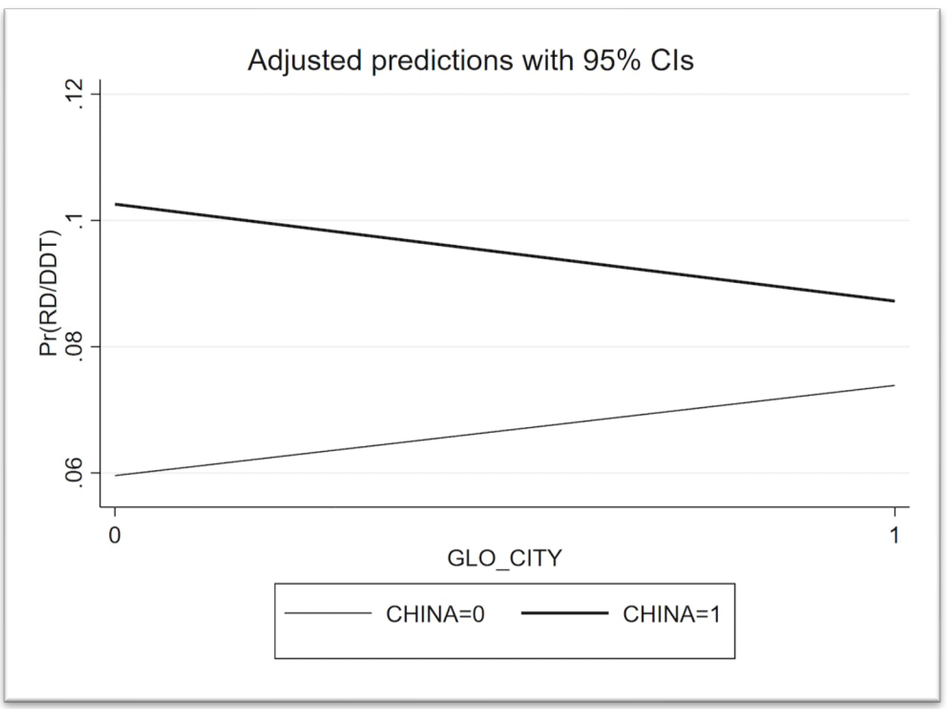

Figure 3.1 Interaction between Chinese dummy and global cities for SAS FDI

Regarding the moderating effect of high-tech research-intensive cluster cities (H2b), the coefficient between CMNEs and technological cluster cities is 0.469 at the 1% significance level in model E (Table 3.3). The Odds ratio for this model is larger than 1 (*ORs* = 1.598, $p < 0.01$ in Table 3.4), which indicates that the probability of CMNEs undertaking GF SAS FDI increases in high-tech city clusters in comparison to DMNEs. In addition, the average marginal effect for model E in Table 3.5 shows the probability of choosing the R&D investment is 0.0391 higher ($p < 0.01$), suggesting that if the destination city is located in a high-technological cluster region, the likelihood of the Chinese parent firms undertaking GF SAS FDI increased by 3.91% (at the 1% significant level). Thus, hypothesis 3.2b is supported (see also Figure 3.2 below).

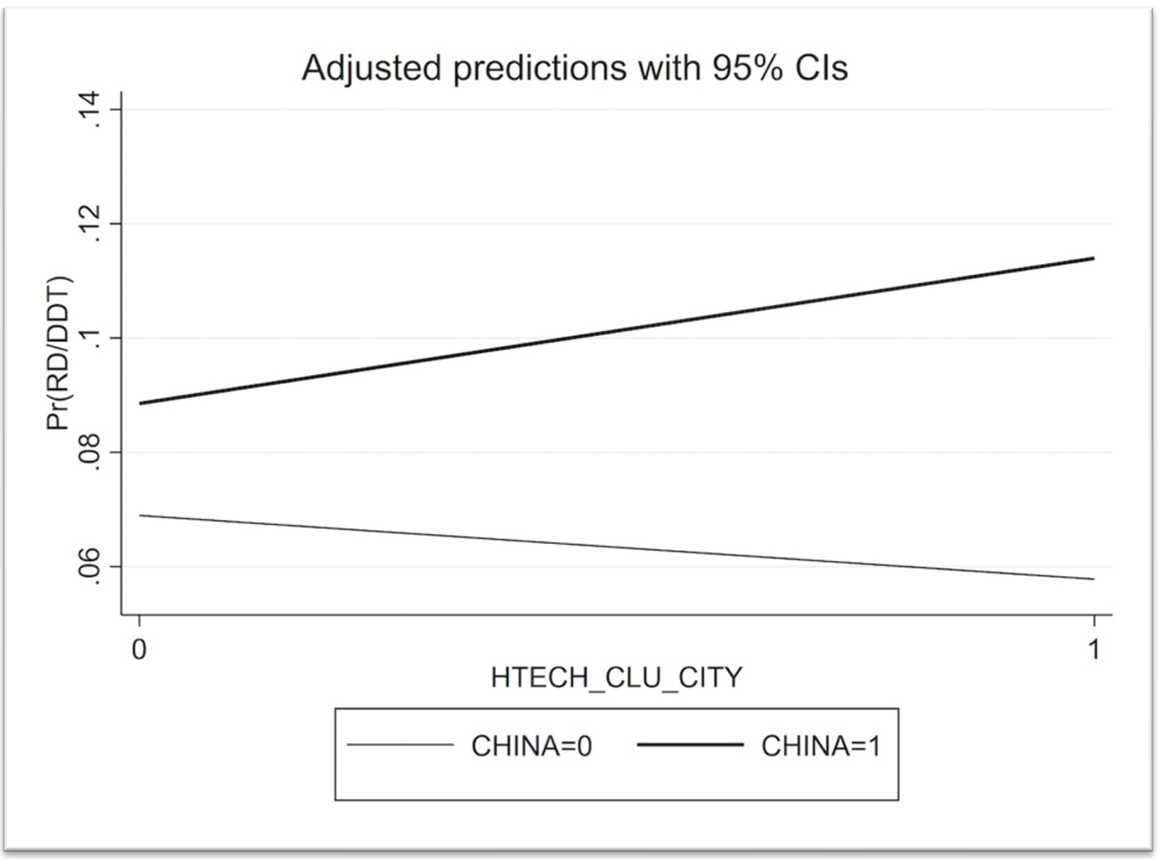

Figure 3.2 Interaction between Chinese dummy and high-tech cluster cities for SAS FDI

3.5 Discussion

Based on the above findings it is argued that late-arriving CMNEs are able to locate intangible knowledge assets on global markets, but their considerations are based on factors at the city level of the subnational level, demonstrating how they differ from their DMNE counterparts in terms of economic geography. The results indicate that CMNEs have: (i) chosen GF SAS FDI over other FDI projects, which has been more active than MNEs from developed OECD countries. (ii) SAS location choice is strongly influenced by sub-national research-intensive technological clusters, as compared to DMNEs'. (iii) Contrary to expectations, global cities do not attract as much GF SAS FDI for CMNEs. The initial discussion addresses general implications for the literature on EMNE catch-up, followed by considerations for the literature related to subnational location choice, specifically cities.

3.5.1 Greenfield knowledge seeking SAS related FDI: DMNEs versus EMNEs

In the IB literature, there is a fundamental question about whether EMNEs differ from DMNEs, and whether new theories are required to explain their activity. This increased propensity towards SAS has been highlighted within EMNE theoretical frameworks (Hernandez & Guillén, 2018; Kumar et al., 2020; Liu & Giroud, 2016; Luo & Tung, 2018). however, IB literature has mainly focused on the importance of international SAS via M&As rather than greenfield FDI on firm-level catch-up (Schaefer, 2020; Schaefer & Liefner, 2017). In part, this is due to the influence of several high-profile contributions to the EMNE debate, exemplified most prominently by the 'Springboard Theory', which is challenged in this context. In Luo and Tung's (2018) theory, catch-up speed, and acquisitions, are considered the preferred method of SAS establishment. Despite this, Luo and Tung (2018) acknowledge, "*most research has looked at SMNEs [springboard MNEs] through the lens of M&As, while little attention has been paid to other important investment modes*". This has led to several studies comparing the relative EMNE/DMNE SAS orientations used in international mergers

(Jindra et al., 2016; Sutherland et al., 2018; Sutherland et al., 2020). The comparative proclivity to seek strategic assets through greenfield foreign direct investment has, however, been largely ignored, even though this is arguably an important conceptual element of EMNE/DMNE differentiation (i.e., whether EMNEs internationalize to 'augment' rather than to exploit ownership advantages (Ramamurti, 2012). Additionally, SAS acquisitions pose unique challenges for Chinese MNEs because of the geopolitical tensions between China and the U.S. (Fjellström et al., 2023; Luo & Van Assche, 2023; Luo & Witt, 2021). Due to these geopolitical dynamics, SAS acquisition opportunities for CMNEs are limited in comparison to other EMNEs (Luo & Witt, 2021). The greenfield FDI in SAS, which is generally associated with reduced political risk, appears to be another alternative "springboard" strategy for CMNEs.

To achieve technological catch-up, SAS-related greenfield FDI has arguably become increasingly important for CMNEs. In fact, since 2016, owing to a changing geopolitical environment, and evolving Chinese policy to restrict capital flight and reckless unrelated deal-making, for example, HNA, Wanda, Fosun and Anbang Groups, among others, have bought a vast portfolio of unrelated foreign firms (Shi et al., 2021), greenfield SAS strategies appear increasingly viable for CMNEs (i.e., many large M&As are subject to greater international and domestic scrutiny). Interestingly, in contrast to their DMNE counterparts, CMNEs exhibit a greater preference for greenfield SAS projects. Indeed, in terms of both the volume and value of greenfield SAS-related FDI, CMNEs have witnessed a substantial increase, coinciding with a period where these investments have seen global growth, as indicated by the available data set. This is also supported by a Chinese investment report by the Rhodium Group, in association with the Mercator Institute for China Studies (MERICS), which reports that Chinese greenfield investments in Europe have reached an impressive EUR 4.5 billion. This translates to a significant 57% of the total investments. It has been demonstrated that the 'Springboard Theory' of Luo and Tung (2018), which posits that accelerated internationalisation involves aggressive acquisitions, is only a partial explanation

of CMNE catch-up strategies. The evidence from a variety of case studies, suggests Chinese firms are increasingly setting up research and development centres abroad in an effort to enhance their competitive advantages (Awate et al., 2015; Chen, 2011; Fu et al., 2018; Nair et al., 2018). The success of Huawei, one of the most successful Chinese latecomers, can be attributed largely to its FDI strategies based on greenfield projects. Even though the 'springboard' type literature has emphasised the explosive/aggressive/rapid nature of this FDI activity, calling for reconsideration of traditional IB models, a rebalance towards a greater focus on greenfield FDI may potentially lead to a more realistic evaluation of the internationalisation trajectory of EMNEs. There are several types of expansion paths that may be considered, including incremental expansion, gradualist expansion, and pragmatic expansion. In general, greenfield expansions of R&D facilities involve a gradual and progressive deepening of levels of commitment over time, which is different from M&As (Schaefer, 2020). Consequently, ideas associated with traditional IB approaches (i.e. Uppsala internationalization process Johanson & Vahlne, 2009) may also be relevant to greenfield SAS activities (Hertenstein et al., 2015).

3.5.2 Global Cities and knowledge intensive city clusters as Hubs for CMNE Catch-Up

Further exploration of the unique attributes and characteristics of EMNEs reveals that certain sub-national geographical considerations significantly influence CMNEs' greenfield SAS strategies, compared to that of other OECD-based DMNEs. Specifically, the R&D/DDT subsidiaries of CMNEs are more likely to be located in knowledge-intensive cities than in global cities in comparison with those of OECD-based DMNEs. These findings are not surprising considering the knowledge, expertise, and associated technological resources that CMNEs need to become innovators at the world's technological frontier are concentrated in specific geographical areas (Schaefer, 2020). There has been a considerable amount of attention paid by IB scholars to MNE activity in global cities.

Global cities have an important characteristic in that they are interconnected and have business service providers on hand (Chakravarty et al., 2021). For example, the GaWC ranking of global cities is based on their connectivity through advanced producer services (such as accountancy, advertising, banking, and law). It may be the case, however, that knowledge-seeking CMNEs are not so interested in these aspects of enhanced service and connectivity when undertaking SAS activities in global cities. Indeed, the results indicate that CMNEs are more likely to create knowledge-intensive R&D outputs in knowledge-intensive technological cluster cities than in global cities. Global Innovation Index city rankings, based on patents and innovation ecosystems (including education) around the world, identify the types of research-intensive urban city-based clusters that CMNEs are more likely to locate in. Cities such as Ankara, Ann Arbor, Austin, Basel, Boston (MA), Cincinnati, Cleveland, Dallas, Eindhoven, Frankfurt am Main, Grenoble, Heidelberg, Kobe, Kyoto, Lausanne, Los Angeles, Lund, Lyon, Malmo, Mannheim, Nagoya, Osaka, Ottawa, Oxford, Phoenix, Raleigh, San Diego, Tehran, and Yokohama are included in this category. As per the GaWC listings, these cities are all high-tech centres on the WIPO list (i.e., high-tech centres). The types of CMNEs that are most heavily invested in these cities include, Haier Group (Dallas, Eindhoven, Kyoto, Lyon and Osaka), Huawei (Eindhoven, Grenoble, Lausanne, Lund, Lyon, Ottawa and Yokohama) and Wuxi Pharma tech (Boston and San Diego, i.e., biotech clusters).

Taking a closer look at these WIPO-listed (i.e., non-global) cities may provide further insight into what these cities offer to CMNEs and why they are so strongly attracted to them. In terms of SAS projects, Frankfurt was by far the most popular location for CMNEs GF SAS (72 projects, US $181 million). Frankfurt, which is part of the greater Frankfurt Rhein Main region, is home to one of Europe's largest Chinese business communities. With its excellent international airport and world-leading internet node platform, it has a unique connection to China. In addition, no other region of Europe has more direct flights to China. In addition,

the city has a unique mix of service providers, investment banks, chambers of commerce, and local authorities with expertise in China, which can serve as substitutes for those commonly found in global cities. It also hosts many successful businesses and is the centre of Germany's manufacturing sector, which has also received a considerable amount of inward FDI from China. For example, it is located in the heart of the European automotive cluster, which attracts a number of Chinese automakers. Chery Automobile has R&D subsidiaries located in a suburb of Frankfurt, and Geely has just opened its own development centre 'virtually next door'. Frankfurt offers a wide range of R&D opportunities, from automotive to diverse sectors like photovoltaics, medical equipment manufacturing, cloud computing, and precision parts. The diversity of R&D activities carried out in the Frankfurt region makes it an exceptionally attractive SAS location for CMNEs.

3.6 Conclusion

In terms of EMNE analysis of SAS M&As, extensive research has been conducted at the national level. M&As are considered the primary method for acquiring high-quality strategic assets to facilitate 'accelerated' catch-up (Kumar et al., 2020; Luo & Tung, 2018). Due to the excessive focus on mergers and acquisitions, greenfield foreign direct investment has been marginalized. In addition, subnational geographic factors have not been taken into account and their impact on the decision-making process of CMNEs has not been fully evaluated. The types of knowledge, capabilities and resources that EMNEs require to facilitate catch-up via SAS are, however, concentrated in very few specific locations within countries - usually in cities. They may however provide insight into the firm-level catch-up strategies that EMNEs are engaging in and how they may differ from MNEs in developed markets by understanding the subnational economic geography of their FDI strategies.

Chinese MNEs are undoubtedly becoming more active in the field of GF SAS when it comes to FDI, and thus, their strategies for seeking knowledge appear to be in line with the general

concept that firm-level catch-up is an important factor in internationalization strategies. CMNEs have developed a strategy to catch up at the firm level by investing in specific knowledge-intensive regions centred around city clusters. These cities are often not part of the global city network. Global city studies have not incorporated specific decomposition of EMNE-related GF SAS FDI, nor have they conducted comparative analyses of the impact of city locations on the impact of EMNEs and DMNEs. The findings suggest that this is a potentially valuable question for understanding whether EMNEs differ from their DMNE counterparts and whether new theories may be required to explain the activities of these organizations (Hernandez & Guillén, 2018).

Chapter 4: An analysis of the impact of establishment mode on the creation of intangible assets in Chinese MNEs: A comparison of cross-border M&As with greenfield investment

4.1 Introduction

It is increasingly important for firms to be able to generate and deploy intangible assets effectively to maintain competitive advantage. It is argued that Chinese MNEs often invest in psychically distant developed markets to acquire intangible assets, such as brands, technology, and distribution networks, through strategic asset-seeking outward FDI (Deng, 2009, 2012; Luo & Tung, 2018; Madhok & Keyhani, 2012; Mathews, 2017; Rui & Yip, 2008; Sutherland et al., 2020). According to recent studies (Anderson & Sutherland, 2015; Piperopoulos et al., 2018), CMNEs generally locate in markets that have a high availability of strategic assets. CMNEs appear to generally enter developed markets for SAS purposes, with the intention of accelerated firm-level catch-up, or "springboard" FDI, as explained by the Springboard Theory (Luo & Tung, 2018). Even so, there have been serious concerns raised regarding CMNEs' ability to integrate acquired foreign strategic assets and successfully springboard (i.e., effectively manage and utilize acquired strategic assets) (Sutherland et al., 2020). This is primarily due to their lack of absorptive capacity (Guan et al., 2006); the psychological distance involved; their limited experience with foreign investment and markets (Gammeltoft et al., 2012; Liu & Woywode, 2013); and the challenges associated with managing dual embeddedness (balancing intra-MNE knowledge diffusion with domestic embeddedness), particularly when acquiring a firm in a M&As (Meyer et al., 2011).

Empirical research on the CMNE SAS springboard-related cross-border M&A outcomes, however, remains limited (Buckley et al., 2023). Additionally, there is only limited research concerning the impact of greenfield SAS-related foreign direct investments (i.e., foreign FDI relating to R&D) (Rosenbusch et al., 2019). Especially regarding the "*research questions: What type of host country and entry mode choice do EMNEs prefer?* " (Buckley et al., 2023, p. 4). It is therefore the purpose of this chapter to examine different entry mode, to see a) whether Chinese cross-border greenfield SAS FDI contributes to the creation of further strategic assets compared with the domestic peers; and b) to compare greenfield R&D knowledge sourcing/capability building FDI with cross-border SAS cross-border M&As. Specifically, CMNEs are analysed from the perspectives of their parent firms, and their subsequent growth in intangible assets. Accordingly, the aim of this analysis is to investigate whether greenfield SAS-related FDI versus acquisition establishment mode leads to greater post-investment intangible asset generation.

Indeed, the existing literature has emphasized the importance of SAS M&As or springboard M&As as a means of improving CMNEs' technological competitiveness over other springboard methods (e.g., greenfield R&D-related FDI) (Deng, 2012). This is because CMNEs are thought to actively participate in accelerated internationalization (Tan & Mathews, 2015), and by acquiring intangible assets, CMNEs gain immediate access to a foreign target that boasts a number of competence-creating opportunities, such as overseas subsidiaries with strong foreign market embeddedness (Meyer et al., 2011). Despite this, foreign acquisitions (or joint ventures) often prove difficult to exploit as a result of limited intra-MNE knowledge diffusion networks and bandwidth (Narula, 2014). Due to the 'dual embeddedness' challenge, for example, it is essential for the EMNE parent to effectively learn from its subsidiary (Figueiredo, 2011). In comparison, while another type of SAS OFDI (i.e., greenfield investment) may have limited firm capabilities (such as local embedding) initially, it is likely that these projects will be able to generate stronger intra-MNE knowledge flows than acquisitions due to the stronger connection between parent and subsidiary,

resulting in enhanced intra-MNE cooperation (Mudambi et al., 2014). A greenfield R&D investment may however be established from scratch, but it has the potential to grow rapidly over time (Blomkvist et al., 2019). Case studies involving Chinese MNEs, such as Huawei and ZTE, support this view that they established R&D centres around the world and have become one of the leading innovators in the industry.

To date, there have been limited comparative studies regarding how SAS-related investments influence subsequent intangible asset creation in EMNEs (Buckley et al., 2023). Most studies that examine establishment modes focus on DMNEs (Barkema et al., 1996; Blomkvist et al., 2019; Mudambi et al., 2014). This omission is surprising in light of the importance placed on EMNEs as sources of knowledge (Zhu et al., 2019). The aim of this chapter was to address this gap by using firm-level intangible asset balance sheet data and DID/PSM methodologies to examine the relationship between different outward FDI establishment modes and domestic (Chinese) intangible asset growth in comparison with comparable Chinese firms (a) which have not embarked on cross-border SAS investment, but are similar in other ways, or (b) similar CMNEs that have been involved in SAS-related acquisitions (but not greenfield projects). Interestingly, Chinese parent firms that undertook greenfield cross-border FDI projects demonstrated significantly higher intangible asset growth compared to their domestic peers, as well as CMNEs which have applied "springboard" M&A strategies. The findings of this research are in line with Luo and Witt's (2021) view that CMNEs should not limit themselves to conventional SAS M&A strategies to compete globally. This chapter contributes to the outcomes post-SAS investment (Buckley et al., 2023), and supplements the "Springboard" discourse, especially under the current geopolitical dynamics between China and the U.S. (Luo & Van Assche, 2023; Luo & Witt, 2021), underlining the importance of alternative springboard investment.

4.2 Background

MNE's FDI research has traditionally focused on the OLI framework, highlighting the important role that existing ownership advantages play during international expansions (Dunning, 1977). There is, however, a growing interest in alternative theoretical underpinnings to explain EMNE SAS FDI, including springboard perspectives (Luo & Tung, 2007, 2018), and the link-leverage-learn model (Mathews, 2006, 2017). They provide theoretical support for both the similarities and differences between EMNEs and DMNEs' behaviours.

According to Luo and Tung (2018), MNE FDI variances may be attributed to a strategic asset-seeking orientation. An asset-exploration strategy is therefore of paramount importance for EMNEs, for in order to take full advantage of purchased strategic assets via OFDI, they aim to achieve capability transfer, home-centred capability upgrading, and reinvigorated home base while strengthening capabilities to re-catapult into the global market (Luo & Tung, 2007, 2018).

Having these intangible assets or capabilities, such as proprietary technology, brand equity, and extensive distribution networks, effectively differentiates a firm from its competitors (Teece et al., 1997). It is therefore increasingly recognized that cultivating such strategic assets is important for EMNEs in order to address competitive disadvantages when undertaking SAS OFDI (Child & Rodrigues, 2005; Deng, 2009; Luo & Tung, 2007, 2018; Mathews, 2006, 2017).

Interestingly, CMNEs seem to be attracted to foreign knowledge, driven by the pull of their large domestic markets (Hennart, 2012; Luo & Tung, 2007, 2018). According to Enderwick and Buckley (2021, p. 8), CMNEs typically benefit from "home country advantages – large

market size, strong growth, adequate resources, and supportive government policies in particular - are all key influences on a firm's upgrading path".

There have been numerous studies that have corroborated the privileged access that many Chinese firms have within their domestic environments, allowing them to maximize the value of foreign-acquired strategic assets to unprecedented extents (Liu & Woywode, 2013; Wu et al., 2023). This discourse is further emphasised by CMNE's reverse knowledge transfers – flows from foreign subsidiaries back to parent EMNEs – as a significant contributor to enhancing intangible assets. Awate et al. (2015) demonstrate that such reverse flows are important for improving the competitiveness of EMNEs. Intangible asset transfers from developed to domestic markets are often prompted by such dynamics, maximizing their utility (Munjal et al., 2022).

As a result of such strategic augmentations, these EMNEs can strengthen their intangible performance metrics, creating bridges between knowledge gaps (Dhir et al., 2020). Even though the motivation behind SAS oriented towards domestic repatriation is a driving force behind CMNE's outward FDI, the research question remains: What is the impact of different outward FDI (i.e., GF SAS FDI, SAS CBM&As) strategies on the growth trajectory of the parent firm's intangible assets at home?

Existing studies on the relationship between establishment mode and intangible creation in CMNEs are sparse. While many believe Chinese firms can quickly gain key intangible assets through M&As, challenges related to knowledge integration persist (Liu & Woywode, 2013; Tang & Zhao, 2023; Wu et al., 2023). Factors such as cultural differences and dual embeddedness question the ability of CMNEs to utilize acquired targets' assets effectively.

It follows that, while certain intangibles, such as well-known brands, can confer a location-unconstrained advantage to MNEs under certain circumstances, in actuality, targets abundant

in intangibles often encounter reverse transfer barriers. These challenges, rooted in diverse legal and institutional barriers, may inhibit the transfer or deployment of such intangibles beyond domestic boundaries. To some extent this exposes the limitations of the springboard theory (i.e. the problem of oversimplification in the third stage of springboard theory, particularly in dealing with intangible assets such as reverse transfers of knowledge and technology).

Consequently, greenfield investments, which involve building resources from the ground up, may be more beneficial for CMNEs. This mode emphasizes a reversed knowledge flow from subsidiary to parent, differing from traditional developed MNEs (Awate et al., 2015). Long-term, greenfield R&D investments, which include setting up new facilities and adopting new technologies, could provide a more sustainable means for knowledge acquisition and enhance R&D capabilities of EMNEs.

4.3 Hypothesis development

4.3.1 Greenfield SAS FDI and CMNE's intangible creation

CMNEs face an interesting trade-off when attempting to domestically exploit intangible assets. Acquisitions may provide an apparently quick solution to firm-level generation of intangible strategic assets (Deng, 2009; Luo & Tung, 2018), however foreign targets may possess relevant intangible assets with high net worth in the Chinese market. They are, however, already strongly 'embedded' in their home markets (Mudambi et al., 2014). Such local embeddedness allows for the exploitation of country specific assets in the local milieu. In this case, it is considered central to intangible asset creation to have competence creating subsidiaries (Meyer et al., 2011; Narula, 2014) As a result, there has been an increase in interest in competence-generating subsidiaries as these subsidiaries are viewed as originating the firm-specific advantages of MNEs (Meyer et al., 2020; Mudambi et al., 2014). In this

case, subsidiary specific advantages may be diffused within the MNE corporate network (Narula, 2014). Specifically, subsidiaries play a critical role in creating new knowledge and promoting knowledge flows, and they transfer the knowledge within the internal networks and develop new knowledge linking the external networks (Hansen et al., 2016). As an autonomous subunit within the network, the subsidiary acts not only as an embedded centre of activity in the host country, but also has an impact on other MNEs (Meyer et al., 2020; Meyer et al., 2011; Nell et al., 2011). Instead of a top-down hierarchy, the MNE has evolved into a network focusing on intra-MNE coordination and the leveraging of strengths within different units, such as learning from centres of expertise (Meyer et al., 2011). Especially for the cases where CMNEs are considered a late comer, their knowledge flow is as parents learning from their innovative subsidiaries (Awate et al., 2015).

R&D FDI strategies used by EMNEs are innovative, according to recent studies. It involves scanning global tech developments for future investments (Zhang et al., 2017), building local R&D infrastructure (Schaefer, 2020), getting in touch with tech pioneers, and hiring foreign researchers (Kerr & Robert-Nicoud, 2020). Having assimilated these researchers, they were then able to establish robust research and development networks and develop new technological collaborations (Schaefer, 2020; Schaefer & Liefner, 2017). As part of the strategies, external technological support is leveraged from a variety of local entities, including eminent universities (Zhang et al., 2017), as well as the establishment of systems designed to effectively manage overseas R&D teams with frequent interactions (Schaefer, 2020).

Among the successful Chinese MNEs illustrating this trend are Huawei and ZTE, which extensively employ foreign expertise in their global research and development centres. Huawei, in particular, has demonstrated the importance of such a strategy by pursuing overseas knowledge and ascribing growth to the integration of foreign professionals (Schaefer, 2020). In addition, many of Huawei's pivotal patents originate outside China,

highlighting the strategic importance of offshore R&D hubs for technology catching up in CMNEs (Schaefer, 2020). A push toward greenfield SAS-related foreign direct investment allows CMNEs to gain access to key innovative resources through this initiative. With the maturation of these GF R&D networks, they become centres for knowledge diffusion, positioning firms that embrace greenfield SAS R&D-related FDI to potentially exceed their competitors in the creation of intangible assets (Wu et al., 2023). In comparison to domestic Chinese firms that do not undertake greenfield SAS FDI, it is assumed that those that do will outperform their domestic counterparts in terms of generating intangible assets. Thus hypothesis 4.1 is defined (H4.1)

Hypothesis 4.1: *In comparison to similar Chinese firms that have not undertaken FDI, greenfield SAS-related FDI leads to higher levels of intangible asset creation for CMNE parent firms.*

4.3.2 CMNE's intangible creation (SAS Greenfield FDI vs. SAS CBM&A)

Compared with SAS acquisition, it has been argued that CMNEs are capable of cultivating strategic assets by setting up R&D subsidiaries that provide strategic support to the firm. Indeed, a recent report by the Rhodium Group and the Mercator Institute for China Studies (MERICS) emphasised changes in Chinese OFDI patterns (from M&As to Greenfield investment). Due to stricter European screening for SAS acquisitions, many Chinese MNEs struggle to close deals with tech industry firms (Kratz & Zenglein, 2023). Specifically, greenfield investments surpassed M&A for the first time in two decades in 2022, amounting to EUR 4.5 billion, or 57% of the total (Kratz & Zenglein, 2023). While greenfield investments are also an important component of SAS OFDI, according to Rosenbusch et al. (2019), research in the area of such CMNE's internationalized R&D investment is still lacking. This deficit is further highlighted by Vrontis and Christofi (2021), especially regarding the impact of greenfield investments by Chinese MNEs on R&D.

Though EMNE literature does not extensively discuss SAS through greenfield investments, it is often perceived as a more uncertain route for intangible asset creation (Luo & Tung, 2007, 2018). These investments usually do not offer immediate knowledge transfer, yet by hiring locally, firms can access local expertise (Castellani & Lavoratori, 2020; Guimón et al., 2018). Greenfield projects can offer a more gradual learning curve (Johanson & Vahlne, 2009), although they do face challenges in local integration compared to pre-established acquisitions (Blomkvist et al., 2019; Mudambi et al., 2014). Mudambi et al. (2014) emphasized that the mode of establishment affects the subsidiary's integration with its parent firms, leading to varied insider-outsider dynamics. Due to the shared culture and practices of greenfield investments, these investments facilitate deep integration with the parent organization (Blomkvist et al., 2019). The result of this closer relationship is a smoother flow of knowledge within the MNE structure (Narula, 2014).

It is well established that SAS plays a significant role in CMNE cross-border M&A activity, however, evidence regarding their effective utilization of strategic assets is limited (Zhu et al., 2019). CMNEs are active global seekers of knowledge-based firms (Deng, 2009; Luo & Tung, 2007, 2018; Mathews, 2017), but establishing a sustainable strategy is difficult. According to recent studies, CMNEs experience difficulties in integrating and leveraging knowledge from the post-acquisition stage onwards (Agnihotri & Bhattacharya, 2018; Ai & Tan, 2020). After acquisition, CMNEs may utilize the unique methods of autonomy delegation (Wang et al., 2014), or a light-touch approach (Liu & Woywode, 2013), to keep the target company and the parent MNE structurally separate, thereby avoiding negative effects associated with post-integration. Specifically, to ensure that the acquirer does not disrupt the target's business operations, both organizations refrain from interfering with one another's activities as part of the coordination process, while retaining key employees and product brands to the maximum extent possible (Liu & Woywode, 2013; Tang & Zhao, 2023; Wu et al., 2023). This approach may, however, slow the flow of intra-MNE knowledge and

reverse diffusion within them, and it may be difficult for them to reverse transfer them from target countries to home countries without causing friction between existing target firms and their parents (Arikan et al., 2021).

In summary, greenfield investments may lag behind in terms of local embeddedness compared to acquisitions, but they offer stronger connections within MNEs. Establishing organic relationships from the beginning however facilitates the smoother flow of knowledge within MNEs (Narula, 2014). Greenfield projects, due to their smaller scale and EMNEs' long-term commitments, therefore, could potentially achieve deeper local integration (Contractor et al., 2016). This suggests that CMNEs might derive more value from SAS greenfield FDI in the long run when compared to SAS cross-border M&As, especially in terms of intangible asset growth. Thus Hypothesis 4.2 can be defined as follows:

Hypothesis 4.2: *Compared to similar CMNEs engaging in SAS cross-border M&As, CMNE parent firms undertaking GF SAS FDI experience a greater growth in intangible assets.*

4.4 Methodology

4.4.1 Data and sample

Using the fDi Markets, Zephyr and Orbis databases, a comprehensive dataset was gathered for the purpose of running DID/PSM panel modelling. The fDi Markets database contains more than 250,000 greenfield projects around the world. All greenfield foreign direct investment projects undertaken by CMNEs between 2005 and 2018 and were collected using press releases, newspaper reports, information from local and national investment agencies, and information provided by investing firms. Consequently, it provides a comprehensive overview of the greenfield investments made during this period, including the name of the

parent firm, the foreign subsidiaries, the location of the investment (city and country), the amount of capital invested, and the number of jobs created. Most importantly, it records the industry activity involved in the project, including R&D, design and testing; logistics, distribution and transportation; education & training; sales, marketing & support; customer contact centre; electricity; construction; manufacturing; extraction; technical support, maintenance & servicing; and recycling; business services; headquarters; ICT & Internet infrastructure related.

Initially, the industry activity was used to note the CMNEs that had undertaken research and development and design, development, or testing activities. According to De Beule et al. (2014), these FDI projects are strategic assets in nature and have previously been used (Castellani & Lavoratori, 2020; Guimón et al., 2018). fDi Markets' global ultimate owner (parent MNE) was then matched to Orbis. For the dependent variable, Orbis provided additional time series financial data on firms, including intangible assets. In order to obtain a matching sample of non-transnational comparator firms (for PSM purposes), the Orbis database was searched for similar Chinese firms. As recommended by previous studies, these firms had their ultimate owners (>50.01%) located in China (Sutherland & Anderson, 2015; Sutherland et al. 2019). In addition, this research focused on firms that were listed in the Orbis database as being engaged in Research and Development or Design, Development & Testing' activities (i.e., those that produce intangible assets and are therefore more technologically advanced). In order to match the CMNE sample with the non-CMNE (domestic) sample, a kernel matching approach was used, which focused on various variables (sales, total assets, profit margin, return on assets, gross profit, industry, and destination countries). Based on this, a further analysis was undertaken to examine H4.2, to determine whether CMNEs that had adopted greenfield FDI only (excluding those that had also undertaken cross-border M&As) outperformed similar domestic firms.

For H4.2, the matching sample was further refined by utilizing the Zephyr database to identify and gather data on Chinese ultimately owned MNE parent firms that executed cross-border M&As between 2005 and 2018. The focus was on deals involving a strategic asset-rich target firm, specifically target firms that (a) either owned intangible assets on their balance sheets, (b) possessed patents/trademarks, or (c) were described as having a technology-seeking motive in the descriptive information provided by Zephyr. Given that Zephyr is consistent with the Orbis database, the Zephyr sample firms facilitated the extraction of additional firm-level time series data from Orbis. Emphasis was placed on CMNE parent firms engaged in R&D or design, development, and testing activities, underscoring their commitment to innovation and technological progress and targeting transactions involving intangible assets. Only CMNEs with a single M&A transaction (and no greenfield FDI) were retained to minimize potential confounding effects from multiple deals/SAS activities involving the same parent firm over time. Consideration was limited to firms with available observations on essential variables utilized in the PSM sampling (e.g., total assets, return on assets, gross profit, sales, industry SIC, and destination countries). After discarding observations with incomplete or missing information, the final dataset comprised 178 strategic asset-seeking greenfield investments, 108 strategic asset-seeking cross-border M&As, and 1,863 strategic asset-seeking non-OFDI investments. Appendix C presents a list of deals sorted by the years in the sample.

4.4.2 Measures

4.4.2.1 Dependent variable

The dependent variable comprised intangible fixed assets (abbreviated IFA) in 100 million dollars. IFAs in the Orbis database are defined as non-physical assets in accordance with International Accounting Standard (IAS) 38 and include, but are not limited to, patents, trademarks, copyrights, technology, and brands. These assets arise during a company's operations and have a profound impact on the company's development. Due to these

characteristics and the importance of IFAs, it has become a widely accepted and applied metric to measure assets associated with intangible assets. This variable has been used extensively in previous studies to explore various topics (Contractor et al., 2016; Delgado et al., 2023; Yang & Driffield, 2022). In particular, IFA is often used as a key research variable due to its high relevance to knowledge in studies on knowledge transfer by multinational companies, investments made by such firms in developing nations, and the development of firms' capabilities in foreign markets (Contractor et al., 2016; Delgado et al., 2023; Yang & Driffield, 2022). In conjunction with previous studies and the research objectives, IFA was adopted as the dependent variable.

4.4.2.2 Independent variables

Two difference-in-differences (DID) models were set based on hypotheses H4.1 and H4.2. The SAS greenfield treatment 1 was used in the analysis, based on two groups: GF SAS FDI vs. non-SAS OFDI. Specifically, firms that involved research and development (R&D) and design, development, and testing (DDT) activities for their greenfield investment were classified as 1. This selection criterion was based on previous scholarly work in the field of international business studies, which highlighted the significance of these activities (e.g., R&D, DDT) in strategic asset-seeking investments (Castellani & Lavoratori, 2020; Guimón et al., 2018). For non-SAS OFDI, the value was set to 0.

For the second hypothesis (H4.2), which suggests that greenfield strategic asset-seeking FDI facilitates higher levels of intangible asset growth in CMNE parent firms than in similar CMNEs undertaking cross-border strategic asset-seeking related M&A, the SAS greenfield treatment 2 was set based on two groups: GF SAS FDI vs. SAS CBMA. Specifically, firms that involved research and development (R&D) and design, development, and testing (DDT) activities for their greenfield investment were classified as 1. In addition, firms' activities

involving R&D and testing canters were classified as SAS CBM&A and assigned a value of 0, consistent with the GF investment SAS measure. Detailed descriptions of these variables can be found in Table 4.1, which provides an overview of the variables used in the analysis.

Table 4.1 Description of variables and data source

Abbreviation	Full name	Sources
IFAs	Intangible fixed assets (100 Million USD)	Orbis database
DID	DID=1 if after greenfield investment; SAS=0, others.	fDi market; Zephyr database
lnSale	Log of Sale	Orbis database
lnPM	Log of Profit margin (%)	Orbis database
lnGP	Log of Gross profit	Orbis database
ROA	Return on assets	Orbis database
lnTOA	Log of Total assets	Orbis database
ISO2	2-digit ISO destination country code	Orbis database
SIC4	4-digits SIC code	Orbis database

4.4.3 Model specification

The DID/PSM methodology is well suited to address the inherent endogeneity challenges associated with causality issues that undermine conventional econometric methodologies. The PSM approach was intended to provide better “like-for-like” comparisons (Chang et al., 2013; Schweizer et al., 2019; Yang & Driffield, 2022). Firms that are predisposed toward better performance/growth, for example, may be better to undertake greenfield SAS FDI. Additionally, following Yang and Driffield (2022), kernel matching which has been considered highly appropriate since it gives additional weight to control observations and reduces bias in calculating the average effect of treatment on the treated group was employed. This was in order to ascertain: (1) the impact of Chinese greenfield SAS R&D-related FDI on parent firms' intangible assets compared to similar types of domestic Chinese firms that had not engaged in FDI; and (2) the comparison of parent firm outcomes between the two

different FDI establishment modes, namely greenfield SAS FDI and cross-border SAS acquisitions between similar matched firms (again, using PSM/DID approaches).

To test hypotheses 4.1 and 4.2, the DID specification relates to the CNME's strategic asset value as follows:

$$Y_{it} = \beta_0 + \beta_1 DiD_{it} + Controls + Constant + \gamma_i + \delta_t + \varepsilon_{it}$$

Where Y_{it} is the strategic assets performance of the parent firms i in year t, γ_i and δ_t are firm and year fixed effects. DiD_{it}, the key variable, equals to one for the years after investment for firm i.

4.4.4 Results

As a prerequisite to the use of DID approaches, parallel trends are assumed. As shown in Figure 4.1, GF SAS investments and non-OFDIs showed a positive upward trend in the intangible asset value in the long run following the investment. The findings suggest that there was no significant difference in the trend in intangible asset value between the two groups before the GF SAS investment occurred, and therefore, the common trend requirement for DID estimation was met.

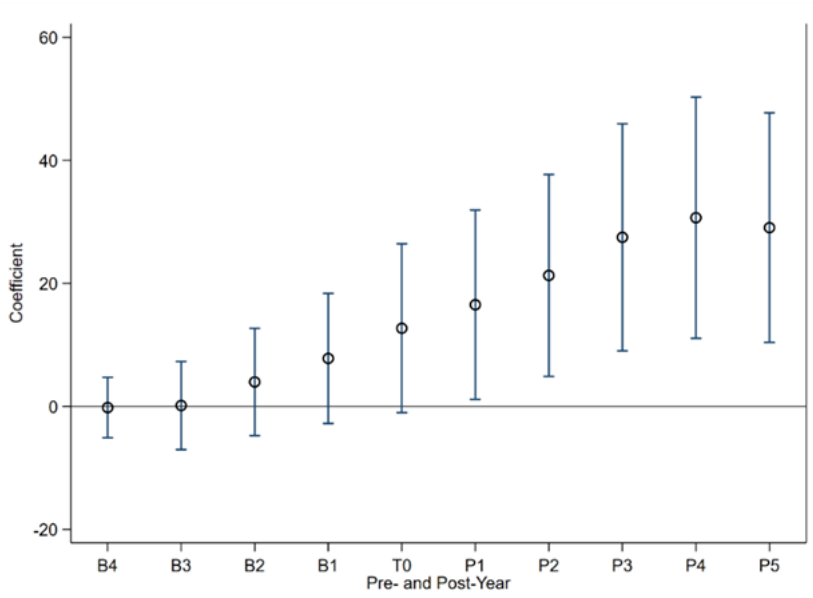

Figure 4.1Common Trend Checks of DID (GF SAS FDI vs. Non-OFDI)

Figure 4.2 also passes the common trend test, revealing no significant difference between the treatment and control groups (greenfield SAS investment versus SAS CBMA investment) from T-0 to T-5. These findings support the validity of the DID analyses. The results indicate a significant increase in the intangible value of the parent company, particularly in the fourth and fifth years after the occurrence of the transaction, thus supporting hypotheses 4.1 and 4.2.

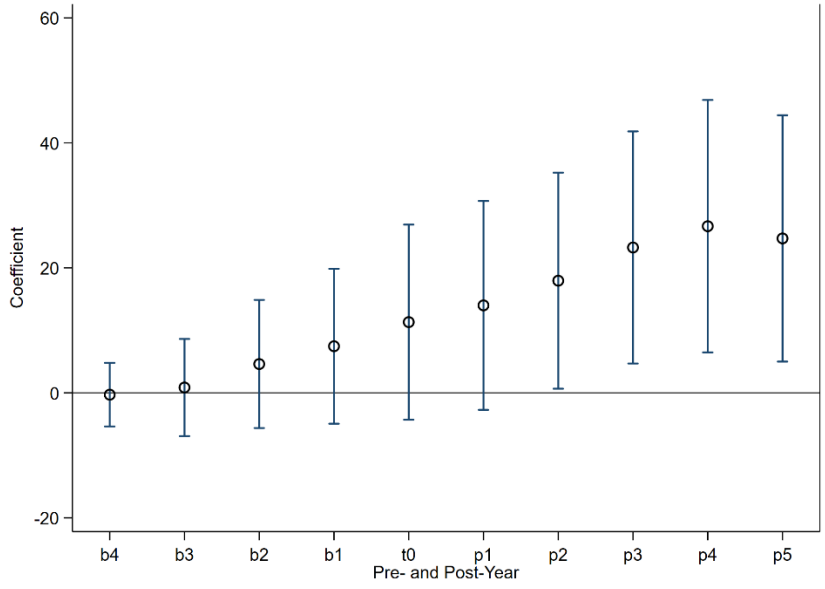

Figure 4.2 Common Trend Checks of DID (GF SAS FDI vs. SAS CBM&A)

Table 4.2 presents the descriptive statistics and correlation matrix for the sample. The results confirm the hypotheses 4.1 and 4.2, with the difference-in-differences (DID) estimates being positive and statistically significant, indicating a positive impact of GF SAS FDI on parent firms' intangible assets. In addition, the control variables, including firm size, sales, and profitability, display a significant positive correlation with intangible assets, consistent with prior research in the field.

In Table 4.3 the DID results are summarized, and present a sample of propensity score-matching (PSM) and un-PSM, as well as multidimensional fixed effects and those without them. Specifically, models 4 and 8, based on the post-PSM sample, incorporate four fixed effects (year, firm, industry, and destination country) to support H4.1 and H4.2. Based on the results of the DID analysis in Model 4 of Table 4.3, the Average Treatment Effect on the Treated (ATT) of 1.792*** indicates a statistically significant positive effect of the treatment (greenfield strategic asset-seeking investment) on the outcome (intangible fixed asset value) at the 0.01 level. This implies that on average, CMNEs' greenfield strategic asset-seeking investments have led to an increase in their parent companies' intangible fixed assets by 1.792 (100 million dollars), compared to non-strategic asset-seeking outward foreign direct investment. In addition, the analysis of the dynamic effects in Table 4.4 reveals that the average treatment effect on the treated (ATT) of CMNE's SAS R&D-related deals increases significantly from the second to the fifth year, compared to non-SAS OFDI transactions. Specifically, the ATT rises from 1.459 (10% significance level), to 3.055(1% significance level). These findings provide further support for the first hypothesis (H4.1) that Chinese parent firms investing in greenfield projects for long-term SAS purposes are more likely to have higher intangible assets compared to those not engaging in OFDI.

Table 4.2 Descriptive Statistics and correlation matrix

Variables	Obs	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
IFA	14872	2.15	19.75	1									
DIDGF_CBMA	3232	0.28	0.45	0.199***	1								
DIDGF_NONOFDI	13480	0.07	0.25	0.265***	1.000	1							
lnTOA	14872	11.98	2.14	0.282***	0.377***	0.436***	1						
lnPM	14872	2.33	0.93	0.025***	-0.148***	-0.058***	0.004	1					
ROA	14872	7.41	7.00	-0.019**	-0.148***	-0.069***	-0.196***	0.617***	1				
lnGP	14872	10.44	2.06	0.286***	0.361***	0.447***	0.946***	0.076***	-0.022***	1			
lnSale	14872	11.52	2.11	0.277***	0.358***	0.440***	0.951***	-0.084***	-0.110***	0.956***	1		
SIC4	14872	4083.84	1707.78	0.080***	0.210***	0.058***	-0.098***	0.049***	0.044***	-0.096***	-0.119***	1	
Year	14872	2014.86	4.30	0.074***	0.461***	0.123***	0.100***	-0.047***	-0.084***	0.089***	0.072***	0.079***	1

*** *p<0.01, ** p<0.05, * p<0.10*

Table 4.3 Intangible Asset Growth in Chinese Parent Firms as a result of Greenfield SAS FDI

Panels	A. GF SAS FDI vs SAS Non OFDI				B. GF SAS FDI vs SAS CBMA			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
IFA	H1				H2			
DID	17.969***	2.155***	18.755***	1.792***	13.878***	6.398**	14.827***	6.325**
	(4.74)	(.518)	(5.729)	(0.532)	(5.345)	(2.545)	(5.61)	(2.612)
lnTOA			1.229***	0.501***			5.345***	6.340***
			(0.412)	(0.124)			(1.933)	(1.875)
lnPM			0.034	-0.050			-0.129	0.479
			(0.145)	(0.045)			(0.700)	(0.482)
ROA			-0.059**	0.016***			-0.073	0.140
			(0.028)	(0.006)			(0.102)	(0.101)
lnGP_			-1.426*	0.133			-10.174**	-5.63**
			(0.768)	(0.120)			(4.997)	(2.617)
lnSale			3.723**	0.544			13.177**	4.532**
			(1.446)	(0.337)			(6.157)	(2.136)
_cons	0.931**	0.44***	-41.208***	-13.342***	5.055***	5.005***	-120.542***	-76.864***
	(0.366)	(0.031)	(13.268)	(3.563)	(1.476)	(.705)	(44.15)	(21.275)
Year	Yes	Yes	Yes	**Yes**	Yes	Yes	Yes	**Yes**
Firm	Yes	Yes	Yes	**Yes**	Yes	Yes	Yes	**Yes**
4 digits SIC	No	No	Yes	**Yes**	No	No	Yes	**Yes**
ISO2	No	No	No	**Yes**	No	No	Yes	**Yes**
PSM sample	No	Yes	No	**Yes**	No	Yes	No	**Yes**
Observations	17242	11248	13283	10728	3222	2957	3222	2824
R-squared	0.658	0.606	0.631	0.628	0.625	0.590	0.643	0.593

*Robust Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.10*

Table 4.4 Dynamic Effects of Post-Treatment Periods on ATT after Propensity Score Matching

Year	ATT	Std. err.	t	ATT	Std. err.	t
	CMNEs GF SAS FDI vs. Non-SAS OFDI			CMNEs GF SAS FDI vs. SAS CBMA		
IFA differences (100 million dollars)						
T0	0.623	0.614	1.01	4.886	3.674	1.33
T+1	0.819	0.614	1.33	7.564*	4.572	1.65
T+2	1.459*	0.754	1.93	10.939*	6.273	1.74
T+3	1.749**	0.789	2.22	6.152*	3.610	1.70
T+4	1.797**	0.719	2.50	10.931*	6.267	1.74
T+5	3.055***	1.043	2.93	12.604*	7.086	1.78

*Robust Standard errors are in parentheses. *** p<0.01, ** p<0.05, * p<0.10*

Model 8 results indicate that the treatment had a statistically significant positive effect on the results with a significance level of 0.05. This suggests that CMNE's greenfield SAS R&D investment yields an average increase of $0.6325 billion in its parent company's intangible fixed assets compared to SAS CBM&A investment. The results presented in Table 4.4, it show that CMNE's greenfield SAS R&D investment had a significant positive impact from year 1 to year 5 after the investment. Specifically, the ATT increases from 10.931 to 12.604 with a significance level of 0.10 in the fourth year after the investment. In the long-term, greenfield SAS R&D investment is also expected to increase the value of intangible assets for the Chinese parent company of the project more than SAS' cross-border M&As. These results support H4.2.

4.5 Discussion

The findings suggest that (i) Chinese firms that engage in greenfield SAS FDI enhance the value of their parent firms' intangible assets more than domestic firms that do not engage in greenfield SAS investment, and (ii) Chinese firms that engage in SAS greenfield FDI have a greater impact on the value of their parent firms' intangible assets than FDI firms that engage in SAS M&As. The following discussion first addresses the impact of the inclusion of greenfield SAS FDI on the CMNE catch-up literature, and then considers the implications of comparing the two modes of entry for EMNE-related theory.

IB literature has discussed the differences between EMNEs and DMNEs, questioning whether new theories are required for EMNEs (Arikan et al., 2021; Cuervo-Cazurra, 2012). Strategic Asset Seeking has been a strong focus within EMNE frameworks (Hernandez & Guillén, 2018; Kumar et al., 2020; Liu & Giroud, 2016; Luo & Tung, 2018), however, attention has been mainly focused on international SAS through M&As, while greenfield FDI has been largely ignored (Schaefer, 2020; Schaefer & Liefner, 2017). Evidence of this

bias is found in Luo and Tung's 'Springboard Theory', which emphasizes the acquisition of assets quickly (Luo & Tung, 2018). This article uses the term 'greenfield' only once, which indicates that other investment modes are not adequately discussed (Luo & Tung, 2018). According to them, "*most research has looked at SMNEs (springboard MNEs) through the lens of M&As, while little attention has been paid to other important investment modes"*, where after 'greenfield investments' is mentioned (Luo & Tung, 2018, p. 147). Liu and Giroud (2016) further emphasize the prominence of M&As as knowledge-seeking strategies in EMNEs.

To date, literature on GF SAS types of foreign direct investment has generally supported the notion that CMNEs can benefit from GF FDI in R&D and science and technology-related greenfield subsidiaries, in terms of building innovation capabilities. This evidence has been supported by the present findings, and by extension it is logical to suggest that the 'Springboard Theory' should be revised in a way that emphasizes alternative OFDI as a key means of catching up on firm-level intangibles (Luo & Witt, 2021). These findings contribute to the effectiveness of reverse intangible asset transfer through 'springboard' type FDI by CMNEs. The result further indicates that greenfield SAS investments positively impact the intangible assets of parent firms, as opposed to their domestic counterparts that refrain from FDI. In recognition of this, a greater amount of interest has been shown in how subsidiary-specific advantages may be transferred back to the parent multinational corporation. Due to its implications for dual embeddedness, establishment mode is also considered an important factor influencing reverse knowledge diffusion. Despite this, most research has been conducted in relation to establishment mode and competence-producing subsidiaries primarily in the context of DMNEs (Blomkvist et al., 2019; Mudambi et al., 2014).

Since EMNEs have been identified as motivated by SAS with the specific objective of engaging in reverse knowledge transfer, this gap in the research is of interest. Additionally, it has been demonstrated that acquisition establishment is a preferred means for rapidly

enhancing firm competitiveness (Awate et al., 2015; Child & Rodrigues, 2005; Tan & Mathews, 2015). Most of these arguments, however, are based on the location choice and establishment mode of CMNE for SAS foreign direct investment rather than the outcomes of such investments. This chapter attempts to fill this gap by examining SAS investments' impact on generating additional intangible assets. In exploring the establishment mode impacts reverse knowledge transfers in CMNEs, a topic of contemporary conceptual interest has been addressed: the impact of establishment mode on the creation of competence-creating subsidiaries and reverse knowledge transfers on the competitiveness of CMNEs.

4.5.1 Chinese Greenfield SAS entry mode: comparing with domestic investment

The question concerning why SAS greenfield FDI may be a more effective way for CMNEs to seek strategic assets and build technological capabilities needs to be answered. Greenfield projects are directly tied to the parent MNE, as research on establishment mode and creating competence subsidiaries has demonstrated (Blomkvist et al., 2019; Mudambi et al., 2014). Intra-MNE linkages are strong and organic. The development of local embeddedness takes some time, but greenfield projects typically involve a gradual investment pattern that facilitates learning and efficient scaling up. As Awate et al. (2015) highlight, EMNE is a ‘reverse’ form of knowledge spillover while DMNE is a ‘teaching’ form. CMNE can build competence through the establishment of foreign subsidiaries. In contrast to DMNEs, EMNEs emphasize the importance of asset-augmentation, which involves the recombination of acquired and existing assets, as well as the reverse transfer of assets from foreign ventures to domestic operations (Buckley et al., 2023). DMNEs, however, aim to maximize their advantages by transferring their knowledge and assets from home to foreign operations (Buckley et al., 2023).

Fjellström et al. (2023) support this view, namely that the headquarters are the dominant entity in their knowledge system. In addition to focusing more on asset exploration, EMNE

subsidiaries also work to strengthen their R&D capabilities to transfer knowledge back to their headquarters. They are often referred to as offshore innovation hubs, and as a result of this pattern of knowledge flows, R&D subsidiaries are likely to play a pivotal role in knowledge innovation and diffusion (Rosenbusch et al., 2019), particularly in the case of CMNE's sub-parents reverse flows. Indeed, for gaining access to cutting-edge technologies and knowledge, Many Chinese MNEs (e.g., Huawei, ZTE) have been actively setting up R&D centres abroad, and by utilizing global innovation hubs, collaborating with international experts, and speeding up their technological advancement, they are able to leverage global innovation hubs. For example, in the case of Huawei, Schaefer (2020) shows that the impact of investment in R&D activities on innovation is more pronounced in global innovation centres. Specifically, the expansion of Huawei's R&D activities to global innovation hubs outside of China, particularly Western technology clusters like Silicon Valley, has allowed the firm to conduct its most impactful R&D overseas, leading to the creation of higher quality patents by its overseas employees.

4.5.2 Comparation between two entry mode: Greenfield SAS FDI versus CBM&As SAS FDI

It is important to determine why greenfield FDI by SAS may prove to be a more efficient mechanism for CMNEs to generate intangible assets compared to cross-border M&As. The challenges of integrating foreign acquisitions, as described in multiple studies, coupled with the limited post-acquisition experience and assets of CMNEs, highlight the often surprisingly challenges incurred by such SAS strategies (Liu & Woywode, 2013; Wu et al., 2023). CMNEs are therefore often seen to adopt "light-touch" integration (Liu & Woywode, 2013; Tang & Zhao, 2023; Wu et al., 2023) and autonomy delegation strategies (Wang et al., 2014). Such an approach may be effective in promoting target development, however, intra-MNE knowledge flows are likely to be delayed. EMNEs have difficulty bridging the knowledge gap between their foreign affiliates and those of their parent firms under this circumstance

(Awate et al., 2015). MNEs generally are experiencing rapid growth, according to Narula (2014), and it is observed that the dispersed constituent establishments of these MNE corporations have not been able to keep up with the increasing amount of information flowing between these dispersed activities due to the insufficient information sharing systems and intra-MNE control mechanisms. There seems to be a particular relevance to this "bandwidth paradox" in the context of CMNE's cross-border M&As. Specifically, when a CMNE undertakes an SAS CBM&A, it often sees it as a springboard opportunity to absorb valuable knowledge, expertise, and other core resources from the acquired target. The existing target firm's unique organizational structure, operational processes, and corporate culture may, however, hinder the reverse knowledge transfer (Arikan et al., 2021). There will inevitably be a series of challenges for CMNEs to integrate the culture, employees, and systems of two firms (Liu & Woywode, 2013; Wu et al., 2023), which form an invisible "bandwidth" limitation that may hinder smooth communication and reverse knowledge transfer.

In comparison to cross-border M&As, greenfield investments undertaken by CMNE SAS, that often start from scratch and emphasize closer ties between subsidiaries and their parent companies within a network, may offer a significant and sustainable source of strategic intangible assets. According to Schaefer and Liefner (2017), which examines Huawei in detail as China's largest GF R&D investor, the performance of local and offshore R&D activities is compared. Despite the additional liabilities of foreignness it faced as a result of operating overseas (Schaefer & Liefner, 2017, p. 1349), they found that patents originating from its foreign R&D locations were of higher quality, and show how CMNEs like Huawei have incorporated foreign R&D subsidiaries into their intra-MNE networks (e.g., weekly online meetings to discuss research progress between Chinese HQs and foreign research labs). In fact, there is an increasing body of evidence indicating that greenfield SAS R&D-related foreign direct investment has contributed to CMNE's innovation performance. This is in line with Zhong et al. (2021), a study focused on CMNEs and including greenfield activities,

research and development internationalization increases innovation efficiency among EMNEs by improving organizational learning and knowledge spillovers from host countries.

4.6 Conclusion

In this chapter the way in which establishment mode influences reverse knowledge flows from competence-creating subsidiaries within EMNEs, namely Chinese subsidiaries was examined. It has been shown that the establishment of FDI in CMNE parent firms is associated with varying impacts on intangible asset creation. According to the findings, CMNEs find it difficult to fully utilize foreign acquisition potential in terms of reverse knowledge transfer and intangible asset creation. The results suggest that intangible assets are improved only in cases of greenfield SAS FDI (relative to domestic peers), in contrast to some of the EMNE literature. CMNEs are experiencing difficulties managing dual embeddedness, which is attributed to these results, and CMNEs find it a significant challenge to reverse knowledge diffusion within their MNEs, while managing local embeddedness.

Accordingly, the findings are in agreement with the existing literature on competence creation subsidiaries and multiple embeddedness, which emphasizes the difficulties associated with coping with the dual bandwidth paradox (Meyer et al., 2011; Narula, 2014). In particular, the findings indicate that intra-MNE knowledge diffusion pathways are likely to be weak if CMNEs acquire firms as a means of gaining access to firms. Obtaining foreign DMNE targets with intangible strategic assets raises serious concerns about the ability to create channels for adequate access to knowledge. In contrast, greenfield investments, while modest, are more likely to facilitate the creation of parent intangible assets by improving parent-subsidiary coordination. CMNEs based on FDI outside of China are also subject to significant constraints on successful firm-level competitive strategies due to intra-MNE knowledge flows. Indeed, acquisitions are an effective means of generating intangible strategic assets for CMNEs. The results also suggest, however, that successfully integrating

acquired strategic assets is more challenging than this view suggests. CMNE managers are therefore advised not to make overly optimistic predictions regarding reverse knowledge transfer when undertaking SAS acquisitions.

Discussion and Conclusion

In this thesis, I have undertaken an-depth analysis the perspective adopted by the Springboard Theory and have centred the focus on its core proposition that EMNEs are keen on acquiring CBMAs due to the unique intangible assets abroad. Drawing data from a comprehensive dataset of EMNEs' overseas activities over the past decade on a global scale, I employed econometric techniques (i.e., logistic modelling, PSM plus DID) to provide empirical evidence supporting the Springboard Theory's assertion that EMNEs engage in SAS FDI to acquire strategic assets. The scope of this analysis also strengthens and elaborates on areas within the Springboard Theory, specifically regarding the reverse transfer and absorption of strategic assets at the post-SAS FDI stage, where previous empirical studies have been somewhat limited or absent (Buckley et al., 2023). In addition, the results of a comparative analysis of the strategic assets following FDI of DMNEs and EMNEs over the last decade, positively corroborate the previously perceived "aggressive" international activities of EMNEs (Luo & Tung, 2018; Meyer, 2015). The results or this analysis address gaps in existing international business theories through statistically significant findings, but they also support a novel perspective, initiated from the subsidiary's viewpoint, offering innovative insights into the SAS cross-border activities of EMNEs.

The Springboard Theory, through the strategic application of logic in management and international business fields, rationalizes EMNEs' motivation for actively pursuing cross-border M&As due to the need to possess superior intangible assets of target firms, however it surprisingly lacks empirical support. Hence, in the first chapter of this dissertation a seemingly straightforward yet critical research question is examined: Are EMNEs truly more inclined than DMNEs to acquire target firms with abundant intangible assets through cross-border M&As?

Following the methodology of Sutherland et al. (2020), a multiple logistic regression model was used to investigate whether EMNEs are more inclined to engage in strategic asset-seeking CBM& as compared to DMNEs. Specifically, through logistic regression analysis of 19,347 cross-border M&As from 2010 to 2019, the findings for this sample data for this period support the hypothesis that EMNEs are more likely to acquire target firms possessing (a) intangible assets or (b) patents. The results further suggest, in line with 'Springboard Theory', that EMNEs are more inclined to carry out strategic asset-seeking M&As when compared to DMNEs. This research contributes to the existing literature by employing firm-level data to assess the actual likelihood of an EMNE/DMNE acquiring a target firm with a SAS intent, including their intangible assets and patents.

These findings provide robust evidence that supports several core arguments presented in the existing theoretical literature, notably within the frameworks of the "Linkage-Leverage-Learning" (Mathews, 2017) and the "Springboard Theory" (Luo & Tung, 2018) in the domain of contemporary international business studies. These theories also converge on the notion that strategic assets exert a significant allure for EMNEs, and encompass attributes such as corporate reputation, technological prowess, and advanced managerial experience (Elia et al., 2020; Li et al., 2021; Meyer, 2015). Despite the myriad challenges faced by EMNEs during the CBMAs process, they deem the procurement of overseas patents and technologies essential to cement their foothold in vast and fiercely competitive domestic markets (Li et al., 2021).

The strategic interplay between domestic resources and strategic assets acquired from host countries often crafts a unique value chain for these MNEs. This is especially true for assets that might be scarce in an EMNE's home country, prompting them to strategically utilize SAS CBMA as a conduit to secure these key assets (Li et al., 2021). Luo and Tung (2018) underscore that such CBMA endeavours can galvanize deeper collaborations among EMNEs, acquisition targets, and local communities, and foster long-term learning and innovation.

Given these considerations, these theories predominantly posit that the principal motive of EMNEs is to harness advanced technologies, thereby enhancing their unique competitive edge. Thus, from a theoretical standpoint, EMNEs are postulated to possess a stronger inclination than DMNEs towards acquiring target firms replete with intangible assets.

Despite the extensive conceptual “goldilocks debate” surrounding this topic (Buckley, Cavusgil, et al.2023; Buckley, Cui, et al.,2023), as previously mentioned, strategic assets such as reputation, trademarks, and technological capabilities are also considered particularly attractive to EMNEs, yet this assertion remains empirically under-verified (Anderson & Sutherland, 2015; Lai et al., 2015; Rui & Yip, 2008). The results presented in Chapter One suggest, however, that EMNEs probably actively pursue and acquire these strategic resources, especially intangible assets, in order (as discussed in subsequent chapters) to leverage the capabilities, knowledge, and location bounded assets of target firms (He et al., 2018). He et al. (2018) refers to this as the “impelling” of target capabilities, to benefit EMNEs, for in doing so, they may enhance their competitiveness in the global market (Luo & Tung, 2007, 2018; Mathews, 2006, 2017).

The methodology and findings of this chapter crucially rely on firm-level data, enabling the capture of the specific contributions of target firms, inclusive of intangible assets and patents. This spans across cases of outward investments by global emerging market firms. On closer analysis, in contrast to prevailing theories, the findings emphasize firm heterogeneity, which extends beyond MNEs to focus more intently on the diverse attributes of the target firms, not confined to investments of a particular nature. In relation to this perspective, both the "Springboard Theory” and the "LLL" model have somewhat overlooked this nuance, as their primary emphasis lies on the investments of EMNEs in developed markets. Consequently, the findings in Chapter One offer a novel lens through which to explore the SAS CBM&As of EMNEs. Echoing views akin to Jindra et al. (2016), Estrin et al. (2018) and Sutherland et al. (2020), the conclusions drawn in this chapter suggest that the existing theoretical corpus

may need to be enriched to further elucidate the motivations behind EMNEs' investments across regions of varying characteristics.

The findings of this thesis therefore prompt a deeper reflection on certain aspects of the "Springboard Theory" and the "LLL" model, as they predominantly emphasize investments by emerging market enterprises in developed markets (Luo & Tung, 2007, 2018; Mathews, 2017). These theories often suggest that the primary motivations of EMNEs are centred on acquiring advanced technologies to enhance their distinct advantages, yet, it could be beneficial to also consider the potential implications of the target's intangible changes, by viewing the intangible asset rich target firm as a key innovation hub, over the long term. Enderwick and Buckley (2021) indicate that the knowledge transfer presents a significant challenge in technical absorption, which reduces the motives for SAS after M&As, so that the EMNEs' SAS is not as simple as described in Springboard Theory. From the preliminary evidence in Chapter One there appears to be a tendency among EMNEs to adopt CBMAs when targeting intangible asset rich firms, however the wider implications, and the influence of these investments on their intangible value, remain somewhat unclear. It suggests that target firms often serve as innovation hubs, however when viewed in the context of long-term strategic positioning and value creation, the landscape becomes even more complex. In Chapter Two, therefore, an in-depth analysis was undertaken to identify the potential underlying factors that might influence the value of a target's intangible creation was conducted.

In essence, the results of the statistical analysis in Chapter One not only validate the preference of emerging market economies for strategic asset management firms, emphasizing the significant role of cross-border M&As in securing intangible strategic assets for emerging market economies, they also trigger the second research question which becomes the focus of Chapter Two: Can EMNEs effectively utilize the rich intangible strategic resources of targets post-acquisition?

This is particularly pertinent as EMNEs, within conventional international business theory, are perceived to lack an absolute advantage. Hence, analysing whether such "aggressive" cross-border M&A activities meet their SAS demands post-acquisition is crucial. Two primary concerns arise: first ensuring that the intangible assets of the targets are not adversely impacted post-acquisition is vital for the subsequent reverse absorption of these assets, for if these assets are negatively affected by the acquisition, it is untenable to guarantee their effective utilization by the acquiring EMNEs. Second, the concerns arising from challenges faced by EMNEs in reverse absorption post-CBMAs for, as the extant literature suggests, a plethora of challenges ranging from geopolitical to geographical and cultural factors may arise (Luo & Witt, 2021). Understanding and analysing the impact of EMNEs' acquisitions on the intangible assets of their acquired firms, therefore, becomes important.

In Chapter Two, a Propensity Score Matching and Difference-in-Differences econometric model was therefore employed to analyse data concerning 1,975 intangible asset-rich target firms and 1,373 multinational acquiring firms for between 2010 and 2019, from the data source as employed in Chapter One. Findings indicate that when EMNEs engage in SAS CBMAs, it promotes growth in the intangible assets (e.g., brand and technology) of the acquired firms, an effect superior to DMNEs. In addition, institutional factors and prior CBMAs experiences of EMNEs amplify the positive post-acquisition performance effect on their targets compared to DMNEs, whereas cultural distance exhibits a negative interactive effect.

The findings in Chapter Two offer manifold contributions to the existing theoretical literature, for the juxtaposition of the impact of EMNEs vs. DMNEs on the post-acquisition intangible assets of targets, substantiates the "Springboard Theory" postulation that EMNEs seek cross-border M&As to satisfy their intangible asset pursuits. This also lends empirical support to the Springboard Theory (Luo & Tung, 2018) and the "LLL" model (Mathews, 2017). While

the feasibility of such an “LLL” model was previously limited to the theoretical domain, these findings emphasize the growth of targets' intangible assets post-acquisition by EMNEs, aligning with theLLL’s emphasis on EMNEs integrating acquired intangible assets with their resources (Mathews, 2017), thereby forging unique value chains and fostering joint development with their targets.

The analysis in Chapter Two provides extensive firm-level data statistical evidence that broaden the existing perspectives on the springboard theory, in particular its oversight on post-acquisition target matters. The findings evidence that EMNEs, compared to DMNEs, not only mitigate negative impacts on targets’ intangible assets but promote them more significantly. This ensures the acquired target retains its value post-acquisition and may even see positive enhancement in its future intangible asset creation. Although the mechanisms through which EMNEs produce this facilitative effect post-acquisition remain unclear, strong statistical evidence supports the literature and the “LLL” and Springboard Theories and advocates for a “light-touch” integration strategy by EMNEs, emphasizing the preservation and enhancement of the intrinsic value of acquired firms, especially their intangible assets (Liu & Woywode, 2013; Marchand, 2017; Tang & Zhao, 2023; Wu et al., 2023).

The conclusions drawn in Chapter Two also potentially suggest a new phenomenon where, due to facing greater legitimacy challenges post-acquisition, EMNEs invest more in targets, and likely generate more intangible assets. Indeed, although the rapidly evolving geopolitical situation negates the possibility of aggressive acquisitions in many cases (Fjellström et al., 2023; Luo & Van Assche, 2023), Springboard Theory has become a widely accepted lens through which to explore the firm-level catch-up strategies of MNEs through FDI, specifically CBM&As. EMNEs, the ‘major subsample’ of springboard MNEs, which have been considered particularly applicable to the theory (Luo & Tung, 2018). In addition, Springboard Theory was originally developed to explain potential differences between EMNEs and DMNEs (Cuervo-Cazurra, 2012), however, since EMNEs are considered more

likely to engage in rapid firm-level catch-up via M&A, they are more likely to acquire firms that are in more advanced markets institutionally (Luo & Tung, 2018).

The results in Chapter Two also highlight deficiencies in the Springboard Theory that arise due to its lack of specificity regarding the type of institutions, such as IPR-related institutions. Such institutions may have an impact on the springboard steps since intellectual property rights, among the most important of intangible assets, may be protected by such IPR-related institutions, thereby preventing reverse transfer in the third step. In fact, the territorial principle inherent to IPR suggests that these intangibles are primarily associated with a particular nation or region and are therefore governed by the laws of that country (Prud'homme & Tong, 2023). As such, these acquired assets are often location bound or location dependent. Based on (Luo & Witt, 2021, p. 772), 'transferring embedded strategic resources has proven difficult even for experienced and mature MNEs and even across advanced industrialized nations'. Such assets are intrinsically linked to their geographical context, making their transfer and deployment across regulatory, cultural and technological environments further challenging. Some literature, however, suggests that EMNEs might prefer to acquire targets situated in better institutions that are believed to facilitate reverse knowledge transfer and technological upgrading from these better institutional contexts (Luo & Tung, 2018).

Intangible assets are locally embedded and not easily transferable, and it is therefore be noted, that Springboard Theory has remained relatively silent in terms of the impact of cross-border M&As on target firms' intangible assets' value. Nevertheless, this remains a crucial question, since it is unclear how this type of deal-making could lead to the creation of capabilities and a technological/intangible asset catch-up in the MNE if the target firm's outcomes were disappointing. At the same time, compared to DMNEs, EMNEs appear to face some seemingly insurmountable challenges when they acquire foreign firms. Among these factors

are a limited degree of international experience, a greater liability of foreignness carried by cultural and institutional distances, and a lower level of absorption.

The findings in Chapter Two also contribute to the theoretical field by exploring how moderating conditions impact intangible asset creation in EMNEs versus DMNEs. In particular, the following moderating effects of three factors were statistically accepted as significant, namely: (1) Institutional Distance; (2) International Experience; and (3) Cultural Distance, on the relationship between SAS M&As and the growth of target firms' intangible asset value (EMNEs versus DMNEs).

It was found that under conditions of stronger institutional distance, the impact of EMNEs relative to DMNEs on intangible asset value creation is amplified. These findings support the view that different national institutions require different operating costs, providing MNEs with arbitrage opportunities that could spur innovation in a better institutional environment (Bruno et al., 2022; Cui et al., 2022). EMNEs typically originate from countries with inferior institutional environments, hence they benefit from their hosts' country location bounded institutional advantages when dealing with technological issues and innovations (Estrin et al., 2018). As an example, a strong legal system may contribute to a stronger protection of intellectual property, which would facilitate the development of intangible assets (Estrin et al., 2018). This finding aligns significantly with the “International Springboard” perspective by Luo and Tung (2018), although Springboard Theory never explicitly states what the impact of an EMNE acquisition will be on the target firm, this emphasizes that firms can boost their global competitiveness by actively seeking strategic assets in favourable foreign institutional environments, thus surpassing their established competitors.

This argument is supported by tests conducted for both low and high institutional distances. CBM&As from EMNEs were found to significantly enhance the value of acquired intangible assets more than those from DMNEs in cases where there are higher institutional distances.

This finding therefore emphasizes the importance of institutional arbitrage in EMNEs as regards to how they seek to 'impel' catch-up in target firms. MNEs from countries with weak institutions can therefore better protect their future intangible assets and amplify their value by leveraging institutional differences. This therefore involves a process of increasing their exposure to countries with superior institutional environments, and so extending their portfolio of location bounded institutional advantages within the EMNE network. DMNEs, by contrast, have already gained significant exposure to such location bounded advantages. Note also, that as these institutional advantages are location bounded, they cannot simply be transferred to the EMNE 'home market', which is what stage 3 of Luo and Tung's 'upward spiral' approach proposes. Certain advantages are therefore not portable and thus cannot be transferred (Arikan et al., 2021).

These findings fill a gap in understanding the international experience of EMNEs (Bu et al., 2023; Li et al., 2021) and highlights the importance of international experience in driving intangible assets for EMNES relative to DMNEs. I suggest that international experience positively moderates the intangible asset value of EMNE-acquired firms compared to those acquired by DMNEs. As emphasized by Luo and Tung (2018, p. 134), "it is incorrect to assume that organizational learning and foreign experience are not important for EMNEs". Albeit, if this is the case, Springboard Theory is relatively silent on exactly what happens after acquisition. In fact, Springboard Theory suggests an iterative upward spiral (Luo & Tung, 2018) where EMNEs' overseas innovation performance is indirectly influenced by international experience (Thakur-Wernz & Samant, 2019).

"Going global" is one of the important ways for EMNEs to access external resources, and these international experiences can lay the foundation for future cross-border investments, which can be more helpful for EMNEs' outbound investments (Xu et al., 2021). This supports the idea in the new compositional 'springboarding' view that in the second phase of 'radical' OFDI, EMNEs need to build experience or a knowledge base to help it undertake SAS OFDI

(e.g., CBM&As) in order to acquire the most critical technologies, brands, and talents (Li et al., 2021). EMNEs can enhance innovation by cultivating organizational learning capabilities, which allow them to assimilate and apply knowledge acquired from international experiences (Thakur-Wernz & Samant, 2019). The results in Chapter Two suggest that international experience plays a more important role relative to DMNEs in determining the value of post-acquisition targets for EMNEs, and widen the gap between EMNEs and DMNEs in terms of value creation of post-acquisition intangible assets. In some senses this also supports a process model view.

The results in Chapter Two also suggest that a higher cultural distance reduces the value of intangible assets of targets acquired by EMNEs compared to DMNEs. This can be attributed to the well-established understanding that a greater cultural distance is associated with the Liability of Foreignness (LOF), which acts as a significant constraint for FDI (Eden & Miller, 2004; Zaheer, 1995). Thus it is widely recognized that cultural distance recognized as an important factor influencing the outcomes of post-acquisition integration and performance in the context of CBM&As (Ahammad et al., 2016; Beugelsdijk et al., 2018; Boateng et al., 2019; Li et al., 2020; Piero et al., 1998; Reus & Lamont, 2009). The presence of excessive cultural distance intensifies the challenges of post-acquisition integration, and leads to what is referred to as a 'double layer of acculturation' (Barkema et al., 1996), characterized by increased information asymmetry and complexity (Lewis & Bozos, 2019). These challenges are particularly pronounced for EMNEs, given their relatively limited competitive capabilities compared to DMNEs (Kumar et al., 2020).

Importantly, a significant portion of value resides in the core employees of the target firm; however, cultural distance poses difficulties in communication and building mutual trust, which can adversely affect post-merger collaboration within the acquiring firm and ultimately undermine value creation (Li et al., 2016). This perspective is supported by Campagnolo and Vincenti (2022), who suggest that managing targets rich in intangible assets

presents challenges for EMNEs operating in culturally complex environments. To effectively leverage the advantages of CBM&As, EMNEs require extensive cross-cultural experience, as this enables them to integrate resources more effectively and unlock significant potential for value creation (Hendriks et al., 2023). Those EMNEs with a higher cultural distance from their target firms may therefore have greater difficulty managing intangible assets within the target organizations when compared with DMNEs, thereby weakening the value of those assets. These findings elucidate the cultural distance paradox view by examining cultural distance.

To date, due to the diversity of technological strategies and the ever-changing global economic landscape, SAS CBMA represents only one approach of springboarding (Kumar et al., 2020; Luo & Witt, 2021; Rosenbusch et al., 2019). Increasingly, SAS greenfield investment strategies are gaining attention in both academia and practice. Due to the rise of techno-geopolitical uncertainty, CMNEs find their acquisition choices increasingly limited (Luo & Van Assche, 2023), thereby pursuing less high-profile but comparably effective FDI strategies (Kratz et al., 2021). I argue, based on the findings in Chapter Three, that CMNEs appear to be more inclined to establish greenfield R&D/DDT subsidiaries than other types of foreign subsidiaries when compared with DMNEs. Such investments, over time, tend to produce more substantial intangible value than cross-border M&As, although such OFDI might initially seem not to offer immediate leapfrogging opportunities, they have, in practice, proven to be a highly effective strategy in numerous EMNEs (i.e., Huawei, ZTE, Wuxi Pharma Tech, Mahindra, Tata, HCL group).

In Chapter Three, both standard and Firth (sparse case) logistic modelling on a dataset of 97,163 global greenfield FDI projects were employed to examine the comparative propensities of Chinese MNEs to embark on R&D, Design, Development, and to test greenfield (termed ‘strategic asset seeking’) FDI endeavours. The findings suggest that CMNEs demonstrate a higher proclivity for GF SAS FDI than DMNEs. A further analysis

was therefore designed to examine the influence of global cities and research clusters and their potential moderating role, in investment location decisions. The research questions in this Chapter are: Do CMNEs show a stronger preference for SAS greenfield investments compared to DMNEs, and how do characteristics of city-regions influence their investment location decisions?

The results of an in-depth statistical analysis indicate a strong geographical inclination by CMNEs towards research-intensive technological clusters in destination countries, compared to DMNEs. Interestingly, global cities were not found to exhibit a stronger attraction for greenfield SAS R&D-intensive FDI from CMNEs. The data further suggests that in matters related to greenfield SAS R&D-driven FDI, CMNEs are more readily lured by established research clusters than DMNEs. These findings suggest that firm-level catch-up strategies, as well as historical cross-border M&A tactics, are intrinsically linked to greenfield investments, a progressively effective mode. Thus, the theoretical contributions of the findings in Chapter Three lie in the examination of greenfield investments as one of the important means of intangible assets exploration, addressing the Springboard Theory's scarcity in capturing the diverse methods through which EMNEs or CMNEs explore strategic resources abroad (Luo & Witt, 2021).

The recent debates on M&As (Luo & Witt, 2021) and the growing role of geopolitics between CMNEs (rather than whole EMNEs) and DMNEs (Luo & Van Assche, 2023; Luo & Witt, 2021), underscore the growing significance of greenfield FDI in refining the extant knowledge concerning CMNE's SAS FDI. The aim of this chapter was to bridge the gap in the Springboard Theory's singular portrayal of cross-border investments. While several studies on EMNEs' cross-border M&A behaviours in specific regions are premised on national-level analyses, both empirical and theoretical works highlight CBMAs as pivotal for EMNEs to secure high-quality strategic assets, thus facilitating an "accelerated" catch-up (Kumar et al., 2020; Luo & Tung, 2018). Despite the extensive focus on CBMAs, the

significance of greenfield FDIs often remains marginalized in the literature, especially R&D related investment (Rosenbusch et al., 2019; Vrontis & Christofi, 2021).

More critically, many studies tend to overlook the influence of sub-national geographical factors on FDI decision-making (Wang & Wu, 2016). Notably, the knowledge, skills, and resources pursued by CMNEs to expedite global catch-up are often concentrated in cities-regions (Kerr & Robert-Nicoud, 2020; Li & Bathelt, 2018). Hence, an in-depth understanding of FDI's strategic layout in the host country's economic geography is paramount in unveiling EMNEs' catch-up strategies and their distinctions from DMNEs.

The impact of sub-national geographical factors and their influence on the decision-making processes of Chinese and emerging market MNEs has rarely been mentioned in existing literature. In this chapter the moderating role from sub-nation level is considered. Building on the suggestion of Vrontis and Christofi (2021), the aim of this research was to compare different market-based MNEs in terms of R&D related internationalization, focusing on the mechanisms underlying their location choices for setting up SAS related subsidiaries. The types of knowledge, capabilities and resources that EMNEs require to facilitate catch-up via SAS are, however, concentrated in very few specific locations within countries - usually in cities. This analysis may provide insights into the firm-level catch-up strategies that EMNEs are engaging in and how they may differ from MNEs in developed markets by understanding the subnational economic geography of their FDI strategies. When it comes to FDI, Chinese MNEs are undoubtedly becoming more active in the field of GF SAS. Thus, their strategies for seeking knowledge appear to be in line with the general concept that firm-level catch-up is an important factor in internationalization strategies.

The indirect impact of sub-national geographical factors and their influence on the decision-making processes of Chinese and emerging market MNEs has rarely been mentioned in existing literature. In this chapter the moderating role from sub-nation level is considered.

Building on the suggestion of Vrontis and Christofi (2021), the aim of this research was to compare different market-based MNEs in terms of R&D related internationalization, focusing on the mechanisms underlying their location choices for setting up SAS related subsidiaries. The types of knowledge, capabilities and resources that EMNEs require to facilitate catch-up via SAS are, however, concentrated in very few specific locations within countries - usually in cities. This analysis may provide insights into the firm-level catch-up strategies that EMNEs are engaging in and how they may differ from MNEs in developed markets by understanding the subnational economic geography of their FDI strategies. When it comes to FDI, Chinese MNEs are undoubtedly becoming more active in the field of GF SAS. Thus, their strategies for seeking knowledge appear to be in line with the general concept that firm-level catch-up is an important factor in internationalization strategies.

CMNEs exhibit remarkable vigour in their global FDI strategies. Their knowledge-seeking approach aligns with firm-level catch-up paradigms. It is evident that CMNEs have geared their investments towards knowledge-rich regions, especially those centred around technologically dense city clusters, in order to achieve firm-level catch-up (Kerr & Robert-Nicoud, 2020). It is noteworthy that these cities often deviate from the traditional global city networks. With respect to global city research, the results did not indicate a significant positive role of SAS-type global FDIs associated with CMNEs, and there is an apparent dearth of comparative studies on the influence of city geographical positions on CMNEs and DMNEs. Hence, in Chapter Three I undertook an examination of whether CMNEs differ from their unstructured counterparts and to determine if there is a need for novel theoretical frameworks to elucidate their behavioural patterns, offering fresh insights to the field of international business (Hernandez & Guillén, 2018).

Sub-nation geographical location and local contexts significantly shape the operations of firms, particularly within CMNEs' SAS greenfield investments. Li and Bathelt (2018) emphasize the profound influence of a firm's city-region location and its engagement with

the environment on intangible assets and innovation. Many CMNEs prioritize technological clusters in less accessible cities for their R&D/DDT subsidiaries over global cities. The rationale behind this might be that these clusters potentially offer closer ties with local stakeholders, potentially facilitating improved knowledge exchange and innovation. In fact, technological clusters are knowledge and innovation hubs that amalgamate advanced technologies and dynamic talents (Kerr & Robert-Nicoud, 2020).

If the 'sticky and tacit' nature of knowledge it taken into account, it could be argued that firms need to immerse themselves in local contexts to foster innovation (Bathelt & Cohendet, 2014; Li & Bathelt, 2018; Lorenzen et al., 2020). For instance, by setting up R&D/DDT subsidiaries in global innovation hubs, particularly in Western tech clusters like Silicon Valley, Huawei has notably enhanced its innovation, leading to the creation of higher quality patents by its overseas employees (Schaefer, 2020). Compared to DMNEs, CMNEs show a stronger inclination towards investing in such clusters, reflecting not only their technological catch-up strategy but also their commitment to fostering innovation within their corporate network. Thus by establishing R&D/DDT subsidiaries in technological clusters, firms may gain both immediate technological support and long-term asset enhancement in these clusters.

While Chapter Three explored the propensity of CMNEs to engage in strategic asset-seeking greenfield investments, there is still limited clarity regarding the performance of such investments for the growth of intangible assets (i.e., patents, brand value) in the parent firm and their effectiveness in achieving technology catch-up goals. Previous research has indicated that greenfield investments related to strategic assets, such as R&D, in offshore locations through sub-parent networks have increasingly impacted the innovation performance of firms from emerging economies (Rosenbusch et al., 2019; Vrontis & Christofi, 2021). Despite the recognition in the international business literature of the need for further research on this type of investment from emerging regions (Kumar et al., 2020;

Luo & Witt, 2021; Rosenbusch et al., 2019), however, the understanding of its impact for EMNEs remains limited (Vrontis & Christofi, 2021).

The analysis in Chapter Four of this dissertation is primarily focused on the effects of greenfield investments on the post-acquisition intangible assets of CMNEs. The aim of this chapter was undertaken a critical analysis of the repercussions on parent firm's intangible asset performance after such greenfield investments, thereby testing the Springboard Theory hypothesis of intangible asset growth from other investment modes. A Propensity Score Matching combined with a Difference-in-Differences approach was employed, and an analysis of178 GF SAS FDI, 108 SAS CBMAs, and 1863 SAS non-FDI initiatives was undertaken. A significant correlation was found between CMNEs' GF SAS FDI and their capability to create intangible assets.

The findings suggest that when comparing the ability to create intangible assets post-greenfield investments to that post-cross-border acquisitions, the former demonstrates superior enhancement in CMNEs' intangible assets. This finding presents a noticeable divergence from existing literature concerning EMNEs, particularly emphasizing the challenges faced by CMNEs in managing dual embeddedness both globally and locally, especially in facilitating the reverse flow of knowledge within their global networks and effectively managing local embeddedness.

This finding does however align with the literature on capability-creating subsidiaries and dual embeddedness, which highlights the paradox encountered in managing such embeddedness (Meyer et al., 2011; Narula, 2014). Based on these findings, I therefore further posit that if CMNEs primarily acquire intangible assets through SAS CBMAs, intra-firm knowledge flows could be inhibited. Concerns arise especially for developed market firms endowed with intangible strategic assets regarding the post-acquisition ability of CMNEs to craft effective knowledge absorption and integration mechanisms (Liu & Woywode, 2013).

In contrast, while greenfield investments might be smaller in scale, they are more likely to amplify the creation of intangible assets through enhanced synergies between parent and subsidiary firms. Additionally, due to barriers in transnational knowledge flows, CMNEs, following an acquisition-based approach, might face constraints in implementing successful global competitive strategies (Luo & Witt, 2021). Even though CBMAs are deemed an effective avenue for CMNEs, the findings in Chapter Four underscore the identified challenges in assimilating strategic assets post-acquisition that were greater than anticipated. It is therefore recommended that CMNEs approach CBMAs with a heightened scrutiny for potential risks associated with reverse knowledge transfer.

The importance of location-bounded FSAs development in the technological catch-up of EMNEs is demonstrated in this chapter through an in-depth examination of the long-term growth of intangible value in parent firms. Foreign subsidiaries are important as they manage some of the most vital assets of MNEs and are often situated within complex host country environments (Colman et al., 2022; Meyer et al., 2020; Stendahl et al., 2021), and although such investments may initially lack local embeddedness, they have significant potential for fostering stronger intra-MNE linkages, thereby facilitating reverse knowledge diffusion to the MNE parents (Awate et al., 2015; Li & Oh, 2016).

Conclusion

In this thesis an in-depth critical analysis of ‘Springboard’ theory has been conducted, which has provided critical statistical evidence that both bolsters its central tenets and addresses its oversights concerning the reverse absorption of strategic assets. ‘Springboard’ theory does offer a valuable framework for analysing emerging markets, however palpable gaps in both theoretical construction and empirical validation exist. Given current geopolitical shifts and fluctuations in global goods and services markets, the applicability of this theory also faces some scepticism (Luo & Witt, 2021). EMNEs appear to be more proactive in CBMAs

associated with specific asset structures compared to DMNEs. As highlighted in Chapter One of this research, however, disparities might exist between EMNEs and DMNEs in this domain. The Springboard Theory also implies that in a strong institutional environment, target firms serve as key resources and capabilities for EMNEs to catch up. This suggests that when these firms are acquired by EMNEs, they might experience substantial investments from EMNE parent firms, evolving into offshore innovation hubs, yet based on the findings in Chapter Two, I posit that the Springboard Theory does not fully take into account the geographical constraints of key strategic assets, as these assets cannot be effortlessly relocated to domestic markets (Arikan et al., 2021). In fact, the sought-after 'Springboard' structures pursued by EMNEs are inherently geographically constrained, as are their innovation capacities. Consequently, EMNEs may heavily invest in their targets to forge opportunities in their protected domestic markets (e.g., China), and to foster them as foreign innovation centres with the intention of generating intangible assets to be utilized within the EMNE network (Awate et al., 2015; Hansen et al., 2016; He et al., 2018; Thite et al., 2016).

In this thesis a detailed analysis was undertaken of the increasingly significant facet of catch-up strategies in emerging markets: how CMNEs, through greenfield investments, establish subsidiaries within technologically intensive R&D clusters to bolster their R&D innovation capabilities. The findings in Chapter Three suggest that, compared to DMNEs, CMNEs are more inclined to leverage this avenue to acquire a greater quantum of intangible assets. Additionally, the findings underscore that for emerging markets, the positive impact of greenfield investments on intangible asset creation might surpass that of CBMAs. This contradicts the 'Springboard' Theory's stance, which views CBMAs as the primary means for EMNEs to achieve firm-level catch up. Indeed, in Chapter Four, it shows that greenfield investments are increasingly becoming central to CMNEs' catch-up strategies, and the evidence provided herein attests to its efficacy as a strategic pathway. In summary, while the 'Springboard' theory furnishes invaluable insights, its limitations cannot be side-lined (Arikan et al., 2021). This exposes an overarching issue in contemporary research on EMNEs,

which overemphasizes the role of acquisitions in corporate evolution. A multifaceted empirical analysis, grounded in its theoretical framework has therefore been undertaken, and the findings robustly support select 'Springboard' hypotheses while concurrently address overlooked pivotal factors.

Implications

For policymakers in international business, from both developed and emerging economies, these findings have some implications. For policymakers in developed markets, concerns have been raised about the assertive approach of EMNEs, especially CMNEs, in pursuing SAS CBM&As (Luo & Witt, 2021), however, the findings show that CBM&As from EMNEs result in higher intangible asset value creation for target firms compared to DMNEs. From an acquired firms' perspective, encouraging inward investment from EMNEs can bring additional benefits to target firms and help those local firms to improve their innovative capabilities.

From a country-level perspective, greenfield investments by EMNEs, particularly those by CMNEs, can positively influence economic growth. Such investments typically involve significant local capital investments and generate advantages such as increased local employment opportunities. Those investors can create jobs, stimulate economic activity, and contribute to the overall development of the local economy by establishing new operations or facilities. To maximize the positive impact of FDI from emerging economies, I therefore suggest policymakers in developed markets consider attracting and facilitating these investments.

Policymakers in emerging market could also promote greenfield SAS investments as a viable option when faced with challenges in pursuing CBM&As. Many EMNEs have effectively utilized this strategy by establishing numerous R&D subsidiaries abroad (Awate et al., 2015; Chen et al., 2012; Fu et al., 2018; Nair et al., 2018). Through these subsidiaries, they have

successfully created strategic assets and achieved value creation. Greenfield investments could also help circumvent the political frictions often associated with high-profile CBM&As, which can discourage investment. It's recommended for policymakers in emerging market actively advocate for greenfield investments in the SAS domain, especially in strategic sectors to enhance global competitiveness and foster technological advancement.

Limitations and future studies

This study has provided several insights however it is necessary to acknowledge some limitations which may provide the opportunity for future development. Understanding the cost-efficiency and value proposition in creating foreign intangibles is still in its early stages, and while DMNEs might experience slower growth rates, they could achieve such growth in a more cost-effective manner. Observations indicate that EMNEs dedicate substantial resources when investing in target firms with strategic assets. Especially in interactions with DMNE targets, EMNEs tend to favour a 'light-touch' strategy (Liu & Woywode, 2013; Tang & Zhao, 2023; Wu et al., 2023), characterized by substantial commitments and investments. Further research could investigate the costs associated with the construction of technological hubs for EMNEs.

In this analysis a large sample was collected in order to estimate SAS acquisition outcomes, however, detailed information regarding reverse knowledge transfer was not provided. It is therefore still important to conduct more research regarding parent/subsidiary knowledge flows and interactions. Further research could build on the qualitative analysis (i.e., case studies) to examine the mechanisms of reverse transfer of intangible asset creation and how MNEs effectively achieve value spillover within complex networks. In addition to SAS OFDI, other avenues of SAS such as inward internationalization (original equipment manufacturing, co-developing, equity-based joint ventures, platform sharing), may also have an impact on SAS strategy (Luo & Witt, 2021). Future research could examine how other SAS mechanisms affect firms' technological catch up.

Some critiques in recent statistical discussions highlight the limitation of PSM and DID approach. These specifically address the potential for bias in DID estimates due to the assumptions about treatment effects and the parallel trends between groups (Goodman-Bacon, 2021). Despite efforts to mitigate these issues, including the application of CSDID for enhanced robustness, it is recommended that future studies should consider alternative methodologies, such as 2SLS or IV-GMM, to navigate these limitations and further refine empirical research strategies.

Appendix

Appendix A. Global ultimate owner Acquirers

Developed economies			Developing Economies		
European		Other developed economies	Asia		Other developing economies
Austria	Italy	Australia	China	Taiwan Province of China	Brazil
Belgium	Latvia	Bermuda	Philippines	Hong Kong, China	British Virgin Islands
Bulgaria	Lithuania	Canada	India	Malaysia	Chile
Croatia	Luxembourg	Iceland	Kuwait	Singapore	Colombia
Cyprus	Malta	Israel	Russia	United Arab Emirates	Curaçao
Czechia	Netherlands	Japan	Viet Nam		Mauritius
Denmark	Poland	New Zealand	Korea, Republic of		Mexico
Estonia	Portugal	Norway	Turkey		Nigeria
Finland	Slovakia	Switzerland	Thailand		Peru
France	Slovenia	United States	Indonesia		South Africa
Germany	Spain				Tunisia
Greece	Sweden				
Hungary	United Kingdom				
Ireland					

Appendix B. Worldwide Target countries

ISO2	Country	ISO2	Country	ISO2	Country	ISO2	Country
AT	Austria	FR	France	LV	Latvia	RU	Russian Federation (the)
AU	Australia	GB	United Kingdom	MA	Morocoo	SE	Sweden
BA	Bosnia and Herzegovina	GI	Gibraltar	ME	Montenegro	SG	Singapore
BE	Belgium	GR	Greece	MK	Republic of North Macedonia	SI	Slovenia
BG	Bulgaria	HR	Croatia	MT	Malta	SK	Slovakia
BM	Bermuda	HU	Hungary	MU	Mauritius	TH	Thailand
BR	Brazil	ID	Indonesia	MX	Mexico	TR	Turkey
BS	Bahamas	IL	Israel	MY	Malaysia	TW	Taiwan Province of China
CA	Canada	IN	India	NG	Nigeria	UA	Ukraine
CL	Chile	IS	Iceland	NL	Netherlands	US	United States
CN	China	IT	Italy	NO	Norway	UY	Uruguay
CO	Colombia	JP	Japan	NZ	New Zealand	VG	British Virgin Islands
CZ	Czechia	KR	Korea, Republic of	PE	Peru	VN	Viet Nam
DE	Germany	KY	Cayman Islands	PK	Pakistan	ZA	South Africa
DK	Denmark	KZ	Kazakhstan	PL	Poland		
EE	Estonia	LK	Sri Lanka	PT	Portugal		
ES	Spain	LT	Lithuania	RO	Romania		
FI	Finland	LU	Luxembourg	RS	Serbia		
FJ	Fiji						

Appendix C. Year-wise distribution of greenfield SAS investments

Event Year	Freq.	Percent	Cum.
2005	4	2.25	2.25
2006	2	1.12	3.37
2007	4	2.25	5.62
2008	5	2.81	8.43
2009	6	3.37	11.8
2010	9	5.06	16.85
2011	14	7.87	24.72
2012	7	3.93	28.65
2013	11	6.18	34.83
2014	17	9.55	44.38
2015	20	11.24	55.62
2016	21	11.8	67.42
2017	27	15.17	82.58
2018	31	17.42	100
Total	178	100	

Bibliography

Agnihotri, A., & Bhattacharya, S. (2018). International acquisitions and emerging market firms' performance-a structural contingency perspective. *Thunderbird International Business Review*, *60*(4), 691-698. https://doi.org/10.1002/tie.21946

Ahammad, M. F., Tarba, S. Y., Liu, Y., & Glaister, K. W. (2016). Knowledge transfer and cross-border acquisition performance: The impact of cultural distance and employee retention. *International Business Review*, *25*(1), 66-75. https://doi.org/10.1016/j.ibusrev.2014.06.015

Ai, Q., & Tan, H. (2020). Uncovering neglected success factors in post-acquisition reverse capability transfer: Evidence from Chinese multinational corporations in Europe. *Journal of World Business*, *55*(3), 1-13. https://doi.org/10.1016/j.jwb.2019.101053

Alon, I., Elia, S., & Li, S. (2020). Greenfield or M&A? An institutional and learning perspective on the establishment mode choice of Chinese outward investments. *Journal of International Management*, *26*(3), 1-17. https://doi.org/10.1016/j.intman.2020.100758

Anderson, J., & Sutherland, D. (2015). Entry mode and emerging market MNEs: An analysis of Chinese greenfield and acquisition FDI in the United States. *Research in International Business and Finance*, *35*, 88-103. https://doi.org/10.1016/j.ribaf.2015.03.008

Arikan, I., Arikan, A. M., & Shenkar, O. (2021). Revisiting emerging market multinational enterprise views: The Goldilocks story restated. *Journal of International Business Studies*, *53*, 781-802. https://doi.org/10.1057/s41267-021-00459-6

Autor, D. H. (2003). Outsourcing at Will: The Contribution of Unjust Dismissal Doctrine to the Growth of Employment Outsourcing. *Journal of Labor Economics*, *21*(1), 1-42. https://doi.org/10.1086/344122

Awate, S., Larsen, M. M., & Mudambi, R. (2015). Accessing vs sourcing knowledge: A comparative study of R&D internationalization between emerging and advanced economy firms. *Journal of International Business Studies*, *46*(1), 63-86. https://doi.org/10.1057/jibs.2014.46

Bai, T., Chen, S., & Xu, Y. (2021). Formal and informal influences of the state on OFDI of hybrid state-owned enterprises in China. *International Business Review*, *30*(5), 1-11. https://doi.org/10.1016/j.ibusrev.2021.101864

Baker, A. C., Larcker, D. F., & Wang, C. C. Y. (2022). How much should we trust staggered difference-in-differences estimates? *Journal of Financial Economics*, *144*(2), 370-395. https://doi.org/10.1016/j.jfineco.2022.01.004

Banalieva, E. R., Cuervo-Cazurra, A., & Sarathy, R. (2018). Dynamics of pro-market institutions and firm performance. *Journal of International Business Studies*, *49*(7), 858-880. https://doi.org/10.1057/s41267-018-0155-7

Barkema, H. G., Bell, J. H. J., & Pennings, J. M. (1996). Foreign Entry, Cultural Barriers, and Learning. *Strategic Management Journal*, *17*(2), 151-166. https://doi.org/10.1002/(SICI)1097-0266(199602)17:2<151::AID-SMJ799>3.0.CO;2-Z

Bathelt, H., & Cohendet, P. (2014). The creation of knowledge: local building, global accessing and economic development—toward an agenda. *Journal of Economic Geography*, *14*(5), 869-882. https://doi.org/10.1093/jeg/lbu027

Bathelt, H., Malmberg, A., & Maskell, P. (2004). Clusters and knowledge: Local buzz, global pipelines and the process of knowledge creation. *Progress in Human Geography*, *28*(1), 31-56. https://doi.org/10.1191/0309132504ph469oa

Bauer, F., Matzler, K., & Wolf, S. (2016). M&A and innovation: The role of integration and cultural differences—A central European targets perspective. *International Business Review*, *25*(1), 76-86. https://doi.org/10.1016/j.ibusrev.2014.07.010

Belderbos, R., Du, H. S., & Slangen, A. (2020). When do firms choose global cities as foreign investment locations within countries? The roles of contextual distance, knowledge intensity, and target-country experience. *Journal of World Business*, *55*(1), 1-11. https://doi.org/10.1016/j.jwb.2019.101022

Bertrand, O. (2009). Effects of foreign acquisitions on R&D activity: Evidence from firm-level data for France. *Research Policy*, *38*(6), 1021-1031. https://doi.org/10.1016/j.respol.2009.03.001

Bertrand, O., Betschinger, M. A., & Laamanen, T. (2019). Effects of subnational regional corruption on growth strategies in emerging economies: Evidence from Russian domestic and international M&A activity. *Global Strategy Journal*, *9*(2), 303-332. https://doi.org/10.1002/gsj.1204

Beugelsdijk, S., Ambos, B., & Nell, P. C. (2018). Conceptualizing and measuring distance in international business research: Recurring questions and best practice guidelines. *Journal of International Business Studies*, *49*, 1113-1137. https://doi.org/10.1057/s41267-018-0182-4

Beugelsdijk, S., Kostova, T., Kunst, V. E., Spadafora, E., & van Essen, M. (2018). Cultural Distance and Firm Internationalization: A Meta-Analytical Review and Theoretical

Implications. *Journal of Management*, *44*(1), 89-130. https://doi.org/10.1177/0149206317729027

Bilgili, T. V., Kedia, B. L., & Bilgili, H. (2016). Exploring the influence of resource environments on absorptive capacity development: The case of emerging market firms. *Journal of World Business*, *51*(5), 700-712. https://doi.org/10.1016/j.jwb.2016.07.008

Blomkvist, K., Kappen, P., & Zander, I. (2019). Who is in and who is out? Integration of technological knowledge in the multinational corporation. *Industrial and Corporate Change*, *28*(3), 437-457. https://doi.org/10.1093/icc/dty024

Boateng, A., Du, M., Bi, X. G., & Lodorfos, G. (2019). Cultural distance and value creation of cross-border M&A: The moderating role of acquirer characteristics. *International Review of Financial Analysis*, *63*, 285-295. https://doi.org/10.1016/j.irfa.2018.12.009

Bowen, H. P., & Wiersema, M. F. (2004). Modeling Limited Dependent Variables: Methods and Guidelines for Researchers in Strategic Management. *Research Methodology in Strategy and Management*, *1*(04), 87-134. https://doi.org/10.1016/S1479-8387(04)01104-X

Bruno, R. L., Crescenzi, R., Estrin, S., & Petralia, S. (2022). Multinationals, innovation, and institutional context: IPR protection and distance effects. *Journal of International Business Studies*, *53*(9), 1945-1970. https://doi.org/10.1057/s41267-021-00452-z

Bu, J., Tang, Y., Luo, Y., & Li, C. (2023). Learning from inbound foreign acquisitions for outbound expansion by emerging market MNEs. *Journal of International Business Studies*, *54*(5), 852-886. https://doi.org/10.1057/s41267-022-00583-x

Buckley, P. J., Cavusgil, S. T., Elia, S., & Munjal, S. (2023). The evolution of emerging economy multinationals. *Journal of Business Research*, *160*, 1-10. https://doi.org/10.1016/j.jbusres.2023.113746

Buckley, P. J., Clegg, L. J., Cross, A. R., Liu, X., Voss, H., & Zheng, P. (2007). The determinants of Chinese outward foreign direct investment. *Journal of International Business Studies*, *38*(4), 499-518. https://doi.org/10.1057/palgrave.jibs.8400277

Buckley, P. J., Cui, L., Chen, L., Li, Y., & Choi, Y. (2023). Following their predecessors' journey? A review of EMNE studies and avenues for interdisciplinary inquiry. *Journal of World Business*, *58*(2), 1-18. https://doi.org/10.1016/j.jwb.2022.101422

Buckley, P. J., Doh, J. P., & Benischke, M. H. (2017). Towards a renaissance in international business research? Big questions, grand challenges, and the future of IB scholarship. *Journal of International Business Studies*, *48*(9), 1045-1064. https://doi.org/10.1057/s41267-017-0102-z

Buckley, P. J., Elia, S., & Kafouros, M. (2014). Acquisitions by emerging market multinationals: Implications for firm performance. *Journal of World Business*, *49*(4), 611-632. https://doi.org/10.1016/j.jwb.2013.12.013

Campagnolo, D., & Vincenti, G. (2022). Cross-border M&As: The impact of cultural friction and CEO change on the performance of acquired companies. *Journal of International Management*, *28*(4), 1-20. https://doi.org/10.1016/j.intman.2022.100942

Campbell, J. T., Eden, L., & Miller, S. R. (2012). Multinationals and corporate social responsibility in host countries: Does distance matter. *Journal of International Business Studies*, *43*(1), 84-106. https://doi.org/10.1057/jibs.2011.45

Cao, M., & Alon, I. (2021). Overcoming the liability of foreignness – A new perspective on Chinese MNCs. *Journal of Business Research*, *128*, 611-626. https://doi.org/10.1016/j.jbusres.2020.11.017

Castaldi, S., Gubbi, S. R., Kunst, V. E., & Beugelsdijk, S. (2019). Business group affiliation and foreign subsidiary performance. *Global Strategy Journal*, *9*(4), 595-617. https://doi.org/10.1002/gsj.1357

Castellani, D., & Lavoratori, K. (2020). The lab and the plant: Offshore R&D and co-location with production activities. *Journal of International Business Studies*, *51*(1), 121-137. https://doi.org/10.1057/s41267-019-00255-3

Chakrabarti, R., Gupta-Mukherjee, S., & Jayaraman, N. (2009). Mars-Venus marriages: Culture and cross-border M & A. *Journal of International Business Studies*, *40*(2), 216-236. https://doi.org/10.1057/jibs.2008.58

Chakravarty, D. (2018). *Foreign Direct Investment in Global Cities and Co-Ethnic Clusters: Foreign Direct Investment in Global Cities and Co-Ethnic Clusters: Characteristics, Performance, and Survival.* [Doctoral dissertation, The University of Western Ontario, Canada]. https://ir.lib.uwo.ca/etd/5505

Chakravarty, D., Goerzen, A., Musteen, M., & Ahsan, M. (2021). Global cities: A multi-disciplinary review and research agenda. *Journal of World Business*, *56*(3), 101182-101182. https://doi.org/10.1016/j.jwb.2020.101182

Chang, S. J., Chung, J., & Jungbien Moon, J. (2013). When do foreign subsidiaries outperform local firms? *Journal of International Business Studies*, *44*(8), 853-860. https://doi.org/10.1057/jibs.2013.35

Chen, D., Gao, H., & Ma, Y. (2021). Human capital-driven acquisition: Evidence from the inevitable disclosure doctrine. *Management Science*, *67*(8), 4643-4664. https://doi.org/10.1287/mnsc.2020.3707

Chen, L., Li, Y., & Fan, D. (2021). Who are the most inclined to learn? Evidence from Chinese multinationals' internationalization in the European Union. *Asia Pacific Journal of Management*, *38*(1), 231-257. https://doi.org/10.1007/s10490-018-9605-9

Chen, W. (2011). The effect of investor origin on firm performance: Domestic and foreign direct investment in the United States. *Journal of International Economics*, *83*(2), 219-228. https://doi.org/10.1016/j.jinteco.2010.11.005

Child, J., & Rodrigues, S. B. (2005). The Internationalization of Chinese Firms: A Case for Theoretical Extension? *Management and Organization Review*, *1*(3), 381-410. https://doi.org/10.1111/j.1740-8784.2005.0020a.x

Cho, S. Y., & Arthurs, J. D. (2018). The influence of alliance experience on acquisition premiums and post-acquisition performance. *Journal of Business Research*, *88*, 1-10. https://doi.org/10.1016/j.jbusres.2018.02.022

Choi, S. B., Lee, S. H., & Williams, C. (2011). Ownership and firm innovation in a transition economy: Evidence from China. *Research Policy*, *40*(3), 441-452. https://doi.org/10.1016/j.respol.2011.01.004

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/Correlation analysis for the behavioral sciences*. Routledge.

Colman, H. L., Grøgaard, B., & Stensaker, I. G. (2022). Organizational identity work in MNE subsidiaries: Managing dual embeddedness. *Journal of International Business Studies*, *53*(9), 1997-2022. https://doi.org/10.1057/s41267-022-00563-1

Contractor, F., Yang, Y., & Gaur, A. S. (2016). Firm-specific intangible assets and subsidiary profitability: The moderating role of distance, ownership strategy and subsidiary experience. *Journal of World Business*, *51*(6), 950-964. https://doi.org/10.1016/j.jwb.2016.09.002

Cooke, F. L., Wu, G., Zhou, J., Zhong, C., & Wang, J. (2018). Acquiring global footprints: Internationalization strategy of Chinese multinational enterprises and human resource implications. *Journal of Business Research*, *93*, 184-201. https://doi.org/10.1016/j.jbusres.2018.04.012

Cozza, C., Rabellotti, R., & Sanfilippo, M. (2015). The impact of outward FDI on the performance of Chinese firms. *China Economic Review*, *36*, 42-57. https://doi.org/10.1016/j.chieco.2015.08.008

Cuervo-Cazurra, A. (2012). Extending theory by analyzing developing country multinational companies: Solving the Goldilocks debate. *Global Strategy Journal*, *2*(3), 153-167. https://doi.org/10.1111/j.2042-5805.2012.01039.x

Cuervo-Cazurra, A., & Ramamurti, R. (2014). *Understanding Multinationals from Emerging Markets*. Cambridge University Press, Cambridge.

Cui, L., Gao, Q., Guo, J., & Ma, P. (2022). OFDI performance of EMNEs: A review and recommendations for future research. *Journal of International Management*, *28*(3), 1-16. https://doi.org/10.1016/j.intman.2022.100967

Cui, L., & Jiang, F. (2012). State ownership effect on firms' FDI ownership decisions under institutional pressure: A study of Chinese outward-investing firms. *Journal of International Business Studies*, *43*(3), 264-284. https://doi.org/10.1057/jibs.2012.1

Cui, L., Meyer, K. E., & Hu, H. W. (2014). What drives firms' intent to seek strategic assets by foreign direct investment? A study of emerging economy firms. *Journal of World Business*, *49*(4), 488-501. https://doi.org/10.1016/j.jwb.2013.12.003

Cui, L., & Xu, Y. (2019). Outward FDI and profitability of emerging economy firms: Diversifying from home resource dependence in early stage internationalization. *Journal of World Business*, *54*(4), 372-386. https://doi.org/10.1016/j.jwb.2019.04.002

Cui, V., Vertinsky, I., Wang, Y., & Zhou, D. (2023). Decoupling in international business: The 'new' vulnerability of globalization and MNEs' response strategies. *Journal of International Business Studies*, 1-15. https://doi.org/10.1057/s41267-023-00602-5

De Beule, F., & Sels, A. (2016). Do innovative emerging market cross-border acquirers create more shareholder value? Evidence from India. *International Business Review*, *25*(2), 604-617. https://doi.org/10.1016/j.ibusrev.2015.09.008

De Beule, F., & Somers, D. (2017). The impact of international R&D on home-country R&D for Indian multinationals. *Transnational Corporations*, *24*(1), 27-55. https://doi.org/10.18356/f8785646-en

Delgado, J. P., Gomes, E., & Neves, P. (2023). Not All Friends Are Alike: A Categorization of Friendly Acquisitions Integrating the Acquired Firm Profile with the Acquirer's Approach. *British Journal of Management*, 1-19. https://doi.org/10.1111/1467-8551.12725

Demmou, L., Stefanescu, I., & Arquie, A. (2019). Productivity growth and finance: The role of intangible assets-a sector level analysis. *OECD Economic Department* https://doi.org/10.1787/e26cae57-en

Deng, P. (2009). Why do Chinese firms tend to acquire strategic assets in international expansion? *Journal of World Business*, *44*(1), 74-84. https://doi.org/10.1016/j.jwb.2008.03.014

Deng, P. (2012). The Internationalization of Chinese Firms: A Critical Review and Future Research*. *International Journal of Management Reviews*, *14*(4), 408-427. https://doi.org/10.1111/j.1468-2370.2011.00323.x

Desyllas, P., & Hughes, A. (2010). Do high technology acquirers become more innovative? *Research Policy*, *39*(8), 1105-1121. https://doi.org/10.1016/j.respol.2010.05.005

Dhir, S., Ongsakul, V., Ahmed, Z. U., & Rajan, R. (2020). Integration of knowledge and enhancing competitiveness: A case of acquisition of Zain by Bharti Airtel. *Journal of Business Research*, *119*, 674-684. https://doi.org/10.1016/j.jbusres.2019.02.056

Dikova, D. (2009). Performance of foreign subsidiaries: Does psychic distance matter? *International Business Review*, *18*(1), 38-49. https://doi.org/10.1016/j.ibusrev.2008.11.001

Du, J., & Zhao, E. Y. (2023). International expansion and home-country resource acquisition: A signaling perspective of emerging-market firms' internationalization. *Journal of International Business Studies*. https://doi.org/10.1057/s41267-023-00624-z

Dunning, J. H. (1977). Trade, location of economic activity and the MNE: A search for an eclectic approach. In B. Ohlin, P. Hesselborn, & P. M. Wijkman (Eds.), *The international allocation of economic activity*. Palgrave Macmillan, London https://doi.org/10.1007/978-1-349-03196-2_38

Dunning, J. H., & Lundan, S. M. (2008). Institutions and the OLI paradigm of the multinational enterprise. *Asia Pacific Journal of Management*, *25*(4), 573-593. https://doi.org/10.1007/s10490-007-9074-z

Eden, L., & Miller, S. R. (2004). Distance matters: Liability of foreignness, institutional distance and ownership strategy. In *Theories of the Multinational Enterprise: Diversity, Complexity and Relevance*. Emerald Group Publishing Limited. https://doi.org/10.1016/S0747-7929(04)16010-1

Elia, S., Kafouros, M., & Buckley, P. J. (2020). The role of internationalization in enhancing the innovation performance of Chinese EMNEs: A geographic relational approach. *Journal of International Management*, *26*(4), 1-20. https://doi.org/10.1016/j.intman.2020.100801

Enderwick, P., & Buckley, P. J. (2021). The role of springboarding in economic catch-up: A theoretical perspective. *Journal of International Management*, *27*(3), 1-36. https://doi.org/10.1016/j.intman.2021.100832

Erel, I., Jang, Y., & Weisbach, M. S. (2015). Do acquisitions relieve target firms' financial constraints? *Journal of Finance*, *70*(1), 289-328. https://doi.org/10.1111/jofi.12155

Estrin, S., Meyer, K. E., & Pelletier, A. (2018). Emerging Economy MNEs: How does home country munificence matter? *Journal of World Business*, *53*(4), 514-528. https://doi.org/10.1016/j.jwb.2018.02.004

Figueiredo, P. N. (2011). The Role of Dual Embeddedness in the Innovative Performance of MNE Subsidiaries: Evidence from Brazil. *Journal of Management Studies*, *48*(2), 417-440. https://doi.org/10.1111/j.1467-6486.2010.00965.x

Fischer, G. H. (1973). The linear logistic test model as an instrument in educational research. *Acta Psychologica*, *37*(6), 359-374.

Fjellström, D., Bai, W., Oliveira, L., & Fang, T. (2023). Springboard internationalisation in times of geopolitical tensions. *International Business Review, 32*(6), 102144. https://doi.org/10.1016/j.ibusrev.2023.102144

Fu, X., Sun, Z., & Ghauri, P. N. (2018). Reverse knowledge acquisition in emerging market MNEs: The experiences of Huawei and ZTE. *Journal of Business Research*, *93*, 202-215. https://doi.org/10.1016/j.jbusres.2018.04.022

Gammeltoft, P., Filatotchev, I., & Hobdari, B. (2012). Emerging multinational companies and strategic fit: A contingency framework and future research agenda. *European Management Journal*, *30*(3), 175-188. https://doi.org/10.1016/j.emj.2012.03.007

Gaur, A., Malhotra, S., & Zhu, P. C. (2022). Institutional distance and ownership in foreign acquisitions. *Journal of International Management*, *28*(2), 100917. https://doi.org/10.1016/j.intman.2021.100917

Goerzen, A., Asmussen, C. G., & Nielsen, B. B. (2013). Global cities and multinational enterprise location strategy. *Journal of International Business Studies*, *44*(5), 427-450. https://doi.org/10.1057/jibs.2013.11

Goodman-Bacon, A. (2021). Difference-in-differences with variation in treatment timing. *Journal of Econometrics*, *225*(2), 254-277. https://doi.org/10.1016/j.jeconom.2021.03.014

Gu, Q., Ju, C., & Bao, F. (2020). The Cross-Border Mergers and Acquisitions of Local State-Owned Enterprises: The Role of Home Country Government Involvement. *Sustainability*, *12*(7), 1-23. https://doi.org/10.3390/su12073020

Guan, J. C., Mok, C. K., Yam, R. C. M., Chin, K. S., & Pun, K. F. (2006). Technology transfer and innovation performance: Evidence from Chinese firms. *Technological Forecasting and Social Change*, *73*(6), 666-678. https://doi.org/10.1016/j.techfore.2005.05.009

Gubbi, S. R., Aulakh, P. S., Ray, S., Sarkar, M. B., & Chittoor, R. (2010). Do international acquisitions by emerging-economy firms create shareholder value the case of Indian firms. *Journal of International Business Studies*, *41*(3), 397-418. https://doi.org/10.1057/jibs.2009.47

Guimón, J., Chaminade, C., Maggi, C., & Salazar-Elena, J. C. (2018). Policies to Attract R&D-related FDI in Small Emerging Countries: Aligning Incentives With Local Linkages and Absorptive Capacities in Chile. *Journal of International Management*, *24*(2), 165-178. https://doi.org/10.1016/j.intman.2017.09.005

Guo, W., & Clougherty, J. A. (2022). Cross-border acquisition activity by Chinese multinationals and domestic-productivity upgrading. *Asia Pacific Journal of Management*, *39*(2), 659-695. https://doi.org/10.1007/s10490-020-09742-w

Hansen, U. E., Fold, N., & Hansen, T. (2016). Upgrading to lead firm position via international acquisition: learning from the global biomass power plant industry. *Journal of Economic Geography*, *16*(1), 131-153. https://doi.org/10.1093/jeg/lbu050

Hashai, N., & Buckley, P. J. (2014). Is Competitive Advantage a Necessary Condition for the Emergence of the Multinational Enterprise? *Global Strategy Journal*, *4*(1), 35-48. https://doi.org/10.1111/j.2042-5805.2013.01069.x

He, S., Khan, Z., & Shenkar, O. (2018). Subsidiary capability upgrading under emerging market acquirers. *Journal of World Business*, *53*(2), 248-262. https://doi.org/10.1016/j.jwb.2017.11.006

Hendriks, G., Slangen, A. H. L., & Heugens, P. P. M. A. R. (2023). How cross-cultural experience shapes emerging-market multinationals' domestic performance after a cross-border acquisition. *Long Range Planning*, *56*(4), 1-20. https://doi.org/10.1016/j.lrp.2023.102342

Hennart, J.-F. (2012). Emerging market multinationals and the theory of the multinational enterprise. *Global Strategy Journal*, *2*(3), 168-187. https://doi.org/10.1111/j.2042-5805.2012.01038.x

Hernandez, E., & Guillén, M. F. (2018). What's theoretically novel about emerging-market multinationals? *Journal of International Business Studies*, *49*(1), 24-33. https://doi.org/10.1057/s41267-017-0131-7

Hertenstein, P., & Alon, I. (2021). A learning portal model of emerging markets multinationals. *Global Strategy Journal*, *12*(1), 134-162. https://doi.org/10.1002/gsj.1400

Hertenstein, P., Sutherland, D., & Anderson, J. (2015). Internationalization within networks: Exploring the relationship between inward and outward FDI in China's auto components industry. *Asia Pacific Journal of Management*, *34*(1), 69-96. https://doi.org/10.1007/s10490-015-9422-3

House, R., Hanges, P., Javidan, M., Dorfman, P., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Sage publications.

Hu, T., Natarajan, S., & Delios, A. (2021). Sister cities, cross-national FDI, and the subnational FDI location decision. *Journal of International Business Studies*, *52*(7), 1279-1301. https://doi.org/10.1057/s41267-021-00409-2

Hutzschenreuter, T., & Harhoff, P. L. (2020). National capital city location and subsidiary portfolio expansion: The negative effect of geographic distance to the capital city at inception on the speed of subsequent investments. *Journal of International Business Studies*, *51*(7), 1107-1132. https://doi.org/10.1057/s41267-020-00305-1

Jindra, B., Hassan, S. S., & Cantner, U. (2016). What does location choice reveal about knowledge-seeking strategies of emerging market multinationals in the EU? *International Business Review*, *25*(1), 204-220. https://doi.org/10.1016/j.ibusrev.2014.11.008

Johanson, J., & Vahlne, J. E. (2009). The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, *40*(9), 1411-1431. https://doi.org/10.1057/jibs.2009.24

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2011). The worldwide governance indicators: Methodology and analytical issues. *Hague Journal on the Rule of Law*, *3*(2), 220-246. https://doi.org/10.1017/S1876404511200046

Kerr, W. R., & Robert-Nicoud, F. (2020). Tech clusters. *Journal of Economic Perspectives*, *34*(3), 50-76. https://doi.org/10.1257/jep.34.3.50

Kim, C., Pantzalis, C., & Chul Park, J. (2012). Political geography and stock returns: The value and risk implications of proximity to political power. *Journal of Financial Economics*, *106*(1), 196-228. https://doi.org/10.1016/j.jfineco.2012.05.007

Kogut, B., & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies*, *19*(3), 411-432. https://doi.org/10.1057/palgrave.jibs.8490394

Kostova, T., & Zaheer, S. (1999). Organizational legitimacy under conditions of complexity: The case of the multinational enterprise. *Academy of Management Review*, *24*(1), 64-81. https://doi.org/10.5465/AMR.1999.1580441

Kratz, A., & Zenglein, M. J. (2023). *Chinese FDI in Europe: 2022 Update*. https://rhg.com/wp-content/uploads/2023/05/MERICS-Rhodium-9May2023.pdf

Kratz, A., Zenglein, M. J., Sebastian, G., & Witzke, M. (2021). *Chinese FDI in Europe: 2020 update*. https://merics.org/en/report/chinese-fdi-europe-2021-update

Kumar, V., Singh, D., Purkayastha, A., Popli, M., & Gaur, A. (2020). Springboard internationalization by emerging market firms: Speed of first cross-border acquisition. *Journal of International Business Studies*, *51*(2), 172-193. https://doi.org/10.1057/s41267-019-00266-0

Lai, H., O'Hara, S., & Wysoczanska, K. (2015). Rationale of internationalization of China's national oil companies: seeking natural resources, strategic assets or sectoral specialization? *Asia Pacific Business Review*, *21*(1), 77-95. https://doi.org/10.1080/13602381.2014.939896

Lai, Y. L., Lin, F. J., & Lin, Y. H. (2015). Factors affecting firm's R&D investment decisions. *Journal of Business Research*, *68*(4), 840-844. https://doi.org/10.1016/j.jbusres.2014.11.038

Lewis, Y., & Bozos, K. (2019). Mitigating post-acquisition risk: the interplay of cross-border uncertainties. *Journal of World Business*, *54*(5), 1-16. https://doi.org/10.1016/j.jwb.2019.100996

Leydesdorff, L., & Zhou, P. (2014). Measuring the knowledge-based economy of China in terms of synergy among technological, organizational, and geographic attributes of firms. *Scientometrics*, *98*(3), 1703-1719. https://doi.org/10.1007/s11192-013-1179-1

Li, D., & Valentini, G. (2023). When are acquisitions a viable catch-up strategy? Some empirical evidence from China. *Long Range Planning*, *56*(1), 1-20. https://doi.org/10.1016/j.lrp.2022.102265

Li, J., & Fleury, M. T. L. (2019). Overcoming the liability of outsidership for emerging market MNEs: A capability-building perspective. *Journal of International Business Studies*, *51*(1), 23-37. https://doi.org/10.1057/s41267-019-00291-z

Li, J., Li, P., & Wang, B. (2016). Do cross-border acquisitions create value? Evidence from overseas acquisitions by Chinese firms. *International Business Review*, *25*(2), 471-483. https://doi.org/10.1016/j.ibusrev.2015.08.003

Li, J., & Oh, C. H. (2016). Research on emerging-market multinational enterprises: Extending Alan Rugman's critical contributions. *International Business Review*, *25*(3), 776-784. https://doi.org/10.1016/j.ibusrev.2016.01.017

Li, L., Liu, X., Yuan, D., & Yu, M. (2017). Does outward FDI generate higher productivity for emerging economy MNEs? – Micro-level evidence from Chinese manufacturing firms. *International Business Review*, *26*(5), 839-854. https://doi.org/10.1016/j.ibusrev.2017.02.003

Li, P., & Bathelt, H. (2018). Location strategy in cluster networks. *Journal of International Business Studies*, *49*(8), 967-989. https://doi.org/10.1057/s41267-017-0088-6

Li, P. P., Prashantham, S., Zhou, A. J., & Zhou, S. S. (2021). Compositional springboarding and EMNE evolution. *Journal of International Business Studies*, *53*, 754-766. https://doi.org/10.1057/s41267-020-00391-1

Li, S., Easterby-Smith, M., Lyles, M. A., & Clark, T. (2016). Tapping the power of local knowledge: A local-global interactive perspective. *Journal of World Business*, *51*(4), 641-653. https://doi.org/10.1016/j.jwb.2016.04.001

Liang, Y., Giroud, A., & Rygh, A. (2022). Strategic asset-seeking acquisitions, technological gaps, and innovation performance of Chinese multinationals. *Journal of World Business*, *57*(4), 1-14. https://doi.org/10.1016/j.jwb.2022.101325

Liefner, I., Si, Y. f., & Schäfer, K. (2019). A latecomer firm's R&D collaboration with advanced country universities and research institutes: The case of Huawei in Germany. *Technovation*, *86-87*, 3-14. https://doi.org/10.1016/j.technovation.2019.03.002

Liu, Q., Lu, R., & Qiu, L. D. (2017). Foreign Acquisitions and Target Firms' Performance in China. *World Economy*, *40*(1), 2-20. https://doi.org/10.1111/twec.12428

Liu, X., & Giroud, A. (2016). International knowledge flows in the context of emerging-economy MNEs and increasing global mobility. *International Business Review*, *25*(1), 125-129. https://doi.org/10.1016/j.ibusrev.2015.07.008

Liu, Y., & Woywode, M. (2013). Light-touch integration of Chinese cross-border M&A: The influences of culture and absorptive capacity. *Thunderbird international business review*, *55*(4), 469-483.

Lorenzen, M., & Mudambi, R. (2013). Clusters, connectivity and catch-up: Bollywood and bangalore in the global economy. *Journal of Economic Geography*, *13*(3), 501-534. https://doi.org/10.1093/jeg/lbs017

Lorenzen, M., Mudambi, R., & Schotter, A. (2020). International connectedness and local disconnectedness: MNE strategy, city-regions and disruption. *Journal of International Business Studies*, *51*(8), 1199-1222. https://doi.org/10.1057/s41267-020-00339-5

Lu, J., Liu, X., Wright, M., & Filatotchev, I. (2014). International experience and FDI location choices of Chinese firms: The moderating effects of home country government support and host country institutions. *Journal of International Business Studies*, *45*(4), 428-449. https://doi.org/10.1057/jibs.2013.68

Luo, Y., & Tung, R. L. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies*, *38*(4), 481-498. https://doi.org/10.1057/palgrave.jibs.8400275

Luo, Y., & Tung, R. L. (2018). A general theory of springboard MNEs. *Journal of International Business Studies*, *49*(2), 129-152. https://doi.org/10.1057/s41267-017-0114-8

Luo, Y., & Van Assche, A. (2023). The rise of techno-geopolitical uncertainty: Implications of the United States CHIPS and Science Act. *Journal of International Business Studies*, 1-18. https://doi.org/10.1057/s41267-023-00620-3

Luo, Y., & Witt, M. A. (2021). Springboard MNEs under de-globalization. *Journal of International Business Studies*, 1-14. https://doi.org/10.1057/s41267-021-00423-4

Madhok, A., & Keyhani, M. (2012). Acquisitions as Entrepreneurship: Asymmetries, Opportunities and the Internationalization of Multinationals from Emerging Economies. *Global Strategy Journal*, *40*, 26-40. https://doi.org/10.2139/ssrn.1578907

Malhotra, S., & Gaur, A. S. (2014). Spatial geography and control in foreign acquisitions. *Journal of International Business Studies*, *45*(2), 191-210. https://doi.org/10.1057/jibs.2013.50

Mandják, T., Wimmer, Á., Naffa, H., & Balpataki, L. (2009). How do finance and accounting perceive relationship value? 25th IMP Conference in Marseilles,

Marano, V., Tashman, P., & Kostova, T. (2017). Escaping the iron cage: Liabilities of origin and CSR reporting of emerging market multinational enterprises. *Journal of International Business Studies*, *48*(3), 386-408. https://doi.org/10.1057/jibs.2016.17

Marchand, M. (2017). Do All Emerging-Market Firms Partner with Their Acquisitions in Advanced Economies? A Comparative Study of 25 Emerging Multinationals'

Acquisitions in France. *Thunderbird International Business Review*, *59*(3), 297-312. https://doi.org/10.1002/tie.21846

Mathews, J. A. (2006). Dragon multinationals: New players in 21st century globalization. *Asia Pacific Journal of Management*, *23*(1), 5-27. https://doi.org/10.1007/s10490-006-6113-0

Mathews, J. A. (2017). Dragon multinationals powered by linkage, leverage and learning: A review and development. *Asia Pacific Journal of Management*, *34*(4), 769-775. https://doi.org/10.1007/s10490-017-9543-y

Meyer, K. (2015). What is "strategic asset seeking FDI"? *Multinational Business Review*, *23*(1), 57-66. https://doi.org/10.1108/MBR-02-2015-0007

Meyer, K. E., Li, C., & Schotter, A. P. J. (2020). Managing the MNE subsidiary: Advancing a multi-level and dynamic research agenda. *Journal of International Business Studies, 51*,538-576. https://doi.org/10.1057/s41267-020-00318-w

Meyer, K. E., Mudambi, R., & Narula, R. (2011). Multinational Enterprises and Local Contexts: The Opportunities and Challenges of Multiple Embeddedness. *Journal of Management Studies*, *48*(2), 235-252. https://doi.org/10.1111/j.1467-6486.2010.00968.x

Meyer, K. E., Wright, M., & Pruthi, S. (2009). Research notes and commentaries managing knowledge in foreign entry strategies: A resource-based analysis. *Strategic Management Journal*, *30*(5), 557-574. https://doi.org/10.1002/smj.756

Minbaeva, D., Fitzsimmons, S., & Brewster, C. (2021). Beyond the double-edged sword of cultural diversity in teams: Progress, critique, and next steps. *Journal of International Business Studies*, *52*(1), 45-55. https://doi.org/10.1057/s41267-020-00390-2

Mudambi, R., Piscitello, L., & Rabbiosi, L. (2014). Reverse Knowledge Transfer in MNEs: Subsidiary Innovativeness and Entry Modes. *Long Range Planning*, *47*(1-2), 49-63. https://doi.org/10.1016/j.lrp.2013.08.013

Munjal, S., Bhasin, N., Nandrajog, D., & Kundu, S. (2022). Examining the evolution of emerging market multinational enterprises' competitive advantages: Evidence from India. *Journal of Business Research*, *145*, 732-744. https://doi.org/10.1016/j.jbusres.2022.03.027

Nair, S. R., Demirbag, M., Mellahi, K., & Pillai, K. G. (2018). Do Parent Units Benefit from Reverse Knowledge Transfer? *British Journal of Management*, *29*(3), 428-444. https://doi.org/10.1111/1467-8551.12234

Narula, R. (2014). Exploring the Paradox of Competence-creating Subsidiaries: Balancing Bandwidth and Dispersion in MNEs. *Long Range Planning*, *47*(1-2), 4-15. https://doi.org/10.1016/j.lrp.2013.10.006

Nelaeva, A., & Nilssen, F. (2022). Contrasting knowledge development for internationalization among emerging and advanced economy firms: A review and future research. *Journal of Business Research*, *139*, 232-256. https://doi.org/10.1016/j.jbusres.2021.09.053

Nell, P. C., Ambos, B., & Schlegelmilch, B. B. (2011). The MNC as an externally embedded organization: An investigation of embeddedness overlap in local subsidiary networks. *Journal of World Business*, *46*(4), 497-505. https://doi.org/10.1016/j.jwb.2010.10.010

Nielsen, B. B., Asmussen, C. G., & Weatherall, C. D. (2017). The location choice of foreign direct investments: Empirical evidence and methodological challenges. *Journal of World Business, 52*(1), 62-82. https://doi.org/10.1016/j.jwb.2016.10.006

North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge University Press. https://doi.org/DOI: 10.1017/CBO9780511808678

Papanastassiou, M., Pearce, R., & Zanfei, A. (2020). Changing perspectives on the internationalization of R&D and innovation by multinational enterprises: A review of the literature. *Journal of International Business Studies*, 51, 623-664. https://doi.org/10.1057/s41267-019-00258-0

Pereira, V., Temouri, Y., Budhwar, P., & Tarba, S. (2021). Cross-border acquisition performance of emerging market multinational enterprises: The moderating role of state-ownership and acquisition experience. *Long Range Planning*, *54*(6), 1-16. https://doi.org/10.1016/j.lrp.2021.102107

Petersen, B., & Seifert, R. E. (2014). Strategic asset seeking by EMNEs: A matter of liabilities of foreignness - Or outsidership? *Progress in International Business Research*, *9*, 375-398. https://doi.org/10.1108/S1745-886220140000009015

Piero, M., Scott, S., & Harbir, S. (1998). National Cultural Distance and Cross-Border Acquisition Performance. *Journal of International Business Studies*, *29*(1), 137-158. https://doi.org/10.1057/palgrave.jibs.8490029

Piperopoulos, P., Wu, J., & Wang, C. (2018). Outward FDI, location choices and innovation performance of emerging market enterprises. *Research Policy*, *47*(1), 232-240. https://doi.org/10.1016/j.respol.2017.11.001

Popli, M., Akbar, M., Kumar, V., & Gaur, A. (2016). Reconceptualizing cultural distance: The role of cultural experience reserve in cross-border acquisitions. *Journal of World Business*, *51*(3), 404-412. https://doi.org/10.1016/j.jwb.2015.11.003

Prud'homme, D., & Tong, T. W. (2023). Rethinking firm-specific advantages from intellectual property rights: Boundary conditions for MNEs. *Journal of International Business Studies, 55*(1), 91-109. https://doi.org/10.1057/s41267-023-00631-0

Ramamurti, R. (2012). What is really different about emerging market multinationals? *Global Strategy Journal*, *2*(1), 41-47. https://doi.org/10.1002/gsj.1025

Ramamurti, R., & Hillemann, J. (2018). What is "Chinese" about Chinese multinationals? *Journal of International Business Studies*, *49*(1), 34-48. https://doi.org/10.1057/s41267-017-0128-2

Ramamurti, R., & Williamson, P. J. (2019). Rivalry between emerging-market MNEs and developed-country MNEs: Capability holes and the race to the future. *Business Horizons*, *62*(2), 157-169. https://doi.org/10.1016/j.bushor.2018.11.001

Rehman, N. U., Hysa, E., & Mao, X. (2020). Does public R&D complement or crowd-out private R&D in pre and post economic crisis of 2008? *Journal of Applied Economics*, *23*(1), 349-371. https://doi.org/10.1080/15140326.2020.1762341

Reus, T. H., & Lamont, B. T. (2009). The double-edged sword of cultural distance in international acquisitions. *Journal of International Business Studies*, *40*(8), 1298-1316. https://doi.org/10.1057/jibs.2009.25

Ribeiro, S. P., Menghinello, S., & De Backer, K. (2010). The OECD ORBIS database: Responding to the need for firm-level micro-data in the OECD.

Rosenbusch, N., Gusenbauer, M., Hatak, I., Fink, M., & Meyer, K. E. (2019). Innovation Offshoring, Institutional Context and Innovation Performance: A Meta-Analysis. *Journal of Management Studies*, *56*(1), 203-233. https://doi.org/10.1111/joms.12407

Roser, M. (2014). Human development index (HDI). *Our World in Data*.

Rui, H., & Yip, G. S. (2008). Foreign acquisitions by Chinese firms: A strategic intent perspective. *Journal of World Business*, *43*(2), 213-226. https://doi.org/10.1016/j.jwb.2007.11.006

Sassen, S. (1991). *The global city: New York, London, Tokyo*. Princeton University Press. https://doi.org/10.2307/2152688

Sassen, S. (1996). Whose city is it? Globalization and the formation of new claims. *Public Culture*, 8, 205-224.

Scalera, V. G., Mukherjee, D., & Piscitello, L. (2020). Ownership strategies in knowledge-intensive cross-border acquisitions: Comparing Chinese and Indian MNEs. *Asia Pacific Journal of Management*, *37*(1), 155-185. https://doi.org/10.1007/s10490-018-9616-6

Schaefer, K. J. (2020). Catching up by hiring: The case of Huawei. *Journal of International Business Studies*, *51*(9), 1500-1515. https://doi.org/10.1057/s41267-019-00299-5

Schaefer, K. J., & Liefner, I. (2017). Offshore versus domestic: Can EM MNCs reach higher R&D quality abroad? *Scientometrics*, *113*(3), 1349-1370. https://doi.org/10.1007/s11192-017-2533-5

Schweizer, D., Walker, T., & Zhang, A. (2019). Cross-border acquisitions by Chinese enterprises: The benefits and disadvantages of political connections. *Journal of Corporate Finance*, *57*, 63-85. https://doi.org/10.1016/j.jcorpfin.2017.12.023

Sears, J. B. (2018). Post-acquisition integrative versus independent innovation: A story of dueling success factors. *Research Policy*, *47*(9), 1688-1699. https://doi.org/10.1016/j.respol.2018.06.003

Shi, X., Sutherland, D., Williams, C., & Rong, K. (2021). Chinese MNE acquisition of unrelated foreign businesses: The role of diversified business group affiliation, private ownership and strategic asset seeking. *Journal of Business Research*, *129*, 145-156. https://doi.org/10.1016/j.jbusres.2021.02.036

Stahl, G. K., & Tung, R. L. (2015). Towards a more balanced treatment of culture in international business studies: The need for positive cross-cultural scholarship. In *Journal of International Business Studies*, *46*, 391-414. https://doi.org/10.1057/jibs.2014.68

Stendahl, E., Schriber, S., & Tippmann, E. (2021). Control changes in multinational corporations: Adjusting control approaches in practice. *Journal of International Business Studies*, *52*(3), 409-431. https://doi.org/10.1057/s41267-020-00371-5

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of management review*, *20*(3), 571-610. https://doi.org/10.2307/258788

Sun, S. L., Peng, M. W., Ren, B., & Yan, D. (2012). A comparative ownership advantage framework for cross-border M&As: The rise of Chinese and Indian MNEs. *Journal of World Business*, *47*(1), 4-16. https://doi.org/10.1016/j.jwb.2010.10.015

Sutherland, D., Anderson, J., & Hertenstein, P. (2018). Is the Strategic Asset Seeking Investment Proclivity of Chinese MNEs Different to that of Developed Market MNEs? A Comparative Analysis of Location Choice and Orientation. *Management International Review*, *58*(6), 911-933. https://doi.org/10.1007/s11575-017-0339-6

Sutherland, D., Anderson, J., & Hu, Z. (2020). A comparative analysis of location and non-location-bounded strategic asset seeking in emerging and developed market MNEs: An application of new internalization theory. *International Business Review*, *29*(2), 101635-101635. https://doi.org/10.1016/j.ibusrev.2019.101635

Szücs, F. (2014). M&A and R&D: Asymmetric Effects on acquirers and targets? *Research Policy*, *43*(7), 1264-1273. https://doi.org/10.1016/j.respol.2014.03.007

Tan, H., & Mathews, J. A. (2015). Accelerated internationalization and resource leverage strategizing: The case of Chinese wind turbine manufacturers. *Journal of World Business*, *50*(3), 417-427. https://doi.org/10.1016/j.jwb.2014.05.005

Tang, L., & Zhao, M. (2023). Light-touch integration: A study on cross-border acquisitions by emerging market multinationals. *Strategic Management Journal*, *44*(11), 2688-2723, https://doi.org/10.1002/smj.3508

Tang, R. W., & Buckley, P. J. (2022). Outward foreign direct investment by emerging market multinationals: The directionality of institutional distance. *Journal of Business Research*, *149*, 314-326. https://doi.org/10.1016/j.jbusres.2022.05.047

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic Capabilities and Strategic Management. *Strategic Management Journal, 18*(7), 509-533. https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z

Thakur-Wernz, P., & Samant, S. (2019). Relationship between international experience and innovation performance: The importance of organizational learning for EMNEs. *Global Strategy Journal*, *9*(3), 378-404. https://doi.org/10.1002/gsj.1183

Thite, M., Wilkinson, A., Budhwar, P., & Mathews, J. A. (2016). Internationalization of emerging Indian multinationals: Linkage, leverage and learning (LLL) perspective. *International Business Review*, *25*(1), 435-443. https://doi.org/10.1016/j.ibusrev.2015.06.006

Torres de Oliveira, R., & Rottig, D. (2018). Chinese acquisitions of developed market firms: Home semi-formal institutions and a supportive partnering approach. *Journal of Business Research*, *93*, 230-241. https://doi.org/10.1016/j.jbusres.2018.04.031

UNCTAD. (2021). World investment report 2021| UNCTAD. *United Nations Conference on Trade and Development.* https://unctad.org/system/files/official-document/wir2021_en.pdf

Vrontis, D., & Christofi, M. (2021). R&D internationalization and innovation: A systematic review, integrative framework and future research directions. *Journal of Business Research*, *128*, 812-823. https://doi.org/10.1016/j.jbusres.2019.03.031

Wang, C., Hong, J., Kafouros, M., & Wright, M. (2012). Exploring the role of government involvement in outward FDI from emerging economies. *Journal of International Business Studies*, *43*(7), 655-676. https://doi.org/10.1057/jibs.2012.18

Wang, C. C., & Wu, A. (2016). Geographical FDI knowledge spillover and innovation of indigenous firms in China. *International Business Review*, *25*(4), 895-906. https://doi.org/10.1016/j.ibusrev.2015.12.004

Wang, S. L., Luo, Y., Lu, X., Sun, J., & Maksimov, V. (2014). Autonomy delegation to foreign subsidiaries: An enabling mechanism for emerging-market multinationals. *Journal of International Business Studies*, *45*(2), 111-130. https://doi.org/10.1057/jibs.2013.40

Wang, T., Gao, J., Jia, Y., & Wang, C. L. (2022). The double-edged sword effect of adaptation strategy on performance: The mediation of legitimacy and synergy. *Journal of Business Research*, *139*, 448-456. https://doi.org/10.1016/j.jbusres.2021.10.004

Wipo. (2020). *Global Innovation Index 2020: Who Will Finance Innovation?*. WIPO.

Wipo. (2021). *Global innovation index 2021*: *World Intellectual Property Organization*. WIPO.

Wu, J., Ma, Z., Liu, Z., & Lei, C. K. (2019). A contingent view of institutional environment, firm capability, and innovation performance of emerging multinational enterprises. *Industrial Marketing Management*, *82*, 148-157. https://doi.org/10.1016/j.indmarman.2019.01.018

Wu, J., Wang, D., & Morschett, D. (2023). Light Touch Goes Where? A Longitudinal Study of the Post-Acquisition Integration Paths Adopted by Chinese Multinational Enterprises. *Journal of International Management,* *29*(5),1-20. https://doi.org/10.1016/j.intman.2023.101063

Wulff, J. N. (2015). Interpreting Results From the Multinomial Logit Model: Demonstrated by Foreign Market Entry. *Organizational Research Methods*, *18*(2), 300-325. https://doi.org/10.1177/1094428114560024

Xu, C., Xiong, Y., Sun, Y., & Liu, Y. (2021). Genetic distance, international experience and the performance of cross-border R&D for EMNEs. *Journal of International Management*, *27*(2), 100853. https://doi.org/10.1016/j.intman.2021.100853

Xu, D., & Shenkar, O. (2002). Institutional Distance and the Multinational Enterprise. *Academy of Management Review, 27*(4), 608-618. https://doi.org/10.5465/amr.2002.7566108

Xu, K., Hitt, M. A., Brock, D., Pisano, V., & Huang, L. S. R. (2021). Country institutional environments and international strategy: A review and analysis of the research. *Journal of International Management*, *27*(1), 100811. https://doi.org/10.1016/j.intman.2020.100811

Yakob, R., Nakamura, H. R., & Ström, P. (2018). Chinese foreign acquisitions aimed for strategic asset-creation and innovation upgrading: The case of Geely and Volvo Cars. *Technovation*, *70-71*, 59-72. https://doi.org/10.1016/j.technovation.2018.02.011

Yang, J. (2018). Subnational Institutions and Location Choice of Emerging Market Firms. *Journal of International Management*, *24*(4), 317-332. https://doi.org/10.1016/j.intman.2018.04.002

Yang, R., & Bathelt, H. (2022). China's outward investment activity: Ambiguous findings in the literature and empirical trends in greenfield investments. *Growth and Change*, *53*(1), 313-341. https://doi.org/10.1111/grow.12586

Yang, Y. (2022). Chinese multinationals post-merger integration evolutions in developed markets from autonomy to actual-form integration: a lens of ambidexterity. *Chinese Management Studies*,1-32. https://doi.org/10.1108/cms-12-2021-0526

Yang, Y., & Driffield, N. (2022). Leveraging the benefits of location decisions into performance: A global view from matched MNEs. *Journal of Business Research*, *139*, 468-483. https://doi.org/10.1016/j.jbusres.2021.09.071

Yiu, D., Bruton, G. D., & Lu, Y. (2005). Understanding business group performance in an emerging economy: Acquiring resources and capabilities in order to prosper. *Journal*

of Management Studies, *42*(1), 183-206. https://doi.org/10.1111/j.1467-6486.2005.00493.x

Yu, P. K. (2021). Intellectual property, global inequaliry and subnational policy variations. *Intellectual Property, Innovation and Global Inequality*, *86*, 1-19. https://ssrn.com/abstract=3760413

Zaheer, S. (1995). Overcoming the liability of foreignness. *Academy of Management Journal*, *38*(2), 341-363. https://doi.org/10.2307/256683

Zhang, H., Young, M. N., Tan, J., & Sun, W. (2018). How Chinese companies deal with a legitimacy imbalance when acquiring firms from developed economies. *Journal of World Business*, *53*(5), 752-767. https://doi.org/10.1016/j.jwb.2018.05.004

Zhang, J., Di Minin, A., & Quan, X. (2017). A comparison of international R&D strategies of Chinese companies in Europe and the U.S. *International Journal of Technology Management*, *74(1)*, 185–213. http: //doi.org/10.1109/ITMC.2011.5995940

Zhang, J., Zhou, C., & Ebbers, H. (2011). Completion of Chinese overseas acquisitions: Institutional perspectives and evidence. *International Business Review*, *20*(2), 226-238. https://doi.org/10.1016/j.ibusrev.2010.07.003

Zhang, Y., Enang, E., & Sminia, H. (2019). Post-acquisition integration of emerging market multinational corporations: a research agenda. *Multinational Business Review*, *27*(1), 4-34. https://doi.org/10.1108/MBR-11-2017-0093

Zheng, Q., Noorderhaven, N., & Du, J. (2022). Making the unlikely marriage work: The integration process of Chinese strategic asset-seeking acquisitions. *Journal of World Business*, *57*(3), 101305-101305. https://doi.org/10.1016/j.jwb.2021.101305

Zhong, X., Song, T., & Chen, W. (2021). Can R&D internationalization improve EMNES' innovation efficiency? The moderating effects of TMT human capital. *Baltic Journal of Management*, *16*(2), 190-207. https://doi.org/10.1108/BJM-03-2020-0098

Zhou, C., Xie, J., & Wang, Q. (2016). Failure to Complete Cross-Border M&As: "to" vs. "from" Emerging Markets. *Journal of International Business Studies*, *47*(9), 1077-1105. https://doi.org/10.1057/s41267-016-0027-y

Zhu, H., Ma, X., Sauerwald, S., & Peng, M. W. (2019). Home Country Institutions Behind Cross-Border Acquisition Performance. *Journal of Management*, *45*(4), 1315-1342. https://doi.org/10.1177/0149206317699520