Top management team attributes, multinationality and MNE performance: Evidence from Chinese Manufacturing Enterprises

A dissertation presented in partial fulfilment of the

requirements for the degree of

Doctor of Philosophy

in

International Business

at Massey University, Albany,

New Zealand

Submitted by

Mingzhu Stella YE

s.m.ye@massey.ac.nz

2023

Abstract

The purpose of this research is to investigate how top management team (TMT) attributes explain the performance of Chinese Multinational Enterprises (CMNEs) by examining four TMT attributes: TMT tenure, TMT educational level, TMT international experience and TMT functional diversity. I propose that TMT attributes function as the micro-foundation of CMNEs' performance. Previous research suggests that these selected attributes of top managers are valid proxies for TMT attitudes affecting international multinational decisions. Therefore, based on upper echelons theory and institutional theory, this research examines how multinationality mediates the relationship between TMT attributes and CMNE performance and how institutional factors of state ownership and formal institutional distance moderate the impact of TMT attributes on multinationality.

This research applies a quantitative method by using large-scale secondary data to assess the proposed hypotheses. The sample generates panel data consisting of 7,627 firm-year observations from 1,125 publicly listed CMNEs. 56,188 individual top managers' profiles are created to compute the TMT data for the sampled firms in the period from 2007 to 2019.

Based on the sample of CMNEs in the manufacturing industry, the findings suggest that TMT tenure and TMT educational level have significant impacts on CMNEs' performance and there is a U-shaped relationship between a firm's multinationality and its performance. Moreover, multinationality partially mediates the direct TMT tenure and performance relationship. In addition, the institutional contexts the firms face in terms of state ownership and formal institutional distance are found to moderate the influence of some of TMT attributes on multinationality.

The findings from this study contribute to the body of research grounded in upper echelons theory and institutional theory. It enriches the international business literature by exploring the effects of TMT attributes on multinationality. It empirically confirms that TMT tenure and TMT educational level function as a micro-foundation which has significant impacts on CMNEs' performance, while the relationship between TMT tenure and CMNE performance is partially mediated by multinationality. Moreover, it further explores the contingency factors and boundary conditions in terms of state ownership and formal institutional distance for the

relationship between TMT attributes and multinationality.

Key words: TMT attributes, TMT tenure, TMT educational level, TMT international experience, TMT functional diversity, international strategy, multinationality, CMNEs, firm performance.

Acknowledgement

In this part, I would like to express my sincere gratitude and appreciation to all the people who helped me and provided support to me throughout my whole PhD journey.

First and most important, I would like to thank my primary supervisor Associate Professor Yuanfei Kang. I probably could not have finished my study without his guidance. He is the most kind, helpful, patient and insightful researcher I have ever met. He is always there whenever I have problems. I really appreciate his professional and prompt feedback on all my draft papers, his tolerance of my shortcomings, and his encouragement whenever I have no direction and feel helpless. He unselfishly offers his scholarly guidance to me through all the theoretical and methodological challenges in my research. To me, he is the most qualified supervisor in my PhD journey; more than this, he is also a life mentor. I would like to express my appreciation once again for all his guidance in my PhD research, career development and life.

Next, I am thankful to Dr Tanya Jurado. I had to change my co-supervisor because the previous one retired in the last year of my study. Therefore, first, I would like to thank Dr Tanya Jurado for accepting me and being my co-supervisor from then on. Then, I thank her for all of her valuable suggestions on my study, such as the advice on how to develop the research logic. I vividly remember that she suggested that a good research paper needs to tell a "good story". This metaphor gives me great inspiration. She also helps me a lot in my writing.

I would also like to thank Dr Jeffrey Kennedy. Although he could not be my supervisor until the end of my journey due to his retirement, he did help me greatly during the first part of my study. He recommended many methodological books, journals and websites to me, and provided a careful review of chapters on methodology and results. Even after his retirement, he has also kindly been available for me when I had doubts that needed to be clarified. My true gratitude for his generous help is beyond words.

I would also like to thank the administrative team in my School. They helped me with the administrative process, which made me adapt to the new environment as soon as I arrived in Auckland, starting my PhD study. Afterwards, the Covid-19 outbreak happened and I was staying offshore. They also provided a lot of kind services to make sure that I can maintain a good mental state and continue my study. I want to thank the faculty members of the School of

Management at Massey, who have been very kind to provide their help whenever I approach them.

As a source of friendships and good advice, my PhD classmates in the School of Management and other friends in New Zealand have contributed significantly to my professional and personal time at Massey. During the time when I could not go back to Auckland in the Covid-19 lockdown period, they helped me to deal with many personal issues, which I really appreciated.

Lastly, I would like to express my thanks from the bottom of my heart to my family for all their love and support. Thanks to my parents for their unconditional support in all my pursuits. Thank you.

Table of Contents

List of Figures

List of Tables

List of Abbreviations

FDI	Foreign direct investment
MNEs	Multinational enterprise
TMT	Top management teams
CMNEs	Chinese multinational enterprise (MNEs)
OFDI	Outward foreign direct investments
IB	International business
CSMAR	China Stock Market & Accounting Research Database
GLS	Generalised least squares
ROA	Return on assets
ROE	Return on equity
CSAs	Country-specific advantages
FSAs	Firm-specific advantages
LoF	Liability of foreignness
R&D	Research and development
WGI	Worldwide governance indicators

Chapter 1 Introduction

The ultimate purpose of foreign direct investment (FDI) is to enhance firms' prospects of long-term success and survival. At the same time, firms face a plethora of challenges when operating in different countries and environments. Research on the factors that influence the overall performance of multinational enterprises (MNEs) has attracted extensive interest from scholars (e.g. Carpenter & Sanders, 2004; Fang & Zou, 2009; Abdi & Aulakh, 2018). They have analysed this topic from several theoretical perspectives. Amongst these, the upper echelons theory asserts that organisations are a reflection of their top management team (TMT) (Hambrick & Mason, 1984) who are key in processing information associated with FDI, and have a significant impact on the overall performance (Amin, Jianfeng, & Tu, 2019). However, the impact of the TMT on the strategic decision to invest abroad is inevitably influenced by the institutional environment (such as the government system, political rules, regulations and laws in the local market) of enterprises. Institutional theory believes that the institutions are the "rules of the game" when dealing with business (North, 1990). Therefore, this study is devoted to exploring the micro-foundations and influencing mechanisms of MNEs' performance by combining the upper echelons theory with institutional theory.

This chapter provides an overall introduction to the whole thesis, covering the aspects of research background, research questions and objectives, research philosophy stance and the methodology, the primary contribution and the thesis structure. This study examines the impact of TMT attributes on firms' multinationality, and in turn the Chinese MNEs' (CMNEs) performance. It attempts to elaborate the influencing mechanisms of CMNEs' performance by combining the impacts from micro, firm and country levels. The findings in this study indicate that certain aspects of TMT attributes have significant impacts on CMNEs' financial performance. Meanwhile, the state ownership in the internal environment of CMNEs and the formal institutional distance the CMNEs face moderate the relationships between TMT attributes and multinationality.

1.1 Research background

Companies are increasingly developed on a global scale. Outward foreign direct investment (OFDI) grew from U.S.$ 14 billion in 1970 to $1708 billion in 2021 (UNCTADStat, 2022). Given that the TMT plays a crucial role in a firm, scholars have elaborated that the organisation is a reflection of its top managers and the attributes of the top managers constitute the micro-foundation of a firm's operation (Hambrick & Mason, 1984). Hence, in order to extend their business beyond familiar locations into foreign countries, MNEs have an increasing need for their TMTs to facilitate better financial performance.

A group of suitable and capable managers can generate vital resources, such as ideas and networks, and add significant advantages to the firm (Carpenter & Fredrickson, 2001; Nielsen & Nielsen, 2013). Upper echelons theory suggests that the composition of the TMT creates the basis for managerial decisions and ultimately firm performance (Hambrick & Mason, 1984). Previous research has provided evidence of the link between TMT attributes and firm strategy or performance (Carpenter, Geletkanycz, & Sanders, 2004; Certo et al., 2006). It is essential to understand the impact of top managers, as they are a vital resource available to the firm and can help to exploit opportunities and develop effective organisational strategies (Ener, 2019; Lin et al., 2019). Comparatively, there has been little discussion on the impact of TMT attributes in the context of firm internationalisation (Nielsen, 2010).

MNE performance has always been a critical topic for both scholars and business practitioners (Matysiak & Bausch, 2012; Ng & Sears, 2017). Due to operating in different countries, MNEs deal with multiple and heterogeneous country environments and are exposed to a multitude of risks and conflicts. This leads to the complexity of the factors that affect MNEs' performance. A consistent and comprehensive understanding of the fundamental factors influencing MNE performance has still not been achieved (Matysiak & Bausch, 2012), so that MNE performance is still considered a "black box". Accordingly, to address the need for opening the "black box" about the influential mechanisms on MNE performance, this study focuses on the TMT attributes. Through examining which TMT attributes influence MNEs' performance and how they do so they (Nielsen, 2010), this study will investigate the relationships between four TMT attributes and MNE performance and how these relationships work using the evidence of CMNEs.

The performance of MNEs from emerging economies is a relatively new topic in the IB area (Meyer & Peng, 2016). Related empirical research on this topic is limited (Cozza et al., 2015; Wu, Wood, & Khan, 2021). Though a remarkable rise in OFDI from emerging economy MNEs has been witnessed in the past two decades (Piperopoulos, Wu, & Wang, 2018), compared with MNEs from developed economies, the internationalisation of MNEs from emerging economies has a shorter time span from which to draw a clear picture of performance outcomes. Thus, it is still debatable whether the internationalisation theories, which have been generated from research on MNEs of developed countries (Hutzschenreuter & Voll, 2008; Celo & Chacar, 2015), are applicable to the emerging economy MNEs.

The contributions that the Chinese context has made to the literature in the international business (IB) area are largely derived from its institutional governance (Luo & Tung, 2007; Peng, 2012). It is widely accepted that institutional environment matters when doing business (North, 1990; Scott, 2008). According to institutional theory, institutional legitimacy is regarded as the critical criterion and organisations that are embedded in the institutional environment must adapt to it to attain legitimacy (Zukin & DiMaggio, 1990). A firm's institutional context includes both the country-level institutions, such as the institutional governance of home and host countries, and firm-specific institutional factors, such as state ownership (Oliver, 1997b; Dunning, 2006; Cui & Jiang, 2012; Wang et al., 2012). However, the extant literature offers inconsistent predictions and conflicting evidence regarding the effects of institutional factors on the internationalisation of emerging market firms (Tang, Shu, & Zhou, 2021). Taking state ownership for example, on the one hand, it improves the firm's legitimacy in the home country, which is beneficial for firms to obtain the domestic privileged resources (such as financial support and favourable policies) when they develop their international strategy. On the other hand, state ownership creates legitimacy concerns in the host country, so that the host country may consider the foreign investor as a potential threat to the development of local enterprises and even to the national security (Kalasin, Cuervo-Cazurra, & Ramamurti, 2020; Tang, Shu, et al., 2021). Hence, state ownership might hinder firms' internationalisation instead of promoting the Chinese "going-out" strategy.

As firms from an emerging economy, CMNEs have internationalised rapidly rather than gradually (Cui, Meyer, & Hu, 2014; Yang & Stoltenberg, 2014; Clegg et al., 2016). They have made substantial commitment to international markets (Buckley et al., 2018; Ramamurti & Hillemann, 2018). The Chinese OFDI began to increase considerably after 1990. Just three decades later, China has become an important OFDI source of global investment (Clegg et al., 2016). More than 27,500 Chinese firms had established 44,000 firms in 188 countries and regions all over the world by the end of 2019 (MOFCOM, PRC, 2019[1]). In 2019, with its FDI outflow of US$137.9 billion, China, as one of the most important emerging economies, retained

---

[1] http://www.mofcom.gov.cn/article/i/jyjl/j/202009/20200903002017.shtml Accessed on 9th Aug.2021

the position of the second largest FDI source country (UNCTAD, 2020). The increasingly well-known and indispensable role of CMNEs in the international markets makes China the ideal arena for IB research (Liu, Chizema, & Lu, 2014; Clegg et al., 2016).

As noted by Hambrick and Mason (1984), organisational performance can be partially predicted by the demographic background of its TMT. Yet, the literature on IB has largely neglected the role of managers (Tihanyi et al., 2000; Nielsen, 2010). More specifically, gaps exist in the following four aspects.

First, as one of the "big questions" in IB (Peng, 2004; Glaum & Oesterle, 2007; Bai, Du, & Solarino, 2018), the micro-foundations of the firm performance in international markets are still unclear. Prior studies about the mechanisms influencing performance focused largely on the organisational level or on the country level (Hitt, Tihanyi, et al., 2006; Goerzen, 2007; Li, 2007; Matysiak & Bausch, 2012; Yang & Driffield, 2012; Vogiatzoglou, 2016), such as international entry mode and motivation, culture or institutional environment, locational advantages, and technological opportunities in a given industry (Venaik, Midgley, & Devinney, 2005; Uotila et al., 2009; Kafouros, Buckley, & Clegg, 2012; Azar & Drogendijk, 2014; Cozza, Rabellotti, & Sanfilippo, 2015; Clegg et al., 2016). Relatively little research has shed light on the influence from the micro level, such as the role of TMTs (Nielsen, 2010; Hutzschenreuter & Horstkotte, 2013; Chaganti et al., 2016). I believe that the literature on IB has overlooked the role of TMTs. Moreover, existing studies that tried to explore this topic from multiple dimensions normally combined two levels, which are based on organisational and macro levels (Venaik et al., 2005; Clegg et al., 2016). A more comprehensive understanding of MNE performance is virtually absent from the literature.

Second, the mechanisms influencing firm performance in international markets are unclear neither. Hutzschenreuter, Pedersen, and Volberda (2007) concluded that the mechanism that the managers intentionally influence MNEs is the most neglected part in IB management.

By addressing the above two research gaps, this study aims to examine the critical role played by TMTs in affecting CMNEs' performance. However, based on the upper echelons perspective (Hambrick & Mason, 1984), the impacts from upper echelon characteristics on performance might be influenced by firms' strategic choices. Following this logic, I introduce "multinationality" as a mediating variable, attempting to explore how the influence mechanism between TMT attributes and MNE performance works. Multinationality refers to the degree of firms' OFDI (Tseng et al., 2007; Kirca et al., 2011; Powell, 2014; Clegg et al., 2016). It is an important indicator that reflects a firm's international strategic choice. An MNE that pursues a multinational strategy, should have higher multinationality than one that adopts a single international strategy.

Therefore, two more gaps exist in the current literature accordingly. On the one hand, the complexity of international markets makes it particularly germane to study the effect of TMT demographics. This complexity also provides a unique background for assessing the moderating role of uncertainty. Therefore, paying attention to the context that CMNEs operate in may help to explain the inconsistent findings of prior upper echelons studies on the relationship between TMT attributes and firms' international strategic choices (Carpenter & Fredrickson, 2001). With a significant OFDI flow, China, as an emerging economy, has rapidly become one of the largest foreign investors in the world (Sauvant & Chen, 2014). The rise of Chinese foreign investment follows the provisions of the "Going Out" strategy, launched after the 10th Five-Year Plan in 2000 and reinforced in subsequent plans (such as "One Belt One Road" in 2013), which fosters Chinese firms' internationalisation (Cozza et al., 2015). China has relatively homogeneous internal institutional governance with strong central planning (Sauvant & Chen, 2014; Yang & Stoltenberg, 2014; Buckley et al., 2018), which is different from developed economies (Mike et al., 2005). In terms of the state ownership, Chinese enterprises commonly include state-owned shares (Buckley et al., 2018), while whether the state ownership helps or hinders TMT decisions on firms' international strategic choices still needs further investigation (Mariotti & Marzano, 2019; Kalasin et al., 2020). Moreover, Buckley et al. (2018) suggested that institutional factors, and their impact on the CMNE and its international strategic decisions, should be given greater weight. Therefore, it made me interested in exploring the influence of institutional factors as the contextual environment in the relationship between TMT and multinationality in CMNEs' internationalisation.

More significantly on the other hand, OFDI is considered the most important method of internationalisation (Bany-Ariffin et al., 2014). The topic of how multinationality affects MNE performance has drawn researchers' attention for many years. Although there is extensive research on this topic, no consistent conclusions have been reached. While some studies found no significant relationship between multinationality and performance (Morck & Yeung, 1991), most of the empirical findings have demonstrated a significant effect of multinationality on MNEs' performance. Previous studies have found positive (Kim, Hwang, & Burgers, 1993), negative (Collins, 1990), U-shaped (Lu & Beamish, 2001; Capar & Kotabe, 2003), inverted-

U-shaped (Gomes & Ramaswamy, 1999; Qian et al., 2010) or S-shaped multinationality and performance relationships (Contractor, Kundu, & Hsu, 2003). The overall shape of their relationship is still a crucial but unresolved question in the IB field, which calls for more evidence based on diversified samples.

All in all, to address these four research gaps, this study aims to examine the critical role played by TMTs in affecting CMNEs' performance. In order to open this "black box", I adopt upper echelons theory and institutional theory to explore the mechanisms that influence how TMT attributes affect firm multinationality, and in turn affect performance. The impacts of institutional factors which the TMTs of CMNEs face when they are making the internationalisation choice are considered. Ultimately, this study will examine mechanisms influencing MNE performance by deriving determining factors from the individual, organisational, and country levels.

1.2 Research questions and objectives

Building on the background mentioned in the above section and trying to fill the gaps existing in the current literature, this study focuses on the impact of TMT attributes (TMT tenure, TMT educational level, TMT international experience and TMT functional diversity) on CMNE financial performance, the mediating effect of multinationality on the impact, as well as the moderating effects of institutional factors (which are state ownership and formal institutional distance) on the attributes–multinationality relationship. The research questions will be addressed by following the guidance of upper echelons theory and institutional theory. They are:

1. Do TMT attributes in terms of TMT tenure, TMT education, TMT international experience and TMT functional diversity as factors at the micro level have an impact on firm multinationality, and in turn on the overall performance?
2. What is the impact of multinationality on firm performance in the context of CMNEs?
3. How do firm state ownership and country-level institutional distance interact with the relationships between TMT attributes and CMNE performance?

By addressing the research questions developed above, this study aims to achieve the following research objectives：

1. To understand the role played by TMT attributes as the micro-foundation of CMNEs' performance, that is, to investigate the influence of four dimensions of TMT

attributes on CMNEs' performance;

2. To examine the relationship between the four TMT attributes and multinationality, as well as the relationship between multinationality and CMNEs' performance;
3. To identify the role played by multinationality in influencing the relationships between the four TMT attributes and performance;
4. To examine the moderating effect of firm state ownership and country institutional distance on the relationships between the four TMT attributes and multinationality.

1.3 Research design and methodology

In this study, I adopted a quantitative research method. The method that a researcher adopts is determined by the research paradigm and the philosophical ontology of the study. My study involved testing and verifying a set of hypotheses, which were derived from a conceptual framework formulated from existing theories to address the identified research gaps. The empirical base of this study is the longitudinal data that was collected through the archived databases. Thus, the research paradigm for this study is positivism.

The methodological approach in this study follows the deductive process. It starts from a phenomenon of CMNE internationalisation and the research gaps associated with this phenomenon. Driven by upper echelons theory and the institutional theory, a conceptual framework is developed. Next, a set of hypotheses are derived to delineate interactive relationships among the constructs in the conceptual framework. Then, measurements of the variables associated with the constructs are determined, and corresponding empirical data are collected through the archived databases. Multiple regression analysis is applied for data analysis. Finally, empirical results from modelling analyses are interpreted and discussed with the purpose to provide theoretical contributions and practical implications about my study in the area of IB for the emerging economy MNEs.

The research setting of this study is Chinese firms that are involved in OFDI activities, operating in the manufacturing sector. The quantifiable and objective data was collected from published information sources including China Stock Market & Accounting Research Database (CSMAR), Wind, annual reports of the sampled firms, websites and other international public databases. All the samples are Chinese A-stock-listed enterprises, listing in Shanghai and Shenzhen stock markets, operating in the manufacturing sectors. To ensure the completeness and the accuracy of the data, the enterprises with special treatment (ST) and the risks of delisting (*ST) were excluded from the final dataset. The timeframe of this study is a period of 13 years from 2007 to 2019. Excluding missing values and outliers, I finally obtained 7,627 firm-year observations of 1,125 publicly listed CMNEs during the observation period. Using the generalised least squares (GLS) model, panel data analyses for the hypothesis testing were conducted using Stata software version 15.

1.4 Research contributions

This study intends to extend prior research in four important ways:

First, by integrating influence from the individual level with firm and country-level influences, rather than focusing only on firm-level or country-level influences as done in prior research (e.g. Kafouros et al., 2012; Azar & Drogendijk, 2014; Cozza et al., 2015; Clegg et al., 2016), this study complements insights into the antecedents of MNEs' performance at micro, multiple and comprehensive perspectives. More specifically, this study proposes that TMT attributes act as a micro-foundation in influencing performance and acknowledging the impact of multinationality and the institutional environments at both firm and country levels in the TMT-performance relationship. By combining those factors, the integrated framework enables an empirical study to shed light on the influencing mechanism of MNEs' performance and enrich the theoretical literature in the IB field. In addition, based on a sample of 1,125 Chinese MNEs in the manufacturing sector across a period of 13 years, this study extends the related research to a novel context through deep contextualisation of MNEs from emerging economies.

Second, prior studies have identified some TMT attributes as important factors influencing firm performance (Keck, 1997; Cannella, Park, & Lee, 2008; Buyl et al., 2011). For example, it was found that cognitive abilities, competencies and networks of the top managers have important implications for firm management (Rivas, 2012). The influence of TMT on firm performance for the MNEs does not occur in a vacuum. Hambrick and Mason (1984) argued that performance is determined by a certain set of strategic choices made by top executives. However, the "mechanism" of how TMT attributes influence MNEs' performance is noticeably absent in previous studies. This study seeks to address this gap in the literature by examining the mediating effect of multinationality on the relationship between TMT attributes and MNE performance. My research enriches the understanding of the influential role of TMT demographic characteristics on firm internationalisation by extending their beneficial and detrimental implications for implementing international strategy (Tihanyi et al., 2000; Li, 2017; Agnihotri & Bhattacharya, 2019; Kumar et al., 2021) further to the overall MNE performance.

Moreover, the longitudinal data of TMT attributes (56,188 top managers' profiles in 1,125 CMNEs are covered in the sample for the period under consideration) in this study has the advantage of overcoming the potential issues in validity and reliability associated with other types of data, such as survey-based cross-sectional data (Rivas, 2012), which improves the generalisation and the credibility of the empirical results of the research on TMT attributes' effects on firm internationalisation.

Third, through examining the contingency factors and boundary conditions for executives' decision-making, this study emphasises the importance of the institutional environment's effect on top managers' strategic decisions by revealing the pivotal roles of state ownership and institutional distance in moderating the relationships between the TMT attributes and multinationality. By highlighting the role of both firm-specific and country institutional factors, to my best of knowledge, this study is the first to introduce the institutional constructs into the "black box" of how TMT attributes affect firm international behaviour. Combined with upper echelons theory, it enriches the application of institutional theory to firms' international behaviour.

Fourth, a large body of research has sought to empirically explore the relationship between multinationality and performance (Powell, 2014), but the performance implications of multinationality have been mixed (Glaum & Oesterle, 2007; Li, 2007). Responding to the calls for more delicate and specific explorations into this important relationship, this study attempts to join the discussion of the multinationality-performance relationship in the context of emerging economy MNEs. Internationalisation of MNEs from emerging economies is a relatively new phenomenon. In response to the calls for expanding the research context (Powell, 2014; Kalasin et al., 2020), this study investigates whether the internationalisation theories generated from developed countries are applicable to the emerging economy MNEs. It enriches the understanding of internationalisation performance based on empirical evidence of a sample of MNEs from China, one of the major emerging economies.

Regarding the practical aspects, the findings of this study are expected to assist CMNEs to identify the influence of TMTs as well as to be more aware of how to achieve better performance and sustainable development. In the current business environment, expansion into international markets is a common practice for enterprises (Tihanyi et al., 2000). More and more Chinese firms have chosen to "Go out". This study clarifies the picture about the relationship between TMT attribute(s) and firm multinationality as well as the linkage between

TMT attribute(s) and CMNEs' performance. It also provides practical suggestions for firms' international management, such as top managers' configuration in a cross-national business environment.

1.5 Structure of the Thesis

The study is composed of seven chapters. A brief overview of each chapter is described as below.

Chapter 1 is the overall introductory part, which provides an overview of the study. This chapter presents the research background and also provides the research motivation by identifying the area with current gaps. Next, it develops research questions to address the research gaps and establishes research objectives for the study to achieve. Then it introduces the research design and adopted methodology of the study. It is followed by a section on research contributions and study structure.

Chapter 2 presents a review of the literature relevant to the research topic. It provides an overview of the overarching theories that have been employed in the thesis to guide the study as well as a review of the relevant research that has already been conducted in the topic area. Firstly, upper echelons theory is reviewed and justified as one of the overarching theoretical lenses by exploring the aspects of TMT attributes, and their influence on the firms' strategic choice and performance. Research gaps are identified through a synthesis of fragmented findings on TMT attributes and performance implications. Secondly, the chapter summarises the literature on the multinationality-performance relationship to justify the research topic in a CMNE context, given the conflicting findings in the current literature. Thirdly, it reviews the institutional theory with an emphasis on the importance of operational legitimacy. The research significance and gaps in internationalisation research on the CMNEs are verified again. In summary, this chapter provides a review of the existing literature, which covers the key constructs in my study.

Chapter 3 contains the conceptual framework and hypotheses development. Based on the rationale for the linkages between theoretical constructs that are drawn from existing research reviewed in Chapter 2, a conceptual framework is developed, centring on the four TMT attributes (TMT tenure, TMT educational level, TMT international experience and TMT functional diversity) and their interactions with multinationality and in turn with firm performance. In this framework, the interaction of institutional factors in the relationship between TMT attributes and multinationality is another focus of my research. Then, derived from the conceptual framework, a set of hypotheses are postulated, which are empirically tested in Chapter 5.

Chapter 4 covers the research design and methodology that has been employed in the research. The distinctive ontological and epistemological positions of quantitative and qualitative research are discussed in order to justify the selection of quantitative research for this study. Then, the rationale for identifying the listed CMNEs in the manufacturing industry as the research sample is presented. After this, the chapter discusses the construction of the variables which are identified in my research framework and describes the data collection process. At the end, it briefly introduces the estimation methodology used in this study.

Chapter 5 comprises the data analysis and results. It begins with the data examination which includes discussion about the techniques used to handle the missing data and the outliers. An insight into the data by discussing the descriptive statistics is also included. Later, the chapter delineates the techniques adopted to analyse the data. I discuss the specification and selection of the model, including a test of multicollinearity, Hausman test, and test for heteroskedasticity. The endogeneity problem is also discussed. Then, the main regression results of the generalised-least-square (GLS) regression are presented. Last, it describes the sensitivity tests which were run to assess the robustness of my results.

Chapter 6 provides an in-depth interpretation and discussion of the empirical results. The results of the hypotheses testing are presented and discussed in detail. In the last section of this chapter, I also provide a summary of the research findings regarding the relationship between the variables under examination in the framework.

Chapter 7 consists of the conclusion and implications. It summarises the key findings and contributions to relevant theories, followed by a discussion of practical implications. Then, limitations associated with the sample selection, variable measurements and research methodology are discussed. In addition, the directions for future research constitute another important part of this chapter.

Chapter 2 Literature Review

2.1 Introduction

This chapter discusses the theoretical foundations of my study and presents a review of the relevant literature. Specifically, Section 2.2 provides an overview of upper echelons theory and institutional theory, which constitute the theoretical underpinnings of my research. In this section, I give a brief introduction and summarise the main arguments of these two perspectives. Section 2.3 reviews the literature on internationalisation and the performance of multinational enterprises (MNEs). In this section, the definition of multinationality, various determinants of MNE performance, as well as the relationship between multinationality and performance are explained and summarised. Section 2.4 focuses on the research on the attributes of top management teams (TMTs) in the area of international business (IB). This section concludes with a description of the four TMT constructs used in my study. Sections 2.5 and 2.6 respectively provide the overviews of the influence of state ownership and formal institutional distance in the internationalisation strategic decision-making process.

2.2 Primary theoretical foundation

Theory is "a set of interrelated propositions that provide a framework for understanding or explaining phenomena" (DePoy & Gitlin, 2011, p. 18). In this section, I present a review of upper echelons theory and institutional theory as the theoretical underpinnings which are used to develop the conceptual framework and associated hypotheses of this thesis.

2.2.1 Upper echelons theory

Top managers are the powerful actors who are critical in the firm's strategic decision-making process. They act as an interface between the firm and its environment. Based on their judgment of the internal and external environments, they determine the development of the firm they are working for. However, either the internal environments or the external environments they are facing are complex. The choices and decisions that they make are likely to have direct impacts on the organisation. The intuitive outcomes and impact on strategic choices and performance (Carpenter et al., 2004), can be viewed as "the reflection of the values and cognitive basis of powerful actors in the organization" (Hambrick & Mason, 1984, p. 193).

Upper echelons theory is derived from the perspective of the Carnegie School, which has argued that under the conditions of complexity, managerial choices are largely determined by behavioural factors rather than rational ones. This theory was firstly developed by Hambrick and Mason (1984). In their seminal paper, they synthesised the previously fragmented literature about the role of decision-makers around a general "upper echelons perspective", which suggests that the effects of strategic leaders on organisations can be adequately assessed based on the collective attributes of the entire top management team (TMT). Upper echelons theory emphasises that top managers' judgments depend greatly on their values and on their cognitive bases (Hambrick & Mason, 1984; Carpenter et al., 2004; Hambrick, 2007), that is, even when facing the same situations or challenges, top managers with different attributes might make different decisions. The underlying purpose of this theory is to answer the question "Why do organizations act as they do" (Hambrick & Mason, 1984, p. 193) from the perspective of the top management team. Its central premise is that the experiences and personalities of top managers greatly influence their understanding of the environments they face, and in turn, affect their choices (Hambrick & Mason, 1984; Hambrick, 2007).

However, values and cognitive bases belong to the psychological realm which is very difficult to observe as they are "not convenient to measure or even amenable to direct measurement" (Hambrick & Mason, 1984, p. 196). In this regard, Hambrick and Mason (1984) propose an observable model in their seminal paper. They place primary emphasis on managers' observable characteristics and take them as the "indicators of the givens that a manager brings to an administrative situation" (Hambrick & Mason, 1984, p. 196).

According to the framework proposed by upper echelons theory (see Figure 2.1), the characteristics of top managers can be captured from psychological and observable factors. Demographic characteristics represent the observable aspects which are used as proxies of psychological aspects (managerial cognition and value base). According to the perspective of this framework, the TMT can be regarded as the core decision-maker of the organisation and its attributes constitute the firm's operational foundation and consequently influence the firm's performance. Therefore, the framework concludes that TMT attributes, such as "age, tenure in the organization, functional background, education, socioeconomic roots, and financial position" (Hambrick & Mason, 1984, p. 196), serve as the micro-foundation of organisation performance.

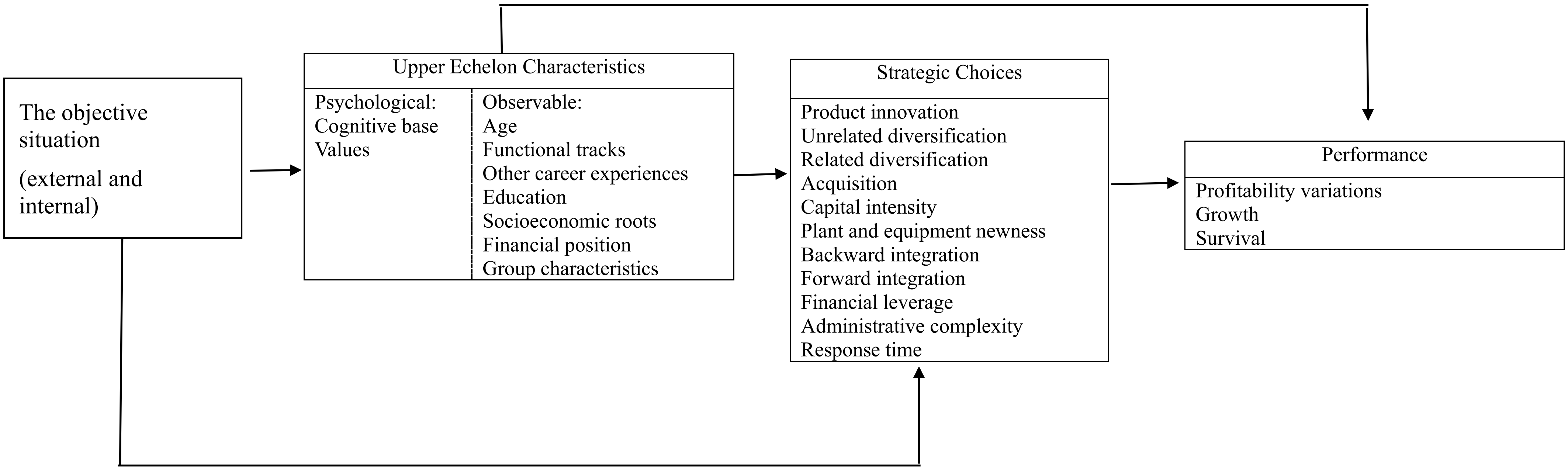

Figure 2.1 Upper echelons perspective on organisations[2]

---

[2] This originates is it the same from Figure 2 in Hambrick and Mason (1984) p. 198.

After being introduced in Hambrick and Mason's (1984) seminal article, the upper echelons perspective has been widely adopted in organisational research. For more than three decades, a large body of literature, influenced to a great extent by Hambrick and Mason's perspective, has examined how TMT demographic characteristics can be used to explain firm activities (e.g. Kor & Mahoney, 2005; Crossland & Hambrick, 2007; Mihalache et al., 2012; Mitchell et al., 2016). Scholars relate TMT attributes to the capability of the organisation to deal with information, its receptivity to change, and willingness to take risks (Herrmann & Datta, 2005; Singh, Gaur, & Schmid, 2010; Rivas, 2012). In addition, the literature also highlights the impacts of TMT diversities (Lee & Park, 2006; Cannella et al., 2008; Buyl et al., 2011; Boone et al., 2018; Agnihotri & Bhattacharya, 2019). The central assumption behind the diversity-related arguments is that the diversity of demographic characteristics of top managers can be translated to either cognitive improvement or deterioration, thus affecting firms' operations. Based on their investigations of such insights, upper echelon researchers propose that TMT demographic characteristics have a significant influence on firm-level outcomes.

The upper echelons perspective focuses on the characteristics of the individuals who have strategic influence on the organisation, to explain organisational behaviour and outcomes (Finkelstein & Hambrick, 1990). Although a surge of research on top managers has been witnessed since the theory was put forward by Hambrick and Mason in 1984, most of the research was conducted in a mono-environment or even inside the organisation (see the review of Carpenter et al., 2004). More recently, upper echelons theory has been applied to the research on international business areas, such as the firm's international strategies and cross-border performance (Song & Ma, 2010; Mihalache et al., 2012; Nielsen & Nielsen, 2013; Maitland & Sammartino, 2015; Chaganti et al., 2016; Wang et al., 2016; Xu, Yun, et al., 2019). In addition, the traditional framework of upper echelons theory is a linear one: that is, enacted by the TMT, the TMT's decision leads to strategic choices, and the outcomes of the firm's strategic choices will finally affect its performance. However, the linkage connecting the situation to TMT attributes and strategic choice, as well as how this linkage works, is rarely explicitly addressed (Carpenter et al., 2004).

"Top management team members play critical roles in important decision-making (e.g., internationalisation) in China" (Wu et al., 2021, p. 6). They are vital in shaping the firms' major operational outcomes. The upper echelons theory provides one angle to investigate the micro-foundation of CMNEs' performance. Therefore, following the previous research (e.g. Barkema

& Shvyrkov, 2007; Kedia & Bilgili, 2014), the key assumption of this study is that, due to their observability and accessibility, the demographic characteristics of the top managers are useful indicators of individual experiences, skills, values, cognitive styles, and information sources. However, the influence of top managers on organisational outcomes might be affected by other forces including environmental ones (Finkelstein & Hambrick, 1990). Considering that internationalisation involves multiple and complex external environments, the institutional theory constitutes the second theoretical base of this study to try to open the "black-box" of CMNE performance mechanisms.

2.2.2 Institutional theory

The institutional theory provides a frequently referenced theoretical basis of IB studies (Meyer & Peng, 2016), particularly for the internationalisation of firms from emerging economies (Hejazi & Santor, 2010; Sauvant & Chen, 2014; Yang & Stoltenberg, 2014; Cozza et al., 2015; Chen, Li, & Hambright, 2016; Kang et al., 2018). The reality of the embeddedness of organisations in institutional environments provides challenges and opportunities for the key decision-makers.

There are two dominant perspectives on the institution-based view: the institutional economics perspective and the sociological perspective. Stemming from the transaction cost theory, the perspective of institutional economics was conceptualised as the rules of the game by North (1990). Transaction cost theory was first put forward by Coase (1937) and widely adopted in strategic management research. In 1975, Williamson introduced it into the strategic management field. Transaction cost, as an analytical tool, can be used to analyse the efficiency of organisational structures and strategic decisions (Williamson, 1985). Based on the transaction cost theory, strategic researchers focus on how to reduce transaction costs and to avoid opportunism and uncertainty, so that the firm can obtain value by being aligned to the institutional environment. Institutions reduce the uncertainty the organisation faces, enhance its stability and then reduce both transaction costs and information costs of the firm (North, 1990). Therefore, the institution is no longer an operational condition, but an important factor that directly affects the firm's strategic choices and performance.

North (1990) categorised institutions into formal and informal types. Formal institutions are composed of political rules, regulations, laws, and contracts which are explicitly created, usually by government legislation. Informal institutions refer to the driving forces that modify behaviour and form the subjective perception of members in a society, including norms of behaviour, values, attitudes, and conventions (North, 1990). The informal institutions emerge from individuals' interactions, and they involve conformity among social groups or communities where the individuals develop or share rules of behaviour, values, and beliefs (Martinez & Williams, 2012).

When conducting foreign direct investment (FDI), firms are involved in both home and host countries' institutions. Therefore, they are also subject to both institutional environments. Institutional distance refers to the difference between home and host institutions. It aims to capture the degree to which the institutional frameworks are different (Meyer & Peng, 2016). When engaged in outward OFDI, the investing company as a new player might have considerably less knowledge and experience of how to pursue an effective operation in a different and unfamiliar host country than in its home country (Xu & Shenkar, 2002; Eden & Miller, 2004). Thus, a different institutional governance environment could increase a firm's operational cost and even decrease its internationalisation intent. For a firm with foreign subsidiaries, organisational units adjust to the external institutional arrangements in their respective countries (Kostova & Roth, 2002). Internal operations and communication between units become complex as they are located in different countries. Therefore, when the institutional distance is greater, the transaction costs are likely to increase, negatively affecting MNEs' international strategic choices (e.g. Liou, Chao, & Yang, 2016).

From a sociological perspective, Scott (1995) conceptualised institutions as structures and activities restricted by regulations, norms and cognitive systems, which stabilise the society and make social behaviour meaningful. In the 1970s and 1980s, the perspective of institutional analysis was rejuvenated by social scientists. They evolved a new analysis paradigm under the institutional perspective. According to this new paradigm, the motivation for behaviour is not limited to economic optimisation, but also to the demands of social legitimacy and social obligations. Therefore, the consistency with social expectations largely determines the survival and the success of the organisation (Oliver, 1991; Scott, 1995). Based on this perspective, scholars believe that the firm that operates in a social framework needs to constrain its economic behaviour to be appropriate and acceptable under the local framework which is composed of certain social norms, values and a series of universally acknowledged cognitions (Oliver, 1997a). Rather than being driven by economic efficiency (Meyer & Rowan, 1977; DiMaggio & Powell, 2000), the sociological perspective emphasises the adaptability, rationality and social decisiveness of organisational strategic behaviour.

Scott (1995) categorised the institutional system into "three pillars", namely, regulative, normative and cognitive. The regulative pillar refers to the mandatory government rules, including laws and regulations that ensure stability and order in societies. The normative pillar comprises values and norms that have impact on the social behaviour of the individuals or organisations. The cognitive pillar is made up of the values and beliefs through which meaning is made.

Suchman (1995) defined "legitimacy" as "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" (p. 574). The institutional theory stresses the importance for the firms to conform to their institutional environments (Scott, 1995). Thus, to gain "legitimacy" in the institutional environment, a firm needs to be isomorphic with the local governance (DiMaggio & Powell, 2000). Due to this isomorphism, it can be viewed as an insider rather than an outsider. Therefore, legitimacy can empower the organisation to easily access resources, which is indispensable for the survival and thriving of organisations (Kostova & Zaheer, 1999; Xu & Shenkar, 2002). MNEs have to be involved in both home and host-country institutions, so they are also subject to the legitimacy issues in both institutional environments. Legitimacy is important in emergent economies such as China where government capital control of outward FDI is prevalent (Morck, Yeung, & Zhao, 2008; Cui & Jiang, 2010). In order to gain more support from the home government in terms of capital, resources, and favourable policies, the firm needs to elevate its domestic legitimacy (Wang et al., 2012). However, when entering a foreign country, it might suffer from the liability of foreignness, which prevents the firm from gaining legitimacy in the foreign country and then hinders its development (Zaheer, 1995). In terms of corporate ownership, as in China, state ownership could allow the firm to access valuable resources provided by the home government, such as financial, regulatory, and informational support, but it could also bring legitimacy problems when this firm is doing business abroad, especially in the countries which have different governance policies to China.

In summary, while North and Scott elaborated the institution from different perspectives, these two perspectives are interlinked (Cui & Jiang, 2012). Institutional theory elaborates the role of the rules of the game in the social and economic entity. It stresses the homogeneity between the organisation and its environment, such as political rules, regulations, and laws, as well as cultural codes and social customs. It is a theory for understanding organisational behaviour and predicting firms' development. Grounded in the institutional theory, internationalisation can be regarded as a process of gaining and adapting legitimacy. Researchers in the international business field have widely employed it in a range of topics, such as international strategy (Salomon & Wu, 2012; Kang & He, 2018), foreign market entry mode (Kogut & Singh, 1988; Brouthers, 2013), investing location choice (Kang & Jiang, 2012; Kang, 2018) and international performance (Cozza et al., 2015).

2.3 Micro-foundations in international business management

Although strategic management and organisation theory were heavily focused on macro factors instead of the micro ones (Felin, Foss, & Ployhart, 2015), in the IB area, there is research, such as on managerial capabilities, or on the influence of the TMTs, which is interested in micro-foundation movements (Foss & Pedersen, 2019). The researchers believe that engaging in the research perspective of micro-foundations can be more helpful in unveiling the mechanisms of organisational operation and explaining some phenomena at the level of the MNEs (Abell, Felin, & Foss, 2008; Aharoni, Tihanyi, & Connelly, 2011; Felin et al., 2015).

According to Felin et al. (2015), two conceptual interpretations of micro-foundations are presented. One is micro-foundations as levels, which means "constructing microfoundations are about locating (theoretically and empirically) the proximate causes of a phenomenon (or explanations of an outcome) at a level of analysis lower than that of the phenomenon itself" (p.586). The other is the micro-foundations focusing on the primacy of individuals. From my understanding, the first argument about micro-foundations emphasises the logical relationship between a phenomenon and its corresponding causes. The causes underpinning the target phenomenon can be considered as the micro-foundation whether they are from the individual level or not. However, the latter argument is more specific. It clearly points out that the research on micro-foundations could focus on the individual level. This argument is adopted by the vast majority of the micro-foundation literature (Abell et al., 2008). Abell et al. (2008) argued that the micro-foundations of a firm's outcomes (including the firm's behaviour and performance) "exist at a small group and individual levels" (p.111). The research targeting micro-foundational mechanisms often uses samples of firm units or even individual employees (Foss & Pedersen, 2019).

A noteworthy way to understand the black box in the MNE's operation is to unpack its constructs. The smallest organisational unit in the firm is the individual, which constitutes the underlying factor in organisational outcomes (Becker, 2004; Felin & Foss, 2006; Felin et al., 2015). Research on individuals or small units made up of the individuals may make the most sense to explore the causes of macro phenomena in international business management.

Upper echelons theory provides a long-standing theoretical base for the micro-foundations research (Felin et al., 2015). This perspective is concerned with a small but extremely critical set of individuals in an organisation and proposes that organisational outcomes can be viewed as “the reflection of the values and cognitive basis” of those powerful actors (Hambrick & Mason, 1984, p. 193). In other words, the upper echelons and top management teams can be considered as the micro-foundations of some of the firm’s behavioural outcomes, such as strategic choices and performance.

2.4 Research on TMT attributes in international business

Upper echelons theory argues that a firm’s strategic choices and performance outcomes are affected by TMT attributes. TMT attributes were summarised by Cuypers et al. (2022) as “the collective characteristics of the TMT members, either in terms of the quantity of a compositional characteristic (e.g., the extent or level to which it is present in a team, such as the average tenure of team members), or in terms of the dispersion of a characteristic (e.g., the tenure heterogeneity in the team)” (p. 485). While some scholars suggest that TMT attributes have a limited impact on firms’ decision-making and performance, more studies have demonstrated that those demographic traits tend to be significantly associated with various organisational outcomes (Lee & Park, 2006).

2.4.1 TMT attributes and performance

The influence of TMT attributes on organisational outcomes is based on the proposition that specific attributes are associated with TMT perceptions. Factors at the individual level are able to influence the MNE’s operational activities (Maitland & Sammartino, 2015), and ultimately lead to a certain effect on firm performance (Hambrick & Mason, 1984). Thus, this study proposes that TMT attributes constitute the micro-foundation of MNE performance.

Recent research on the influence of TMT attributes has mainly focused on the general firm performance. Based on the empirical evidence, TMT organisation tenure (Xu, Yun, et al., 2019), TMT size (Chaganti et al., 2016), and TMT functional heterogeneity (Chaganti et al., 2016) have positive effects on firm performance. Based on a meta-analysis, Wang et al. (2016) found that executives’ characteristics (i.e., age, tenure, formal education, and prior career experience) are all positively related to firm performance. Díaz-Fernández, González-Rodríguez, and

Pawlak (2014) found that the diversity of TMT education level negatively affects firm performance.

While research has widely discussed the impacts of TMT attributes on firm performance, only a few studies have examined the attributes–performance relationship from the perspective of MNEs' internationalisation. For example, through empirical testing, Carpenter, Sanders, and Gregersen (2001) concludes that US MNEs perform better under a TMT with international working experience. Based on a sample of Swiss MNEs, Nielsen and Nielsen (2013) found that diversity of TMT nationality is positively related to performance. The international markets faced by TMTs are challenging and dynamic. Hence, research on TMT attributes and MNEs' performance is more complex but valuable. Moreover, top managers sampled in the same country tend to be homogenous, which means the national environment has shaped enterprises' selection of management executives. For example, scholars have found that the chief executive officers in western developed economies are often equipped with characteristics such as white skin colour, long tenure, and higher education degrees (Le & Kroll, 2017). It is perhaps elusive for researchers to reach a consensus about the relationship between TMT attributes and firm performance when using different samples. Hence the research that discusses the impacts of TMT attributes on MNEs' performance based on the samples from other countries (such as China) becomes more valuable.

2.4.2 TMT and international strategies

Internationalisation does not occur all of a sudden, or in a vacuum, but is determined by a certain set of firm strategic choices. From the perspective of upper echelons theory, the strategies are made by executive decision-makers. Differences such as age, educational background, experience, and tenure may lead the firm's TMT to make different international actions, as these TMT characteristics are linked with managerial cognition (Hambrick & Mason, 1984). Even facing the same environment, differences in managers' cognition may result in different judgments, and subsequent selection of different firm strategies, which are made by those managers (Burillo & Moreno, 2013). Thus, TMT attributes are recognised as the fundamental determining factors of firm international strategies (Maitland & Sammartino, 2015). Below, I will review the literature on the linkage of TMT and international strategies based on the different international periods in which the firm's strategic choices are made: before and during internationalisation. It is noteworthy that MNEs' multinationality strategy exists in the period "during internationalisation".

Before internationalisation, the most important strategic decision for the firm is whether to expand abroad or not. As examined by Burillo and Moreno (2013), features of the TMT are vital for firm internationalisation. For example, the tendency of risk aversion is lower when executives are young, so that younger executives are more likely to implement internationalisation strategy if they think this strategy can bring more profits to the firm even if it is riskier. The language background of executives also counts. The more members of the TMT who know other languages, the more likely the firm is to establish international relations.

Once the firm decides to engage in international expansion, the fundamental strategic decision presented to the decision-makers is how the firm expands beyond its national borders, such as entry modes, internationalisation speed, and multinationality level (Cuypers et al., 2022).

Entry modes

TMT attributes are considered as the key indicators to understand why top managers decide to choose a particular mode for the foreign market entry. Herrmann and Datta (2006) showed that both positions and tenure of the decision-makers have positive effects on their preferences for full control modes. Xie (2014) further demonstrated that the effect of executive tenure is particularly evident when the top managers have greater managerial discretion. Based on the empirical analysis of 165 Swiss listed firms during 2001 to 2007, Nielsen and Nielsen (2011) found that when entering foreign markets, TMTs with international experience are more likely to choose a high-equity mode, while TMTs with diverse nationalities are more inclined to opt for a low-equity mode which involves shared control with other partners. Based on a sample of Indian firms, Chittoor, Aulakh, and Ray (2015) found that TMT international experience is positively related to foreign acquisitions.

Internationalisation speed

Reuber and Fischer (1997) argued that TMT international experience is a competitive resource for the firm, and it accelerates internationalisation at an early stage of the firm's life cycle. Recently, Mohr and Batsakis (2019) argued that internationally experienced TMTs prefer a more rapid internationalisation because international experience gives the managers more radical ambitions. However, they also found that as TMT international experience reaches a critical high level, this positive effect tails off. In the research on internationalisation speed, based on upper echelons theory, Batsakis and Theoharakis (2021) further found that executives' international experience and education strengthen the positive impact of internationalisation speed on firm performance. Wu and Ang (2020) demonstrated that TMTs' domestic political ties and foreign ties have a positive impact on firm international expansion.

Multinationality

To what extent the MNE should be internationalised is another key issue for its business strategy. Scholars have shown that TMT attributes significantly affect a MNE's multinationality. The key assumption in this aspect is that demographic traits are proxies for the cognitive orientation and knowledge base of the TMT members (Hambrick & Mason, 1984), which affect a TMT's decision-making about the degree of a firm's internationalisation. For example, with evidence from multinational firms in the US electronics industry, Tihanyi et al. (2000) found that a higher age of the TMT members is negatively associated with multinationality. The relationships between TMT attributes and multinationality tested by previous research are shown in Table 2.1. Table 2.1 shows that while TMT attributes are relevant to firm multinationality, the specific relationships of some attributes are varied.

Table 2.1 Relationship between TMT attributes and multinationality

TMT attributes	Relationship	Sample studies
TMT age	Positive	(Bany-Ariffin et al., 2014)
	Negative	(Tihanyi et al., 2000; Herrmann & Datta, 2005)
TMT education level	Positive	(Tihanyi et al., 2000; Herrmann & Datta, 2005)
TMT functional heterogeneity	Positive	(Bany-Ariffin et al., 2014)
	Negative	(Wally & Becerra, 2001)
TMT international experience	Positive	(Tihanyi et al., 2000; Herrmann & Datta, 2005; Li, 2018; Pisani, Muller, & Bogăţan, 2018)
TMT organisational tenure	Positive	(Tihanyi et al., 2000; Wally & Becerra, 2001; Rivas, 2012)
	Negative	(Herrmann & Datta, 2005)
	Inverted U-shaped	(Agnihotri & Bhattacharya, 2015; Lee, Kim, & Moon, 2016; Li, 2018)
TMT tenure heterogeneity	Positive	(Tihanyi et al., 2000)

2.4.3 TMT attributes

Previous research has identified different TMT attributes that can influence organisations' decision making and performance. In the following, I will review several main categories of TMT attributes.

Tihanyi et al. (2000) distinguished two dimensions of TMT composition. One is the specific demographic traits, and the other is the diversity (synonymous with "heterogeneity") of the attributes. Studies focusing on the first dimension of attributes have suggested that specific demographic attributes are associated with executive perceptions that ultimately lead to certain actions of the firm they serve. In the same light, studies focusing on the second dimension of attributes attempted to identify significant relationships between the heterogeneity of various TMT attributes and firm outcomes. A specific demographic attribute refers to each attribute's situation, such as age, education background, gender, and international experience. Diversity of attributes refers to the deviation of the specific attributes among the whole team, such as the functional diversity and tenure diversity. Both dimensions have been widely studied by researchers.

Considering the nexus between the attributes and work, TMT demographic attributes can be classified into surface and deep levels (Harrison, Price, & Bell, 1998). Surface-level attributes refer to the overt demographic or biological characteristics of the members, such as age, gender, and nationality. Deep-level attributes are acquired through behaviour and they are more entrenched, such as experience, education etc. When studying the dynamic effects of the diversity of TMT attributes, Harrison et al. (2002) argued that over time, the impact of surface diversity on team results decreases, whereas the impact of deep-level diversity increases.

Compared with the surface-level attributes, the deep-level ones are more work-related. Work-related attributes are more likely to be prevalent in discussions and become salient in work situations than surface-level attributes (Barkema & Shvyrkov, 2007). Lee and Park (2006) believed that work-related TMT attributes are more related to firm outcomes. Barkema and Shvyrkov (2007) also suggested that diversity in work-related attributes has greater influence on decision processes. Stemming from social identity theory, Naranjo-Gil, Hartmann, and Maas (2008) distinguished between work-related and non-work-related TMT attributes. Especially when firms face dynamic operational environments, they found that the influence of work-related TMT heterogeneity on the relation between strategic change and operational performance is more significant than that of non-job-related attributes.

In addition to distinguishing the nature of those attributes, some of the research focused on the general situation of TMT attributes (e.g. the average of TMT firm tenure), while some looked at the heterogeneity, and some examined both the general situation and the heterogeneity of TMT attributes (Cuypers et al., 2022).

This study focuses on the work-related TMT attributes of firm tenure, education level, international experience, and functional background as valid surrogates for the values, cognition, and capabilities that influence managers' decisions and behaviours. More specifically, the average of TMT firm tenure, TMT education level and TMT international experience, and the heterogeneity of TMT functional background (TMT functional diversity) are identified as the factors drawn from the construct of TMT attributes in my study. A review of these TMT-related constructs is provided in the following sections.

2.4.3.1 TMT firm tenure

Tenure has been widely studied in research regarding TMT demographic attributes (Rivas, 2012). It refers to the length of time a person has worked in the firm or occupied an executive position. From the perspective of upper echelons theory, TMT tenure as a work-related trait greatly affect firm outcomes (Hambrick & Mason, 1984; Carpenter et al., 2004). As for the research on its impact, scholars have focused on the following aspects.

First, TMT tenure affects the firm's decision-making efficiency. Michel and Hambrick (1992) found that the longer-tenured TMT can make a firm's decision-making more efficient due to their shared cognition based on a long work tenure. Because of the higher social cohesion, Pelled, Eisenhardt, and Xin (1999) argued that tenure helps to reduce conflicts. Higher group tenure acts as a moderator in the linkage of TMT diversity and inter-group conflict. Scholars have found that TMT tenure improves the communication within the firm and enhances the firm's operational efficiency (Carroll & Harrison, 1998; Zimmerman, 2008; Liu et al., 2012). However, Keck (1997) argued that longer-tenured TMTs are associated with negative effects on firms' general operations. The common perspective that the managers develop with the extended periods of work time may converge on similar views (Tihanyi et al., 2000). It results in dysfunctional decision-making processes (such as "groupthink") and reduces the firm's efficiency, particularly in complex and challenging situations (Tihanyi et al., 2000; Li, 2018).

Second, TMT tenure reflects managers' attitudes towards risk. The length of the tenure also reflects a manager's willingness to opt for risky and uncertain decisions. Scholars have found that TMTs with longer tenure tend to maintain the status quo, resulting in unwillingness to take risks or make changes (Bantel & Jackson, 1989; Song & Ma, 2010; Liu et al., 2012; Li, 2018). Managers who have spent a longer time in the firm tend to stick to existing strategies and industry norms (Agnihotri & Bhattacharya, 2015). They find it hard to adjust to the growing needs for adaptability in the competitive environment (Katz, 1982). Herrmann and Datta (2005) found that internationalisation requires exhaustive information processing while a TMT with longer tenure shows less interest in novelty exploration. They favour more stable strategies and prefer to be more professional and profitable in their familiar markets (Kor, 2006). In contrast, Xu, Yun, et al. (2019) found that managers with shorter tenures are more willing to try innovative management methods. Unlike the longer-tenured managers who experience persistent strategies, shorter-tenured decision-makers are more likely to experience swift strategic changes (Barron, Chulkov, & Waddell, 2011). These managers have the motivation to establish their reputation and demonstrate their performance quickly. Wang et al. (2016) argued that such managers have more enthusiasm to make extraordinary progress (or changes) in the firm during their tenure.

Third, over time, individuals who were once considered outsiders become insiders (Kramer, 1991). Kor (2006) believed that longer-serving managers largely have lower legitimacy pressures in the firm. Zhou, Wu, and Luo (2007) argued that the network ties possessed by the top managers help firms to access and exchange external information. A longer duration in a top position in the same firm helps the manager to develop a broader, stronger, and more stable network, which make the firm more acceptable to the target business environments.

Finally, tenure can represent a competitive resource of the firm. With increased tenure, the knowledge and managerial experience which are gained by the managers increase as well (Cheng, Chan, & Leung, 2010). Firms often lack sufficient knowledge about foreign markets, which is an important source of uncertainties in pursuing internationalisation. A longer team tenure could improve the understanding of the complexities that the international markets pose to a firm (Rivas, 2012). With increased tenure, TMT members enhance their abilities to assess international opportunities, and develop their knowledge reserve to deal with the complexity in foreign contexts. Therefore, previous research has argued that longer tenures are positively associated with a firm's degree of internationalisation. However, those findings are overwhelmingly dominated by the enterprises sampled in developed countries. Relying on the longitudinal data from 126 firms from the U.S. electronics industry, Tihanyi et al. (2000) indicated that TMT tenure has a positive impact on firm international diversification. Based on a sample of U.S. multinationals in Europe, Wally and Becerra's (2001) empirical results also showed that TMT tenure is positively associated with international diversification.

2.4.3.2. TMT education level

Education level refers to the number of formal schooling years a person has or post-secondary degrees a person holds. It provides an important indicator that captures an accumulation of skills and knowledge, and helps to shape an individual's cognitive ability, information integration ability and decision-making ability (Hambrick & Mason, 1984; Xu, Yun, et al., 2019). Education level is used as the reflection of the quality of managerial resources (Wally

& Becerra, 2001). Díaz-Fernández et al. (2014) found that education diversification has a significant and negative effect on firm performance. An enormous amount of research on firm performance which used TMT education as a control variable (e.g. Carpenter & Fredrickson, 2001; Hutzschenreuter & Horstkotte, 2013; Cui et al., 2015; Mohr & Batsakis, 2019) also confirmed its significant effects on firm performance.

Literature has examined the impact of TMT general educational level on firms' operations, especially on firms' internationalisation. The upper echelons theory suggests that the managers with higher education levels are more capable of dealing with complex situations (Hambrick, Cho, & Chen, 1996). A higher level of education is associated with various team and firm-level outcomes, such as innovation (Kimberly & Evanisko, 1981; Bantel & Jackson, 1989; Smith, Collins, & Clark, 2005), quicker decision-making (Wally & Baum, 1994), more efficient management (Williams, Hoffman, & Lamont, 1995) and more flexibility regarding strategic changes (Wiersema & Bantel, 1992).

Cui et al. (2015) argued that TMT educational level is "an indicator of managers' learning capability" (p.370). They controlled it in their research on the relationship between TMT international experience and firm internationalisation. The knowledge brought by education also gives the managers the competencies to analyse and evaluate opportunities, such as those in foreign markets. Those managers have more understanding of the foreign cultures, and perceive less risk in foreign operations. Carpenter and Fredrickson (2001) reported that TMT education is positively associated with firm global strategic posture. Based on a sample of large U.S.-based manufacturing firms, Herrmann and Datta (2005) found that TMTs with a higher level of education have a positive impact on firms' international diversification. Tihanyi et al. (2000) came to the same conclusion about the positive nexus between TMT educational level and multinationality, based on a sample of U.S.-based electronic firms. Agnihotri and Bhattacharya (2015) found that managers' educational qualifications is a vital element to stimulate the firm to develop foreign markets.

In addition, education can offer opportunities for managers to gain knowledge about foreign countries, including their different markets and cultures (Wally & Becerra, 2001). Certo et al. (2006) concluded that different TMT educational levels have positive relationships with both firms' market share growth and profit growth. Based on the listed firms in the U.S., Li and Lo (2017) found that the more different the TMT educational background is, the more diversified the firm is.

However, the significant impact of TMT education on firms' outcomes does not seem to exist all the time according to research. Based on the high-technology firms in Taiwan, Jaw and Lin (2009) believed that many Taiwan listed companies are heavily family-controlled. This means the impact of TMT educational background on such firms' international diversification is not important. Although adopting the same measurement as other researchers, but in a study of U.S.-based MNCs in European countries, Wally and Becerra (2001) found no significant relationship between TMT education and international diversification strategy. Scholars have suggested that the inconsistent findings are due to the differences in the selection of country or even the firm samples (Bany-Ariffin et al., 2014).

2.4.3.3 TMT international experience

TMT international experience "reflects the experiences that executives have had in an international context such as growing up abroad or by studying or working outside of one's own country" (Hutzschenreuter & Horstkotte, 2013, p. 267). According to upper echelons theory, it is one of the most useful elements of managers' backgrounds, which can complement and expand on the roles played by other experiences. TMT international experience is an important source of cognition and capability of top managers. It shapes their skills and personal and professional networks (Hutzschenreuter & Horstkotte, 2013). Many studies have found that TMT international experience significantly affects organisational outcomes (Tihanyi et al., 2000; Carpenter & Fredrickson, 2001; Burillo & Moreno, 2013; Wang et al., 2016).

Gupta and Govindarajan (2002) noted that cognition building through international experience is a lengthy and complex process, as the established nationality imprinting of managers' home-country instincts is hard to change and then brings operational risks during international management. Moreover, due to dynamic international environments, previously accumulated international experience may become outdated or irrelevant (Fernhaber, Mcdougall-Covin, & Shepherd, 2009), and it is even likely to be an obstacle to firms' development. However, international experience, whether acquired through overseas study or foreign assignments, provides the top managers with a global view of their work, especially when they make decisions related to international assignments (Herrmann & Datta, 2005).

The impact of TMT international experience on firms' international expansion has interested many scholars. Hutzschenreuter and Horstkotte (2013) argued that TMT international experience helps managers to better understand the foreign markets. Agnihotri and Bhattacharya (2015) believed that TMT international experience facilitates the managers to gain awareness of different cultures. Moreover, international experience is also a good way for managers to become familiar with new competitors and complex environments in different countries (Tihanyi et al., 2000; Pisani et al., 2018), which makes them more confident when making decisions on international expansion (Herrmann & Datta, 2005). Li (2018) stated that international experience can, to some extent, be internalised into the capability of the top managers, enabling them to understand other cultures, regulations, and risks, as well as helping them overcome the obstacles of foreign operations. Scholars have argued that managers with international experience are more likely to have a broader international network (Pisani et al., 2018), which enables the firm to have more outside support and develop collaborative relations with potential local partners (Hitt, Lee, & Yucel, 2002). Compared with managers without or with insufficient international experience, managers who are equipped with more international experience bring critical information and knowledge to newly internationalised firms (Hutzschenreuter & Horstkotte, 2013). They are more sensitive to the opportunities in international markets and can then grab them (Milanov & Fernhaber, 2014). In addition, they can also develop international networks and alliances to assist the internationalisation process (Eberhard & Craig, 2013; Hutzschenreuter & Horstkotte, 2013).

TMT international experience has been empirically found to positively contribute to firm performance (Daily, Certo, & Dalton, 2000; Certo et al., 2006). Carpenter et al. (2001) found that the positive impacts of TMT leaders' international experience on firm performance are enhanced if the rest of the TMT also have a higher level of international experience. Nielsen (2010) argued that this positive effect is mediated by the number of subsequent foreign market entries, that is, TMT international experience positively promotes the number of foreign markets entered and in turn generates the positive effect on firm performance. Le and Kroll (2017) specified three measures of international experience: the length of time spent abroad, number of countries worked in, and cultural distance exposed to. They found a direct and positive impact of international experience on firm performance and indirect impacts through influencing strategic change. Based on their review of 140 papers on TMTs in IB, Cuypers et al. (2022) argued that many studies have concluded that the effects of TMT experience on firm performance might have some boundary conditions. For example, Carpenter et al. (2001) found that when international experience of TMT leaders is accompanied by that of other team members, it is particularly beneficial to firm performance, because of the accumulation and shared understanding.

2.4.3.4 TMT functional diversity

Functional background has been defined as "the distinct units (with associated goals, concerns, etc.) to which a member belongs currently or in the past" (Rivas, 2012, p. 4). It is another important and influential attribute of upper echelons (Hambrick & Mason, 1984; Hambrick, 2007; Amin et al., 2019). Research has found that functional position directly links to a manager's professional experience and reflects their personality, cognition, knowledge and ability (Evert et al., 2018). For example, a marketing director may be more aggressive, while a chief finance officer may be more prudent.

Carpenter et al. (2001) stated that a TMT's working background is helpful to form social networks of personal and professional ties. Professional experience brings the firm both relational capital (e.g., networks) and human capital (e.g., expertise, knowledge and skills) (Díaz-Fernández et al., 2014), and influences firm strategic decisions and managerial operations (Hambrick & Mason, 1984). TMTs whose members have different professional backgrounds have several advantages. For example, they might have broader perspectives, better knowledge sharing (Amin et al., 2019), and hence offer more comprehensive strategic options to improve the firm's ability to deal with environmental complexities (Tihanyi et al., 2000).

TMT functional diversity refers to the degree to which TMT members differ with respect to their functional backgrounds. As the diversified TMT's functional experience provides TMTs with a wider set of social categories, such managerial teams could more easily adapt to a higher level of change. Moreover, due to multiple functional backgrounds, such as accounting, finance, operations, strategy, human resources and marketing, TMT functional diversity can improve management efficiency and thus is significantly related to the business operations (Buyl et al., 2011; Chaganti et al., 2016; Amin et al., 2019).

Scholars have found that the TMT's functional diversity has influence on firm outcomes both directly and indirectly. Studying electronic firms from the U.S., Tihanyi et al. (2000) empirically demonstrated a significant positive relationship between TMT functional diversity and firm international diversification. Naranjo-Gil et al. (2008) argued that diversity provides TMTs with different types of knowledge and a great variety of professional perspectives, which can make the TMTs more adaptive to the volatile and complicated market environment. Based on a Spanish sample, they empirically found that TMT functional diversity negatively moderates the relationship between firm strategic change and performance. Based on the information/decision-making perspective, Rivas (2012) found that functional background diversity of TMT members is positively related to internationalisation. The empirical results of the research of Cai, Liu, and Yu (2013) based on a Chinese firm sample indicated that TMT functional background diversity alone is not significantly related to firm performance, but mediated by the inter-TMT conflicts. Bany-Ariffin et al. (2014) also found that high diversity of functional experience among TMT members has a positive impact on firm international diversification, based on a sample of 83 of the 100 largest Malaysian multinational firms.

On the other hand, researchers have also argued that the influence of diversity on business management is a double-edged sword (Horwitz & Horwitz, 2007; Homberg & Bui, 2013). Despite its benefits in delivering a variety of perspectives, diversity may generate conflicts and disagreements. Wally and Becerra (2001) found that TMT functional diversity can risk hindering the firm's multinationality. Cai et al. (2013) stated that the diversity of top managers' expertise areas results in longer deliberation time in achieving team consensus, which lowers team efficiency and harms team cohesion. Díaz-Fernández, González-Rodríguez, and Simonetti (2015) found that the diversity in TMT members' functional background negatively affects firm performance.

To sum up this section, upper echelons theory suggests that the TMT is the core decision-maker in firm management (Singh et al., 2010). Its work-related demographic characteristics, including tenure, education, international experience, and functional background, are strong indicators of managers' cognition, values, and abilities, which constitute powerful predictors of firm behaviour (Li & Cui, 2018). However, I found that the existing literature has not reached a consensus on how these attributes affect MNEs' performance and strategic decisions. In addition, scholars have suggested that results vary due to the country- or even sample-specific differences, while the previous research was overwhelmingly based on the samples of firms from western countries. Therefore, I focus on Chinese international enterprises, specifically the impact of TMT attributes on their multinationality and performance.

2.5 Internationalisation and MNE performance

2.5.1 Overview of the firm internationalisation

Internationalisation is a core topic in international business literature and practice (Oviatt & McDougall, 2005). It refers to the process of increasing involvement in international operations. Research on firm internationalisation can be traced back to 1976 in work by Hymer (Hymer, 1976; Feng et al., 2019). According to the classic internationalisation theory, a firm obtains profits through a series of organised and planned activities under incomplete competition conditions in host countries by utilising the advantages that have been established in its home country (Hymer, 1976). Joining the global markets and being internationalised improve their performance (De Jong & Van Houten, 2014).

Internationalisation comprises inward and outward processes (Gu & Lu, 2011). Inward internationalisation is the process where firms engage in transactions with foreign companies in their domestic market (Buckley et al., 2007), which includes but is not limited to activities such as importing products or technology, attracting foreign direct investment to the home country, and absorbing know-how or management experience from abroad. In contrast, outward internationalisation refers to the domestic companies becoming involved in transactions in foreign markets (Johanson & Vahlne, 1977), such as exporting, acquisition or greenfield investments in host countries. Outward investment has been the focus for a large majority of studies on FDI (Dunning, 1993). Inward and outward internationalisation interact with each other. Scholars consider that outward internationalisation to some extent is the result of the development of inward internationalisation (Lyles, Li, & Yan, 2014).

The Uppsala model (Johanson & Vahlne, 1977) posited that outward internationalisation is the outcome of a series of gradual decisions made by firms, which means that, through exporting or setting up marketing agencies overseas, firms may gradually develop into overseas outward direct investment. In contrast with exporting or franchising, the companies that configure investments in foreign markets are more engaged in the international markets and more affected by the interactions between home and host countries. A study asserted that internationalisation is an essential factor in expanding capital, increasing productivity and stimulating economic growth (Dorozynska & Dorozynski, 2015). Outward investment has been an important way for firms to be involved in the global value chain. The past decades have witnessed an unprecedented and continuous increase in FDI all over the world (Kim & Park, 2013).

However, research based on firms from emerging markets, for instance China, has shown that only some of the MNEs follow the Uppsala model, while some firms choose the more risky FDI approach. Luo and Tung (2007) presented "a springboard perspective" to depict the phenomenon where MNEs from emerging markets start directly from outward internationalisation. They employ an aggressive expansion approach, directly investing in some developed economies, to overcome their latecomer disadvantage or acquire the critical resources in a relatively short period of time. Ramamurti and Hillemann (2018) further proposed that one of the distinctive features of the internationalisation of CMNEs is that their evolution as MNEs does not follow the Uppsala model but is faster and more aggressive. CMNEs have the advantages of the government support, and "leapfrog" to the newest technology and some sunrise industries, rather than being internationalised from step to step. In the area of internationalisation, as late-comers but faster players, MNEs from emerging economies have been a valuable research topic.

2.5.2 The multinationality strategy

Internationalisation is an important firm-level strategic decision for doing business abroad (Hitt, Tihanyi, et al., 2006). Hitt, Ireland, and Hoskisson (2007**)** defined it as "a strategy through which a firm expands the sales of its goods or services across the borders of global regions and countries into different geographic locations or markets" (p. 251). According to Tseng et al. (2007), multinationality refers to "the extent to which firms' business activities span across national borders" (p. 961). It can be considered as an indicator to measure a firm's international strategy. Moreover, some scholars regard it as the firm-level international strategy for MNEs (Clegg et al., 2016).

Multinationality offers an enterprise a way to create value through accessing foreign markets. Based on resource-based theory, going abroad provides the firm an important channel to access and acquire critical resources (Kirca et al., 2011; Feng et al., 2019), which include both tangible (such as natural resources, labour force and market shares) and intangible resources (such as technology, experience and intelligence). Multinationality indicates that the firm can expand its competencies from home country to multiple foreign markets, enlarging the scope of obtaining resources. From the perspective of institutions, internationalisation is also a strategy of the firm to align with the policy initiatives of the government (Luo & Tung, 2007). The home country's institutional policy, taking the "Going out" policies launched by the Chinese government in 2000 as an example, is beneficial for the firm to gain government support in areas such as financing and taxation, when it is going abroad. Moreover, institutional legitimacy gained in the home country is helpful to strengthen the firm's competencies in the domestic market, which can in turn promote its international expansion.

On the other hand, researchers have argued that internationalisation does not always create value for the firm because of the "liability of foreignness" (Zaheer, 1995). Firms may suffer additional uncertainty, risk, and costs when they are operating in foreign markets. Institution-based theory suggest that institutional environments vary from one country to another, resulting in the “liability of foreignness”. Consequently, a lack of legitimacy in host countries gives rise to trust crises and operational risk that become operational obstacles for the firm. There is evidence showing that overseas operations are likely to have a negative impact on MNE performance. Buchner et al. (2018) empirically found that foreign firms underperform more than the local firms. Mata and Freitas (2012) also argued that foreign firms are more likely to leave host countries that they once entered due to the liability of foreignness. Following the same logic, Mata and Alves (2018) found that the survival rate of the firms operated and owned by foreigners is lower than that of local counterparts.

Consequently, although multinationality is a critical strategy of the firm when it internationalises its business and is vital to firm performance, the relationship between multinationality and firm performance (M-P relationship) is a complex issue. Scholars have made great efforts to probe into their relationship, but little consensus has been achieved. Existing research on the M-P relationship will be reviewed in more detail in Section 2.5.4.2.

In addition to the research on the M-P relationship, another research topic has also attracted the interest of many scholars in the IB area: what factors affect firm multinationality. Kirca et al. (2011) found that the firm-specific assets, such as innovative intensity and advertising intensity, are positively related to firm multinationality. Other research has emphasised the role of top managers in the decision to increase a firm’s internationality level. Based on upper echelons theory, studies found that TMT education, tenure, international experience and working experience are associated with firm international diversification (Tihanyi et al., 2000; Herrmann & Datta, 2005; Bany-Ariffin et al., 2014; Pisani et al., 2018). For example, when discussing the impact of TMT education, researchers suggested that the skills and knowledge brought by formal education assist top managers in acquiring the ability to deal with more complex information and thus being more optimistic and receptive to being internationalised; therefore, their company is inclined to go to more foreign markets for business operations. Managers’ international experience provides them with a more global view, reduces the associated uncertainty and creates social capital, when they make decisions related to international expansion.

In this study, multinationality is used as a reflection of MNEs’ firm-level internationalisation strategy. It is a dynamic indicator to reflect the implementation of the international strategy in each observation year.

2.5.3 MNE performance

Performance implications of internationalisation have been widely acknowledged as the primary and ultimate objective in strategic management as well as the central research theme (Hitt, Tihanyi, et al., 2006; Kirca et al., 2011). Firms internationalise with the purpose of performance improvement that constitutes a basic and important research objective in IB studies.

Generally, two types of research on performance have been conducted. One includes studies that investigate firms' merger and acquisition performance (Gubbi et al., 2010), or performance related to "being listed", such as time to Initial Public Offering (Chaganti et al., 2016). The other focuses more on a sustained period of time, that is, the performance of some financial indexes, for instance, sales growth measured as the annual percentage change in total sales (Filatotchev & Piesse, 2009), or other indexes shown in the annual report, such as return on assets (ROA) or return on equity (ROE).

Regarding the subject of performance evaluation, there are also two perspectives. One is the parent company, and the other is the overseas affiliates. The MNE establishes its subsidiaries, either as a wholly owned venture or a joint venture, in the host country. To assess the international performance, either the performance at the headquarters level or the affiliates performance could be focused on. According to different purposes of the research, scholars can choose to focus on the performance either of the parent company or of its affiliates. Research on subsidiary performance (e.g. Nguyen & Rugman, 2015; Gaur et al., 2019) has emphasised the overseas operations in the specific foreign countries, while research on the performance of the headquarters (e.g. Nielsen & Nielsen, 2013; Clegg et al., 2016; Rugman, Nguyen, & Wei, 2016) has focused on overall performance of the MNE as a whole. Normally, financial data of overseas subsidiary(s) is consolidated into the statement of the headquarters. Moreover, the performance of the parent company reflects the impact of internationalisation on a firm's overall performance. Therefore, in this study, the parent company's financial performance is the focal perspective.

2.5.4 Research on MNE performance

The following section reviews the research on antecedent factors of MNE performance. After conducting the review, I found that among the research on factors influencing MNE performance, multinationality-performance (M-P) studies predominate (Matysiak & Bausch, 2012), while other potentially essential antecedents have received comparatively less attention.

Thus, in the following sections, I summarise the related literature according to these two aspects.

2.5.4.1 The antecedent factors of MNE performance

Table 2.2 summarises the research on antecedent factors of MNE performance that was published in the past two decades (2000-2019) in the top business and management journals in the field of international business (Hitt, Tihanyi, et al., 2006; Matysiak & Bausch, 2012). The top journals are the *Journal of International Business Studies, Strategic Management Journal, Academy of Management Journal* and *Academy of Management Review*. Based on the literature review, I categorised the antecedent factors of MNE performance into three levels: macro (country or industry) level, organisational level, and individual level.

The macro level normally includes country and industry factors. To expound why and how country affects MNE performance, three theoretical notions have been primarily adopted by scholars: the inter-country distance (Hutzschenreuter & Voll, 2008; Qian et al., 2010; Banalieva & Dhanaraj, 2013), liability of foreignness (Qian et al., 2008), and country-specific advantages (Gaur et al., 2019). The distance between two economic entities in terms of geography, governance, or culture cognitively create operational complexity and additional transaction costs which ultimately impose negative effects on the MNE performance. The liability of foreignness, which is closely linked to the inter-country distance, hinders the MNE from acquiring legitimacy in the host country and then negatively affects performance or even threatens the survival of the MNE. Country-specific advantages (CSAs), referring to factors such as natural resources, human resources, government policy support and markets, exist in either the home country or host country. By equipping the firm with more competitive advantages, CSAs facilitate the MNE's performance.

Factors at the industrial level predominantly focus on market conditions (Matysiak & Bausch, 2012). For example, Short et al. (2009) found that industry membership matters less for the performance of a new firm than the established firm in terms of sales and sales growth. Guo (2017) reported that industry-specific knowledge and experience provide advantages to the firm in some industries which have stable interaction with the firm, but disadvantages in other industries. Therefore, they empirically showed that stable effects of firm-industry interaction are critical to firm performance. Chowdhury and Endres (2021) found that growth of the related industries has a positive impact on firm performance. Research has illustrated that the industry does matter for firm performance, but this impact normally interacts with other factors and not as dramatically as other factors (Short et al., 2009).

Organisational-level factors have indispensable effects on firm performance (Matysiak & Bausch, 2012). These factors include firms' international strategy and firm-specific advantages (FSAs), of which the impact of multinationality on MNE performance has drawn extensive attention from the scholars. In the next section (Section 2.5.4.2), I will review the literature on the relationship between multinationality and performance. FSAs, such as the resources and capabilities the firm possesses, have been widely considered to have impact on MNE performance. The primary theoretical foundation of FSA research is the resource-based view (Matysiak & Bausch, 2012). By and large, FSAs can be defined as the influential factors at the firm level, which form the sources of firm competitiveness. Research has elaborated and identified these firm-specific and non-imitable assets, such as the research and development (R&D) intensity, dynamic capability, financial resources, and diverse alliance networks, as indispensable for MNEs to successfully compete in a multitude of countries (Venaik et al., 2005; Fang & Zou, 2009; Filatotchev & Piesse, 2009; Nguyen & Rugman, 2015).

In addition to the country and firm-specific factors, the role of executive managers in MNE operations constitutes an individual-level antecedent of MNE performance. By introducing TMT-related theory into the international business field, research has found that top managers' mental model or some of their demographic attributes comprise a significant foundation of the mechanisms influencing MNE performance. However, based on a review of the literature, factors related to top managers' attributes have not attracted much attention in this area. As Hutzschenreuter and Horstkotte (2013) argued, a central factor in the micro level of the management system has been largely neglected in the empirical analysis regarding effects of internationalisation on performance. The relationships between individual attributes and MNE performance still need further exploration.

To sum up, a review of the key findings, methodologies and research samples of prior related research (refer to Table 2.2) has led to several findings. They are: first, studies about organisational-level factors have dominated the research on antecedents of MNE performance. To be more specific, how multinationality affects firm performance is the focus for the majority of studies. Second, empirical research is the dominant research method in this field. Third, most of the research is based on the MNEs from developed economies, for instance, the U.S, E.U. countries such as Germany, and Japan.

By and large, MNE performance is an important outcome in international management. It has attracted intensive research attention. However, existing research has mainly focused on the antecedents drawn from either the organisational or macro level, leading to a neglect of the micro-foundations of performance.

Table 2.2 Summary of the antecedent factors of MNE performance published in the top journals in the past 20 years (2000-2019)

Antecedent factors	Category	Study	Key findings	Methodology	Data/Sample
Country environment diversity	Country-level	(Goerzen & Beamish, 2003)	Higher country environment diversity is associated with lower performance, but positively moderates the MP relationship.	Quantitative	580 Japanese MNEs over the period of 1995-1999
Cultural distance	Country-level	(Hutzschenreuter & Voll, 2008)	Cultural distance is associated with decreased performance.	Quantitative	91 German firms excluding financial services industry for the period of 1985-2004
Intra-regional diversification	Country-level	(Qian et al., 2010)	Intra-regional diversification positively affects firm performance, and the shape of the relationship is inverted-U.	Quantitative	123 U.S.-based MNEs in manufacturing industries over the period of 1999-2005
Host country characteristics	Country-level	(Gaur et al., 2019)	Firm performance depends on institutional development.	Quantitative	292 MNCs from Korea over the period of 1995-2013
Regional diversification, multinationality	Country-level Organisational-level	(Qian et al., 2008)	Regional diversification has linear and curvilinear effects on firm performance; Multinationality significantly affects firm performance.	Quantitative	189 U.S. MNEs over the period of 1996-2000
Psychic distance and firm innovation	Country-level Organisational-level	(Azar & Drogendijk, 2014)	Psychic distance positively affects firm performance through innovation.	Quantitative	186 Swedish companies, survey conducted in 2012
International coherence within an MNE, industry concentration	Organisational-level Industrial-level	(Celo & Chacar, 2015)	The degree of relatedness in a multinational firm has a positive impact on MNE performance, which gets weaker as the industry concentration increases.	Quantitative	960 U.S. MNEs in 2008
Multinationality, industry type	Organisational-level Industrial-level	(Contractor et al., 2003)	It demonstrates the S-shape relationship between multinationality and performance and this shape fits better in knowledge-based firms in the service industries.	Quantitative	Over 200 firms in 11 service industries from 12 nations over the period 1983-1988
Multinationality, industry type	Industrial-level organisation level	(Berry, 2006)	MNE performance increases via FDI in developing economies are associated with more knowledge-intensive industries and higher levels of multinationality.	Quantitative	191 U.S. manufacturing firms over the period of 1981-2000
Multinationality	Organisational-level	(Dastidar, 2009)	Multinationality has a positive impact on performance.	Quantitative	2980 MNEs from the U.S. over the period of 1990-1998

R&D and export intensities	Organisational-level	(Filatotchev & Piesse, 2009)	Both R&D and export intensities have a positive effect on the sales growth of firms.	Quantitative	1110 IPO firms from E.U. countries over the period of 1985-2004
Equity alliances relationship of the enterprises, organisational environment	Organisational-level	(Goerzen, 2007)	Lower equity alliances relationship is associated with higher performance, and positively moderated by technological environment uncertainty.	Quantitative	580 Japanese MNEs, survey conducted in 1999
Multinationality, firm’s assets	Organisational-level	(Hejazi & Santor, 2010)	The causal relationship between multinationality and performance depends upon the riskiness associated with each bank's foreign assets.	Quantitative	Big Six Canadian banks for the period of 1994-2004
Multinationality	Organisational-level	(Kirca et al., 2011)	Multinationality positively affects MNE performance.	Quantitative	Meta-analysis of 120 samples from 111 academic papers
Product diversity, international diversity	Organisational-level	(Kumar, 2009)	Product and international diversity are negatively associated with each other in a short time, both have a positive impact on performance.	Quantitative	690 U.S. manufacturing MNEs over the period of 1993-1997
International strategies	Organisational-level	(Lee & Makhija, 2009)	International strategies (foreign direct investments and export-related international investments) are associated with higher performance in the times of economic crisis in Korea.	Quantitative	459 Korean MNEs over the period of 1996-1998
International expansion strategy	Organisational-level	(Banalieva & Dhanaraj, 2013)	Home-region orientation does not have a significant effect on performance.	Quantitative	625 MNEs over the period of 1997-2006
Multinationality	Organisational-level	(Abdi & Aulakh, 2018)	The relationship between multinationality and performance conforms to a negative sigmoid curve.	Quantitative	2,620 U.S. manufacturing firms over the period of 1976–2008
Multinationality	Organisational-level	(Capar & Kotabe, 2003)	Multinationality has a U-shaped curvilinear effect on performance.	Quantitative	81 German service firms over the period of 1997-1999
Firm’s dynamic capabilities	Organisational-level	(Fang & Zou, 2009)	Marketing dynamic capabilities has a positive effect on firm performance.	Quantitative	144 MNEs, survey conducted in China
Firm’s alliance networks experience	Organisational-level	(Goerzen & Beamish, 2005)	More diverse alliance networks experience lower firm performance.	Quantitative	580 Japanese MNEs, survey data
Multinationality, firm’s relational capital	Organisational-level	(Hitt, Bierman, et al., 2006)	Multinationality and corporate client relational capital positively affect firm	Quantitative	72 U.S. MNEs over the period of 1992-1999

			performance, foreign government relational capital negatively affects performance.		
Multinationality	Organisational-level	(Lu & Beamish, 2001)	Internationalisation has a positive impact on performance.	Quantitative	164 Japanese MNEs
Multinationality	Organisational-level	(Lu & Beamish, 2004)	Horizontal S-shaped impact of internationalisation on performance	Quantitative	1489 Japanese MNEs over the period of 1986-1997
Capability of internal equity financing	Organisational-level	(Nguyen & Rugman, 2015)	Internal equity financing has a positive effect on firm performance.	Quantitative	91 British MNEs over the period of 2003-2007, survey data
Capability of inter-unit learning and innovation	Organisational-level	(Venaik et al., 2005)	Inter-unit learning and innovation can improve performance.	Quantitative	119 MNEs, survey data
Firm-specific capability	Organisational-level	(Lu et al., 2010)	Positive relationship between firm resources and international performance and a mediating role of firm-specific capabilities.	Quantitative	775 Chinese MNEs, survey data
International working experience of CEO	Individual-level	(Carpenter et al., 2001)	CEO with international assignment experience has a positive effect on MNE performance.	Quantitative	256 multinational companies from Fortune 500 over the period 1994-1996
Mental models of key decision-makers	Individual-level	(Maitland & Sammartino, 2015)	Mental models of decision-makers affect MNE performance.	Qualitative	Case analysis of 11 MNE decision-makers
Nationality diversity of top managers	Individual-level	(Nielsen & Nielsen, 2013)	TMT nationality diversity is positively related to performance.	Quantitative	146 Swiss listed firms in 32 industries over the period 2001-2008

2.5.4.2 The relationship between multinationality and performance

Research interest in the relationship between multinationality and firm performance (M-P relationship) is not new. This topic has drawn enormous scholarly attention. A great number of empirical studies have been conducted, although a limited consensus has been reached (Contractor et al., 2003; Glaum & Oesterle, 2007; Li, 2007; Cozza et al., 2015). Empirical studies have generated inconsistent, sometimes even contradictory results. While previous studies suggest that the M-P relationship is curvilinear rather than linear, various shapes of the curvilinear relationship have been proposed, such as U-shaped, inverted U-shaped, or S-shaped (sigmoid) curves. A few other depictions of the M-P relationship have also been presented by scholars based on specific samples, for example, the inverted J- and M-shapes. Table 2.3 shows the diversity of all the above relationship forms and their representative empirical studies. The measurements of multinationality (M) and performance (P), as well as the samples they are based on, are also reflected in Table 2.3.

Table 2.3 Summary of representative empirical studies on the M-P relationship

Study	Relationship of MP	Measurement of multinationality (M)	Measurement of Performance (P)	Sample
Geringer, Beamish, & daCosta, 1989	Inverted J	FSTS	ROS, ROA	100 largest MNEs from U.S. and E.U.
Collins, 1990	Negative	Three categories	Financial index model (Risk-return)	133 firms from Fortune 500
Morck & Yeung, 1991	No relation	NFS, NFC	Tobin's Q	1644 U.S. MNEs
Kim et al., 1993	Positive	Entropy measure	ROA	125 large U.S. MNEs
Gomes & Ramaswamy, 1999	Inverted U-shaped	FSTS, FATA, NFC	ROA, OPSAL	Longitudinal data from U.S. MNEs in four key industries
Lu & Beamish, 2001	U-shaped	The number of FDIs in which the parent firm had a 10 percent or greater equity share; the number of countries in which the firm had FDIs	ROA, ROS	164 Japanese SMEs
Riahi-Belkaoui & Alnajjar, 2002	Negative	FSTS, FPTP, FATA	Annual Persistence Measures	878 U.S. firms
Capar & Kotabe, 2003	U-shaped	FSTS	ROS	81 major German service firms in four industries

Contractor et al., 2003	S-shape (sigmoid)	Constructed a composite index	ROA, ROS	204 MNEs in service sectors
Lu & Beamish, 2004	S-shape (sigmoid)	Integrated NFS and NFC	ROA, Tobin's Q	1,489 Japanese firms
Goerzen & Beamish, 2005	Negative	Number of unique Japanese (home country) partners; the number of unique local partners; number of unique industries of partners	ROA, ROS, ROC	580 Japanese MNEs
Qian et al., 2008	Linear and curvilinear effects	Composite index of FATA, FSTS, & FETE	ROA, ROS	189 U.S. MNEs
Chao & Kumar, 2010	Inverted U-shaped	A two-item measure consisting of NFS and NFC	ROA	Fortune Magazine Global 500
Hejazi & Santor, 2010	Positive	FATA (but FA split into deposits, loans, and entities)	ROA, ROE	Big Six Canadian Banks
Qian et al., 2010	Inverted U-shaped	Composite index	ROA	123 U.S.-based MNEs in manufacturing industries
Singh et al., 2010	Inverted U-shaped	CSTS	ROA	565 German SMEs
Kirca et al., 2011	Positive	Code	Multiple indicators	Meta-analysis of 120 samples from 111 academic papers
Yang & Driffield, 2012	U-shaped	Dummy variable = 1 if the study does not use the FSTS to measure multinationality	Dummy variable	Meta-analysis of 67 academic papers
Hsu, Chen, & Cheng, 2013	Positive	FSTS, FATA	ROA	187 Taiwanese SMEs that expanded abroad
De Jong & Van Houten, 2014	Positive	Composite measure of NFS and NFC	Earnings before interest and taxes divided by assets (EBITOA)	568 E.U. MNEs
Almodóvar & Rugman, 2014	M-shaped	FSTS	ROS	110 Spanish International New Ventures
Rugman et al., 2016	No relation	FSTS	Multiple indicators	49 Chinese MNEs
Feng et al., 2019	U-shaped	Income of the primary overseas business to the general income	Firm profitability	170 Chinese listed companies in the Yangtze River Delta region

Notes: Abbreviations: ROA = return on assets; ROE = return on equity; ROI = return on investment; ROS = return on sales; ROC = return on capital; OPSAL = a ratio of operating cost to sales; FSTS= foreign sales/total sales; FATA = foreign assets/total assets; FPTP = foreign profits to total profits; FETE = number of foreign employees to total employees; NFS = number of foreign subsidiaries; NFC = the number of foreign countries; SMEs = small and medium-sized firms; DOI = degree of internationalisation

In general, when entering foreign markets through FDI, firms expect a high return on their capital investment. Promoting a positive relationship, some studies have argued that internationalisation provides a mechanism for firms to overcome market imperfections and gain access to critical resources they need in different foreign markets.

Yet, facing large costs related to the complexity of cross-national operations, the proponents of a negative relationship have argued that numerous problems in communication, coordination, quality control, and cross-cultural management can occur during internationalisation, especially to a destination with higher uncertainty or distance from the home market, so that the parent companies are likely to suffer a negative effect from multinationality.

Proponents of a U-shaped relationship have argued that MNE performance decreases first and then increases with increasing degree of internationalisation, thus showing a U-shape. When firms enter a few foreign markets at the early stage, the costs brought by the liability of foreignness are much higher, but these costs will be reduced when the firms become more internationalised, more mature, and more familiar with the deepening of internationalisation. Conversely, proponents of the inverted U-shaped relationship have argued that multinationality helps firms to capitalise on capabilities and markets that are not easily accessible within their home country. Multinationality also enables those firms to have more opportunities to gain competitive advantages as well as more knowledge, which enhance their overall international performance. However, higher multinationality will result in higher costs and more risks, leading to a negative effect on the overall performance. The emergence of a sigmoid relationship is a combination of both U-shape and inverted U-shape. Furthermore, the proponents of the “S-shaped relationship” have explained the M-P relationship with a three-stage theory of international expansion. This stream of research suggests that the international expansion generally goes through three stages, in each of which the M-P relationship changes. Stage one is the early stage which has a negative slope, because the costs and barriers dominate in the initial international expansion; stage two is the more advanced international period which has a positive slope, because the benefits of international expansion are now realised. Stage three is the excessive international period which has a negative slope (again), because the international expansion has moved beyond an optimal threshold.

In summary, the phenomenon of internationalisation has been discussed broadly in the international business field. The overall relationship of multinationality and performance is a topic that is crucially important for academic researchers as well as business practitioners (Contractor et al., 2003; Feng et al., 2019), although there seems to be no consensus in the findings. Matysiak and Bausch (2012) argued that it is difficult to draw a consistent conclusion about the M-P relationship because so many complexities are involved in the internationalisation process. They suggested that multi-level points of view should be adopted to probe into this topic. Moreover, differences in research setting with regard to country origin for the sampled firms or the samples with different internationalisation features may also result in different empirical results (Contractor, 2007). Currently, as pointed out in the earlier review, most of the empirical studies have been based on firms from developed countries.

As the leading emerging economy, China started its OFDI in 1979 when the Chinese government initiated its national economic development programme for the first time to attract inward foreign investment. The speed of Chinese companies' internationalisation was rather slow until 2000, after which it began to accelerate (Yang & Stoltenberg, 2014). Now, after only 20 years' development, China has become the second largest OFDI source country in the world. The phenomenon of firm internationalisation brought by such rapid development enriches research on internationalisation (Luo & Tung, 2007) and may also shed new light on the inconsistent M-P relationship.

2.6 The effects of institutional factors

From the institutional perspective, I focus on formal institutional distance and firm-specific state ownership to explore their impacts on firms' internationalisation. Both of them have been examined as important contextual factors in the study of Chinese MNEs' outward foreign investment (Luo & Tung, 2007; Wu & Chen, 2014; Buckley et al., 2018). The related research on each of them is reviewed in the following two sections.

2.6.1 The formal institutional distance

Conceptualised as the "rules of the game" (North, 1990, p. 1), institutions, including both formal and informal institutions, constitute important contexts for international business behaviour. Informal institutions refer to the driving forces that modify behaviour and form the subjective perception of members in a society, including norms of behaviour, values, attitudes, and conventions (North, 1990). The informal institutions emerge from individuals interacting. They involve conformity among social groups or communities where individuals develop or share rules of behaviour, values, and beliefs (Martinez & Williams, 2012).

When dealing with a variety of strategic and managerial issues involved in internationalisation, the firm needs to retain its firm-specific advantages and match them with country-specific advantages of both home and host countries (Lopes, Casson, & Jones, 2019). The institutional theory provides a frequently referenced theoretical basis for international business studies (Meyer & Peng, 2016), particular in the area of the internationalisation from emerging countries (Hejazi & Santor, 2010; Sauvant & Chen, 2014; Yang & Stoltenberg, 2014; Cozza et al., 2015; Chen et al., 2016; Kang et al., 2018). The current study focusses on the impacts of formal institutions.

Formal institutions are composed of political rules, regulations, laws, and contracts which are explicitly created, usually by government legislation. The existing institutional systems have their impact on FDI through two broadly defined institutional interventions. One is controlling and constraining, the other is impelling and encouraging (Marinova, Child, & Marinov, 2012). Restrictive formal institutions include the strict administrative processes and procedures mandated by the governments for OFDI approval, firm operation, etc. Supportive formal institutions can reduce uncertainty and market deficiencies, which also provide convenience and lay the foundation for the internationalisation of firms (Child & Rodrigues, 2005). Formal institutions play a particularly critical role in emerging economies (Marinova et al., 2012). In China, for example, the formulation and implementation of the "Going Out" policy by the Chinese government have greatly encouraged Chinese firms to invest abroad and directly enhanced their international competitiveness (Luo & Tung, 2007). Evidence shows that the number of Chinese companies participating in international business increased significantly, due to strong government incentives (Marinova et al., 2012; Yang & Stoltenberg, 2014).

Operating in different countries, MNEs engage in at least two distinctive institutional environments: the home and the host country. In the research related to both home and host countries, formal institutional distance is a central construct under the institutional theory (Beugelsdijk, Ambos, & Nell, 2018). It reflects the extent of similarity or dissimilarity between home and host countries' formal institutions. The measure of institutional distance captures the degree to which the institutional frameworks are different (Meyer & Peng, 2016).

Regarding the distinctive institutional environments between the home country and host country, empirical research has studied the impact of institutional distance on MNEs' international operations (e.g. Salomon & Wu, 2012; Kostova et al., 2020). With a high institutional distance to the foreign markets, the environmental uncertainty increases (Azar & Drogendijk, 2014). Both the cost and difficulty are high for resource/knowledge transactions (Chao & Kumar, 2010; Meyer & Peng, 2016). Moreover, the legitimacy issues are more concerning (Kostova, Roth, & Dacin, 2008; Liou et al., 2016; Liou, Chao, & Ellstrand, 2017; Kostova et al., 2020).

Accordingly, Chao and Kumar (2010) found that formal institutional distance negatively moderates the relationship between international diversity and MNEs' overall performance. Based on the samples from large U.S. firms, Abdi and Aulakh (2012) found that a higher degree of formal distance between institutional environments has a negative impact on MNEs' performance. Estrin, Baghdasaryan, and Meyer (2009) argued that a high distance between formal institutions in home and host countries leads to MNEs exerting tight control over ownership during cross-border mergers and acquisitions, especially for their first FDI investment. Liou et al. (2016) reached a similar conclusion, suggesting that the international strategy of a higher ownership structure can gain more governance efficiency when formal institutional distance is higher. In addition, the issues such as transaction cost and liability of foreignness caused by distance in institutional environments of home and host countries have significant impacts on the behaviour of the managers in the MNEs.

In summary, the formal institutional environment provides a structure for MNEs to accomplish their goals, determining how firms establish and manage their businesses. Institutional theory provides a macro perspective for the study of internationalisation. In the relevant literature, institutions have typically been theorised as contextual variables that affect other relationships informed by management theories (Lin et al., 2009). Cui (2016) also proposed that it might be too much of a leap to make the relation directly between institutional variables and firm issues, studies that theorise the indirect (such as moderating or mediating) pathways involving institutional variables and firm behaviour could be beneficial. Therefore, in this study, I will explore the contingent effect of formal institutional distance on my research framework.

2.6.2 State ownership

Local institutional conditions have been considered as another important factor affecting firms' internationalisation (Peng, Wang, & Jiang, 2008). Scholars have argued that under the specific institutional conditions in the home and host countries, a firm's ownership plays a critical role in influencing how it competes internationally (Ren, Manning, & Vavilov, 2019; Aguilera et al., 2021). Firms with different ownership, such as state ownership or private ownership, are treated differently by the regulatory frameworks and normative infrastructures which are designed by the home and host governments (Cui & Jiang, 2012; Cuervo-Cazurra et al., 2014; Rugman et al., 2016). State ownership represents an intervention from governments. It might impose the will of the government on enterprise management, thus the decisions made by the firm could be guided by the realisation of particular political tasks (Aguilera et al., 2021). Compared with the economic orientation of privately-owned enterprises, state-owned enterprises might have more interests connected with the government. Scholars have found that both state ownership and political connections have a profound effect on the strategies firms pursue, such as financial leverage, R&D intensity, innovativeness, and internationalisation (Cui & Jiang, 2012; Zhou, Gao, & Zhao, 2016; Kalasin et al., 2020; Tang, Shu, et al., 2021).

Hennart, Sheng, and Carrera (2017) found a positive relationship between state ownership and OFDI. Wang et al. (2012) showed that state ownership is conducive to enterprises gaining resources. They found that compared to market-seeking OFDI, state ownership has a more positive impact on resource-seeking OFDI. As argued by Li, Li, and Wang (2019), state ownership "affects the resources that a company can access" (p. 304). Government involvement allows and even provides a firm's access to some valuable resources provided by the home government, such as financial, regulatory, and informational support, which enhance firms' competitive advantages in international markets (Cuervo-Cazurra et al., 2014; Buckley et al., 2018; Li et al., 2019). However, Zhou et al. (2016) argued that state ownership in an emerging economy enables a firm to obtain crucial resources but makes the firm less efficient in using those resources to generate innovation.

State ownership seems more like a double-edged sword, not purely a facilitator of international expansion, especially for the enterprises from emerging markets (Tang, Shu, et al., 2021). On the one hand, high dependence on the home government for the critical resources facilitated by the higher level of state ownership weakens the firm's willingness to expand abroad (e.g. Xia et al., 2014; Huang et al., 2017). It is easily understandable that there is no motivation for the enterprises to try to explore unfamiliar overseas markets if they already receive preferential treatment at home. On the other hand, and more importantly, state ownership could reduce a firm's legitimacy in the host countries. According to the institutional theory (Scott, 1995), a firm needs to gain legitimacy when it is operating in a market with a new institutional framework. However, state ownership, which represents government interests, may create legitimacy concerns for the enterprises, especially the state-owned enterprises, in the host countries (Tang, Shu, et al., 2021). Li et al. (2018) argued a negative relationship between state ownership and OFDI in their study. Kalasin et al. (2020) also argued that legitimacy concerns created by the home government's involvement in the host country could inhibit state-owned enterprises' OFDI. Therefore, the arguments and findings of previous research about the influence of state ownership on firms' internationalisation are inconsistent.

China is one of the largest OFDI source countries (UNCTAD, 2018) and its MNEs have invested in a wide range of destinations during the past three decades (Tang, Shu, et al., 2021), including both developed and developing economies. Along with the growing international status, China's institutional situation may differ from other countries due to its one-party status of the Communist Party and socialist policies (Li et al., 2019). China has one of the largest number of state-owned enterprises in the world (Aguilera et al., 2021). The total operating income of state-owned and state-controlled firms (114366.97 billion RMB) were estimated to contribute 66.06% of national GDP (Gross Domestic Product) (75554.36 billion RMB) in 2021[3] (National Bureau of Statistics, 2022). Many of the state-owned enterprises have been involved in OFDI (Peng et al., 2008; Luo, Xue, & Han, 2010; Karolyi & Liao, 2017).

Moreover, with the economic reform since 1978, more and more state-owned enterprises in China have introduced mixed ownership (Bai, Chen, & Xu, 2021). The state-owned enterprises that used to be wholly owned by the government have become owned by both state and private owners. Both the central or local government prefer to investment and own shares in the privately-owned enterprises. Therefore, the distinction between wholly state-owned enterprises and purely privately-owned enterprises is not quite clear. Recently, the topic of how state ownership of the Chinese firms affects internationalisation has attracted more and more scholars' attention. Cui and Jiang (2012) investigated the effect of state ownership on Chinese firms' FDI ownership decisions. They found that when the share of equity held by state entities in the firm is high, the pressure from home and host institutions will increase the likelihood of the firm choosing a joint ownership structure in its FDI. By analysing case studies of Chinese mining enterprises, Ren et al. (2019) argued that state ownership enables the firms to make

[3] http://zcgls.mof.gov.cn/qiyeyunxingdongtai/202201/t20220126_3785083.htm
https://data.stats.gov.cn/easyquery.htm?cn=C01
accessed 4th Nov., 2022

internationalisation decisions that align with state expectations. Considering the institutional environment of host countries, Tang, Shu, et al. (2021) found that state ownership increases the FDI amount from the Chinese firms to a host market which has a good political relationship with China.

However, Li et al. (2019) emphasised the legitimacy issues and consequently found that state ownership lowers the completion rate of the cross-border acquisitions launched by Chinese enterprises. Based on the previous studies, the proportion of state ownership of Chinese MNEs, indicating the level of government involvement, is related to their internationalisation strategy, but does state ownership hinder or help OFDI by emerging market firms? There are still no consistent answers. Furthermore, when making strategic decisions, managers need to assess the potential for further support or obstacles, especially in unexpected adverse circumstances (Cui & Jiang, 2012). Managerial cognition influences decision-makers' risk perception (Buckley et al., 2007), and then leads managers to have different reactions during international expansion. Research has argued that state ownership may affect the managerial cognition of top management teams (Kirca et al., 2010). Yet, there have still been calls for more research on how state ownership affects the TMT's decisions on firms' internationalisation (Mariotti & Marzano, 2019).

Chapter 3 Research Framework and Hypotheses Development

3.1 Introduction

In this chapter, I present the conceptual framework of my study and develop the theoretical hypotheses. Based on the upper echelons theory and institutional theory, a conceptual framework is proposed to examine the relationship between TMT attributes and CMNE performance. Then, a set of theoretical hypotheses are developed under the guidance of the conceptual framework. Specifically, first, I assume that work-related TMT attributes, including tenure, educational level, international experience, and functional diversity, act as the micro-foundations of CMNEs' performance. These hypotheses suggest that each of the four TMT attributes have a positive impact on CMNEs' performance. Second, I discuss the positive relationships between each of these TMT attributes and multinationality as well as the moderating effects of state ownership and formal institutional distance on the direct attributes–multinationality links. Next, a curvilinear relationship between multinationality and CMNE performance is proposed. Lastly, hypotheses on the mediation role of multinationality on the relationship between TMT attributes and CMNEs are postulated.

Based on the above logical relationships, this chapter is arranged into eight sections. After Section 3.1's introduction, Section 3.2 presents the conceptual framework. Derived from the conceptual framework, Sections 3.3 to 3.7 propose a set of theoretical hypotheses regarding the relationships among the key constructs in the study, including TMT attributes, multinationality, MNE performance and institutional factors. Finally, Section 3.8 provides a summary of all the hypotheses.

3.2 Conceptual framework

How firms perform internationally is a critical research topic in the international business (IB) field (Contractor et al., 2003; Glaum & Oesterle, 2007; Abdi & Aulakh, 2018). This study aims to develop an integrated theoretical framework that incorporates factors drawn from upper echelons theory and institutional theory to provide a more comprehensive investigation of the mechanisms influencing MNE performance.

Upper echelons theory is the main theory underpinning this study. Following this theory, the TMT is considered a competitive intangible resource of a firm. The demographic attributes of the top managers reflect their capabilities, cognition and values, and eventually affect firms' strategic decisions and performance (Hambrick & Mason, 1984). A study of TMT attributes helps to clarify the influences from the micro level on MNE performance.

Multinationality is critical in leveraging firm competences in the internationalisation process (Clegg et al., 2016). According to upper echelons theory, demographic attributes of a TMT reflect its attitude towards decision-making. Research has found significant relationships between TMT attributes and firm international decision-making (e.g. Tihanyi et al., 2000; Herrmann & Datta, 2005). Moreover, as one of the major outcomes of a firm’s international decisions, multinationality has drawn many scholars’ attention. Studies have suggested that multinationality significantly affects MNE performance (e.g. Lu & Beamish, 2004; Hejazi & Santor, 2010; Abdi & Aulakh, 2018), but the empirical results of the relationship between multinationality and firm performance are inconsistent (Glaum & Oesterle, 2007; Li, 2007).

I believe that TMT attributes constitute the micro-foundation of MNE performance. Their impacts on firm performance might be indirect rather than direct through the strategic decisions about internationalisation made by the TMT. The demographic characteristics of the TMT are also considered valuable indicators about what kind of decision they would make.

Moreover, the influence from TMT on multinationality (decisions) is context-based (Li, 2018; Pisani et al., 2018; Wu et al., 2021). Institutional factors derived from institutional theory represent the contextual settings that affect the relationship between TMT attributes and multinationality. Formal institutional distance, representing the dissimilarity between the institutional environments in different countries, affects TMT’s judgments through its effects on cross-border transactions and communication costs (Meyer & Peng, 2016). State ownership, a firm-level institutional factor, brings governmental resource support to CMNEs, but it might also cause significant legitimacy concerns during CMNEs’ internationalisation.

The conceptual framework in Figure 3.1 illustrates the hypothesised relationships between factors from individual, firm, and country levels. It proposes that personal attributes of TMTs, including tenure, education level, international experience, and functional experience, have impacts on CMNEs’ performance and multinationality. Accordingly, it proposes that the links between TMT attributes and performance are mediated by multinationality. Further, the framework suggests that institutional factors (in terms of formal institutional distance and state ownership) moderate the influence from TMT attributes and multinationality.

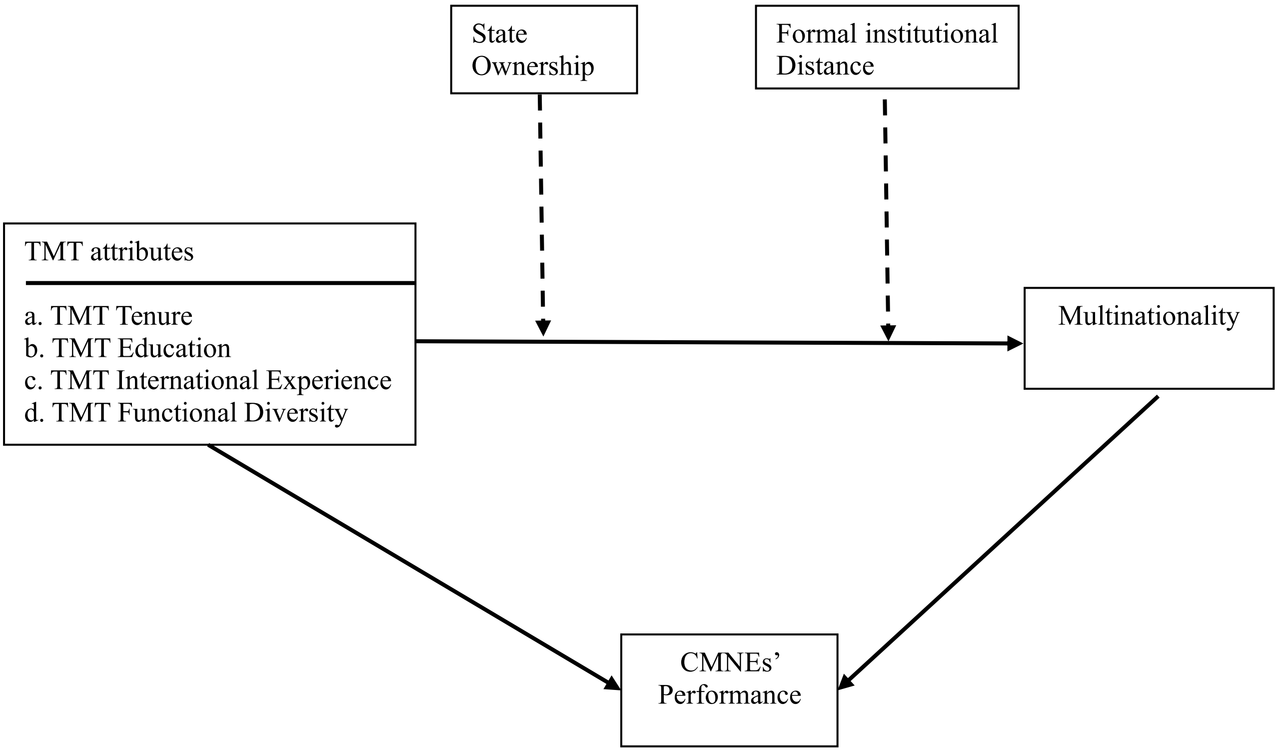

Figure 3.1 Conceptual framework

3.3 TMT attributes and CMNE performance

3.3.1 TMT tenure

Although some researchers have argued that managers who serve together for extended periods of time may share a common perspective and tend to develop similar views (Tihanyi et al., 2000), which result in groupthink and further negatively affect the efficiency of firms' general operation (Keck, 1997; Tihanyi et al., 2000; Li, 2018), tenure can still be considered as an important proxy of an individual's capability. It consists of one's competitiveness.

Compared to the manager with shorter tenure, the one with longer tenure is more sophisticated in firm management. Both the knowledge and managerial experience which are gained by the managers are increased accordingly (Cheng et al., 2010). The more long-tenured managers the TMT has, the more experienced the TMT is. Studies suggests that the longer the managers' tenure, the more familiar they are with the firm, the more managerial experience they have and the less likely they are to make mistakes (Fraser & Greene, 2006; Xu, Yun, et al., 2019). CMNEs, due to their shorter internationalisation history compared to the MNEs from developed economies, normally lack sufficient knowledge and experience which are important capabilities when dealing with uncertainty in foreign markets and pursuing internationalisation. Longer team tenure could improve the TMT's understanding of the complexities as well as the capabilities to deal with the issues which international markets pose to the firm (Rivas, 2012).

Moreover, with the rich experience accumulated over time, managers in CMNEs feel confident in their managerial position as well as in their expert fields. They can handle the problems better. After long years' service, they are familiar with the firm and have affection for the firm, so they will be more rational and careful in making decisions. They have sufficient knowledge about the firm, the markets and their partners and competitors, which can greatly mitigate the uncertainty in overseas operations.

In addition, studies suggest that the longer the managers' tenure, the more familiar they are with their firms, and the more managerial experience they have in related positions, the less likely they are to make mistakes (Fraser & Greene, 2006; Xu, Yun, et al., 2019), which is beneficial for conducting business. Michel and Hambrick (1992) found that a longer tenured TMT is associated with higher social cohesion and shared cognitive structures. Thus, it improves the communication with the firm and enhances the general firm efficiency (Carroll & Harrison, 1998; Zimmerman, 2008; Liu et al., 2012). A TMT with longer tenure builds better interaction among its members, which facilitates the development of shared language, cognitive structures, ideas and mutual dialogues, thereby reducing the conflicts and contributing to the efficiency of information interaction and communication (Tihanyi et al., 2000; Li, 2018). This kind of "harmony" is a valuable resource for a firm, and it is difficult for other firms to duplicate (Kor, 2006). Thus, it constitutes a firm-specific advantage.

In the multinational operations, firms face an even more complex and dynamic situation (Kirca et al., 2011). More than this, CMNEs are still relative newcomers to the international markets, which means that they rely more on the experienced managers. Therefore, I believe that a longer tenured TMT has a positive impact on the firm's performance, and this impact could be more important for the CMNEs.

Accordingly, this research proposes that:

Hypothesis H1a: TMT tenure has a positive influence on CMNEs' performance.

3.3.2 TMT education

A manager's educational level is associated with his/her cognitive orientation and knowledge base (Herrmann & Datta, 2005). TMTs with above average educational levels can be expected to "have the knowledge base and competencies required for systematically seeking new opportunities and for evaluating multiple options" (Herrmann & Datta, 2005, p. 71). Educational level is an indicator of managers' learning capability; managers with higher learning capability are able to deal with more complex situations, perceive less risk in firm operations (Cui et al., 2015), and make more rational decisions (Hunter, 1986; Wally & Baum, 1994).

Scholars have argued that TMT education is directly associated with innovative thinking (Li, 2017). The innovative orientation in the upper echelon level can facilitate the innovation capability among the whole firm. According to the dynamic capability theory, innovation capability is one of the organisational dynamic capabilities (Lawson & Samson, 2001; Wang, 2016; Kang & He, 2018; Panibratov & Klishevich, 2020). It ultimately constitutes an important foundation of firm-specific advantages (Barney, 1991; Teece, Pisano, & Shuen, 1997; Vu, 2020). Empirical research has demonstrated that innovation capability is positively related to firm performance (e.g.Sher & Yang, 2005; Annavarjula & Mohan, 2009; Zhang, Garrett-Jones, & Szeto, 2013; Rajapathirana & Hui, 2018; Gupta & Gupta, 2019).

The uncertainties and risks associated with international environments also result in managerial work that is more varied and complex. Higher educational level endows the TMTs with socio-cognitive capacities, such as innovativeness, open-mindedness, greater information-processing abilities and problem-solving abilities, which are likely to play important roles in ensuring success in the international context.

Accordingly, this research proposes that:

Hypothesis H1b: TMT educational level has a positive influence on CMNEs' performance.

3.3.3 TMT international experience

The role of the TMT's international experience features prominently in the research that focusses on firm outcomes (Hambrick & Mason, 1984; Cuypers et al., 2022). The experience that TMT members have in an international environment — for instance, they grew up abroad, hold a foreign nationality, studied or worked out of the home country — can be considered as their international experience (Hutzschenreuter & Horstkotte, 2013). International experience has an impact on organisational performance by shaping the skills and mental models of managers as well as their networks of personal and professional ties. Scholars have found empirical support for TMT international experience or the international experience of the individual members (such as CEOs) positively contributing to performance (e.g. Daily et al., 2000; Nielsen, 2010; Piaskowska et al., 2021).

International exposure influences individuals' perception of risks associated with the foreign markets (Nielsen & Nielsen, 2011). It helps managers better understand the foreign markets and is further internalised to some extent into the capability of the managers, enabling them to understand other cultures, regulations and risks, as well as helping them overcome the obstacles of foreign operations (Li, 2018). Considering the complexity of overseas markets and their differences from the domestic environment, the preconceived perception of a foreign country associated with international experience can alleviate overseas operational risks. Hutzschenreuter and Horstkotte (2013) showed that international experience is a good proxy for the knowledge of tackling the critical issues relating to operating in foreign countries.

In addition, compared with managers without or with less international experience, internationally experienced managers bring critical information and knowledge to their firms. They are more likely to have a broader, established international network (Pisani et al., 2018), which enables the firm to have more outside support and develop collaborative relations with potential local partners (Hitt et al., 2002).

Moreover, CMNEs joined the international market much later than other MNEs, especially the ones from developed countries, due to the distinctive national context of China. Therefore, the international experience of TMT members can make up for the enterprises' lack of experience in overseas operations. Thus, it is reasonable to posit that TMT international experience ultimately favours CMNEs' overall performance.

Accordingly, this research proposes that:

Hypothesis H1c: TMT international experience is positively associated with CMNEs' performance.

3.3.4 TMT functional diversity

From the upper echelons theory perspective, as with tenure and international experience, the cognition and capability of TMT members can develop from their experience in their primary professional function. Managers who come from a similar functional background are likely to have similarities in cognitive ability and attitude when facing the same situation. Conversely, TMT members with different functional backgrounds will bring different expert advice rooted in their working experience, such as marketing, production, human resources, technology, law, finance and so on.

Although scholars have argued that TMT functional diversity is a kind of double-edged sword (Horwitz & Horwitz, 2007; Homberg & Bui, 2013), I believe that for CMNEs, the positive effects of TMT functional diversity on firm operations overwhelm its negative side, for example the potential for TMT functional diversity to generate conflicts and disagreements within the TMT and hamper a firm's business operations (Wally & Becerra, 2001; Cai et al., 2013).

When dealing with operational practice, a TMT with different functional expertise should be able to obtain more information, views and less overlapping knowledge. For example, the TMT member with a marketing background might know how to solve the cultural conflicts in a new market, the member with a finance background can suggest ways to negotiate with local banks, the member with legal experience can provide a legitimacy guarantee for the firm's operation, and the members with human resource experience might improve the efficiency of the firm's labour force. Therefore, functional diversity captures the breadth of capability and knowledge sets (Rivas, 2012), and brings a variety of cognitive schemas for dealing with complexity (Díaz-Fernández et al., 2014; Mohr & Batsakis, 2019), which are critical for a CMNE, especially for those that lack experience in dealing with complex overseas markets.

In addition, functional heterogeneity indicates the network resources available to the firm. Prior research has suggested that top managers with greater job-related diversity have more social capital, which increases their external networks (Lee & Park, 2006). The social networks allow them to access more information and resources, and then can help mitigate challenges stemming from market uncertainty (Cannella et al., 2008).

Although Cai et al. (2013) stated that the diversity of top managers' areas of expertise results in longer deliberation time in achieving team consensus, which lowers team efficiency and harms team cohesion, international management is more complex than the management in the familiar domestic market, so a team experienced across functional areas (e.g., finance, human resources, marketing, operations, and engineering) enables the firm to respond to challenges and opportunities more effectively than a team focused in more homogeneous areas (e.g., just engineering). As a result, heterogeneity of TMT functional background is beneficial to firm performance.

Accordingly, this research proposes that:

Hypothesis H1d: TMT functional diversity is positively associated with CMNEs' performance.

3.4 TMT attributes and multinationality

Individual managers' values and cognitive bases, which can be predicted by the observed demographic characteristics, play critical roles that have an impact on the decision-making process (Hambrick & Mason, 1984). TMT attributes are frequently the causal factor in MNE internationalisation (Clark, Li, & Shepherd, 2018).

3.4.1 TMT tenure

Upper echelons theory suggests that tenure reflects an individual's mental models and cognitive schemata. The time that a manager works in an organisation can influence his/her attitude and commitment to the firm. It thus further influences his/her abilities when facing uncertainties and changes, as well as the decisions he/she makes.

A long-tenured manager is characterised by strategic persistence in a course of action

(Finkelstein & Hambrick, 1990), stability and high commitment to the organisation (Rivas, 2012). Due to the persistence and stability of the current strategy, long-tenured managers tend to further their firm's internationalisation. As an MNE, it operates with the purpose to expand business abroad and takes multinationality as its long-term strategy. Therefore, the decision-makers who have spent long periods in this firm are inclined to persist with implementing the firm's international intention. With the increase of tenure, individuals' commitments and loyalty to this organisation increase as well. Consequently, they pay more attention to the interests of their organisation and will try to explore more overseas opportunities for the firm's development.

Social categorisation based on demographic attributes blurs with time (Pelled et al., 1999). Executive managers who serve together for extended periods of time may converge on a common perspective and tend to develop similar views when they serve the company and even work together for a long time. It leads to a common perspective or paradigm within the team members (Tihanyi et al., 2000). On the one hand, as the TMT diversity tendency diminishes, it might cause some dysfunctional decision processes, such as "groupthink" (Tihanyi et al., 2000; Li, 2018). When facing some unfamiliar situations, the decision efficiency of the management team could be reduced. On the other hand, the internal conflicts are also reduced. Considering the complex and uncertain nature of the decisions about multinationality, a shared understanding of the international environment may bring better team communication, less conflict and the superior capabilities of dealing with challenges (Tihanyi et al., 2000; Rivas, 2012), which are critical in promoting a firm's internationalisation.

Moreover, Chinese firms often lack sufficient knowledge of and experience in foreign markets which bring extensive uncertainties in pursuing internationalisation. Tenure is a valuable intangible source of knowledge and social networks as knowledge and experience can enrich and add value to human capital (Cheng et al., 2010). Managers who have served the firm for a longer period of time are likely to develop strong professional ties, known as social networks in their business areas (Rivas, 2012). Those intangible resources can be used to create more stable and reliable relationships with external environments (Luo, 2003), which help mitigate challenges stemming from market uncertainty (Peng & Luo, 2000).

Accordingly, this research proposes that:

Hypothesis H2a: Higher average tenure of TMT will be positively related to CMNEs'

multinationality.

3.4.2 TMT education

Education represents the wisdom, insights, and capability possessed by the individual (Carpenter & Fredrickson, 2001). Normally, when we talk about one's educational background, we refer to tertiary degrees. In China's education system, it usually takes three years for an associate degree, four to five years for a bachelor's degree, two or three years for a master's degree, and four to six years or even longer for a doctoral degree. The amount and type of educational degrees a person has earned greatly shape his/her personality, attitudes and cognitive schemata and ultimately affect the way he/she makes decisions. Therefore, educational background could be a predictor of an individual's capability and action. The upper echelons theory contends that the general level of TMT education constitutes a critical observable fact which reflects organisational outcomes.

TMTs with higher educational levels are expected to possess "the knowledge base and competencies required for systematically seeking new opportunities and for evaluating multiple options" (Herrmann & Datta, 2005, p. 71). They are more receptive to the changes and the challenges. Although a TMT featuring a high level of education is likely to engage in excessive analysis to the detriment of decision-making, it has been found to be advantageous for MNE firms seeking international business (Tihanyi et al., 2000; Herrmann & Datta, 2005). Internationalisation is associated with uncertainties and risks, resulting in varied and complex managerial work. The upper echelons theory contends that a manager's high level of education acts as an indicator of knowledge base and ability to make complex decisions. Therefore, highly educated managers are better suited to comprehend difficult strategic situations and find appropriate solutions for challenging scenarios. The abilities of TMTs related to their educational level, such as sufficient knowledge reserve, stronger information processing ability, greater tolerance of uncertainties and ability to deal with them, motivate the firm to pursue a higher degree of internationalisation.

Educational level can also help to shape an individual's cognitive base (Hambrick & Mason, 1984). TMTs with a higher educational level may have a better understanding of international issues and tend to view international opportunities positively (Tihanyi et al., 2000). Educational institutions offer a mindset as well as a formal education (Finkelstein, 1992). Through the schooling, alongside some basic knowledge, individuals can form their cognition about the outside world. Education offers the individual opportunities to become familiar with foreign countries, including their different markets and cultures (Wally & Becerra, 2001). The values delivered by the courses taught during the schooling years encourage the students to have a more open-minded attitude toward foreign cultures. Higher educational institutions also provide students with unique international educational experiences and the opportunity to meet other elites from diverse international backgrounds. For example, many universities (for bachelor's degree or above) in China provide various international exchange programmes in which the students can have opportunities to go abroad for more international local experience. Conversely there are also international students on the campus. However, such opportunities and foreign students are uncommon in most of the colleges (for associate degrees). Thus, executives with higher educational background may be more aware of international issues and more inclined to view international opportunities favourably.

Educational experience also widens a person's social networks. An executive manager's higher educational level indicates that he/she has spent more years in educational institutions so that he/she has more classmates or friends. Learning is a very special and unforgettable experience in one's life. The other people encountered and befriended during this experience constitute an important part of life. Unlike social networks formulated in the working environment, the relationships between schoolmates are purer and more durable. Higher educational background implies more resources and support which reinforce the capabilities when the TMTs make their strategic decision to enter foreign countries.

Accordingly, this research proposes that:

Hypothesis H2b: Higher educational level of the TMT will be positively related to CMNEs' multinationality.

3.4.3 TMT international experience

International experience, whether acquired through overseas study or foreign assignments, provides the top managers with a global view during their work, especially when they make decisions related to international issues (Herrmann & Datta, 2005). The experiences in different country settings are considered critical for a firm's internationalisation activities (Le & Kroll, 2017; Mohr & Batsakis, 2019; Elia et al., 2021; Piaskowska et al., 2021). Such experience helps managers to gain capabilities of dealing with culture shocks, seeking new competitors, and solving problems in the complex environments in different countries (Tihanyi et al., 2000;

Pisani et al., 2018). It makes the managers more confident in international management (Herrmann & Datta, 2005). Both Tihanyi et al. (2000), and Carpenter and Fredrickson (2001) found a positive relationship between foreign experience of the TMT members and their firms' international diversification.

International experience furnishes TMTs with the knowledge and abilities, such as how to operate in international markets, which are critical when their firms aim to pursue international opportunities (Piaskowska et al., 2021). TMT international experience has been widely found to be positively associated with the MNEs' international expansion. Mohr and Batsakis (2019) suggested that an increase in knowledge associated with international experience is likely to accelerate a firm's internationalisation speed. Le and Kroll (2017) discussed TMT international experience in terms of three categories: (1) the length of time that the top manager spent abroad, (2) the number of countries that the top manager stayed in, and (3) the cultural distance between where the top manager stayed and his/her home country. They concluded that the length of TMT international experience accelerates MNEs' international expansion, and both the number of countries and the cultural distance positively moderate this relationship.

International experience brings the individual an understanding of foreign markets and their associated culture (Mohr & Batsakis, 2019). This kind of familiarity is of great significance in an uncertain environment (Lee & Park, 2006). The literature overwhelmingly supports the notion that a group of top managers who have worked or studied overseas, or possess foreign nationality greatly help the firm to overcome the uncertainty associated with foreign expansion (Tihanyi et al., 2000; Herrmann & Datta, 2005; Li, 2018; Pisani et al., 2018). Compared to other people, a top manager with international experiences has first-hand experience of evaluating and executing strategies in different geographical locations, which make him/her more capable in dealing with challenging issues, especially when his/her firm lacks experience of operating in host locations.

Furthermore, internationally experienced managers are considered to help overcome the normative and psychological distance facing the MNE (Hutzschenreuter & Horstkotte, 2013). It is easy to understand that previous international experience will enhance a person's confidence when he/she is making a decision related to foreign issues. Top managers' prior experience of international studies or working assignments develop their cognitive frameworks and build their confidence for operating internationally. International experience also shortens the distance to foreign environments because it gives the managers positive cognitive models about viewing overseas environments. Thus, the experienced managers' psychological distance to foreign markets will not be as great as those without any overseas experience. Senior managers with overseas education or management experience are more confident when committing to expanding to foreign countries with high perceived risk (Hutzschenreuter & Horstkotte, 2013). Conversely, managers who lack such experience may associate it with a higher risk potential in their decision-making due to high distance of the overseas environments (Herrmann & Datta, 2005), which will hinder their decisions to go abroad.

In addition, the social networks of top managers associated with their international experience provide informational benefits to the firm, which can be of significance when firms want to expand beyond national borders (Lu et al., 2014). Internationally experienced managers are capable of absorbing and processing various information related to internationalisation, which is helpful to identify global opportunities (Lee & Park, 2006). Therefore, they are good at exploiting relational capital and developing foreign strategic partnerships. At the same time, the CMNEs where they work will consequently face less legitimacy pressures.

To sum up, the more international experience the members have, the more internationally friendly the TMT is. The international experience shared by individual members enhances the collective ability of a TMT to absorb and process various information related to internationalisation (Hutzschenreuter & Horstkotte, 2013). Internationally experienced TMTs have faith in their abilities to understand foreign cultures, regulations, and policies because the members have experience in dealing with foreign regulatory, political and cultural challenges. In contrast, firms that lack internationally experienced TMT members have fewer internal resources to consult at the time of international expansion and therefore rely on other sources for FDI decisions, which greatly affects their enthusiasm for internationalisation. Therefore, when making international decisions, internationally experienced TMT swill be more confident, and more open to multinationality.

Accordingly, this research proposes that:

Hypothesis H2c: Higher international level of TMTs will be positively related to CMNEs' multinationality

3.4.4 TMT functional diversity

TMT diversity can be defined as "distribution of personal attributes among interdependent members of a (TMT) work unit" (Jackson, Joshi, & Erhardt, 2003, p. 802). Upper echelons theory emphasises the importance of the diversity of TMT demographic attributes on firm outcomes (Hambrick & Mason, 1984; Carpenter et al., 2004). Generally speaking, top managers with different demographic characteristics have different cognitive schemas, which are likely to add to the cognitive composition of the team and various strategic alternatives in a decision-making process. Therefore, the diverse backgrounds within the firm's TMT will generate comprehensive capabilities or knowledge bases that can be used creatively for complex circumstances. Diverse teams are expected not only to have different perspectives when dealing with problems, but also to enrich the information-processing paradigm of the group.

Professional experience brings the firm both relational capital (e.g., networks) and human capital (e.g., expertise, knowledge and skills) (Díaz-Fernández et al., 2014). Consequently, it has influence on CMNEs' strategic decisions (Hambrick & Mason 1984). As another work-related demographic attribute, TMT functional diversity has been recognised as a "double-edged sword" in the area of international business by the literature (e.g. Horwitz & Horwitz, 2007; Homberg & Bui, 2013). Researchers have argued that TMT functional diversity might cause internal conflicts among TMT members (Wally & Becerra, 2001; Díaz-Fernández et al., 2014). Such conflicts will divide the members and then worsen the overall function of the whole management team. Consequently, functional diversity may not lead to thoughtful decisions, but further exacerbate the difficulties in business management.

However, TMT functional diversity can improve the tendency to choose international decision-making of the management teams in CMNEs. First, functional diversity captures the breadth of skill sets that are available to a TMT (Rivas, 2012). Different professional backgrounds offer TMTs comprehensive strategic options, so that they are more capable of dealing with environmental complexities (Tihanyi et al., 2000). Second, diversified functional backgrounds of the top managers can create abundant and reliable relationships with external environments to the firm by their professional work contacts (Peng & Luo, 2000). A better linkage into external networks allows their firm to have a greater access to information (Milliken & Martins, 1996). The decision to invest in foreign countries is full of uncertainties and ambiguities due to various challenges, such as institutional unfamiliarity of the host country. Therefore, the business informational accessibility is particularly valuable to the firms that are on their way to foreign markets but lack international operating experience (Tihanyi et al., 2000; Cai et al., 2013; Evert et al., 2018), as is the case for most of the CMNEs.

Therefore, TMT functional diversity helps the CMNEs to mitigate challenges stemming from market uncertainty. The wider breadth of skill sets and network resources possessed by a TMT due to its functional heterogeneity will improve a CMNE's multinationality. Accordingly, I propose that:

Hypothesis H2d: TMT functional heterogeneity will be positively related to CMNEs' multinationality.

3.5 The moderating effects of institutional factors

The influences from state ownership at firm level and formal institutional distance at a country level have been widely examined as important contextual factors in the study of CMNEs' foreign expansion (Luo & Tung, 2007; Wu & Chen, 2014; Buckley et al., 2018). Following Wu et al. (2021), in this study, I propose that the relationships between TMT attributes and firm multinationality are respectively conditional on the ownership of the Chinese investing enterprise and the distance of formal institutions between China and the host countries.

Based on the discussion in Section 3.4, I argue that the four TMT attributes, which are tenure, educational level, international experience and functional diversity, have positive impacts on CMNE multinationality. The key arguments for these hypothesised relationships can be summarised as: longer tenure, higher educational level, more international experience, or diversified functional experience (1) furnish the TMT with stronger capabilities of handling complex and unknown risks; (2) bring the TMT more social network resources, e.g. for gaining information or other external support in business operations; and (3) make the TMT more confident in business management, especially when its firm faces risks and challenges. As such, TMTs will perceive less obstacles to entering foreign markets and feel more confident when they are making the strategic decisions on exploring more foreign markets. Therefore, I hypothesised that TMT tenure, TMT educational level, TMT international experience and TMT functional diversity have positive influences on CMNE multinationality in Section 3.4.

3.5.1 State ownership and TMT attributes

State ownership plays an important role in the responses of TMTs to business opportunities in foreign markets. It indicates a Chinese firm's political connections with and resource dependence on its home government. Indeed, Chinese firms with a high level of state ownership are privileged to operate in certain industries or geographical areas, to access key resources, such as cheap capital, and favourable policy support, which are typically not available to private firms from their home country (Cui & Jiang, 2012; Jiang et al., 2015; Chen, Musacchio, & Li, 2018; Lazzarini & Musacchio, 2018). In turn, firms owned or controlled by the state also need to put more effort into achieving some political objectives. In other words, those firms need to reflect national interests.

As an outsider in foreign markets, when making their foreign direct investments, Chinese firms are subject to various difficulties in the local markets, which include discrimination and restrictions on resource access (Meyer et al., 2009). Due to the nature of state ownership, in the host country, CMNEs with state ownership are not only business entities but also political actors. Scholars have proposed that state owned enterprises are "the government's vehicles for intervening in market transactions to provide public goods at home and are expected to align their activities with the government's political agendas" (Tang, Shu, et al., 2021, p. 3). CMNEs are perceived as the representatives of the interests of the home country (Cui & Jiang, 2012). The extra political obligations might mean those firms have not just economic but also other objectives of internationalisation. As a result, from the perspective of the institutional theory (Scott, 2008), these firms might have serious legitimacy problems in the host countries.

Because of the political components associated with Chinese firms' ownership structure, Zhang, Zhou, and Ebbers (2011) have argued that public and media opinions, which are aligned with host regulatory institutions, are concerned with ideological and other political ramifications of Chinese investment with substantial state ownership. Although research suggests that, when facing host country institutional pressures, firms can engage in political negotiation to establish a positive external image and thus attain legitimacy (Kostova et al., 2008), the image of governmental representatives caused by the state ownership makes such negotiation processes extremely difficult or even impossible to conduct. Therefore, even though state ownership increases a firm's ability to access resources under its home-country institutions, its image-building in host-country institutional environments is negatively affected (Cui & Jiang, 2012).

International trade across different economies in the world has been greatly liberalised in the last decades. However, host-country regulatory restrictions still prevail in various forms to protect domestic enterprises and disadvantage foreign investors, such as restrictive policies in specific industries, regulations prohibiting access to key resources, or informal discrimination during some trade procedures. Such disadvantages may become worse for the state-owned enterprises due to the national nature of these firms (Li et al., 2019). The national nature of state ownership brings opaqueness to the firm and further aggravates the "concerns and suspicions" from the host countries, which increase the hurdles for CMNES to establish legitimacy in the host countries (Li et al., 2019). A good example is that, in the trade disputes between China and the United States, the US government has mobilised its Five Eyes Alliance and other western countries to boycott Chinese firms, especially the state-owned firms, which greatly impedes CMNEs' multinationality. In order to avoid such legitimacy issues, the state-owned enterprises sometimes need to obtain the help of the non-state-owned enterprises to realise their overseas acquisitions (Cui & Jiang, 2012).

The negative political image that state-owned firms suffer from ultimately affects top managers' perceptions. It could cause top managers to have more concerns and face more difficulties in handling the decision about international expansion. Consequently, it will reduce their expectations of overseas exploration.

(1) I argue that higher average tenure of TMTs positively affects CMNEs' multinationality. However, when the firm is highly controlled by state ownership, this kind of relationship could be reduced. More years of work bring a TMT efficient executive abilities and rich social resources, and then increase its optimism and expectation of cross-border expansion, but overseas operational obstacles caused by the home country's political interests make the TMT become more prudent about the firms' prospects of international business. Therefore, state ownership could reduce the positive impact on CMNEs' multinationality from the longer-tenured TMT but encourage the top managers to put their advantages to use elsewhere, such as domestic operations or some politically motivated investments in specific host countries.
(2) I argue that higher educational level of TMTs positively affects CMNEs' multinationality, while under a higher level of firm state ownership, even when the educated managers possess stronger cognitive abilities and higher quality social relations, they have to deal with the possible resistance from the host countries because of the political image of the CMNEs. This resistance might make TMTs re-evaluate their firm's strategy of multinationality.
(3) I argue that higher international level of TMTs positively affects CMNEs' multinationality.

I believe that the more international experience the TMT has, the more familiar they are with the foreign markets. However, the extra legitimacy liability brought by state ownership to the CMNEs will diminish the advantages of internationally experienced TMTs for cross-border expansion.

(4) I argue that TMT functional heterogeneity positively affects CMNEs' multinationality. Similarly, following the logic of the above three arguments, a firm's higher level of state ownership brings additional legitimacy issues to the CMNE when it goes abroad, especially when investing in some destinations where their political systems are different from that of China. Under the circumstances, even the TMTs equipped with rich functional experience, who are sophisticated at complex operational management, might be not good at handling the legitimacy problems. Thus, they are not as positive as before on the prospects of their firm's international business and reluctant to increase the multinationality of their firms.

To sum up, the positive relationships between the four TMT attributes and multinationality are weakened by the CMNEs' level of state ownership. Accordingly, in this study, I propose the following specific hypotheses:

Hypothesis H3a: State ownership negatively moderates the link between TMT tenure and multinationality; that is, when firm-level state ownership is high, the positive impact of long TMT tenure on CMNEs' multinationality is weakened.

Hypothesis H3b: State ownership negatively moderates the link between TMT educational level and multinationality; that is, when firm-level state ownership is high, the positive impact of high level of TMT education on CMNEs' multinationality is weakened.

Hypothesis H3c: State ownership negatively moderates the link between TMT international experience and multinationality; that is, when firm-level state ownership is high, the positive impact of TMT international experience on CMNEs' multinationality is weakened.

Hypothesis H3d: State ownership negatively moderates the link between TMT functional diversity and multinationality; that is, when firm-level state ownership is high, the positive impact of TMT functional diversity on CMNEs' multinationality is weakened.

3.5.2 Formal institutional distance and TMT attributes

The institutional theory emphasises the quality of the institutions, stressing the role of formal and informal institutions (North, 1990). An effective system of formal institutions can reduce uncertainty and restrain opportunistic behaviour, lowering transaction costs. Thus, formal institutions are a vital contextual factor that affects firms' internationalisation (Chao & Kumar, 2010; Chen et al., 2016; van Hoorn & Maseland, 2016; Kostova et al., 2020). The firm engages in at least two distinctive formal institutional environments during its internationalisation: institutions of the home and the host countries. Both formal institutional environments exert fundamental influences on firms' behaviours (Martinsons, 1993). Formal institutional distance between home and host institutions is a central construct in the institution-based theory (Beugelsdijk et al., 2018). It aims to capture the degree of the difference between the formal institutional frameworks (Meyer & Peng, 2016), such as political stability, government effectiveness, regulatory quality, rule of law, and control of corruption (Kostova et al., 2020).

Institutionalism in the economic tradition believes that national borders bound the network structure between home and host markets naturally (Abdi & Aulakh, 2012). Formal institutions determine the rules of economic activities in the local market (Kostova et al., 2020). The firm's business activities need to follow the rules established by governments both in the home and the host countries. The greater the difference between these two sets of institutions, the more problems the enterprise needs to solve when it conducts transnational trade. Therefore, if the foreign markets are institutionally distant from those of the home country, it implies a significant increase in transaction costs in daily operations of the MNE (Chao & Kumar, 2010; Meyer & Peng, 2016). In fact, Chao and Kumar (2010) argued that operations in multiple countries with varied institutional contexts are also likely to increase the costs "associated with information collection, processing and dissemination" (p. 96). Considering all the extra costs caused by formal institutional difference, the benefits that the firm expects to gain from international expansion are negatively affected.

Institutional frameworks influence the governance of interfirm relationships (Abdi & Aulakh, 2012). Conducting business in a country with a very different national governance environment might lead to many difficulties in communication, resource and knowledge exchange between the parent company and its subsidiaries. Thus, a higher formal institutional distance could imply a decline in the interfirm relationships between companies across national borders, and consequently cause a negative impact on the transnational decision-making of enterprises.

A larger distance between host and home country formal institutions lead the firm to face less familiarity with the local governance environment (Azar & Drogendijk, 2014). National borders bring unfamiliarity between countries/markets, which makes the local government treat the international firms as foreigners/outsiders and causes various obstacles, such as trade restrictions and regulative discrimination against them. Scholars have named this phenomenon "liability of foreignness (LoF)" (e.g. Hymer, 1976). Campbell, Eden, and Miller (2012) argued that due to the impact from LoF, the firms are more reluctant and less able to implement their social responsibility when they are under the context of higher institutional distance. Añón Higón and Manjón Antolín (2012) found that institutional distance accentuates the negative performance of R&D productivity in a foreign market. Moreover, the regulative restrictions in host countries may disadvantage the foreign investors for the purpose of protecting local companies (Cui & Jiang, 2012). For example, the foreign investors are subjected to difficulties in their internationalisation through various degrees of discriminatory and restrictive policies imposed by local governments. As argued by Meyer et al. (2009), new foreign entrants normally suffer from limited access to local resources, requirements of mandatory exporting, and interventions in daily operational issues. Formal institutional distance presents considerable difficulties to MNEs when in competition with local firms and reduces their internationalisation willingness.

In the context of a more friendly and more familiar institutional environment, international expansion could be more attractive, and vice versa. For the CMNEs, the countries less distant from the Chinese institutional framework, such as some Southeast Asian countries, which are also at the developing level, may be more attractive to Chinese enterprises. Kang (2018) found that when institutional distance is smaller, such host markets are more popular among Chinese MNEs. The primary reason is that CMNEs face less restrictions and enjoy more competitive advantage from their embeddedness in home institutions.

Hence, formal institutions could influence the judgment of the TMT, and consequently, have an impact on the relationship between TMT attributes and multinationality. Compared with the developed countries, the internationalisation history of CMNEs is relatively short. CMNEs are lack international experience and suffer more from the costs and liabilities due to institutional differences. TMT members have to think of the regulatory framework relative to that in the home country when they make their international strategic decisions (van Hoorn & Maseland, 2016). Along with the higher institutional distance, CMNEs face increased transaction and communication costs, as well as the LoF, which will put forward more obstacles for overseas expansions and decrease TMT's internationalisation willingness.

(1) I argue that higher average tenure of TMTs positively affects CMNEs' multinationality. The more years the whole team has worked in a firm, the more the team considers the firm's interests (Rivas, 2012). In order to gain maximum profits for its firm, as well as to minimise the operational risks in foreign markets, a longer-tenured TMT might pay more attention to the liabilities caused by formal institutional distance. The negative impacts of formal institutional distance influence a TMT's decisions on international exploration. The team then is inclined to choose a more stable strategy and reduce its CMNE's multinationality accordingly.
(2) I argue that higher educational level of TMTs positively affects CMNEs' multinationality. Due to the individuals' knowledge base and ability to make complex decisions, TMTs with higher educational levels are more sensitive to the external environments. They could make more objective strategic judgments based on the macro-environment of their firm. Thus, the increased transaction and communication costs along with significant formal institutional distance may restrain those executives from making decisions to strengthen the degree of the firm's internationalisation.
(3) I argue that higher international level of TMTs positively affects CMNEs' multinationality. However, when the invested markets are highly different from Chinese institutions, the previous international experiences of the managers are likely to be useless. Experience is situational. The top managers' experience in one country may not be applicable to another country. Additionally, even though international background gives top managers confidence in international operations, longer formal institutional distance might bring a stronger sense of strangeness and reduce that confidence.
(4) I argue that TMT functional heterogeneity positively affects CMNEs' multinationality. Based on the arguments in the early part of this section, the greater the difference between two sets of institutions, the more transaction costs he CMNEs will face in daily operations (Chao & Kumar, 2010; Meyer & Peng, 2016). Therefore, it brings more difficulties to the TMTs, and weakens the positive impacts of functional skilful TMTs on multinationality.

In summary, the positive effects that I have discussed of the four TMT attributes on multinationality might be reduced. Accordingly, in this study, I propose the following hypotheses:

Hypothesis H4a: Institutional distance negatively moderates the link between TMT tenure and multinationality; that is, when the institutional distance is high, the positive impact of long TMT tenure on CMNEs' multinationality is weakened.

Hypothesis H4b: Institutional distance negatively moderates the link between TMT educational level and multinationality; that is, when the institutional distance is high, the positive impact of a high level of TMT education on CMNEs' multinationality is weakened.

Hypothesis H4c: Institutional distance negatively moderates the link between TMT international experience and multinationality; that is, when the institutional distance is high, the positive impact of TMT international experience on CMNEs' multinationality is weakened.

Hypothesis H4d: Institutional distance negatively moderates the link between TMT functional diversity and multinationality; that is, when the institutional distance is high the positive impact of TMT functional diversity on CMNEs' multinationality is weakened.

3.6 Multinationality and CMNEs' performance

The research on the impact of multinationality on firm performance (M-P relationship) has drawn enormous scholarly attention, though limited consensus has been reached (Contractor et al., 2003; Glaum & Oesterle, 2007; Li, 2007; Cozza et al., 2015). Focusing on the MNE samples from different countries or in different industrial sectors, scholars have found that multinationality has a positive or negative linear (e.g. Goerzen & Beamish, 2003; Hsu, Chen, & Cheng, 2013), U-shaped (e.g. Feng et al., 2019), inverted U-shaped (e.g. Singh et al., 2010), or S-shaped (e.g. Lu & Beamish, 2004) impact on firm performance. I argue that the form of the relationship between multinationality and performance for Chinese manufacturing firms is somewhat different to a positive linear or an inverted U-shaped relationship, but it is a U-shaped curvilinear relationship. Below is the theoretical rationale.

First, compared to the MNEs from developed economies, CMNEs are latecomers to international markets (Child & Rodrigues, 2005). Especially at the early stage of their international journey, they face various disadvantages of technological development, managerial skills, market share and so on. Furthermore, according to the institutional perspective, CMNEs also need to deal with risks caused by cultural shocks and institutional legitimacy (Cui & Jiang, 2012; Kang & Jiang, 2012; Brouthers, 2013). They need to spend time and money to become familiar with the “rules of the game” in the foreign markets. Under such circumstances, the biggest problem the CMNEs need to solve is not making profits but survival. Therefore, when a Chinese enterprise makes an initial expansion abroad, it must undertake considerable risks and uncertainty due to the unfamiliarity with the host markets. Moreover, when the firm gradually enlarges its degree of multinationality, the investments caused by multiple markets, greater geographical distance, cultural differences and communication conflicts increase as well. Such investments are likely to increase the costs and thereby reduce the performance of the firm.

Second, manufacturing enterprises are most likely to benefit from scale economies (Capar & Kotabe, 2003). Significant upfront investment is very important for these firms. Some host countries might have strict control over the extent of foreign involvements in the manufacturing industry, especial the businesses involved in natural resource exploitation (Cui & Jiang, 2010), preventing manufacturing multinationals from operating efficiently. The constraints often seen in the manufacturing industry include, but are not limited to, ownership restrictions, manufacturing industry policies, unfavourable taxes, and unbalanced employment rules. Additionally, unlike other industries, when entering a new market, manufacturing enterprises need to invest more in tangible resources, such as factories, equipment, and production lines. They must on the one hand transfer their production, and on the other hand try to differentiate their products and management systems in response to the host markets. More internationally manufacturing firms might have higher costs (Rugman, 1981). Therefore, international manufacturing enterprises could first sacrifice their interests in order to become familiar with the international environment and achieve scale economies.

Even though scholars have argued that the "going out" policies, such as tax rebates and preferential loan offers, launched by the Chinese government provide a range of support for CMNEs’ multinationality (Sauvant & Chen, 2014; Cozza et al., 2015; Ramamurti & Hillemann, 2018), I believe the CMNEs’ performance still decreases as firms expand abroad. The "going out" policies might encourage Chinese enterprises to internationalise their domestic business. However, their firm performance could still decrease due to the liabilities of latecomers or foreignness and significant upfront investments.

However, performance decreases to a certain point, beyond which higher levels of multinationality will increase CMNEs’ performance. Scholars have found that either knowledge or capability can be accumulated through “learning by doing” (Li, 2007; Lyles, Li, & Yan, 2014). As a CMNE becomes multinational, it gets more involved in the local markets and more experienced in international management. Through the international experience and resources the CMNEs have obtained, they learn international trade rules and become familiar with overseas management. The managerial knowledge, experience and the networks gained in one foreign country could be beneficial to its operations in other new foreign countries and increase their overall operational performance.

On the other hand, as firms further increase their total involvement in foreign markets, they may benefit from economies of scale in the long run (Capar & Kotabe, 2003). The firm gains cost savings from economies of scale by sharing cost-producing activities across geographic markets and through worldwide learning. Based on the large upfront investments, the enterprises gradually begin to recover costs and earn profits from the economies of scale associated with higher levels of multinationality. I thus summarise the aforementioned arguments in the following hypothesis:

Hypothesis H5: Multinationality is associated with CMNE performance in a U shape.

3.7 The mediating effect of multinationality

In Section 3.4, I discussed the relationship between work-related TMT demographic attributes (tenure, education level, international experience, and functional diversity) and CMNE multinationality. TMT attributes, as an influential factor on the firm decision mechanism (Elia et al., 2021), is one of the key determinants for firm strategic decisions. Different demographic backgrounds of the TMT members reflect their knowledge, cognition, capability, and social networks, which finally have an impact on their decision preferences during a firm’s internationalisation process. Then in Section 3.6, I argued that the multinationality level which the firm chooses influences organisational performance. Following the discussions in Sections 3.4, 3.6, and Section 3.3, in this section, I develop the other key proposition that, as the micro-foundation of CMNEs’ performance, the four TMT attributes’ impacts on CMNEs’ performance are mediated by multinationality. In other words, multinationality mediates the relationships between the four TMT attributes and CMNE performance. This logic also reinforces the framework proposed by Hambrick and Mason (1984) that TMT attributes per se are a sufficient condition for superior performance of the firm, while their impact is realised through the strategies the TMT chooses.

Multinationality serves as a mediator between TMT tenure and CMNE performance. First, I discuss the influence of TMT tenure on CMNEs' multinationality in detail in Section 3.4.1 because of the following arguments: (1) With the increase of tenure, an individual's commitments and loyalty to his/her organisation also increases (Rivas, 2012). (2) The internal conflicts within the management team decrease with the increase in managers' working tenure (Tihanyi et al., 2000; Rivas, 2012). (3) Managers who have served in the firm for a longer period of time are likely to develop stronger business networks in their professional areas (Cheng et al., 2010). They create more stable and reliable relationships with external environments, which equip the managers to better mitigate the challenges during the firm's internationalisation process. Therefore, TMT tenure facilitates the firm's multinationality. Second, in Section 3.6, I argue that multinationality firstly decreases CMNEs' performance, but with the continuous increasing of a firm's multinational level, CMNE performance improves as well. Along with the conceptual framework, the impact of TMT tenure on CMNEs' performance could be mediated by the influence from CMNEs' multinationality.

Multinationality serves as a mediator between TMT educational level and CMNEs' performance for the following arguments. As stated by Herrmann and Datta (2005), education provides the managers with the know-how and ability to identify new opportunities and evaluate multiple options. Moreover, learning can broaden one's horizons and worldview. Based on one's educational experience, he/she could become more confident and more positive about the international opportunities (Tihanyi et al., 2000). Therefore, I firstly argue that highly educated managers are better at expanding business in new markets, that is, the educational level of TMT could have a positive impact on a firm's multinationality in Section 3.4.2. Then, according to the discussion in Section 3.6, CMNEs' performance is affected by the firms' multinational level. It argues that, TMT educational level might firstly affect CMNEs' multinationality, and then, through influence from multinationality, it ultimately has an impact on CMNEs' performance.

TMT international experience is critical in international operations (Le & Kroll, 2017; Mohr & Batsakis, 2019). Based on the following arguments, TMTs with more international experience should be more optimistic about international expansion: first, working or studying abroad, or even a foreign nationality, is an important way for individuals to understand overseas environments (Mohr & Batsakis, 2019). Such TMTs normally have better capabilities to deal with the challenges from foreign markets. Second, international experience shortens a TMT's perception of the psychological distance to the overseas market (Herrmann & Datta, 2005; Hutzschenreuter & Horstkotte, 2013). Third, living or working abroad is another way to expand the social and political networks of top managers. Moreover, in Section 3.6, I argue that multinationality directly affects CMNEs' performance. Consequently, through the influence from multinationality, TMT international experience could finally have an impact on CMNEs' performance.

Based on similar logic, I believe that TMT functional diversity also has an impact on CMNEs' performance through the mediating effects from multinationality. TMT functional diversity has a direct positive impact on multinationality, which mediates the influence of TMT functional diversity on CMNEs' performance. The range of skill sets and professional network resources included in the functionally diverse TMT are particularly scarce for Chinese enterprises lacking overseas experience. They make CMNEs more sophisticated in dealing with operational problems in a foreign environment (Tihanyi et al., 2000; Rivas, 2012). Thus, I believe that TMT functional diversity could facilitate the CMNE to go abroad and improve its multinationality. Then through the U-shaped influence from multinationality that was discussed in Section 3.6, TMT functional diversity further affects CMNEs' performance.

Collectively, the above analyses provide a basis for the proposition of a mediating role of multinationality in the four TMT attributes and CMNEs performance link. I posit that multinationality mediates the TMT's leverage to CMNEs' international development and in turn the firm's performance. Therefore:

Hypothesis H6a: Multinationality mediates the TMT tenure and performance relationship in such a way that TMT tenure has a positive impact on multinationality that, in turn, has a U-shaped impact on CMNEs' performance.

Hypothesis H6b: Multinationality mediates the TMT educational level and performance relationship in such a way that TMT tenure has a positive impact on multinationality that, in turn, has a U-shaped impact on CMNEs' performance.

Hypothesis H6c: Multinationality mediates the TMT international experience and performance relationship in such a way that TMT tenure has a positive impact on multinationality that, in turn, has a U-shaped impact on CMNEs' performance.

Hypothesis H6d: Multinationality mediates the TMT functional diversity and performance relationship in such a way that TMT tenure has a positive impact on multinationality that,

in turn, has a U-shaped impact on CMNEs' performance.

3.8 Summary of hypotheses

In summary, based on the conceptual framework regarding TMT attributes, state ownership, institutional distance, and firm performance, a set of eighteen hypotheses has been developed. Figure 3.2 provides an illustration of all these hypotheses (H6a-d show the mediating role of multinationality in the relationships between TMT attributes and MNE performance).

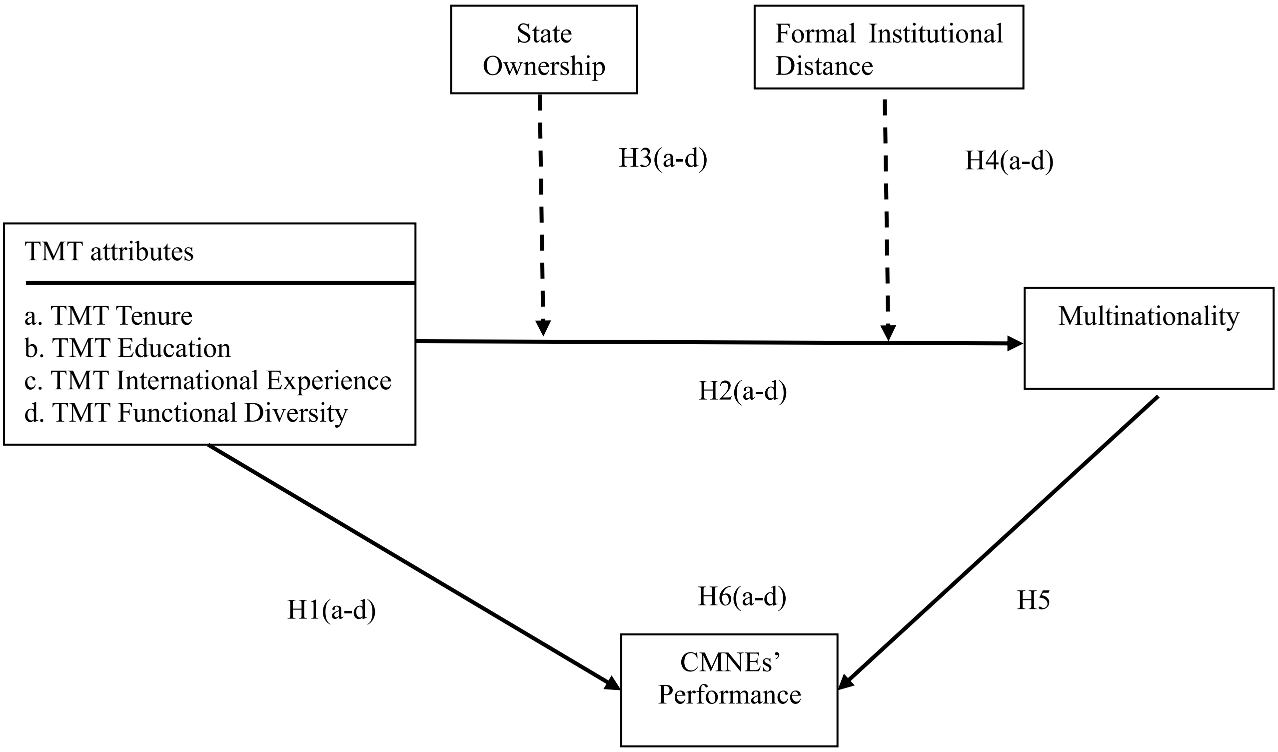

Figure 3.2 Hypotheses framework

The above hypotheses are summarised in Table 3.1

Table 3.1 Hypotheses summary

	TMT attributes and MNE performance
H1a	TMT tenure is positively associated with CMNEs' performance.
H1b	TMT education level is positive associated with CMNEs' performance
H1c	TMT international experience is positively associated with CMNEs' performance
H1d	TMT functional heterogeneity/diversity is positively associated with CMNEs' performance
	TMT attributes and Multinational Strategy
H2a	TMT tenure is positively associated with CMNEs' Multinationality.
H2b	TMT education level is positively associated with CMNEs' Multinationality
H2c	TMT international experience is positively associated with CMNEs' Multinationality
H2d	TMT functional heterogeneity/diversity is positively associated with CMNEs' Multinationality
	Moderation effect — State Ownership
H3a	The firm-level state ownership negatively moderates the relationship between TMT tenure and CMNEs' Multinationality.
H3b	The firm-level state ownership negatively moderates the relationship between TMT education level and CMNEs' Multinationality.
H3c	The firm-level state ownership negatively moderates the relationship between TMT international experience and CMNEs' Multinationality.
H3d	The firm-level state ownership negatively moderates the relationship between TMT functional heterogeneity and CMNEs' Multinationality.
	Moderation effect — formal institutional distance
H4a	The formal institutional distance negatively moderates the relationship between TMT tenure and CMNEs' Multinationality.
H4b	The formal institutional distance negatively moderates the relationship between TMT education level and CMNEs' Multinationality.
H4c	The formal institutional distance negatively moderates the relationship between TMT international experience and CMNEs' Multinationality.
H4d	The formal institutional distance negatively moderates the relationship between TMT functional heterogeneity and CMNEs' Multinationality.
	Multinationality and MNE performance
H5	Multinationality is U shaped associated with CMNEs' performance
	Mediating effect — Multinationality
H6a	Multinationality mediates the relationship between TMT tenure and CMNEs' performance
H6b	Multinationality mediates the relationship between TMT educational level and CMNEs' performance
H6c	Multinationality mediates the relationship between TMT international experience and CMNEs' performance
H6d	Multinationality mediates the relationship between TMT functional diversity and CMNEs' performance

Chapter 4 Research Design and Methodology

4.1 Introduction

Based on the development of all the hypotheses in the previous chapter, Chapter 4 focuses on the methodology and construct measurements of this study. It includes five main sections. It firstly discusses the distinction between quantitative and qualitative research methodology. Then it presents the justification for the selection of quantitative methodology for this study. Later, the criteria that were used to draw on a sample of firms is discussed in detail, including the definition of the CMNEs, the industrial setting, and the data sources. This is followed by the measurement and identification of the variables. In this section, I discuss the construction and the logic for using various variables. I also share the sources that I have used for collecting information on the variables. This chapter ends with the estimation technique that was used to assess hypothesised relationships.

4.2 Research paradigm

Two main research paradigms are widely applied in social sciences. One is the qualitative method and the other is the quantitative method. Each of them has characteristic features and suitability for different research orientations.

The qualitative research method is based on the subjectivist ontology, and it focuses primarily on exploration. It aims to describe what the object is and enables researchers to understand the topic in depth. In a qualitative study, the observations are mainly expressed in text form which is not or cannot be quantified in specific numbers. A widely used method of qualitative research is the case study, and interviewing is a common method for data collection. Researchers analyse the textual information or phenomenon with the aim to explain reasons or posit theories or positions.

The quantitative research method is based on the objectivist ontology. It is data-oriented, and it mainly describes how the object works. The observations in quantitative research are measured and expressed in numerical form (Yilmaz, 2013). Quantitative data can be analysed with mathematical statistics methodology which enables the researchers to test the proposed hypotheses, interpret the results and make predictions accordingly.

The differences between qualitative and quantitative data and their concomitant research paradigms are generally categorised into the following aspects as shown in Table 4.1. The relation of both methodologies is shown in Figure 4.1.

Table 4.1 Comparison of qualitative and quantitative research methods

Category	**Qualitative research method**	**Quantitative research method**
Definition	It describes how an entity is	It describes how an entity works
Philosophical foundations	Subjectivism	Objectivism
Methodological assumptions	The fact is socially constructed and variables are complex, difficult to measure.	The social fact has its objective reality and variables can be identified and relationships measured.
Research purposes	It is concerned with contextualisation, interpretation, and understanding of the actors' perspectives.	It is concerned with generalisation, cause-effect relationships, and prediction.
Data type	In a non-numerical form, such as text, pictures, videos, etc.; an understanding from a small number of samples' features	Numerical values for carrying out statistical analysis; trying to test hypotheses or prediction on a large sample
Research approach	Inductive: it is data-driven and aims to generate theory	Deductive: it is theory-driven and aims to test hypotheses
Examples of research methods	Case study, qualitative interviews, etc.	Primary research (survey), secondary analysis, etc.

Notes: summarised by author after reviewing the research of Allan and Skinner (1991), Gelo, Diana, and Benetka (2008) and Yilmaz (2013).

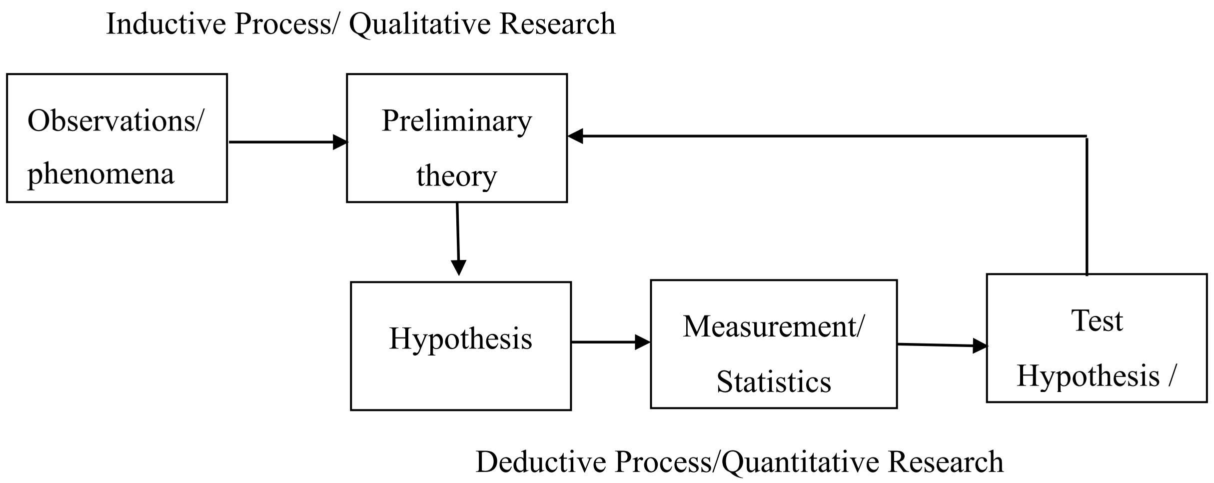

Figure 4.1 The theory-building process

4.3 Research design

Due to the differences between qualitative and quantitative research paradigms and the research purpose of this study, a quantitative research method was adopted.

First of all, this study is based on an objectivist ontology. All of the main constructs are derived from the theory of upper echelons and institution. The primary objective of this study is to empirically test the relationships among the selected key variables. This study is theory-driven and aims to test hypotheses. Hence, it fits the methodological assumptions and research purposes of the quantitative paradigm. Secondly, the data type in this study is numerical values. All the variables in this study can be numerically measured. Quantitative research is more appropriate for the examination of the correlation of quantified variables (Yilmaz, 2013; Taguchi, 2018). Furthermore, the research object of this study is CMNEs. Based on the Report on Development of China's Outward Investment 2018 by the Ministry of Commerce of the Republic of China, 25,600 Chinese companies were involved in OFDI activities by the end of 2017. Therefore, the potential population size in this study is big. Given that the qualitative method is more suitable for gaining an understanding from a small sample's features, it is less appropriate for this study. Last but not least, quantitative research is a widely used research method in the existing papers on this topic — the influential factors on MNE performance — so both the reliability and validity of this method in this area have been verified (e.g. Cozza et al., 2015; Rugman et al., 2016; Georgakakis, Greve, & Ruigrok, 2017; Feng et al., 2019; Gaur et al., 2019). Given these insights, this study adopted the quantitative research paradigm for further investigation.

After having determined that the study would adopt a quantitative-oriented research method, the next issue was which type of data collection method is more suitable. There are two broad types of quantitative research methods: primary research and secondary analysis. According to Allan and Skinner (1991, p. 215), in primary research "you both collect and analyse data", and in secondary analysis "you analyse data from secondary sources". To be consistent with the research framework, secondary analysis is more suitable for this study, although there are also some potential problems with secondary data analysis, for instance, secondary data are more general and extensive which might make it harder to generate deep insights into some specific subjective studies.

The reasons I decided to use secondary data for analysis are, first, though the parent companies of MNEs are from China, their subsidiaries are located all over the world. It is important to consider the feasibility of obtaining data. Cross-national issues might bring obstacles for primary data collection, while secondary analysis makes it easy to conduct cross-national studies (Allan & Skinner, 1991, p. 250). Second, the sample of my study is the listed CMNEs. As we know, listed companies are required to disclose detailed information regularly regarding their operations and performance outcomes. Therefore, it makes the data available for this study. More importantly, secondary archival data are more objective and have a higher level of credibility (Liu et al., 2014; Clegg et al., 2016; Feng et al., 2019), and thus it effectively avoids various biases caused by the subjective cognition that may exist in primary survey data. Third, there are considerable savings in time and cost by gathering archival data, especially for the panel data normally characterised by a big population, cross-national inquiry and time-span. In summary, secondary analysis for quantitative research was deemed worth adopting in this study after balancing its pros and cons.

In addition, my dataset in this study is a panel, including the dimensions of cross-section and time. The use of panel data has become popular in the studies of international business (Abdi & Aulakh, 2018; Gaur et al., 2019; Mariotti & Marzano, 2019) and is recommended to be employed more (Buckley et al., 2018). Compared to the cross-section data, panel data has a number of advantages (Cannella et al., 2008; Wooldridge, 2020). First, because of the larger sample size, it can enhance the accuracy of estimation. Second, through pooled cross-sectional time series data, it can reflect both average effects for individual observations and dynamic effects for an entire sample. More importantly, it can address the bias caused by omitting variables by controlling for the unobserved heterogeneity which is time invariant and in turn improve the statistical estimation. In reality, it is clear that the MNEs' performance impact may depend on various intervening variables (Glaum & Oesterle, 2007), and that the impact TMTs have on firm performance will materialise over time. In addition, longitudinal data, due to its wide time span and enormous sample size, could make the results of the research more general and objective. Unlike the cross-sectional data, panel data is more suitable for discovering the causal relationships between variables, rather than just the mutual relationships. Hence, a longitudinal data (panel data) approach is appropriate to empirically test the relationships in my study.

4.4 Research sampling

The research subjects of this study are Chinese A-stock listed enterprises, operating in the manufacturing sector, in both Shanghai and in Shenzhen stock markets. Scholars have widely taken listed enterprises as research subjects, especially for empirical analysis (Li, Vertinsky, & Li, 2014; Cui et al., 2015; van Hoorn & Maseland, 2016; Boone et al., 2018). The A-stock market is the major financial market in China. It includes all the enterprises that register in and list in mainland China. Both S&P Dow Jones and Morgan Stanley have included Chinese A-stock shares in their global index. Moreover, the sample for this study was restricted to public firms because data on top managers of other firms (such as non-public enterprises) are often inaccessible. Under the regulation issued by the Chinese Securities Regulatory Commission, the listed enterprises are required to provide regular data disclosure, including TMT information, which to a large extent ensured the availability and quality of my data.

I restricted my analysis to a specific industry, the manufacturing industry[4]. The reasons for restricting it to this industry are: first of all, it maintains some degree of comparability in the industrial backgrounds of the sample (Abdi & Aulakh, 2018). Secondly, firm operation varies by industry, thus a single-industry sample in which to test the hypotheses is desirable (Hitt, Tihanyi, et al., 2006). Thirdly, manufacturing firms represent a core value-adding sector in the emerging economy of China. In 2019, the manufacturing sector represented 32 percent of the GDP (Gross Domestic Product)[5] (National Bureau of Statistics, 2019), and OFDI from the manufacturing industry comprised 35% of Chinese non-financial OFDI[6] (National Bureau of Statistics, 2019), thus indicating a significant sector in the Chinese national economy as well as in Chinese OFDI flow. Last but not least, compared to the firms in other industries, manufacturing firms generally have longer history of operation, publishing annual reports, and disclosing financial and governance status according to the operation standards, which makes the sources of data longitudinal, reliable, and stable. Consequently, restricting analysis to the manufacturing industry is also the practice of many researchers in international business (Capar

---

[4] Following the Industrial Classification for National Economic Activities of PRC (GB T4754－2011), which is formulated with ISIC Rev.4, I selected those companies whose codes are in the B category.

[5] http://data.stats.gov.cn/easyquery.htm?cn=C01Accessed on 1st Oct.2020

[6] http://www.stats.gov.cn/tjsj/zxfb/202002/t20200228_1728913.html Accessed on 1st Oct.2020

& Kotabe, 2003; Cozza et al., 2015; Abdi & Aulakh, 2018; Kang & He, 2018).

The timeframe of this study is from 2007 to 2019. The Ministry of Finance of PRC issued the new Accounting Standards in 2007. Therefore, collecting data after 2007 helps to avoid the deviation caused by the difference of measurement standards. The outbreak of the coronavirus epidemic (COVID-19) at the end of 2019 has seriously hindered the development of the global economy (UNCTAD, 2020). Due to this "Black Swan", global FDI flow has shrunk dramatically. Accordingly, the empirical analysis of this study is conducted on the Chinese listed enterprises in the manufacturing industry over the period of 2007-2019.

In line with my research purpose, this study focuses on the sample of multinational enterprises (MNEs). The definition of "multinational enterprise" varies slightly in the literature; a broad definition is a firm that engages in the activities of FDI (Dunning, 1981). Rugman (1981, p. 31) described "a firm which [is] headquartered in one country and has operations in other countries" as an MNE. Various criteria have been adopted as the threshold for a MNE, such as a firm having 20% of sales outside the home country and direct investment in at least six countries (Michel & Shaked, 1986), a firm whose foreign sales comprise more than 10% of total assets (Collins, 1990), a firm whose sales or production are located in at least three foreign countries (Carpenter & Sanders, 2004), or a firm that has operations in six or more countries (Goerzen, 2007). Given that internationalisation of Chinese firms is a relatively recent phenomenon (Rugman, Nguyen, & Wei, 2016), a broad definition of MNE is more suitable to ensure that firms will not be excluded unnecessarily. Hence, this study adopted Rugman's (1981) definition of CMNEs, that is, the firms with headquarters in China and with at least one affiliate outside the Chinese mainland (Cozza et al., 2015), while affiliates established in tax havens, such as British Virgin Islands, Cayman Islands, Barbados and American Samoa were excluded from the dataset, as capital flows to these destinations do not reflect the normal pattern of FDI activities (Morck et al., 2008; Kang, 2018).

To ensure the data completeness and accuracy, the enterprises with special treatment (ST) and even with the risk of delisting (*ST), that is, the enterprise that have suffered deficits for at least two consecutive years or in other abnormal situations, were excluded (Feng et al., 2019). In addition, I limited the sample to firms with at least three years of FDI information to enable consideration of the impact of trends over time of the TMT attributes.

The main data source of this study is the China Stock Market & Accounting Research Database

(CSMAR) developed by GA Information Technology Co., Ltd., which is a leading financial database provider in China. CSMAR contains detailed information on all publicly listed Chinese firms. It is widely used in empirical studies of Chinese public companies (Li et al., 2019; Wu et al., 2021). In my study, CSMAR provided listed firms' financial data, FDI-related data, and most of the TMT information. The financial data and FDI-related data of the samples are supplemented by Wind[7] database and firms' annual reports. The TMT information was supplemented by firms' annual reports, LinkedIn, and other online open information.

In the end, this study ultimately utilised 7,676 unbalanced panel observations, which include 1,125 publicly listed CMNEs operating in the manufacturing sector from 2007 to 2019. Figures 4.2 to 4.5 show the distribution of the sampled CMNEs in my study in terms of firm location, firm ownership, firm size and firm age.

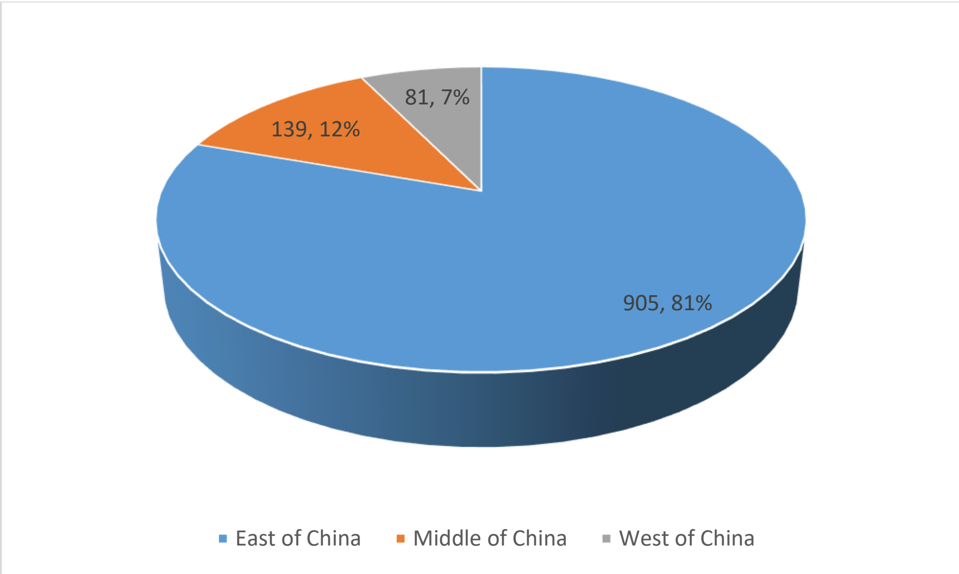

Figure 4.2 The distribution of the firms' location

Of the three economic zones in China[8], most of the CMNEs are located in east China, which accounts for 81% of my sample. In contrast, only 7% of the CMNEs in the sample come from

[7] Wind is a financial database that focuses on the financial operation information of Chinese enterprises. It is also widely used in the research on the Chinese market by Chinese researchers and international media, research reports. https://www.wind.com.cn/portal/en/AboutUs/index.html, Accessed 11th Nov. 2022.

[8] East of China, includes Beijing, Tianjin, Hebei, Liaoning, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, Guangxi, and Hainan.
Middle of China, includes Shanxi, Inner Mongolia, Jilin, Heilongjiang, Anhui, Jiangxi, Henan, Hubei, Hunan.
West of China, includes Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, Qinghai, Ningxia, and Xinjiang.

west China, as shown in Figure 4.2. It is also in line with the economic development of China, in that the east is somewhat more developed than the west.

In terms of firm ownership, Figure 4.3 shows that among 1,125 sampled publicly listed CMNEs, there are only 232 state-owned enterprises. However, in the following discussions (such as in Sections 4.5.4 and 5.2.3), it is mentioned that even the non-state-owned enterprises still have some degree of state ownership. It reflects the phenomenon that in China many multinational enterprises involve state-owned assets, but at different levels.

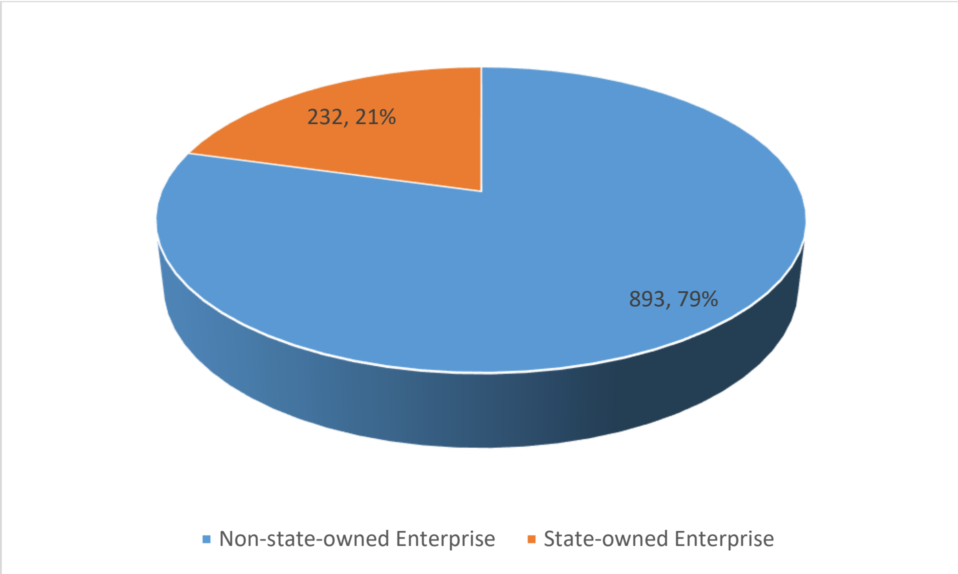

Figure 4.3 The distribution of the firms' ownership

Figure 4.4 shows the distribution of sampled CMNEs' size by total assets. For each of the sampled CMNE, total assets exceed 1 billion RMB and more than 50% of them range from 1 to 5 billion RMB. This illustrates that listed CMNEs in the field of manufacturing industry are mainly large or very large enterprises.

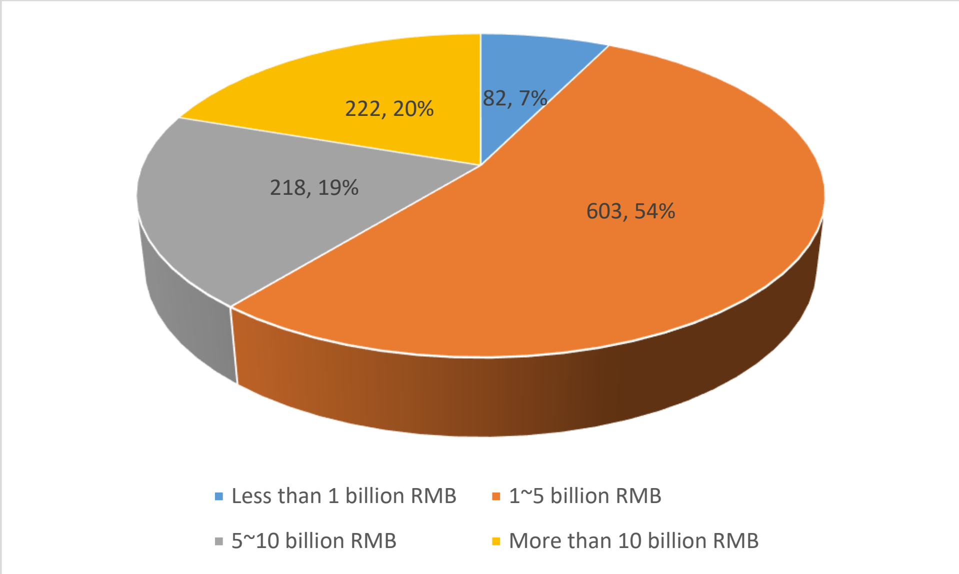

Figure 4.4 The distribution of the firms' size by total assets

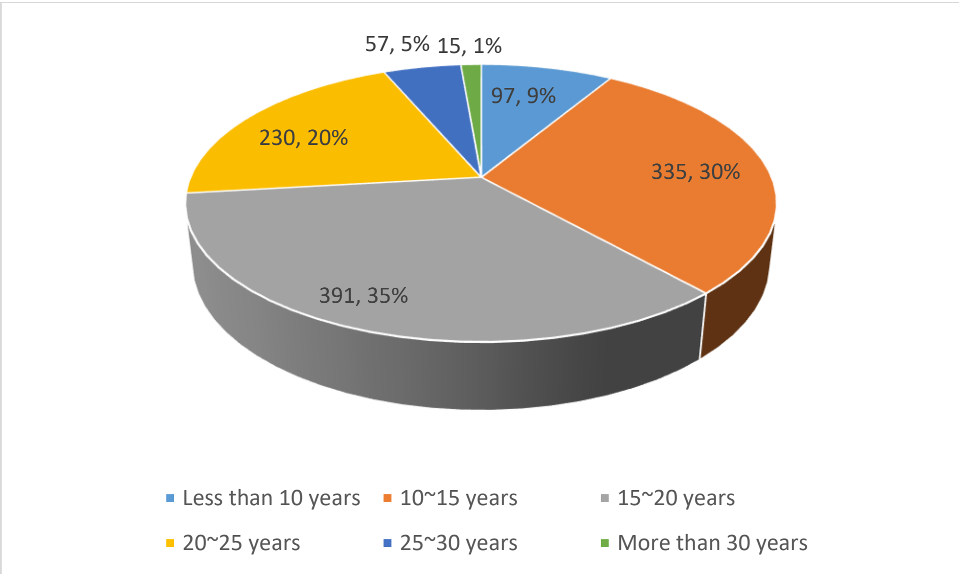

Figure 4.5 The distribution of the firms' age

More than 90% of my sampled CMNEs have been established for less than 25 years, as shown in Figure 4.5. Among these firms, 85% are between 10 and 25 years old. It shows that the firms have already experienced a period of development, which to some extent reflects that the data about these enterprises should be relatively stable, and also provides a guarantee for the quality of my subsequent analysis in Chapter 5.

In the sample, the CMNEs have on average 6.8 years of internationalisation experience. The distribution in terms of FDI experience of sampled CMNEs is shown in Table 4.2.

Table 4.2 The distribution of sampled CMNEs' FDI experience

FDI experience (years)	Number of CMNEs	Frequency
3	213	18.93%
4	163	14.49%
5	118	10.49%
6	89	7.91%
7	82	7.29%
8	106	9.42%
9	104	9.24%
10	70	6.22%
11	42	3.73%
12	53	4.71%
13	85	7.56%
Total	1,125	100.00%

The FDI destinations of CMNEs cover 104 countries and regions, including Hong Kong SAR (HK), Macao SAR and Taiwan. The five most popular destinations for sampled CMNEs to invest are the United States, Germany, Australia, Japan and India, excluding Hong Kong SAR. Figure 4.6 shows the number of subsidiaries which are affiliated to the sampled 1,125 publicly listed CMNEs in each observed year (from 2007 to 2019). From this figure, it is clear that although the trend shows that India has drawn increasing attention since 2018 as an investment destination for Chinese enterprises, instead of investing in developing countries, the enterprises from emerging economies (such as China) are interested in FDI in developed economies, especially the United States.

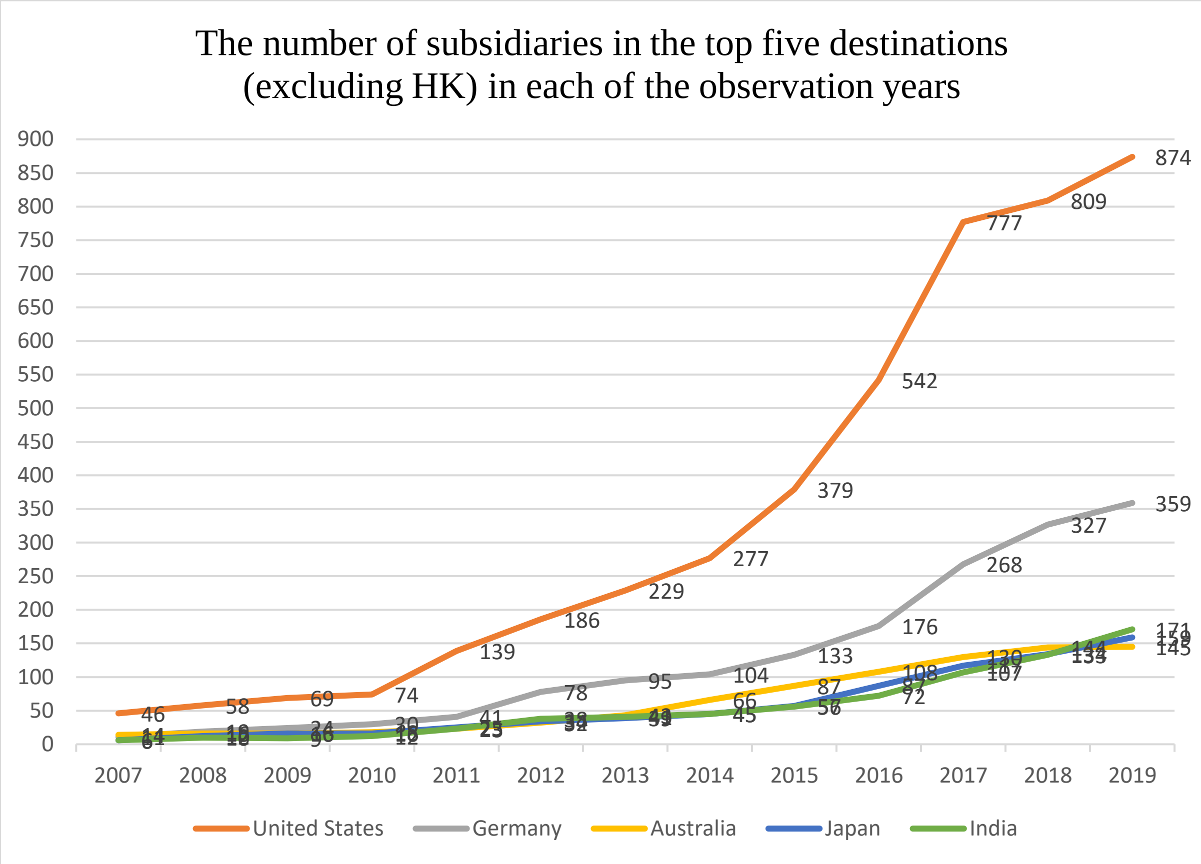

Figure 4.6 The FDI from sampled CMNEs

4.5 Measurement of constructs

The variables used in this study are divided into five types: dependent variable, independent variables, mediating variable, moderating variables and control variables. Table 4.3 summarises all the variables used in this study and their measurements.

Table 4.3 Summary of the measurement variables

Constructs	Variables	Measurement	Reference	Data Source
Dependent variable				
CMNE performance	Firm performance	ROA (Return on Assets)	(Vermeulen & Barkema, 2002; Lu & Beamish, 2004; Chang & Rhee, 2011)	CSMAR
Independent variables				
TMT attributes	TMT tenure	Natural logarithm of the mean number of TMT members' tenure (years) of each firm in year t	(Herrmann & Datta, 2005; Song & Ma, 2010; Bany-Ariffin et al., 2014; Chaganti et al., 2016; Evert et al., 2018)	CSMAR, annual reports, securities information websites and LinkedIn
	TMT education	The mean value of TMT members' education level of each firm in year t	(Song & Ma, 2010; Xu, Yun, et al., 2019)	
	TMT international experience	The number of the TMT members who have international experience / total number of the TMT of each firm in year t	(Wally & Becerra, 2001; Nielsen & Nielsen, 2011, 2013; Li, 2018)	
	TMT tenure diversity	The coefficient of variation of the members' tenures of each firm in year t	(Pelled et al., 1999; Rivas, 2012; Nadolska & Barkema, 2014)	
	TMT education diversity	The Blau's index = $1-\sum(P_i)^2$ (i is the proportion of the team in the i^{th} educational category)	(Lyon & Ferrier, 2002; Lee & Park, 2006; Barkema & Shvyrkov, 2007; Mitchell et al., 2016)	
	TMT functional diversity	The Blau's index = $1-\sum(P_i)^2$ (i is the proportion of the team in the i^{th} functional category)	(Lee & Park, 2006; Cannella et al., 2008; Rivas, 2012)	
Mediating variable				

Multinationality	Multinationality	A composite index of number of foreign subsidiaries (NFS) and number of foreign countries (NFC)	(Lu & Beamish, 2004; Chao & Kumar, 2010)	CSMAR
Moderating variables				
Institutional distance	Formal institutional distance	Average difference of Worldwide Governance Indicators (WGI) between China and each host country (calculated by Euclidean distance)	(Beugelsdijk et al., 2018; Kostova et al., 2020)	https://datacatalog.worldbank.org/dataset/worldwide-governance-
Ownership	State ownership	The proportion of state-owned shares	(Kalasin et al., 2020)	CSMAR
Control variables				
TMT age	TMT age	Natural logarithm of the average age of TMT members	(Li & Lo, 2017)	CSMAR, annual reports, securities information websites and LinkedIn
TMT size	TMT size	Natural logarithm of the number of members of the TMT	(Li, 2018)	CSMAR, annual reports, securities information websites and LinkedIn
Firm age	Firm age	Logarithm of the total number of years between the firm's foundation and the observation year	(Powell, 2014; Li, 2017; Gaur et al., 2019; Mariotti & Marzano, 2020),	CSMAR
Firm size	Firm size	Logarithm of the firm's total assets	(Nielsen & Nielsen, 2013; Liu et al., 2014; Liu et al., 2016; Li & Lo, 2017; Li & Cui, 2018; Gaur et al., 2019; Zhang et al., 2019; Mariotti & Marzano,	CSMAR

			2020; Kumar et al., 2021)	
Firm leverage	Debt to Assets	The ratio of total debt scaled by total assets.	(Qian et al., 2008; Qian et al., 2010; Hsu et al., 2013; Nielsen & Nielsen, 2013)	CSMAR
Innovation	R&D intensity	The ratio of R&D expenditures to total sales of the firm	(Carpenter & Fredrickson, 2001; Carpenter & Sanders, 2004; Herrmann & Datta, 2006; Li, 2017; Li & Lo, 2017; Piperopoulos et al., 2018; Agnihotri & Bhattacharya, 2019)	Wind, CASMAR
Informal institutional distance	Cultural distance	Average difference of Hofstede Index between China and each host country (calculated by Kogut and Singh's index)	(Slangen & Beugelsdijk, 2010; Nielsen & Nielsen, 2011; Liou et al., 2016)	https://geerthofstede.com/research-and-vsm/dimension-data-matrix/
Year effects	Year dummies	Create 12 dummy variables to represent the period of time between 2007 and 2019	(Wang & Dass, 2017; Boone et al., 2018)	

4.5.1 Dependent variable

Firm Performance

The dependent variable in this study is CMNE performance. Scholars agree that MNE performance is mainly reflected in their financial profit, which is measured by some accounting-based indicators, such as return on total assets (ROA), return on equity (ROE) and return on sales (ROS). All those indicators have high and significant correlations with each other and they may generate similar findings, for instance, the correlation coefficient between ROA and ROS is 0.91 (Hitt, Hoskisson, & Kim, 1997). Over other accounting-based indicators of performance, ROA is widely adopted in the international management literature (Hitt et al., 1997; Vermeulen & Barkema, 2002; Chang & Rhee, 2011; Yang, Lu, & Jiang, 2017), especially in the studies of the Chinese context (Li & Wong, 2003). On the one hand, ROS is correlated with firm sales (Abdi & Aulakh, 2018). In the emerging economies, sales could be more vulnerable to the external environments, so it is a less stable basis for comparison than firm assets. On the other hand, ROE is sensitive to the firm’s capital structure (Hitt et al., 1997; Sher & Yang, 2005). Moreover, the Chinese capital market is not quite as mature as the western market, so accurate assessment of a firm’s equity may be lacking (Li & Wong, 2003). Therefore, both ROE and ROS are more likely to result in artificial issues, and they were ruled out in the main regression models in my study.

In addition, as a market-based financial performance measurement, Tobin's Q is also found in the research on internationalisation to be an indicator for firm performance (Morck & Yeung, 1991; Lu & Beamish, 2001). Tobin’s Q is a ratio defined as the market value of assets divided by the replacement value of assets, which reflects the market's expectation of the company's future profits, and then affects the enterprise’s valuation and its investment decisions. However, as with Hutzschenreuter and Horstkotte (2013), my model focuses on the firm’s realised performance. Thus, the measurement of Tobin’s Q, which is more focused on an expectation about a firm’s future performance was ruled out in my regressions as well.

Consequently, due to the above considerations and also following the practices of many of previous studies (Geringer, Beamish, & daCosta, 1989; Lu & Beamish, 2001; Contractor et al., 2003; Qian et al., 2008), this study used ROA as the measurement of CMNEs’ performance. The data of CMNEs’ ROA were obtained from the CSMAR database, supplemented by Wind and firms’ annual reports.

4.5.2 Independent variables

The independent variables in this study are the variables of TMT attributes: TMT tenure, TMT educational level, TMT international experience and TMT functional diversity. Chinese company laws and securities regulations require all publicly listed firms to disclose the necessary information (such as gender, age, position, educational background etc.) of their TMT and board members in their annual reports (Bai et al., 2021). The CSMAR database, which is a credible source of information on Chinese stock markets and listed firms (Wang & Qian, 2011; Zhang et al., 2011), collects the information for top managers, supervisory boards and the boards of the directors of the listed companies automatically from the disclosed firm annual reports. Thus, the primary source for TMT-related information in this study is CSMAR. However, for individual-specific information, almost two-fifths of the data are missing. After fixing the members of the TMT of each sample firm in each year, missing individual information, such as degree level, international experience and functional background were manually filled in using the supplemental information. The supplemental informational sources include firm annual reports and online information (Pisani et al., 2018), for instance, the securities information websites and LinkedIn.

Identification and definition of the TMT have been contested in upper echelons research. Hambrick and Mason (1984) provide very broad terms of "upper-level managers" or "top executives" (p.196). Later, scholars identified various kinds of TMTs in their empirical studies, such as the CEO and his/her direct reports (Tushman & Rosenkopf, 1996; Boeker, 1997b, 1997a), Vice President and above (Keck, 1997; Tihanyi et al., 2000; Carpenter et al., 2001), chair/CEO and key division CEOs (Pitcher & Smith, 2001), all the board members in the company (Singh et al., 2010), and top executives reporting directly to the CEO (Rivas, 2012). Other scholars identify the TMT as all the managers listed in some public financial documents, such as the management section of the IPO prospectus (Carpenter, Pollock, & Leary, 2003b; Chaganti et al., 2016), or the 10-K filing (Gordon et al., 2000). Although the identification of TMT members is not consistent in previous research, they have followed some of the same principles: 1) following the general standard of the countries or regions where the firms are; and 2) the members who have influence on a firm's strategic decision-making. Therefore, to remain consistent with the literature and to adhere to the Chinese national context, I defined the TMT in this study as the top managers who have substantive decision-making authority and are listed in the annual reports.

The members of different TMTs in 1,125 CMNEs during the observation years were primarily collected from CSMAR. CSMAR lists all the names of a firm's top managers, supervisory boards and the boards of directors. According to the provisions of the Company Law of China, "the chairperson of the board is the legal representative of a listed company and has the substantive final decision-making authority" (Xu, Yun, et al., 2019, p. 6), and the general manager, deputy manager, the person in charge of the firm's financial issues, secretary of the board and other senior managers listed in the articles of association comprise the TMT (Company Law of the People's Republic of China, 2018). It is also worth mentioning that the titles of Chief Executive Officer (CEO), Chief Financial Officer (CFO), and Chief Operational Officer (COO) are not stipulated in the Company Law and are not as popular in Chinese firms as they are in other countries. For this reason, I filtered the members of each TMT by their specific position, screening out the people whose titles include supervisory, independent director, party secretary or trade union chair. In Chinese enterprises, those people do not have actual managerial power but take charge of the legality of the enterprise's operation. Ultimately, top managers (with the title of CEO, CFO, COO and other equivalents), the chair, vice chair and the secretary of the board comprise the final list of the TMT members in this study.

Consequently, for the period under consideration, 56,188 individuals were found to be members of different TMTs of the firms that were selected in my sample. Their profiles were obtained mainly from CSMAR, supplemented by firm annual reports, securities information websites and LinkedIn. In this study, TMT attributes focus on the job-related characteristics (Naranjo-Gil et al., 2008), that are tenure, educational level, international experience and functional background. Details regarding the construction of various TMT variables are covered below. I lagged the independent variables by 1 year (at t-1) to assess their impact on the dependent variable in the analysis models.

TMT attributes

1. TMT tenure

Tenure refers to the amount of time an individual has been a member of the work unit. The upper echelons literature refers to two alternative measures of tenure: tenure in the firm or tenure in the position (Finkelstein & Hambrick, 1990). As it implies, tenure in the firm is the amount of time (in years) an individual has been an employee of the firm (Wally & Becerra, 2001; Herrmann & Datta, 2005; Song & Ma, 2010). Tenure in the position is the amount of time (in years) an individual has been in the top manager's position (Tihanyi et al., 2000; Rivas, 2012; Hsu et al., 2013; Nadolska & Barkema, 2014; Wang et al., 2016; Evert et al., 2018; Li, 2018; Xu, Yun, et al., 2019). As the underlying arguments of this study are aligned with tenure in position, and data extracted from firm annual reports provide information about when the person became a top manager, the measurement of tenure in position is adopted. In my study, there are two variables related to TMT tenure; one is mean years of the tenure of each TMT (*TMT tenure*), which I used for the main regression. The other is the diversity of the tenure among TMT members (*TMT tenure diversity*), which I used in the supplementary regression models, trying to expand my research conclusions.

TMT average tenure was calculated as the log to the mean of TMT members' tenure of each firm in year t.

TMT tenure diversity was calculated by computing the coefficient of variation – standard deviation divided by the mean – of the members' tenures for each firm in year t (Pelled et al., 1999; Rivas, 2012; Nadolska & Barkema, 2014). The coefficient of variation provides a direct and scale-invariant measure to capture the dispersion of an attribute among members (Allison, 1978; Naranjo-Gil et al., 2008).

2. TMT education level

A top manager's education level refers to his/her highest degree. There are several different classifications for education level in the previous literature. For instance, Wally and Becerra (2001) use a three-point scale (1 = Bachelor's degree or less, 2 = Master's degree, and 3 = PhD) to measure managers' educational level. Meanwhile Herrmann and Datta (2005) adopt a seven-point scale for the highest degree the managers earned (1 = high school, 2 = college, 3 = undergraduate degree, 4 = graduate school, 5 = master's degree, 6 = attended doctoral programme and 7 = doctorate). In this study, given the Chinese educational system, a five-point scale is more suitable (Song & Ma, 2010; Chaganti et al., 2016; Xu, Yun, et al., 2019), that is: 1 = senior high school or below, 2 = junior college, 3 = bachelor's degree, 4 = master's degree, and 5 = doctorate. The more points the degree is allocated, the higher the educational level the manager has.

Notably, I classified MBAs or EMBAs in category 4 (Master's degree), as for the academic master's degree. The reason is that, from the degree perspective, they all meet the requirements of master's degree level. First, I derived the information of TMT education levels from CSMAR.

Then, I sorted them with the five-point scale. Third, I obtained the missing information from public resumé information in, for example, announcements in the annual reports, biographies or personal social media. Finally, the TMT education variables were calculated after scoring managers' education levels. TMT education level was computed as the mean value of TMT members' education level of each firm in year t (Song & Ma, 2010; Xu, Yun, et al., 2019).

As well as the variable of *TMT education* which reflects the general education level of different TMTs of each firm, I also created another relative variable, which is *TMT education diversity. TMT education diversity* reflects the heterogeneity of the education level for each TMT. This variable was used in the supplementary regression models after the main regression.

TMT education diversity was calculated using Blau's index (Blau, 1977). Blau's index is more suitable for the discrete categorical variables that are not amenable to the coefficient of variation measure (Harrison & Klein, 2007). Blau's index is calculated as $1-\sum(p_i)^2$, where p_i is the percentage of the population in the i^{th} category. This index varies between 0 and 1, where values close to 1 indicate higher diversity among the group and values close to 0 indicate that the group is dominated by one type (Lee & Park, 2006). Therefore, I computed *TMT education diversity* with Blau's index, in line with prior studies (Lyon & Ferrier, 2002; Lee & Park, 2006; Barkema & Shvyrkov, 2007; Mitchell et al., 2016).

3. TMT international experience

I gauged TMT international background using the variable of *TMT international experience*. In the literature in the area of international business, there are two widely applied approaches to measure international experience. One is in years. It refers to the time a top manager has spent abroad (relative to the home country in the research setting) due to assigned work throughout his/her career (Carpenter & Fredrickson, 2001; Georgakakis et al., 2017). Years of overseas higher education could also be included (Herrmann & Datta, 2005, 2006). The other method is using a dummy variable. It equals 1 if the manager has international working experience and 0 otherwise (Wally & Becerra, 2001; Nielsen & Nielsen, 2011, 2013). International education is also included in some research (Tihanyi et al., 2000; Hsu et al., 2013; Li, 2018). Other methods have also been adopted, such as nationality (Pisani et al., 2018), or asking them directly about the extent of their international experience using a Likert scale (Zhang et al., 2019).

Considering the above measurements adopted by previous literature and the data availability (many companies do not disclose the number of years the manager has worked or studied abroad), in this study I applied the dummy variable to measure a manager's international background. The individual received 1 if he/she matched any of the following three situations: (1) holds non-Chinese nationality; (2) has current or previous work experience from outside mainland China; and (3) was educated outside mainland China. Otherwise, they received 0. After scoring the international experienced of individuals, *TMT international experience* was identified as the proportion of members of the TMT who have international experience of each firm in year t (Wally & Becerra, 2001; Nielsen & Nielsen, 2011, 2013; Li, 2018).

4. TMT functional background

Functional heterogeneity is the proxy of the TMT's functional background in this study. Functional background refers to the department or function in which managers have worked. A person might have worked for different departments or functions during his/her career life. I regarded the most recent one as a manager's primary functional area.

The construction of *TMT functional diversity* followed a similar process to that of TMT education diversity; that is, firstly, the functional backgrounds of team members were assigned; then the extent of team diversity in functional backgrounds was computed.

The category of functions is not unique. Rivas (2012) followed a five-category classification: production and technical, marketing and sales, finance, legal and operations, and other. In my study, top managers functions were divided into seven categories following Chaganti et al. (2016) and Tihanyi et al. (2000): 1=general management, 2=human resources, 3=finance or accounting, 4=marketing or public relations, 5=research and development or technology, 6=production and operations, and 7=legal or law.

As a first step, the TMT's functional background was scored by categorising each member's primary functional background into one of the above seven tracks. As a second step, Blau's index was computed to identify the TMT's functional diversity (Lee & Park, 2006; Cannella et al., 2008; Rivas, 2012). Similarly, this index varies between 0 and 1, where values close to 1 indicated a higher degree to which TMT members differ from others in their functional backgrounds.

4.5.3 Mediating variable

Multinationality

The mediating variable in this study is *Multinationality* (also known as Degree of internationalisation, abbreviated as DOI). The primary data sources for this variable were CSMAR and firm annual reports. Multinationality is one of the important concepts in the area of international business. How to provide a suitable measurement of multinationality attracts scholars' attention (Sullivan, 1994; Marshall, Brouthers, & Keig, 2020). Hitt, Tihanyi, et al. (2006) and Li (2007) provides detailed reviews of various measurements of multinationality used by past researchers.

Among the various indexes of multinationality, the ratio of foreign sales over total sales (FSTS) is perhaps regarded as the oldest measure of firm internationalisation (Vernon, 1971) and remains the most commonly used one (Marshall et al., 2020). Proponents believe that FSTS, as a simple division of non-domestic sales by total sales, is theoretically meaningful and operationally simple. However, critics consider that FSTS might incorporate sales from exporting, licensing and foreign subsidiaries (Berry, 2006), which cannot reflect the breadth or scope of foreign operations (Chao & Kumar, 2010). Thus, FSTS is an index concentrated on the sales (Hitt, Tihanyi, et al., 2006). Some measurements include foreign assets to total assets (FATA), or foreign employees to total employees (FETE), et al. (Contractor et al., 2003; Qian et al., 2008). Compared with the international scale, another common measure of multinationality concentrates on the international scope, that is, the breadth of international operations. It is simply the number of foreign countries (NFC) in which a MNE has operations (Ioulianou, Leiblein, & Trigeorgis, 2020). However, a restrictive feature of simple international scope is that each country, regardless of its size, has the same weight (Marshall et al., 2020). Moreover, there are researchers using a composite index or entropy to weight the level of firm international diversification (Wally & Becerra, 2001; Lee & Park, 2006; Qian et al., 2010; Rivas, 2012). In general, each measurement has its pros and cons, so the decision of how to gauge the multinationality should be consistent with the research setting.

In this study, multinationality reflects the strategic decisions made by TMTs. Hence, the sales related index might not be suitable for the research setting. For an extreme example, a firm has abundant overseas sales, while it only invests in one foreign country. Another firm has FDI in several countries, but the sales in those countries are relatively small. Therefore, an index such as FSTS does not reflect a firm's overseas expansion decisions, but a composite index of number of foreign subsidiaries (NFS) and NFC does. This indicator not only includes the scope of firm internationalisation (NFC), but also reflects the scale of internationalisation (NFS) to a certain extent. Moreover, it is also commonly adopted in previous research (Lu & Beamish, 2004; Chao & Kumar, 2010).

To develop this index, two count measures are firstly needed. One is a count of a firm's number of overseas subsidiaries (of which the parent company holds more than 50% shares) in each year. The other is a count of the number of countries in which a firm has subsidiaries in the same year. These two variables are highly correlated (Lu & Beamish, 2004); in my dataset, their correlation coefficient is 0.826. Next, I integrated these two measures into a composite measure of internationalisation following established procedures (Sanders & Carpenter, 1998). First, I respectively divided each of the two count measures by either the maximum number of subsidiaries or the maximum number of FDI countries. Then, the mean value of these two ratios was computed. The final measure of *Multinationality* ranges from 0 to 1, with 1 representing the highest level of internationalisation in my sample.

4.5.4 Moderate variables

State Ownership

One of the moderating variables in this study is *State Ownership*. I gauged the enterprise ownership using the proportion of state owned shares (Kalasin et al., 2020; Wu et al., 2021) of each firm in year t. The data were collected from CSMAR.

Researchers also widely apply dummy variables to measure ownership (Li, Xia, & Lin, 2017; Williams & Vrabie, 2018; Mariotti & Marzano, 2019, 2020). Specifically, a state-owned firm is coded as 1 and a non-state-owned firm as 0. However, the criterion standards for distinguishing state-owned firms from non-state-owned firms vary. Li et al. (2017) define the state-owned firm as the government owning at least a 50% stake in it, while Li et al. (2019) took 15% of state-owned shares as the threshold to define whether a firm is state owned.

Compared to continuous variables, a binary value is relatively static. It reflects the firm's ownership over a period of time. The proportion value can change. The government investors might increase or decrease their holding from year to year. Therefore, I believe that the proportion value is more suitable to measure the dynamic influence on the firm of the state ownership.

Formal institutional distance

Formal institutional distance is the other moderating role in this study. Based on North's (1990) conceptualisation of the "rules of the game", the institutional environment is composed of political rules, regulations, laws, and contracts which are explicitly created, usually by government legislation. Accordingly, institutional distance between two countries is defined as the dissimilarity between institutional environments of the home and the host countries (Estrin et al., 2009; Slangen & Beugelsdijk, 2010; Abdi & Aulakh, 2012).

Beugelsdijk et al. (2018) offered ideas of what method and what data to use when constructing a distance index. Kostova et al. (2020) also provided a review and analysis on institutional distance in the area of international business. To construct a distance index, three metrics are widely applied (Beugelsdijk et al., 2018): the Euclidean distance metric, Kogut and Singh's (1988) index which is a type of Euclidean distance, and the Mahalanobis approach (Mahalanobis, Bose, & Roy, 1937).

The major difference between the Euclidean distance metric and Kogut and Singh's formula is "the correction for differing variances across the dimensions" (Beugelsdijk et al., 2018, p. 1118). Kogut and Singh's index takes into account the variance of individual variables (Berry, Guillen, & Zhou, 2010), while the Euclidean distance metric does not. The Mahalanobis method can be regarded as an improvement on the Euclidean approach, correcting the problem of inconsistent and related dimensions in Euclidean distance (Berry et al., 2010). Therefore, when the individual distance indicators are totally uncorrelated or highly correlated, there actually is no added value in using the Mahalanobis method (Beugelsdijk et al., 2018). However, the kind of data used to construct the distance index has an impact on the calculation methods. In the following, I present the data sources, and then the method of distance index that was adopted in this study.

To measure institutional distance, scholars have mostly used data from Kaufmann's Worldwide Governance Indicators (WGI) (e.g.,Liu et al., 2016; van Hoorn & Maseland, 2016; Shirodkar & Konara, 2017; Kang, 2018), the Economic Freedom Index (EFI) (e.g.,Gubbi et al., 2010; Liou et al., 2016; Vogiatzoglou, 2016) or the International Country Risk Guide (ICRG) dataset (e.g. Clegg et al., 2016). The WGI framework includes six measurement items for institutional governance (Kaufmann, Kraay, & Mastruzzi, 2006): (1) voice and accountability, (2) political stability and absence of violence, (3) government effectiveness, (4) regulatory quality, (5) rule of law, and (6) control of corruption. All of the six dimensions are more in line with the conceptual essence of North's formal institutions of ease of doing business, market-supporting institutions, transaction costs, and uncertainty (Kostova et al., 2020). Moreover, compared to the other two datasets, the latest WGI provides the governance indicators of 205 countries and regions, including the information in my sample. Therefore, in this study, I derived the formal institutional indicators of the countries from WGI[9].

WGI indicators are highly correlated (Kaufmann et al., 2006; Kostova et al., 2020), so Mahalanobis' technique becomes less advantageous as compared to Euclidean approaches. Moreover, all the scores for the six dimensions were standardised when calculated, hence, re-scaling the dimensions by correcting for variance difference was not required either. Consequently, the following Euclidean distance metric was adopted in my study.

$$\text{EuclideanDist}_j = \sum_{i=1}^{n}\{(I_{ij} - I_{iHome})^2/V_i\}/N \qquad \text{formula (1)}$$

where I_{ij} stands for the index for i^{th} WGI dimension in j^{th} country, "Home" indicates "home country", which is mainland China in this study, and EuclideanDist_j is the formal institutional distance of the j^{th} country.

For each firm, the institutional distances between China and each host country were calculated by formula (1). The final formal institutional distance the firm faced in year *t* is the mean value of above distances, that is,

$$\text{InsDis}_{kt} = (\sum \text{EuclideanDist}_{jt})/N \qquad \text{formula (2)}$$

where $\text{EuclideanDist}_{jt}$ stands for the institutional distance of j^{th} country and N is the number of host countries, in year t of the k^{th} company. The InsDis_{kt} is the formal institutional distance of the k^{th} company. This measure is time varying.

4.5.5 Control variables

The control variables are employed to avoid omitted variable bias and alternate explanations, reduce error terms, eliminate inaccuracy, and improve the statistical prediction and confidence of the model (Becker, 2005; Nielsen & Raswant, 2018). The selection of control variables needs to meet three major criteria: 1) the variables are aligned with the theorising; 2) the variables should have influence on the dependent variable; and 3) they are commonly discussed in the preceding similar literature. In this regard, I controlled the following variables in this study. All

[9] https://datacatalog.worldbank.org/dataset/worldwide-governance-indicators

control variables were lagged by a year (at t-1) when they were included in the analysis model, with respect to the dependent variable.

1. TMT age

TMT age is associated with an individual's values and experience (Chaganti et al., 2016). It might be a proxy for social networks (Richard & Shelor, 2002). Scholars have stated its impact on firms' strategic decisions and financial performance (Carpenter et al., 2004; Herrmann & Datta, 2005; Rivas, 2012; Bany-Ariffin et al., 2014). For example, Tihanyi et al. (2000) point out that firms with a higher average TMT age formulate a more conservative enterprise strategy and lose good market opportunities.

In order to accommodate these concerns, I controlled for TMT age in this study. The age of each team member was sourced from CSMAR, supplemented by annual reports and websites. TMT age was computed as a logarithmic transformation of the average age of TMT members (e.g., Li & Lo, 2017).

To logarithm the variable does not change the nature and correlation of data, but it compresses the scale of variables, which makes the data more stable and attenuates the collinearity and heteroscedasticity of the model. Therefore, the variables related to size or age were all computed as log values in my study.

2. TMT size

Haleblian and Finkelstein (1993) suggested that TMT size represents an important determinant of firm performance. Larger TMTs are associated with more abundant resources and a wider range of perspectives that can both be applied and considered while evaluating problems (Certo et al., 2006). Researchers report consistently positive relationships between TMT size and firm international level (Sanders & Carpenter, 1998) as well as firm performance (e.g., Carpenter et al., 2001; Certo et al., 2006). Considering its impact, TMT size has been widely used as a control variable in upper echelons research (e.g., Cannella et al., 2008; Greve, Biemann, & Ruigrok, 2015; Kumar et al., 2021). Accordingly, in this study, I controlled for TMT size, measuring it as the natural logarithm of the number of TMT members (e.g., Li, 2018).

3. Firm age

A firm's age reflects the duration of a business, which is related to its experience, knowledge storage and ability to identify environmental changes and opportunities in the international market (Autio, Sapienza, & Almeida, 2000). Bausch and Krist (2007) argued that firm age has impacts on multinationality and firm performance. Zhang and Li (2008) argued that a firm that has been in existence longer is likely to have greater market share. Powell (2014) believed that age could result in deeper knowledge stock and improved performance. Moreover, longer operational history usually leads to abundant domestic resources that will promote the firm's internationalisation and its overseas behaviours (Feng et al., 2019). Therefore, I controlled for firm age in this study by using the logarithm of the total number of years between the firm's foundation and the observation year (Powell, 2014; Li, 2017; Gaur et al., 2019; Mariotti & Marzano, 2020).

4. Firm size

Firm size is the other variable known to affect corporate performance (Barkema & Shvyrkov, 2007; Abdi & Aulakh, 2012). Firm size indicates the firm's operational experience (Liou et al., 2017) and capability for resource commitments (Liou et al., 2016), which is largely an indicator of economic value of the firm per se (Li et al., 2017). The greater experience and resources of large firms help them avoid the risks in the process of internationalisation, thereby improving performance (Feng et al., 2019). Yiu, Lau, and Bruton (2007) found that larger firms tend to possess greater resources to engage in internationalisation which is even obvious for emerging-market enterprises. More importantly, the larger firm is likely to have more TMT members, which also has an impact on the relationship between the TMT's characteristics and the organisational outcomes (Carpenter, 2002), such as strategic decisions and firm performance. Although Barkema and Shvyrkov (2007) pointed out that firm size and TMT size may be highly correlated because larger firms tend to have larger TMTs, Hutzschenreuter and Horstkotte (2013) found that the results are virtually identical whether TMT size is included or not in their research on how TMT experience affects the performance of international expansion processes. Therefore, in my model, I kept TMT size and firm size as the control variables.

Scholars usually gauge firm size by any of these three indicators: the total number of employees (Nielsen & Nielsen, 2013; Liu et al., 2016; Li & Lo, 2017; Zhang et al., 2019; Kumar et al., 2021), firm assets (Liu et al., 2014; Li & Cui, 2018; Gaur et al., 2019; Mariotti & Marzano, 2020), or total sales (Lu & Beamish, 2004; Zhang & Li, 2008; Nielsen & Nielsen, 2011; Hsu et al., 2013; Li & Lo, 2017). In this study, I operationalised the firm size as the log of firm total assets, because there are fewer missing data points for firm assets in this study. Data were derived from CSMAR.

5. Financial leverage

Financial leverage, often weighted by debt-to-assets, captures the firm's long-term debt level (Wang et al., 2016). It accounts for the role of a firm's capital structure in shaping firm strategy (Mariotti & Marzano, 2020) and may affect firm performance (Hsu et al., 2013). Singh et al. (2010) found that firm leverage has a negative impact on firm performance. Following the preceding literature, in this study, I controlled the variable of firm leverage by computing the ratio of total debt scaled by total assets (Qian et al., 2008; Qian et al., 2010; Hsu et al., 2013; Nielsen & Nielsen, 2013).

6. Research and development (R&D) intensity

R&D intensity is a common proxy of firm innovation capability (Li, 2017). Higher innovation capability can offer firms more opportunities to sell products in international markets (Agnihotri & Bhattacharya, 2019). It also indicates a firm is more able to deal with the competition in the international markets. The relationship between innovation and internationalisation strategy is significant (Lee & Park, 2006; Li, 2017). Previous research confirmed the effect of a firm's R&D intensity on performance (Barkema, Geroski, & Schwalbach, 1997; Cannella et al., 2008; Kirca et al., 2011). Singh et al. (2010) find R&D intensity has a positive impact on firm performance in their research about the effect of internationalisation on MNE performance. Therefore, in my research framework, following several scholars (e.g., Carpenter & Sanders, 2004; Qian et al., 2008; Mihalache et al., 2012), I controlled the variable of R&D intensity.

To measure R&D intensity, various measurements have been applied. Both Lee and Park (2006) and Cannella et al. (2008) computed it as R&D expenditure divided by the total number of employees. Several studies also used indicators such as patents (Hitt et al., 1991) to represent the R&D intensity. However, considering that the firms in emerging markets are in the relatively early stages of innovation, the patents of the firms as well as the information about the patents are still limited. Thus, I followed the standard measurement and computed the R&D intensity as the ratio of R&D expenditure to total sales of the firm (Carpenter & Fredrickson, 2001; Carpenter & Sanders, 2004; Herrmann & Datta, 2006; Li, 2017; Li & Lo, 2017; Piperopoulos et al., 2018; Agnihotri & Bhattacharya, 2019). Data were derived from Wind database and CSMAR.

7. Cultural distance

Cultural distance is measured primarily by Hofstede's cultural dimensions (Hofstede, 1980, 2001), although there are other frameworks such as Schwartz Value (Schwartz, 1994, 2006) or GLOBE Value (House, 2004). Hutzschenreuter and Voll (2008) have recommended using the nine GLOBE dimensions instead of Hofstede's due to its more comprehensive coverage and higher predictive validity of the culture. Some scholars employ mixed frameworks, for example, Estrin et al. (2009) used both Hofstede and GLOBE indexes to measure informal institutional distance. Additionally, there has also been substantial criticism of Hofstede's dimensions for condensing culture into a small number of dimensions, limiting the sample to a single MNE (IBM), and ignoring intra-country cultural heterogeneity etc. (Kirkman, Lowe, & Gibson, 2006). However, Hofstede's is still the most often used cultural index in the international business literature (Shenkar, 2012; Beugelsdijk et al., 2018). After reviewing 171 related empirical papers, Kostova et al. (2020) found that "there is also an increasing number of authors who opt for measuring informal institutional distance with the Hofstede-based distance index" (p.489). Moreover, according to the latest data, there are 60 countries with GLOBE scores[10], while Hofstede has 111[11]. Hence, Hofstede covers more country data and might be more suitable for the studies which involve more countries.

In addition, there were originally four dimensions as surrogates for measuring a country's informal institutions, but two more dimensions were added later (Hofstede, 2010). Beugelsdijk et al. (2018) recommend that "the six-dimensional framework is preferred as compared to the four-dimensional one" (p.1123) because the former takes more available information into account for a more comprehensive index (Shenkar, 2012).

Therefore, this study adopted the measures for the cultural distance construct from Hofstede as many scholars have done so (Hutzschenreuter & Voll, 2008; Salomon & Wu, 2012; Azar & Drogendijk, 2014). The six cultural dimensions in Hofstede's framework are: power distance, individualism, masculinity, uncertainty avoidance, long-term orientation, and indulgence. The informal institutional distance is the difference between China and the host countries in those

---

[10] https://globeproject.com/study_2004_2007#data

[11] https://geerthofstede.com/research-and-vsm/dimension-data-matrix/

dimensions.

As for the choice between the Euclidean Hofstede-based cultural distance and Mahalanobis Hofstede-based cultural distance, both of them have high correlations. In fact, Beugelsdijk et al. (2018) have demonstrated that "there is no significant difference between the results obtained with the Hofstede-based Kogut and Singh index or with its Mahalanobis equivalent" by meta-analysis (p.1121). Thus, Kogut and Singh's cultural distance index was employed in this study.

$$\mathrm{KSIndex_j} = \sum_{i=1}^{n}\{(I_{ij} - I_{iHome})^2/V_i\}/N \qquad \text{formula (3)}$$

where I_{ij} stands for the index for i^{th} Hofstede dimension of j^{th} country, "Home" indicates "China" in this study, V_i is the variance of the index of the i^{th} dimension, n is the number of Hofstede dimensions (6), and $\mathrm{KSIndex_j}$ is the cultural distance of the j^{th} country.

As with formal institutional distance, the cultural distance of the MNEs which have FDI in more than one host country was calculated by the mean value of $\mathrm{KSIndex_j}$ (Chao & Kumar, 2010).

$$\mathrm{CulturalDis}_k = (\sum \mathrm{KSIndex}_j)/N \qquad \text{formula (4)}$$

Where $\mathrm{KSIndex_j}$ stands for the distance of j^{th} country and N is the number of the host countries of the k^{th} company. The $\mathrm{CulturalDis_{kt}}$ is the cultural distance of the k^{th} company. As the culture of a country reflects the nature of a nation and will not change in the short term, this measure is time invariant.

8. Year dummies

Using year dummies is a standard method in panel data analysis. As the data in this study is in a panel-data format, it is critical to account for time-specific effects. Over time, variations in economic landscape, domestic policy and global situation occur, thus influencing a firm's international strategy and its financial performance. Year dummies are applied to control for the unobserved changing macro-conditions within the years (Wang & Dass, 2017; Boone et al., 2018). In order to control for such time-specific effects, I created 12 dummy variables to represent the period of time between 2007 and 2019. Year dummies were included in the models, but their estimated data are not shown in the results in Chapter 5.

4.6 Estimation methods

Regression analysis is used for estimating the relationships between a dependent variable and one or more independent variables (Cook & Weisberg, 1982; Wooldridge, 2020). The correct choice of regression model depends upon the attributes of the dependent variables followed by those of the independent variables (Ang, 2014). In statistics, linear regression, which is commonly used for predictive analysis and modelling in research, is a linear approach for modelling the relationship between a dependent variable and one or more independent variables. The case of one explanatory variable is called simple linear regression; for more than one, the process is called multiple linear regression (Freedman, 2009).

This study investigates the correlation between the TMT attributes and MNEs' multinationality and then their performance. The value of either the Multinationality or the Firm performance is neither binary nor categorical. Moreover, I explore the impact of four kinds of TMT attributes, hence there is more than one independent variable in the regression models. Therefore, multiple linear regression analysis was adopted in my study for the study of the relationship between TMT attributes and multinationality as well as the relationship between TMT attributes and MNEs' performance. The mathematical representation of multiple linear regression is:

$$Y = a + bX_1 + cX_2 + dX_3 + eX_4 + \varepsilon$$

In the above equation, Y is the dependent variable; X_1, X_2, X_3 and X_4 represent the four TMT attributes (independent/explanatory variables); a is the intercept; b, c, d and e are the slopes for the independent variables respectively; and ε is the residual/error for the model.

Linear regression models are often fitted using a least squares approach, includes several types: Ordinary Least Squares (OLS), Weighted Least Squares (WLS) and Generalised Least Squares (GLS) (Wooldridge, 2020). When the regressors are exogenous, and — by the Gauss–Markov theorem — optimal in the class of linear unbiased estimators when the errors are homoscedastic and serially uncorrelated, the OLS estimator is consistent. WLS is a generalisation of ordinary least squares and linear regression in which knowledge of the variance of observations is incorporated into the regression. GLS is a technique for estimating the unknown parameters in a linear regression model when there is a certain degree of correlation between the residuals in a regression model, because under this circumstance, OLS and WLS can be statistically inefficient, or even give misleading inferences. The selection of a suitable estimation method mainly depends on the nature of the dataset. Accordingly, I discuss which linear regression estimation method is more appropriate in my data analysis in the next chapter.

Moreover, a nonlinear relationship has also been assumed (Hypothesis 5) in my study, so based on the above discussions about regression analysis and the study of Haans, Pieters, and He (2016), I followed the method adopted by the previous researchers to "regress the dependent variable Y on the independent variable X and its square" (Haans et al., 2016, p. 1181) as evidence for a U-shaped/ inverted-U-shaped relationship.

$$Y = \beta_0 + \beta_1 X + \beta_2 X^2 + \varepsilon$$

where Y is the dependent variable; X is the independent variables; β_0 here is the intercept; and ε is the residual/error.

The basis for judging the existence and direction of a U-shaped relationship is the significance and the value of β_2. A significant and negative β_2 indicates an inverted U-shaped relationship. A significant and positive β_2 indicates a U-shaped relationship. However, researchers further found that a significant β_2 coefficient alone is not sufficient to establish a quadratic relationship. A three-step procedure is proposed by Lind and Mehlum (2010): (1) β_2 needs to be significant and of the expected sign (negative or positive); (2) the slope must be sufficiently steep at both ends of the data range to avoid the possibility of half a U-shape; (3) the turning point needs to be located well within the data range, otherwise, a half-U-shape might also exist. Therefore, after regressing the dependent variable Y on the independent variable X and its square, the "Utest command" was conducted by the data analysis software (Stata) to exclude the above situations (Lind & Mehlum, 2007).

4.7 Model specification

I developed the following regression models to test the hypotheses. To inspect H1a-b, the regression model was formulated as below:

$$\begin{aligned} Performance_{it} &= \beta_0 + \beta_1 \, TMT\ Tenure_{it} + \beta_2 TMT\ Education_{it} \\ &+ \beta_3 TMT\ International\ Experience_{it} + \beta_4 TMT\ Functional\ Diversity_{it} \\ &+ \beta_5 Multinationality_{it} + \beta_j Controls_{jit} + \varepsilon_{it} \end{aligned} \tag{1}$$

To inspect H2a-b, the regression model was formulated as below:

$$\begin{aligned} Multinationalty_{it} &= \beta_0 + \beta_1 \, TMT\ Tenure_{it} + \beta_2 TMT\ Education_{it} \\ &+ \beta_3 TMT\ International\ Experience_{it} + \beta_4 TMT\ Functional\ Diversity_{it} \\ &+ \beta_j Controls_{jit} + \varepsilon_{it} \end{aligned} \tag{2}$$

To inspect H3a-b, the regression model is:

$$\begin{aligned} Multinationality_{it} &= \beta_0 + \beta_1 \, TMT\ Tenure_{it} + \beta_2 TMT\ Education_{it} \\ &+ \beta_3 TMT\ International\ Experience_{it} + \beta_4 TMT\ Functional\ Diversity_{it} \\ &+ \alpha_1 State\ ownership_{it} + \alpha_2 interaction_{1it} + \ \beta_j Controls_{jit} + \varepsilon_{it} \end{aligned} \tag{4}$$

To inspect H4a-b, the regression model is:

$$\begin{aligned} Multinationality_{it} &= \beta_0 + \beta_1 \, TMT\ Tenure_{it} + \beta_2 TMT\ Education_{it} \\ &+ \beta_3 TMT\ International\ Experience_{it} + \beta_4 TMT\ Functional\ Diversity_{it} \\ &+ \alpha_1 formal\ institutional\ distance_{it} + \alpha_2 interaction_{2it} + \ \beta_j Controls_{jit} \\ &+ \varepsilon_{it} \end{aligned} \tag{5}$$

To inspect H5, the regression model is:

$$
\begin{aligned}
Performance_{it} &= \beta_0 + \alpha_1 Multinationality + \alpha_2 Multinationality^2 + \beta_1\, TMT\ Tenure_{it} \\
&+ \beta_2 TMT\ Education_{it} + \beta_3 TMT\ International\ Experience_{it} \\
&+ \beta_4 TMT\ Functional\ Diversity_{it} + \beta_5 State\ ownership_{it} \\
&+ \beta_6 formal\ institutional\ distance_{it} + \beta_j Controls_{jit} + \varepsilon_{it}
\end{aligned} \quad (6)
$$

Where:

(1) i (= 1,. . ., 1,125) stands for the sample company;

(2) t (= 2007,. . ., 2019) stands for the year;

(3) “Controls” stands for all the control variables (7 control variables along with 12-year dummies) in this study (j=1,…,19);

(4) β_0 is the coefficient of the constant, β_1 to β_j are the coefficients attached to the corresponding variables;

(5) ε_{it} stands for the unobserved disturbance;

(6) and $\mathrm{Interaction}_{1it}$ stands for the interactions of the variables of State Ownership and the four TMT attributes respectively. $\mathrm{Interaction}_{2it}$ stands for the interaction of the variables of formal institutional distance and the four TMT attributes respectively.

It is noteworthy that the values of β_0 to β_j and ε_{it} are different in formulas (1) to (5). α_1 to α_2 are also different for the coefficient attached to the corresponding variables, which are different in different models. I merely used the same symbols for simplification.

Chapter 5 Data Analysis and Results

5.1 Introduction

The previous chapter discussed the research design, the methodology of sampling, data measurements, and the statistical analysis techniques for hypotheses testing. This chapter focuses on the data analysis and results presentation. It begins with the data examination. Then, the results of preliminary tests are reported, which include the tests for multicollinearity, heteroscedasticity and endogeneity. Subsequently, I present the main regression results for all of my hypotheses, including the direct relationships between TMT attributes and CMNE performance, the moderating effects of firm state ownership and country institutional distance, as well as the mediation effect of multinationality. Last, the sensitivity and robustness tests of my models are discussed, followed by a short summary of the hypotheses testing results.

5.2 Data examination

Data examination is an initial and necessary step in the empirical analysis (Allan & Skinner, 1991; Freedman, 2009). In this section, I firstly discuss the treatment of missing data and the outliers. Then, an overview of basic descriptive statistics and correlations among variables will be presented.

5.2.1 Treatment of missing data

The problem of missing data has long been an issue for data analysis in social science research (Graham, 2012). Missingness is defined as "the state of being missing " (Graham, 2012, p. 7). Where valid values for one or more variables are unavailable for analysis they are deemed as missing. It might occur either in survey data or the archived longitudinal data. Thus, missing data is "a fact of life in multivariate analysis" (Hair et al., 2011, p. 34).

There are three types of missing data: missing completely at random (MCAR), missing at random (MAR) and not missing at random (NMAR) (Little & Rubin, 2002). The most direct impact of missing data is the reduction of the sample size which is available for analysis (Hair et al., 2011). Consequently, it may reduce the power of statistical analysis techniques to detect the true relationships from the data.

According to Hair et al. (2011), for example, from the substantive perspective, any statistical results based on NMAR could lead to biased parameter estimates. Therefore, they specify a four-step process for identifying missing data and applying remedies (Hair et al., 2011, p. 44-64). I followed their guidelines to address the issue of missing data in my study.

Archived data that come from open data resources were employed in this study. The main variables with missing data include TMT-related variables (especially for education background), informal institution distances and some firm-level variables (such as state ownership and R&D intensity). I put considerable effort into creating complete profiles for the observations.

At first, I assessed the missing data and ensured that they were missing not because of any typographic error but due to unavailability in the database, so the missing data in my study was completely appearing at random with no particular pattern.

Secondly, the extent of missing data was determined. Hair et al. (2011, p. 47) assert that "missing data under 10% percent for an individual case or observation can generally be ignored except when the missing data occurs in a specific non-random fashion." The data in this study were first derived from one primary database, and then supplemented by other public resources. Taking the TMT information as examples, more than one third of the data derived from CSMAR was missing but most of the information could be completed by searching firm annual reports, the securities information websites and LinkedIn. In the next step I dealt with the variables whose missing values comprised more than 10%.

Thirdly, I filled in the missing data with values under the particular methods. In my dataset, 23 countries did not have a Hofstede's score, which means that the corresponding values of the variable of informal institutional distance were missing. Hofstede's score covers the information of 111 countries and regions. Although there are 104 FDI destinations of the sampled CMNEs, only some of them have Hofstede's scores. To deal with this missingness, I followed Hutzschenreuter and Voll (2008) to obtain additional scores for countries not included in the original Hofstede list by carefully examining country characteristics such as the legal system, religions, languages, geographical location and ethnicity, and then assigned scores using the available scores of countries with similar characteristics. For the missing value of R&D expenditure, there were 883 firm-year values missing. To deal with this missingness, I used the matching principle for imputation, where the mean of R&D expenditure for the same firm for all available years was used to compute the figure.

Fourthly, some cases with missing information were removed from the dataset. For instance, if all the information for an individual was not available, then this individual was dropped from the team. In the same way, if all the information for any firm-year observation was not available, then this observation was deleted. After the above processing of missing data, this study generated 7,629 firm-year unbalanced panel observations.

5.2.2 Outlier detection and treatment

Outliers are the observations that are "substantially different from the other observations" (Hair et al., 2011, p. 36), which may "unduly influence the outcome of any multivariate analysis and skew the results" (Hair et al., 2011, p. 34). Following the categories and treatments which are proposed by Aguinis, Gottfredson, and Joo (2013), I identified and analysed the extreme values as error outliers, interesting outliers or influential outliers.

Error outliers "lie at a distance from other data points because they are the result of inaccuracies" (Aguinis et al., 2013, p. 282). They are caused by errors in coding, transcription or sampling procedure, etc. I plotted a histogram to assess the extent of outlying observations for each variable. Variables such as TMT international experience and culture distance were found to have some extreme observations. I thus examined the distant observations, and double checked the values through other data resources. It turned out that there were no mistakes or errors in the values.

Interesting outliers are defined as "outlying observations, but not confirmed as actual error outliers" (Aguinis et al., 2013, p. 287). Interesting outliers can be studied further by using quantitative or qualitative approaches (Aguinis et al., 2013; Aguinis & Edwards, 2014). However, Hair et al. (2011) recommend that outliers should be retained in the analysis unless it can be verified that they are not representative of the population. With this background, I decided not to deal with the outlying interesting observations.

Influential outliers are the data points whose presence could significantly influence the model fit or parameter estimates (Aguinis & Edwards, 2014). For multiple regression, influential outliers are identified based on their impact on the leverage to the model. Therefore, I used the multiple construct technique to predict the centred leverage value of each variable (Aguinis et al., 2013). Based on predictor scores, it showed two cases, which also had some extreme observations of R&D intensity and firm leverage, which might have significant influence on regression results. They were two years' (years 2007 and 2008) observations of one company. The values of R&D intensity and firm leverage were obviously higher than other firm-years. I evaluated these two cases and found that these values of R&D intensity were imputed by intragroup mean. Moreover, the data of this firm was discontinuous, which means, there were only the data of years 2007 and 2008 and years 2013 to 2019 but no values for 2009 to 2012. Therefore, I excluded these two observations from my final analysis. After dealing with the outliers, 1,125 firms with 7,627 firm-year observations were finalised.

5.2.3 Descriptive statistics and correlations

Table 5.1 presents descriptive statistics and correlations between variables. The descriptive statistics analysis shows the overall characteristics of each variable in my sample in terms of mean value, standard deviation, maximum value and minimum value. According to descriptive statistics, I also found that there were no more outliers and all values are within a reasonable range.

A correlations matrix produces Pearson's correlation coefficient values which can assess the relationship between every pair of variables. The values for the coefficient vary over a range of +1 through 0 to -1. A positive value indicates a positive correlation between variables, and vice versa. The absolute value of the coefficient reflects the degree of correlation between two variables. Table 5.1 summarises the correlation coefficients between all variables in my dataset.

Although there is no definite criterion for the level of correlation that constitutes a serious multicollinearity problem, researchers propose various criteria. The general guidelines state that it should not exceed thresholds such as 0.8 (Kennedy, 1979), 0.75 (Tsui et al., 1995), 0.7 (Hair et al., 2011), and 0.6 (Foo, Sin, & Yiong, 2006). Table 5.1 shows that none of the correlation coefficients exceed the threshold of 0.6. Hence, it was concluded that multicollinearity might not be a concern in my dataset.

Table 5.1 Descriptive statistics and pairwise correlations table

Variables	Mean	Std. Dev.	Min	Max	(1)	(2)	(3)	(4)	(5)	(6)
(1) ROA	0.050	0.067	-0.959	0.964	1					
(2) TMT Tenure	1.610	0.567	-2.499	3.217	-0.029**	1				
(3) TMT Education	3.304	0.492	1.250	4.750	-0.048***	-0.062***	1			
(4) TMT International Experience	0.092	0.148	0.000	1.000	-0.009	-0.004	0.152***	1		
(5) TMT Functional Diversity	0.634	0.127	0.000	0.857	0.021*	0.056***	-0.020*	-0.003	1	
(6) Multinationality	0.049	0.001	0.019	0.824	-0.009	0.047***	0.128***	0.141***	0.022*	1
(7) State Ownership	3.128	0.965	0.084	6.120	0.026**	-0.111***	-0.041***	-0.054***	0.020*	-0.215***
(8) Formal Institutional Distance	0.113	0.185	0.000	1.000	-0.076***	-0.147***	0.286***	-0.069***	-0.067***	0.005
(9) Cultural Distance	1.953	1.515	0.329	6.740	0.019	0.020*	0.035***	0.088***	0.035***	0.203***
(10) TMT Age	3.846	0.079	3.520	4.108	-0.073***	0.263***	0.057***	0.048***	-0.031***	0.064***
(11) TMT Size	1.921	0.379	0.693	3.807	0.001	-0.160***	0.093***	-0.052***	0.309***	0.107***
(12) Firm Age	2.728	0.416	-0.139	3.964	-0.111***	0.231***	0.053***	-0.037***	-0.012	0.081***
(13) Firm Size	22.300	1.234	18.990	27.470	-0.050***	0.039***	0.296***	-0.043***	-0.019*	0.344***
(14) Firm Leverage	0.421	0.192	0.008	2.861	-0.364***	-0.091***	0.140***	-0.037***	-0.061***	0.188***
(15) R&D Intensity	0.051	0.068	0.000	2.516	0.016	-0.054***	0.097***	0.058***	-0.016	-0.020*

Table 5.1 Descriptive Statistics and Pairwise Correlations Table (Cont'd)

Variables	**(7)**	**(8)**	**(9)**	**(10)**	**(11)**	**(12)**	**(13)**	**(14)**	**(15)**
(7) State Ownership	1								
(8) Formal Institutional Distance	0.012	1							
(9) Cultural Distance	-0.050***	0.019*	1						
(10) TMT Age	-0.079***	0.242***	0.016	1					
(11) TMT Size	-0.032***	0.138***	0.058***	0.082***	1				
(12) Firm Age	-0.199***	0.070***	0.017	0.272***	0.008	1			
(13) Firm Size	-0.122***	0.393***	0.025**	0.260***	0.274***	0.206***	1		
(14) Firm Leverage	-0.104***	0.251***	-0.026**	0.111***	0.124***	0.155***	0.516***	1	
(15) R&D Intensity	0.038***	-0.006	0.039***	-0.068***	0.016	-0.125***	-0.152***	-0.171***	1

Note: *** shows significance at the .01 level; ** shows significance at the .05 level; * shows significance at the .1 level

Table 5.1 also shows some features of the sample. Given that the CMNEs listed in the Shanghai and Shenzhen stock markets and operating in the manufacturing sector constitute the sample in my research, the mean values of the variables to a certain extent reflect the basic information of Chinese manufacturing MNEs. For example, the mean value of TMT tenure is 1.610, showing that average TMT member's number of working years in each sample company is less than 2. It reflects that the managers generally have not been working long in their current CMNE. The mean value of TMT international experience is 0.092. It indicates that the proportion of TMT members who have international experience is quite low. It further reflects that the internationalisation of the TMT itself is still pretty low for CMNEs. Moreover, the mean value of TMT education is 3.304, showing that the average TMT education level is a bachelor's degree. The average functional diversity is 0.634, which shows that CMNEs generally have a functionally diverse TMT. Last but not least, the mean value of multinationality is 0.049, indicating that the level of internationality for the CMNEs in the manufacturing sector is relatively low. It also reflects that CMNEs are still at the initial stage of internationalisation.

5.3 Preliminary tests

5.3.1 Test for multicollinearity

To further assess the multicollinearity issues in this study, I calculated the variance inflation factors (VIFs). None of the VIFs of each variable exceed the generally accepted critical value of 10 (Tan & Tan, 2005; Hutzschenreuter & Horstkotte, 2013), and the average VIF value of the combinations of variables in my model is 1.26. The results suggest that multicollinearity does not significantly affect the results. Hence multicollinearity is not an issue in my model.

Table 5.2 VIF results for testing multicollinearity assumption

Variable	VIF	1/VIF
TMT Tenure	1.25	0.80
TMT Education	1.25	0.80
TMT International Experience	1.09	0.92
TMT Functional Diversity	1.11	0.90
Multinationality	1.28	0.78
State Ownership	1.38	0.72
Formal Institutional Distance	1.10	0.91
Cultural Distance	1.06	0.94
TMT Size	1.35	0.74
TMT Age	1.29	0.77
Firm Age	1.23	0.81
Firm Size	2.01	0.50
Firm Leverage	1.43	0.70
R&D Intensity	1.08	0.93

5.3.2 Hausman test for selection of fixed VS random effects model

This study employed panel data for hypotheses testing. Referring to the practices of many previous studies which also tested panel data (e.g.Carpenter & Fredrickson, 2001; Hutzschenreuter & Horstkotte, 2013; Clegg et al., 2016; Yuan, Pangarkar, & Wu, 2016), I assessed the appropriateness of the fixed effects model and the random effects model for the regression methodology in my study. Both models are popular in panel data analysis. They allow researchers to purge any unobserved time-invariant firm-specific effects (Clegg et al., 2016), and they might produce significantly different results as well. Hence, it is necessary to assess the appropriateness of either of the models before the main regression analysis.

Although researchers try to take the variables that have impact on the dependent variable into account and control them, missing variables (μ_{it}) always exist in reality. Missing variables are the individual variables that do not change over time (time invariant) (Graham, 2012). When missing variables are related to the independent variables, the ordinary least square (OLS) estimation will not be BLUE[12] (Feng et al., 1999), because it violates one of the three basic assumptions of the Gauss–Markov theorem[13], saying that "the errors in the linear regression model are uncorrelated" (Wooldridge, 2020). However, the fixed effects model is assumed to capture all constant firm-specific effects. Consequently, it can eliminate this faultiness by making a difference within the group or generating n-1 individual dummy variables.

When missing variables are not related to the independent variables, the OLS estimator might be workable but it is not BLUE either. The reason is that because the missing variables are time invariant, they cause autocorrelation between (μ_{it}) and (μ_{it+1}). Under this circumstance, a random effects model, which assumes that firm-specific effects are randomly present with a normal distribution, can modify the original model to make the estimators more effective.

I used the Hausman test to evaluate which model is appropriate for this study (Hausman, 1978). The principle of the Hausman test is to test the consistency of estimation results between fixed and random effects models. If the p value of the Hausman significance test is less than 0.05, it strongly rejects the null hypothesis (H_0: μ_{it} is not related to independent variables) and indicates that the fixed effects model is more appropriate than the random effects model.

The "hausman" command in Stata 15 was conducted to compare the fixed effects model with the random effects model for model equation (1) (the main hypothesis in this study, shown in Section 4.7). The test results indicated that the fixed effects model is more appropriate than the random effects model ($\chi2 = 164.44$, $p < 0.001$).

5.3.3 Test for heteroscedasticity

Following Hutzschenreuter and Horstkotte (2013), I further tested the heteroscedasticity issue in my models. The existence of heteroscedasticity is a major concern in regression analysis and

---

[12] BLUE means unbiased, that is, the estimator has the lowest sampling variance among those that are unbiased and linear in the observed output variables.

[13] The three basic assumptions of the Gauss–Markov theorem are: the errors in the linear regression model (1) are uncorrelated, (2) have equal variances and (3) an expectation value of zero. If a linear regression meets all above three assumptions, the ordinary least squares (OLS) estimator will be BLUE.

analysis of variance, because it invalidates the statistical test of significance assuming that both modelling errors have the same variance. Although the ordinary least squares (OLS) estimation is still unbiased in the presence of heteroscedasticity, it is inefficient (Wooldridge, 2020) and generalised least squares (GLS) should be used instead (Johnston, 1972).

To detect this problem, I adopted the White test, which is a statistical test that establishes whether the variance of the errors in a regression model is constant (H_0: homoscedasticity). This test and the estimator for heteroscedasticity-consistent standard errors proposed by Halbert White (White, 1980) have been widely used in empirical research (Kim, Morse, & Zingales, 2006).

I conducted the White test (by using the "*estat imtest,white*" command in Stata) right after the regression analysis. The test's results (χ^2=646.79, P<0.001) significantly rejected the null hypothesis, showing that there was heteroscedasticity in my model.

In order to eliminate the deviation caused by heteroscedasticity, I employed the generalised least squares (GLS) to do the estimation. The GLS method is acknowledged as the appropriate way to overcome the problems of cross-sectional heteroscedasticity. According to Lee and Park (2006), GLS "procedures partitions error variance into three components – random error in space, random error in time and random error not unique to space or time – and uses this information to derive efficient and unbiased parameter estimates" (p. 203). Thus, it "allows us to investigate the time-series component of the data while maximizing the degrees of freedom" (Lee & Park, 2006, p. 203) and finally optimises the estimation.

Moreover, GLS has been widely adopted in prior research related to upper echelons, internationalisation or firm performance (Lee & Park, 2006; Cannella et al., 2008; Raisch et al., 2009). Therefore, according to our test statistics, as well as being consistent with prior research, I chose to use the estimation model of GLS to test the hypotheses H1(a-d) to H4(a-d).

5.3.4 Test for endogeneity

Technically, endogeneity occurs when an independent variable (x) is correlated with the error term (ε) in the regression model. It arises under a variety of conditions in the IB research (Reeb, Sakakibara, & Mahmood, 2012), such as omitted variables, measurement errors and reverse causality. If the independent variable is correlated with the error term in a regression model, then the estimate of the regression coefficient in an OLS regression will be biased. Because the underlying assumption of an OLS model is that independent variables are uncorrelated with the error term of a dependent variable, taking endogenous variables as predictors of other endogenous variables means that the assumption of OLS is not tenable (Kang & He, 2018). As I have explained in Section 4.6, GLS is a modified model based on OLS. Thus, my testing models had potential for endogeneity problems.

5.3.4.1 Endogeneity problem of TMT attributes

In the models which test the relationships between TMT attributes (TMT tenure, TMT education, TMT international experience and TMT functional diversity) and MNE multinationality, there could be reverse causality. Thus, endogeneity might exist in those relationships. Whereas some studies assume the TMT demographic characteristics are independent variables in their relationship with firm internationalisation (Carpenter & Fredrickson, 2001; Carpenter, Pollock, & Leary, 2003a), some other scholars examine this relationship with some TMT attributes (such as TMT nationality) as the dependent variable (van Veen & Marsman, 2008; Greve, Nielsen, & Ruigrok, 2009). Therefore, I adopted the approach that Kaczmarek and Ruigrok (2013) and Kang and He (2018) used. I also checked for the possibility of reverse causality with the Durbin-Wu-Hausman (DWH) test (Durbin, 1954; Wu, 1973; Hausman, 1978; Nakamura & Nakamura, 1981). It is a statistical hypothesis test in econometrics named after James Durbin, De-Min Wu, and Jerry A. Hausman. The test evaluates the consistency of an estimator when compared to an alternative, less efficient estimator which is already known to be consistent. By choosing TMT average age as the instrumental variable, I performed DWH tests of endogeneity for TMT tenure and multinationality, TMT educational level and multinationality, TMT international experience and multinationality, TMT functional diversity and multinationality in my estimation models respectively.

Table 5.3 DWH test of TMT attributes

Relationship	F (1,7618)	P
TMT tenure and multinationality	7.6e-06	0.998
TMT educational level and multinationality	0.007	0.932
TMT international experience and multinationality	0.705	0.401
TMT functional diversity and multinationality	0.010	0.919

The results of the DWH test (shown in Table 5.3) indicate that none of the TMT attributes are endogenous in my models. The null hypotheses of exogenous influences on the dependent variable were not rejected. Therefore, there was no need for an estimation of the instrumented Variable (IV) regression (Kaczmarek & Ruigrok, 2013). Then, I retained the results based on the GLS estimation for those relationships.

5.3.4.2 Endogeneity problem of multinationality

There could be another possible endogeneity problem in the setting of the model, that is, as the level of firm multinationality increases, business operations improve their performance and firms may expand their target markets accordingly to further increase multinationality (Feng et al., 2019). In other words, MNE performance might in turn affect the firm multinationality.

To probe the potential endogeneity of multinationality, I chose one-phase and two-phase lags of multinationality as instrumental variables (Feng et al., 2019). I also adopted the DWH test to verify whether there was an endogeneity problem. The result indicated that these two variables are endogenous ($F(1,5200) = 11.047$, $p<0.001$).

Hence, the 2-stage least square (2SLS) model was adopted as the method for empirical analysis of the relationship between multinationality and performance. This model has been increasingly recommended for business strategy research because of its ability to address the endogeneity problem (e.g. Kumar, 2009; Banalieva & Dhanaraj, 2013; Nguyen & Rugman, 2015). The 2SLS regression method also has the ability to remove the confounding effects of potential reverse causality (proactive financial performance might strengthen a firm's actions to be more international), so that the effect of multinationality on MNE performance can be more accurately tested.

To operate the 2SLS model, in the first stage regression, the instrumental variables (IVs) are regressed with endogenous explanatory variables, that is $p_t \xrightarrow{OLS} x_t$, to obtain the fitting value $\hat{p}_t$ (Bae & Lawler, 2000). In this stage, I needed at least one IV to render the system identifiable, as I had one endogenous regressor in this model (Kang & He, 2018). A valid IV needs to meet the following two key conditions: correlation and exogeneity. An IV must be correlated with the endogenous independent variable and it should be unrelated to the error values. For the time series data or panel data, lagged forms of the endogenous independent ones are often used as instrumental variables (e.g. Groves et al., 1994). Thus, following the suggestions of Feng et al. (2019), I used a one-year lag of multinationality as the IV for multinationality. In the first stage of the regression, multinationality and MNE performance were modelled as a function of the instrumental variable of one-year lag of multinationality, and remaining control variables. In the second stage, the fitting values from first stage estimation were included to be regressed with the dependent variable, that is $q_t \xrightarrow{OLS} \hat{p}_t$. I use the Stata command (ivregress 2sls) to conduct 2SLS regression.

5.4 Main regression results

Based on suggestions made by Hutzschenreuter and Horstkotte (2013), I mean-centred all the variables in order to mitigate possible collinearity before the empirical test for the main regression models. For the main regression, I firstly tested the linear relationship among the variables of interest in the hypotheses, based on the GLS model. Then, I tested the curvilinear relations between CMNEs' performance and multinationality, using the 2SLS model. According to the results of all the models, the hypothesised relationships between the constructs were as follows.

5.4.1 The effect of TMT attributes on MNE performance

Hypotheses H1a-H1d predict that TMT attributes, i.e. TMT tenure, TMT education level, TMT international experience and TMT functional heterogeneity, are positively associated with MNE performance respectively. It can be seen in Table 5.4 that some of the hypotheses are supported by the models. In Table 5.4, Model 1 is the one with control variables only, while four independent variables (four TMT attributes) were added to Models 2-5, and Model 6 is the full model. Model 2 indicates that the effect of TMT tenure on MNE performance is positive but non-significant (β =0.007, p=0.528), while Model 6 shows that the effect of TMT tenure is positive and significant (β =0.007, p=0.000). This indicates that with the increasing of TMT tenure, the performance of the sampled CMNEs increases as well. Therefore, H1a is supported.

The results from Model 3 show that the effect of TMT education level on MNE performance is negative and significant (β =-0.030, p=0.001). However, it becomes significant (β =-0.027, p=0.002) in Model 6. It indicates that with the increasing of TMT education level, the performance of the sampled CMNEs could be decreased, which is opposite to my hypothesis, so H1b is not supported.

Hypothesis H1c predicts that TMT international experience would have a positive effect on MNEs' performance. However, the results from Model 4 show that the effect of TMT international experience is non-significant with a negative coefficient (β =-0.013, p= 0.156), and in Model 6, the coefficient is still non-significant (β =-0.009, p=0.338). Therefore, H1c is not supported.

Hypothesis H1d predicts that TMT functional diversity would have a positive effect on MNEs' performance, while the results from neither Model 5 nor Model 6 provide support for this hypothesis. The coefficient of TMT functional diversity in Model 5 is positive but non-significant (β =0.006, p= 0.568). In Model 6, its coefficient is still non-significant with a positive value (β =0.006, p= 0.559). Therefore, H1d is not supported either.

Table 5.4 Results of GLS regression analysis of H1a-H1d

VARIABLES	M1 (1) ROA	M2 (1) ROA	M3 (1) ROA	M4 (1) ROA	M5 (1) ROA	M6 (1) ROA
(2) TMT Tenure		0.007				0.007***
		(0.011)				(0.002)
(3) TMT Education			-0.030***			-0.027***
			(0.009)			(0.009)
(4) TMT International Experience				-0.013		-0.009
				(0.009)		(0.009)
(5) TMT Functional Diversity					0.006	0.006
					(0.010)	(0.009)
(6) Multinationality	0.025***	0.026***	0.027***	0.028***	0.025***	0.028***
	(0.009)	(0.009)	(0.010)	(0.010)	(0.009)	(0.010)
(9) Cultural Distance	0.004	0.003	0.001	0.005	0.004	0.002
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
(10) TMT Age	-0.035***	-0.033***	-0.037***	-0.035***	-0.033***	-0.033***
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
(11) TMT Size	0.013	0.013	0.014	0.013	0.012	0.012
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.010)
(12) Firm Age	-0.019*	-0.018*	-0.019*	-0.021**	-0.018*	-0.018*
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
(13) Firm Size	0.168***	0.171***	0.177***	0.167***	0.168***	0.178***
	(0.011)	(0.011)	(0.012)	(0.011)	(0.011)	(0.012)
(14) Firm Leverage	-2.766***	-2.772***	-2.748***	-2.762***	-2.781***	-2.767***
	(0.071)	(0.071)	(0.070)	(0.071)	(0.070)	(0.070)
(15) R&D Intensity	-0.975***	-1.008***	-0.874***	-0.965***	-1.006***	-0.918***
	(0.185)	(0.187)	(0.189)	(0.187)	(0.186)	(0.192)
Year Dummy	Include	Include	Include	Include	Include	Include
Constant	0.400***	0.410***	0.387***	0.395***	0.411***	0.388***
	(0.066)	(0.072)	(0.066)	(0.066)	(0.068)	(0.072)
Observations	7,627	7,627	7,627	7,627	7,627	7,627
R-squared	0.191	0.191	0.192	0.191	0.194	0.194
F	89.90	85.32	86.14	85.73	87.28	76.18

Note: Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1

5.4.2 The effect of TMT attributes on MNE multinationality

Hypotheses H2a-H2d predict that TMT tenure, TMT education level, TMT international experience and TMT functional heterogeneity have positive effects on MNEs' multinationality respectively. It can be seen in Table 5.5 that these hypotheses are partly supported by the results. In Table 5.5, Model 7 is the one with control variables only, while four independent variables (four attributes) were added to Models 8-11 one by one, and Model 12 is the full model. Model 8 indicates that the effect of TMT tenure on multinationality is positive and significant (β =0.013, p=0.000). Likewise, Model 12 also shows that the effect of TMT tenure is positive and significant (β =0.006, p=0.000). It demonstrates that with the increasing of TMT tenure, the degree of sampled CMNEs' internationalisation is increased. Therefore, H2a is supported.

Hypothesis H2b predicts that TMT educational level would have a positive effect on multinationality. The results from Model 9 show that its effect is significant with a positive coefficient (β =0.024, p= 0.013). However, in the full model (M12）, the coefficient of TMT educational level is non-significant (β =0.003, p=0.791). Therefore, H2b is not supported.

The results from Model 10 show that the effect of TMT international experience on MNE performance is positive and significant (β =0.134, p= 0.000). Likewise, Model 12 also shows that the effect of TMT international experience is positive and significant (β=0.129, p=0.000), which indicates that with the increasing of TMT education level, the multinationality of the firm increases as well. Thus, H2c is supported.

Hypothesis H2d predicts that TMT functional diversity would have a positive effect on multinationality. The coefficient of TMT functional diversity in Model 11 is positive but non-significant (β =0.005, p=0.654), while in Model 12, its coefficient becomes non-significant but still with a positive value (β =0.003, p=0.331). Therefore, H2d is not supported.

Table 5.5 Results of GLS regression analysis of H2a-H2d

VARIABLES	M7 (6) multinationality	M8 (6) multinationality	M9 (6) multinationality	M10 (6) multinationality	M11 (6) multinationality	M12 (6) multinationality
(2) TMT Tenure		0.013***				0.006***
		(0.002)				(0.002)
(3) TMT Education			0.024**			0.003
			(0.010)			(0.010)
(4) TMT International Experience				0.134***		0.129***
				(0.013)		(0.012)
(5) TMT Functional Diversity					0.005	0.010

					(0.011)	(0.010)
(9) Cultural Distance	0.186***	0.184***	0.179***	0.171***	0.186***	0.166***
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.009)
(10) TMT Age	-0.051***	-0.053***	-0.044***	-0.050***	-0.049***	-0.049***
	(0.011)	(0.011)	(0.010)	(0.011)	(0.011)	(0.010)
(11) TMT Size	0.022**	0.021*	0.010	0.030***	0.022*	0.017
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
(12) Firm Age	-0.042***	-0.042***	-0.043***	-0.031***	-0.039***	-0.033***
	(0.012)	(0.012)	(0.011)	(0.012)	(0.012)	(0.011)
(13) Firm Size	0.324***	0.319***	0.311***	0.305***	0.323***	0.304***
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
(14) Firm Leverage	0.301***	0.307***	0.244***	0.305***	0.293***	0.261***
	(0.085)	(0.085)	(0.079)	(0.082)	(0.085)	(0.077)
(15) R&D Intensity	0.581***	0.529**	0.464**	0.500**	0.596***	0.418*
	(0.225)	(0.220)	(0.220)	(0.221)	(0.223)	(0.217)
Constant	-0.235***	-0.229***	-0.247***	-0.203***	-0.237***	-0.198***
	(0.080)	(0.077)	(0.074)	(0.076)	(0.079)	(0.072)
Year Dummy	Include	Include	Include	Include	Include	Include
Observations	7,627	7,627	7,627	7,627	7,627	7,627
R-squared	0.177	0.176	0.180	0.185	0.178	0.189
F	86.24	81.20	83.76	86.07	82.39	76.93

Note: Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1

5.4.3 The moderating effect of firm state ownership

Hypotheses H3a-H3d predict that state ownership would weaken the effects of TMT attributes on MNEs' multinationality. In Table 5.6, the results from Models 13 to 18 partly support my hypotheses. In Model 13, I added the variable of *State ownership* to the equation and its results show that state ownership has a negative and significant effect on multinationality (β =-0.059, p =0.000). Then, the interaction terms of four TMT attributes and *State ownership* were added one by one to Models 14 to 17. Model 18 is the full model with all the four interaction terms, finding that the coefficient of *State ownership* is positive and significant (β =0.096, p =0.000).

The results from Model 14 show that the interaction term of *TMT tenure* and *State ownership* is negative but non-significant (β =-0.004, p=0.586). In Model 18, the coefficient of this interaction term is negative and significant (β =-0.014, p=0.031), and the direction relationship between TMT tenure and multinationality is positive and significant (β =0.003, p=0.043). Both the main effect and moderating effect between TMT tenure and multinationality are statistically significant with opposite signs, thus it provides empirical support for H3a.

The results from Models 15 and 18 in Table 5.6 show the impact of the interaction term of *TMT educational level* and *State ownership* on multinationality. In Model 15, the coefficient of this interaction term is significantly negative (β =-0.017, p=0.049), and in the full model (M18), it is still negative and significant (β =-0.023, p=0.011). M18 shows the main relationship between TMT educational level and multinationality is significantly positive (β =0.003, p=0.067), providing support for H3b.

The results from Models 16 and 18 in Table 5.6 show the moderation effect of state ownership between TMT international experience and multinationality. The coefficients of the interaction term of *TMT international experience* and *State ownership* in both Models 16 and 18 are non-significant. Therefore, H3c is not supported.

The results from Models 17 and 18 in Table 5.6 show that the coefficients of the interaction term of *TMT functional diversification* and *State ownership* are negative and significant, which are β =-0.062 and p=0.039 in Model 17 and β =-0.069, p=0.031 in Model 18. Considering the direct positive and significant relationship (β =0.016, p=0.069) between TMT functional diversity and multinationality shown in Model 18, H3d is supported.

Table 5.6 Results of GLS regression analysis of H3a ~ H3d

VARIABLES	M13 (6) multinationality	M14 (6) multinationality	M15 (6) multinationality	M16 (6) multinationality	M17 (6) multinationality	M18 (6) multinationality
(2) TMT Tenure	0.003**	0.004**	0.002	0.004**	0.003**	0.003**
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
(3) TMT Education	0.004**	0.004**	0.004**	0.004**	0.003*	0.003*
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
(4) TMT International Experience	0.049***	0.048***	0.048***	0.046***	0.048***	0.044***
	(0.006)	(0.006)	(0.005)	(0.006)	(0.006)	(0.006)
(5) TMT Functional Diversity	0.005	0.007	0.004	0.006	0.012	0.016*
	(0.008)	(0.008)	(0.007)	(0.008)	(0.009)	(0.009)
(7) State Ownership	-0.059***	-0.053***	0.013	-0.059***	-0.018	0.096**
	(0.004)	(0.012)	(0.031)	(0.005)	(0.019)	(0.037)
(2) TMT Tenure * (7) State Ownership		-0.004				-0.014**
		(0.007)				(0.007)
(3) TMT Education * (7) State Ownership			-0.017**			-0.023**
			(0.009)			(0.009)
(4) TMT International * (7) State Ownership Experience				-0.022		0.040
				(0.041)		(0.042)
(5) TMT Functional Diversity * (7) State Ownership					-0.062**	-0.069**
					(0.030)	(0.032)
(9) Cultural Distance	0.007***	0.007***	0.007***	0.007***	0.007***	0.007***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
(10) TMT Age	-0.004	-0.005	-0.008	-0.007	-0.005	-0.010
	(0.011)	(0.011)	(0.010)	(0.011)	(0.010)	(0.010)
(11) TMT Size	0.001***	0.001***	0.001***	0.001***	0.001***	0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
(12) Firm Age	-0.005**	-0.004**	-0.004**	-0.005***	-0.006***	-0.005**

	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
(13) Firm Size	0.017***	0.018***	0.018***	0.018***	0.018***	0.018***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
(14) Firm Leverage	0.027***	0.026***	0.024***	0.028***	0.027***	0.025***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
(15) R&D Intensity	0.041***	0.044***	0.039***	0.042***	0.048***	0.044***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.012)	(0.011)
Year Dummy	Include	Include	Include	Include	Include	Include
Constant	-0.354***	-0.363***	-0.351***	-0.351***	-0.362***	-0.369***
	(0.041)	(0.040)	(0.039)	(0.040)	(0.041)	(0.039)
Observations	7,627	7,627	7,627	7,627	7,627	7,627
R-squared	0.195	0.195	0.199	0.198	0.200	0.205
F	76.58	73.49	75.52	75.00	76.10	69.97

Note: Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1

I graphically illustrate the hypothesised interactive relationships that have been supported by the regression results in Figures 5.1, 5.2 and 5.3. They are the interaction between TMT tenure and State ownership, TMT educational level and State ownership, and TMT functional diversification and State ownership, respectively.

As shown in Figure 5.1, a more positive regression slope of Multinationality at a lower level of State ownership (the solid line) suggests that the relationship between TMT tenure and Multinationality is stronger when there is a lower level of State ownership. This interpretation along with significant statistical results indicates that H3a is supported.

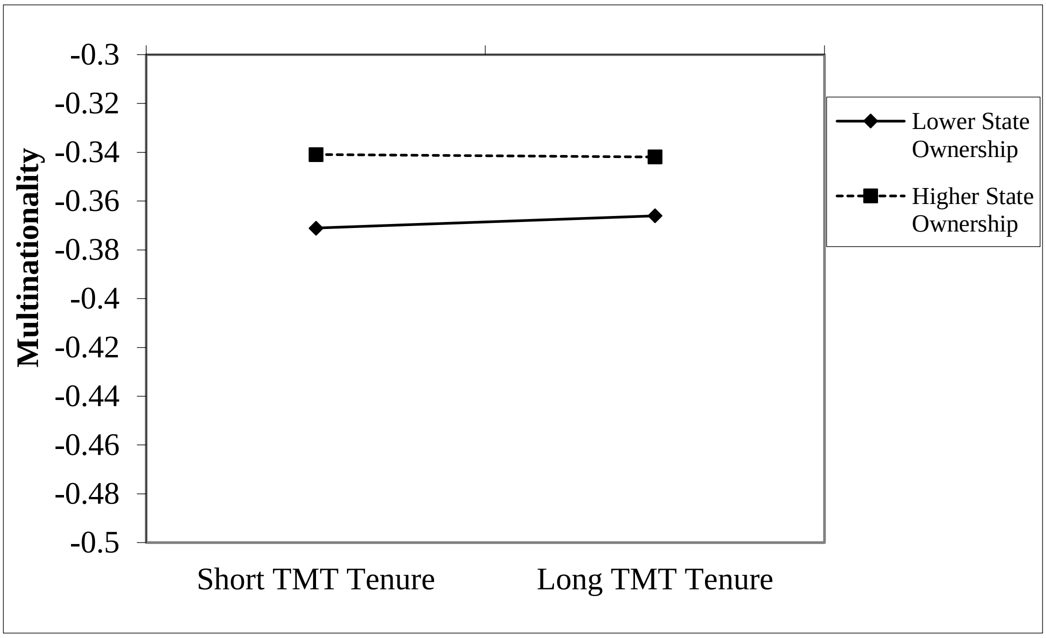

Figure 5.1 The moderating role of state ownership on the relationship of TMT tenure and MNE multinationality

From Figure 5.2, it can be observed that the solid line (for firms with lower State ownership) is slightly upward-sloping. The dashed line slopes down (for firms with higher State ownership). These results witness a weaker relationship between TMT educational level and MNE multinationality when the MNE has a higher level of state ownership. Likewise, this interpretation along with the significant statistical results indicates that H3b is supported.

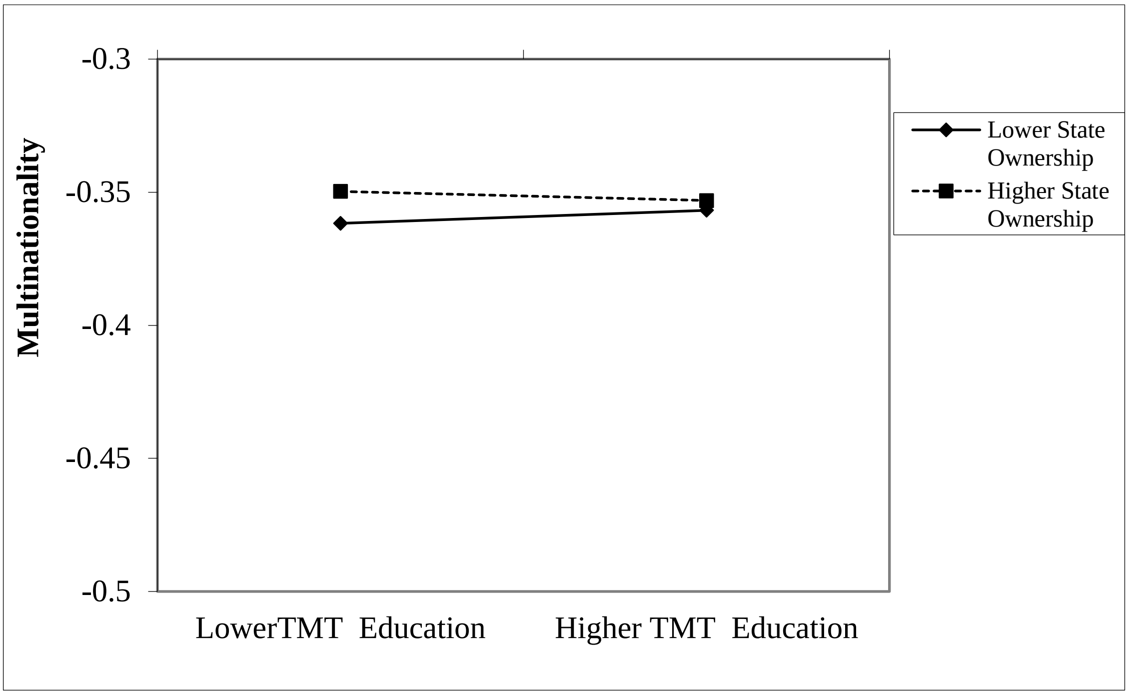

Figure 5.2 The moderating role of state ownership on the relationship of TMT educational level and MNE multinationality

Figure 5.3 also indicates that the regression slope of Multinationality at a lower level of State ownership (the solid line) is more positive than at a higher level of State ownership (the dashed line). These results witness a weaker relationship between TMT functional diversity and MNE multinationality when the MNE has a greater level of state ownership. Along with the significant statistical results, it indicates that H3d is supported.

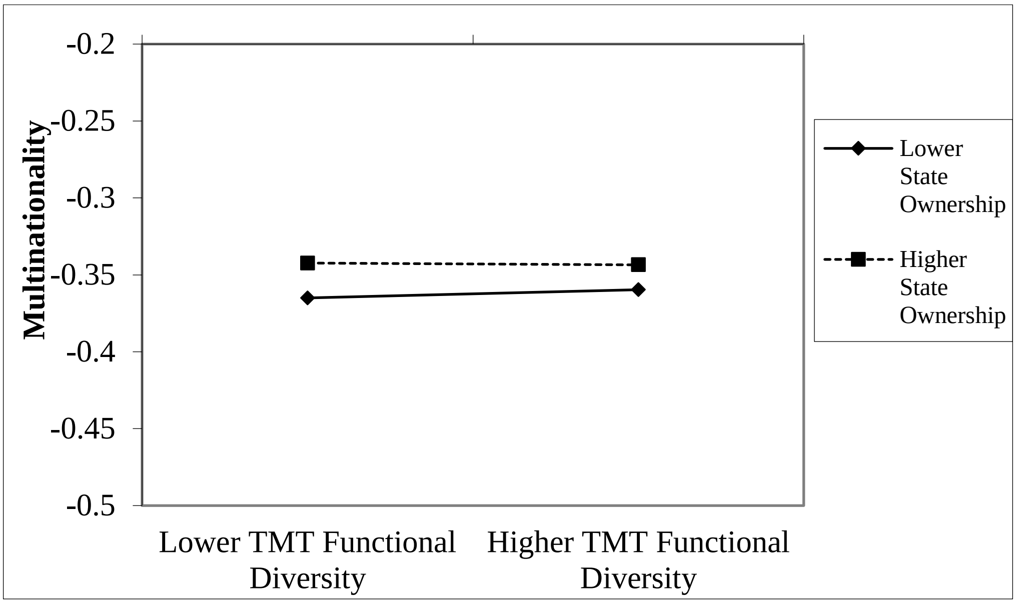

Figure 5.3 The moderating role of state ownership on the relationship of TMT functional diversity and MNE multinationality

5.4.4 The moderating effect of country institutional distance

Hypotheses H4a-H4d predict that formal institutional distance between countries would weaken the effects of TMT attributes on MNEs' multinationality. As with the test of the effect of state ownership, I examined the moderating effect of formal institutional distance on the relationship between TMT attributes and multinationality by adding the interaction terms in Models 19 to 24. The results are shown in Table 5.7. In Model 19, I added the variable of *Formal institutional distance* to the equation and it shows that institutional distance has a negative and significant impact on multinationality (β =-0.232, p =0.000). The interaction terms of four TMT attributes and institutional distance were added one by one from Models 20 to 23, and Model 24 is the full model with all of the four interaction terms. In Model 24, the coefficient of *Formal institutional distance* is still negative and significant (β =-0.232, p=0.000).

Results from Model 20 show that the coefficient of the interaction term of *TMT tenure* and *Formal institutional distance* is positive and non-significant (β =0.007, p=0.272). Likewise, in the full model, the coefficient of this interaction term is still non-significantly positive (β =0.001, p=0.890). The direct relationship between TMT tenure and multinationality is still non-significant (β =0.004, p=0.688). Therefore, H4a is not supported.

The results from Model 21 show that the coefficient of the interaction term of *TMT educational* level and *Formal institutional distance* is negative and significant (β =-0.046, p=0.000). In Model 24, this effect is still negative and significant (β =-0.044, p=0.000), together with the positive and significant relationship between TMT educational level and multinationality in Model 24 (β =0.030, p=0.001), supporting H3b.

The results from Model 22 show that the coefficient of the interaction term of *TMT international experience* and *Formal institutional distance* is negative and significant (β =-0.067, p=0.000). Likewise, in Model 24, this coefficient is negative and significant (β =-0.031, p=0.004), and the main effect from TMT international experience on multinationality is significantly positive (β =0.103, p=0.000), lending support to H3c.

The results from Model 23 show that the coefficient of the interaction term of *TMT international experience* and *Formal institutional distance* is negative and significant (β =-0.023, p=0.006). The coefficient in Model 24 remains negative and significant (β =-0.017, p=0.036) as well. Considering the main relationship between TMT functional diversity and multinationality in Model 24 is positive and significant (β =0.020, p=0.022), H4d is supported.

Table 5.7 Results of GLS regression analysis of H4a ~ H4d

VARIABLES	M19 (6) multinationality	M20 (6) multinationality	M21 (6) multinationality	M22 (6) multinationality	M23 (6) multinationality	M24 (6) multinationality
(2) TMT Tenure	0.016	0.007	0.014	0.014	0.016	0.004
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)
(3) TMT Education	0.006	0.007	0.029***	0.009	0.005	0.030***
	(0.008)	(0.008)	(0.009)	(0.008)	(0.008)	(0.009)
(4) TMT International Experience	0.093***	0.091***	0.093***	0.113***	0.095***	0.103***
	(0.010)	(0.010)	(0.010)	(0.011)	(0.010)	(0.011)
(5) TMT Functional Diversity	0.016*	0.017**	0.016*	0.016*	0.021**	0.020**
	(0.008)	(0.008)	(0.008)	(0.008)	(0.009)	(0.009)
(8) Formal Institutional Distance	-0.232***	-0.225***	-0.244***	-0.243***	-0.224***	-0.232***
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
(2) TMT Tenure * (8) Formal Institutional Distance		0.007				0.001
		(0.007)				(0.006)
(3) TMT Education * (8) Formal Institutional Distance			-0.046***			-0.044***
			(0.009)			(0.009)
(4) TMT International Experience * (8) Formal Institutional Distance				-0.067***		-0.031***
				(0.012)		(0.011)
(5) TMT Functional Diversity * (8) Formal Institutional Distance					-0.023***	-0.017**
					(0.008)	(0.008)
(9) Cultural Distance	0.150***	0.147***	0.148***	0.149***	0.152***	0.146***
	(0.008)	(0.008)	(0.007)	(0.007)	(0.007)	(0.007)

(10) TMT Age	-0.032***	-0.032***	-0.030***	-0.030***	-0.033***	-0.028***
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.008)
(11) TMT Size	0.011	0.012	0.009	0.010	0.010	0.008
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
(12) Firm Age	-0.020**	-0.019**	-0.020**	-0.022**	-0.021**	-0.019**
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.008)
(13) Firm Size	0.242***	0.234***	0.239***	0.240***	0.242***	0.227***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
(14) Firm Leverage	0.126*	0.115*	0.125*	0.123*	0.135**	0.134**
	(0.066)	(0.066)	(0.065)	(0.065)	(0.065)	(0.064)
(15) R&D Intensity	0.234	0.257	0.249	0.222	0.236	0.269
	(0.170)	(0.169)	(0.170)	(0.169)	(0.170)	(0.168)
Year Dummy	Include	Include	Include	Include	Include	Include
Constant	0.006	-0.000	0.009	-0.003	-0.008	-0.022
	(0.057)	(0.050)	(0.057)	(0.056)	(0.058)	(0.049)
Observations	7,627	7,627	7,627	7,627	7,627	7,627
R-squared	0.217	0.217	0.220	0.222	0.217	0.225
F	87.86	84.23	85.65	86.61	84.14	78.64

Note: Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1

To further illustrate the interactive relationship, I plotted the interaction relationship between TMT educational level and Institutional distance, TMT international experience and Institutional distance, and TMT functional diversification and Institutional distance, as shown in Figures 5.4 to 5.6 respectively.

In Figure 5.4, it is clear that the gradient of the slope of the solid line (showing the relationship between TMT educational level and multinationality under the circumstance of lower formal institutional distance) is higher than that of the dashed line (showing the relationship between TMT educational level and multinationality under the circumstance of higher Institutional distance). It corresponds with a negative coefficient of the interaction term of *Formal institutional distance* and *TMT educational level*, showing that the effects of TMT educational level are less pronounced on multinationality with higher country institutional distance. H4b is supported.

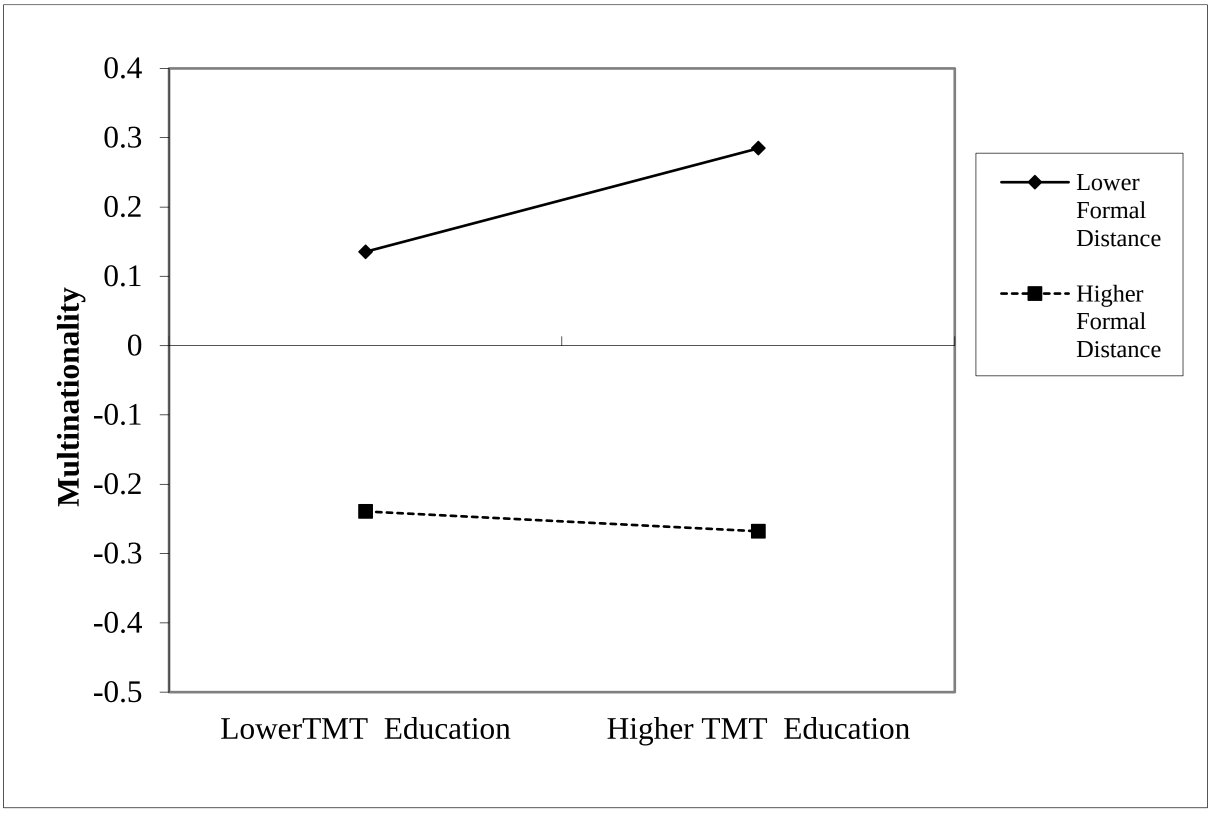

Figure 5.4 The moderating role of institutional distance on the relationship of TMT educational level and MNE multinationality

As shown in Figure 5.5, compared to the solid line (showing the relationship between TMT international experience and multinationality under the circumstance of lower Institutional distance), the dashed line (showing the relationship between TMT international experience and multinationality under the circumstance of higher formal institutional distance) is flatter. It illustrates that when the country institutional distance is higher, the positive effect of TMT international experience on multinationality weakens. Thus, what the Figure 5.5 shows is consistent with the results in Table 5.7, which indicates that H4ac is supported.

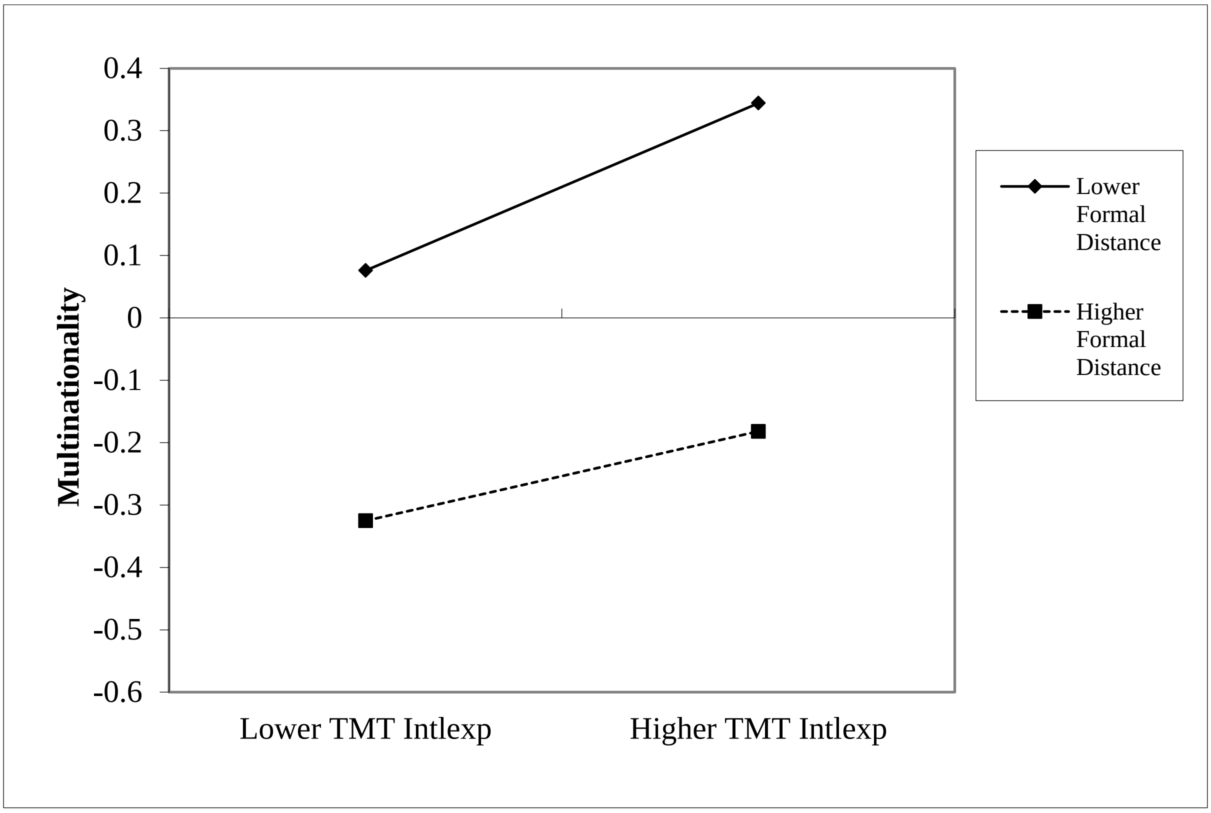

Figure 5.5 The moderating role of formal institutional distance on the relationship of TMT international experience and MNE multinationality

As shown in Figure 5.5, compared to the solid line (showing the relationship between TMT international experience and multinationality under the circumstance of lower formal institutional distance), the dashed line (showing the relationship between TMT international experience and multinationality under the circumstance of higher Institutional distance) is flatter. It illustrates that when the country institutional distance is higher, the positive effect of TMT international experience on multinationality weakens. Thus, what the Figure 5.5 shows is consistent with the results in Table 5.7, which indicates that H4c is supported.

Figure 5.6 indicates that the slope of the solid line (showing the relationship between TMT functional diversity and multinationality under the circumstance of lower formal institutional distance) is positive and higher than that of the dashed line slightly upward (showing the relationship between TMT functional diversity and multinationality under the circumstance of higher formal institutional distance). The graph lines display an attenuated relationship between TMT functional diversity and MNE multinationality when the MNE is facing a higher formal institutional distance, which is consistent with the assumption in H4d.

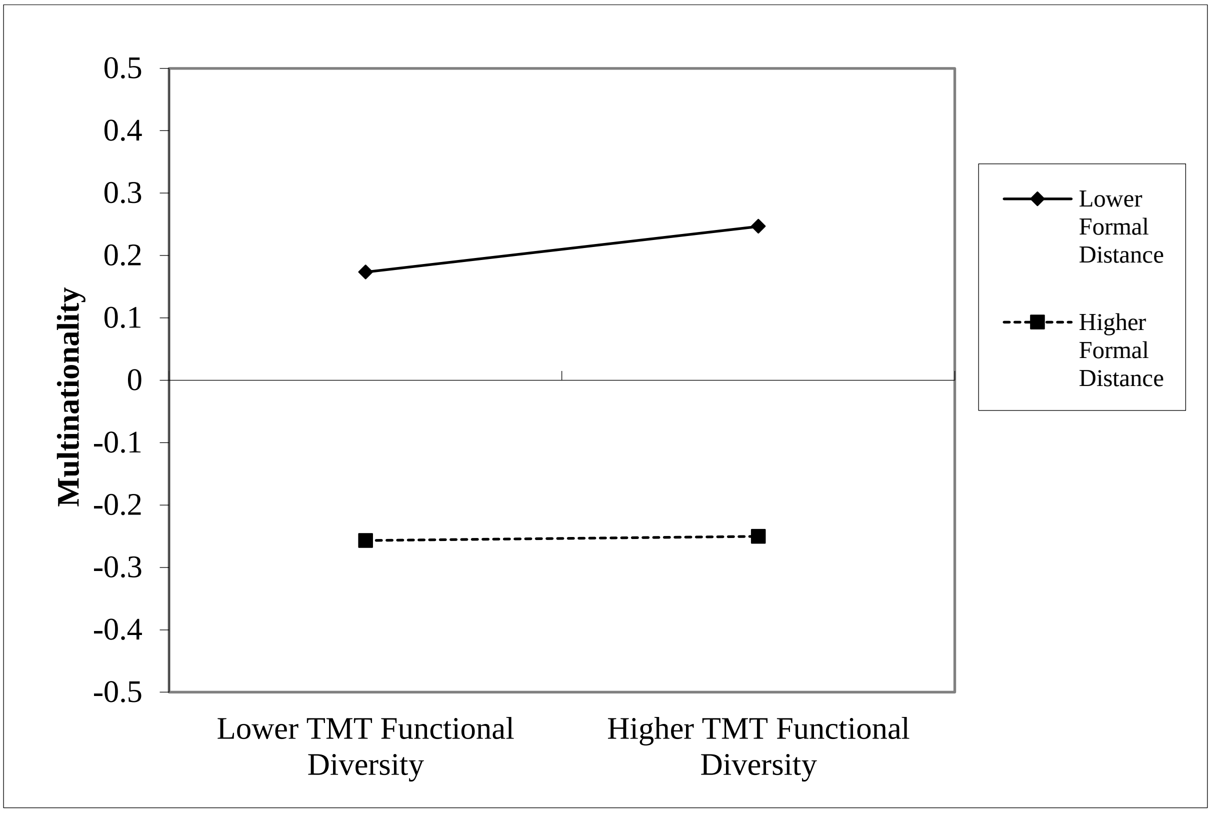

Figure 5.6 The moderating role of formal institutional distance on the relationship of TMT functional diversity and MNE multinationality

5.4.5 The effect of multinationality on MNE performance

I hypothesised that there is a U-shaped relationship between Multinationality and MNE performance in H5. To test the curvilinear relationships, I followed Clark et al. (2018) and Ener (2019) to use the three-step procedure recommended by Haans et al. (2016). Table 5.8 shows the results of the analysis. As with testing in Section 5.3.4.2, there are endogeneity problems between multinationality and performance. Therefore, I employed the 2-stage least square (2SLS) model for the empirical analysis of H5, and show the results of Model 26 and Model 27 in Table 5.8.

Model 25 is the model showing the relationship between ROA and all the control variables. Model 26 introduces the predictor "Multinationality", using its one-year lag as its IV. This variable has a negative coefficient but it is not significant (β =-0.017, p=0.468). To test the curvilinear relationships, I added the variable of "Multinationality Squared" into the regression model as the first step, using the squared one-year lag multinationality as its IV. Model 27 shows that multinationality has a negative and statistically significant effect on MNE performance (β =-0.066, p= 0.038) and that the squared term of multinationality has a positive and statistically significant effect (β =0.114, p= 0.044). The coefficients of the linear and quadratic terms taken together are consistent with a curvilinear and U-shaped effect on MNE performance.

Then, I verified this relationship by conducting a statistical test of the presence of a U-shaped relationship, in the way that Lind and Mehlum (2010) described and incorporated into a Stata software command titled 'U Test' (Lind & Mehlum, 2007). This provided the results for the further two steps. One is the slope of the curvilinear relationship at both the lowest and highest data points (the Second Step). A significant curve with both upward and downward components can be confirmed if tests at both points are statistically significant and have opposing signs (Haans et al., 2016). The results show statistically significant slopes at both the low (t = -2.066, p = 0.019) and high (t =1.878, p = 0.030) data points with opposing signs. The other is the interval of turning point (the Third Step). The turning point (0.300) is within the main body of the data (Haans et al., 2016), and it is within the 95% confidence interval [0.019, 0.824]. All three steps for testing curvilinearity are confirmed. It shows a U-shaped relationship between multinationality and performance. Figure 5.7 illustrates this curvilinear relationship.

Table 5.8 2SLS Regression analysis of Multinationality on MNE performance

VARIABLES	M25 (1) ROA	M26 (1) ROA	M27 (1) ROA
(6) Multinationality		-0.017	-0.066**
		(0.013)	(0.032)
Multinationality Squared			0.114**
			(0.056)
(7) State Ownership	-0.004	-0.016***	-0.017***
	(0.013)	(0.004)	(0.004)
(8) Formal Institutional Distance	0.000	-0.001*	-0.002*
	(0.002)	(0.001)	(0.001)
(9) Cultural Distance	-0.001	0.000	0.000
	(0.001)	(0.001)	(0.001)
(10) TMT Age	0.013	-0.032***	-0.033***
	(0.023)	(0.010)	(0.010)
(11) TMT Size	-0.001**	0.000	0.000
	(0.000)	(0.000)	(0.000)
(12) Firm Age	-0.061***	-0.007***	-0.007***
	(0.007)	(0.002)	(0.002)
(13) Firm Size	0.012***	0.015***	0.015***
	(0.003)	(0.001)	(0.001)
(14) Firm Leverage	-0.182***	-0.169***	-0.169***
	(0.024)	(0.011)	(0.011)

(15) R&D Intensity	-0.062**	-0.057***	-0.057***
	(0.026)	(0.016)	(0.016)
Constant	-0.004	-0.070*	-0.072*
	(0.106)	(0.042)	(0.043)
Observations	7,627	6,404	6,404
R-squared	0.152	0.176	0.176

Note: robust standard errors in parentheses: *** $p<0.01$, ** $p<0.05$, * $p<0.1$

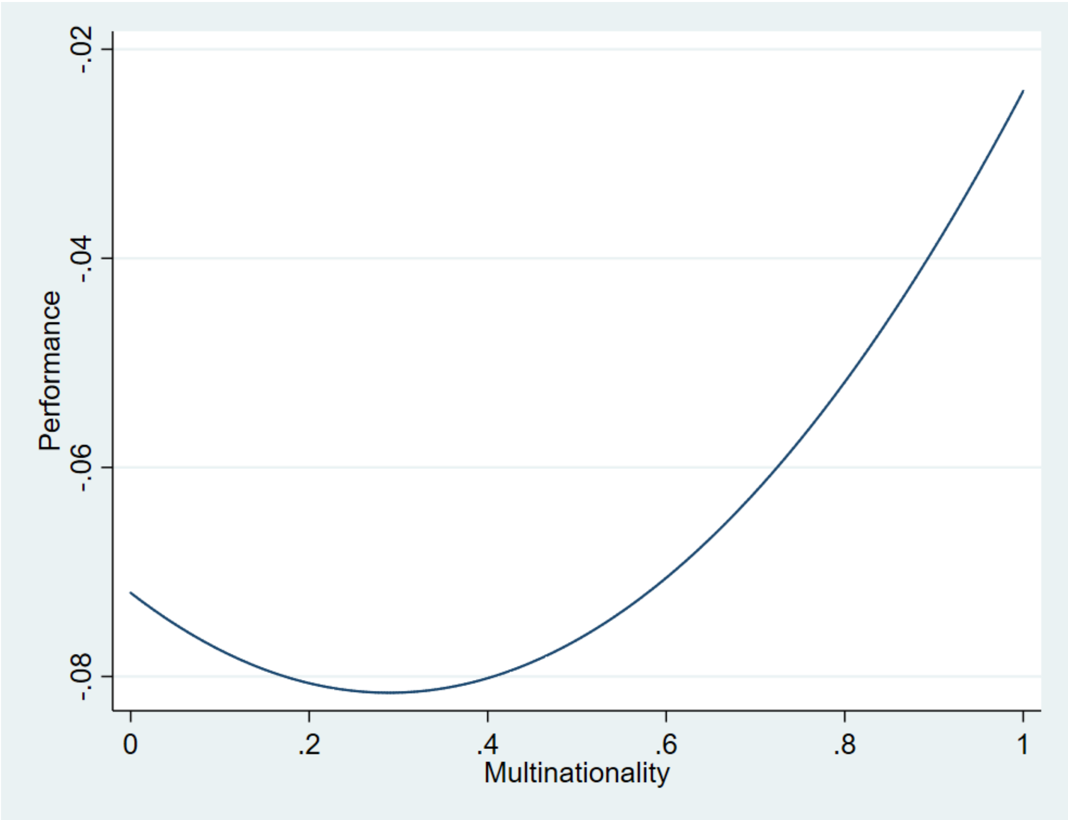

Figure 5.7 Main effect of Multinationality on MNE performance

5.4.6 The mediating effect of multinationality

To test the mediating effect of multinationality, I used the three-step regression analysis recommended by Baron and Kenny (1986). The three-step regression approach for mediation effects examination is widely used in the empirical studies in the IB area (e.g. Lee & Park, 2006; Zhou et al., 2007; Wang et al., 2013). Step one is to regress the mediator on the independent variable(s). To meet the first mediation condition, the independent variable(s) should be significantly related to the intermediary variable. Step two is to regress the dependent variables directly on the independent ones. If their relationship is significant without the presence of the mediator, it thus satisfies the second condition of mediation. Finally, after entering the mediator into step two, if the coefficient of the independent variable is still significant, it shows that the intermediary variable partially mediates this link. If the coefficient of the independent variable becomes insignificant, it indicates that the intermediary variable fully mediates the influence of independent variables on the dependent one. Otherwise, the mediation effect is not found.

The results of the mediation effect of Multinationality are shown in Table 5.9. Following the above process, in Step one, I tested the mediation effects of Multinationality on the links of the MNE performance and TMT attributes in turn. I regressed Multinationality on TMT attributes variables (TMT tenure, TMT educational level, TMT international experience and TMT functional diversity) and the control variables, as with Model 12. I found that both TMT tenure and TMT international experience are significantly related to Multinationality (TMT educational level: β=0.006, p=0.000; TMT international experience: β=0.057, p=0.000).

In step two, I estimated the model (in Model 28) that specifies only the direct paths between the four TMT attributes and MNE performance. I found that, without the presence of the mediator of Multinationality, TMT tenure (β =0.007, p=0.000) and TMT educational level (β =-0.003, p=0.061) have significant effects on MNE performance. Therefore, considering the results of M12, only one attribute (TMT tenure) is significantly related to both Multinationality and MNE performance.

Then, in Step three, I added the mediator of *Multinationality* into M28. The results appear in M29, which employs the 2SLS model due to the endogeneity problem between multinationality and performance. Focusing on the significant path of TMT tenure, I found that the coefficient of the variable of TMT tenure is significant (β =-0.003, p=0.002) in M29. Moreover, its value has an obvious reduction from 0.007 in M28 to -0.003 in M29. Thus, I concluded that Multinationality partially mediated the linkage between TMT tenure and MNE performance, supporting H6a. However, I did not find mediation effects of Multinationality on the relationship between MNE performance and the other three TMT attributes hypothesised in H6, which means that H6b, H6c and H6d do not receive support from the empirical analysis.

Table 5.9 Mediation regression models

	M12	M28	M29(2SLS)
VARIABLES	Multinationality	ROA	ROA

(2) TMT Tenure	0.006***	0.007***	-0.003*
	(0.002)	(0.002)	(0.002)
(3) TMT Education	0.003	-0.003*	-0.005***
	(0.010)	(0.002)	(0.002)
(4) TMT International Experience	0.129***	-0.001	-0.003
	(0.012)	(0.005)	(0.005)
(5) TMT Functional Diversity	0.010	0.003	-0.004
	(0.010)	(0.008)	(0.006)
(6) Multinationality			-0.058*
			(0.032)
Multinationality Squared			0.107*
			(0.057)
(9) Cultural Distance	0.166***	0.001	0.000
	(0.009)	(0.000)	(0.001)
(10) TMT Age	-0.049***	-0.030***	-0.028***
	(0.010)	(0.010)	(0.011)
(11) TMT Size	0.017	0.000	0.000
	(0.011)	(0.000)	(0.000)
(12) Firm Age	-0.033***	-0.002	-0.007***
	(0.011)	(0.002)	(0.002)
(13) Firm Size	0.304***	0.013***	0.016***
	(0.013)	(0.001)	(0.001)
(14) Firm Leverage	0.261***	-0.178***	-0.171***
	(0.077)	(0.004)	(0.011)
(15) R&D Intensity	0.418*	-0.064***	-0.051***
	(0.217)	(0.011)	(0.016)
Year dummy	Include	Include	-
Constant	-0.198***	-0.003	-0.076*
	(0.072)	(0.038)	(0.045)
Observations	7,627	7,627	6,404
R-squared	0.189	0.206	0.178
F	76.93	85.75	-

Note: Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1

5.5 Summary of the hypothesis testing

Table 5.10 summarises the results for all the hypotheses in this study. It shows that some of my hypotheses have been statistically supported, while some of them have not. The results will be discussed in Chapter 6 accordingly.

Table 5.10 Summary of the hypotheses test results

	TMT attribute and CMNEs' performance	*Results*
H1a	TMT tenure is positively associated with CMNEs' performance	Supported
H1b	TMT education level is positively associated with CMNEs' performance	Not supported (showing negative impact)
H1c	TMT international experience is positively associated with	Not supported

	CMNEs performance	
H1d	TMT functional diversity is positively associated with CMNEs' performance	Not supported
	TMT attributes and Multinational Strategy	
H2a	TMT tenure is positively associated with Multinationality	Supported
H2b	TMT education level is positively associated with Multinationality	Not supported
H2c	TMT international experience is positively associated with Multinationality	Supported
H2d	TMT functional heterogeneity/diversity is positively associated with Multinationality	Not supported
	Moderation effect — State Ownership	
H3a	The firm-level state ownership negatively moderates the relationship between TMT tenure and Multinationality.	Supported
H3b	The firm-level state ownership negatively moderates the relationship between TMT education level and Multinationality.	Supported
H3c	The firm-level state ownership negatively moderates the relationship between TMT international experience and Multinationality.	Not supported
H3d	The firm-level state ownership negatively moderates the relationship between TMT functional heterogeneity and Multinationality.	Supported
	Moderation effect— formal institutional distance	
H4a	The formal institutional distance negatively moderates the relationship between TMT tenure and Multinationality.	Not Supported
H4b	The formal institutional distance negatively moderates the relationship between TMT education level and Multinationality.	Supported
H4c	The formal institutional distance negatively moderates the relationship between TMT international experience and Multinationality.	Supported
H4d	The formal institutional distance negatively moderates the relationship between TMT functional heterogeneity and Multinationality.	Supported
	Multinationality and CMNEs' performance	
H5	Multinationality is U-shaped associated with CMNEs' performance	Supported
	Mediating Multinationality	
H6a	Multinationality mediates the relationship between TMT tenure and CMNEs' performance	Supported (partially mediating)
H6b	Multinationality mediates the relationship between TMT educational level and CMNEs' performance	Not supported
H6c	Multinationality mediates the relationship between TMT international experience and CMNEs' performance	Not supported
H6d	Multinationality mediates the relationship between TMT functional diversity and CMNEs' performance	Not supported

5.6 Sensitivity and robustness tests

This section discusses several strategies to check that the analysis results are robust. There are various checks and additional statistics to ensure the robustness of the results. I conducted the tests in the following ways.

5.6.1 Alternative measurements

I checked the robustness of the results by employing an alternate measurement of performance. Previously, I used an accounting-based measure of performance (e.g., ROA). For the robustness test, I adopted ROE as the main measure for performance instead. As described in Section 4.5. 1, ROA and ROE are accounting-based and they are widely adopted for measuring firms' financial performance. The GLS regression results for the effect of TMT attributes on CMNEs' performance with this alternate proxy are reported in Model 30 and in Table 5.11.

Table 5.11 Robust test of H1a ~ H1d

VARIABLES	GLS M6 ROA	GLS M30 ROE	Fixed-effect M31 ROA	Fixed-effect M32 ROE
(2) TMT Tenure	0.007***	-1.422**	-0.005**	-3.464
	(0.002)	(0.656)	(0.002)	(2.239)
(3) TMT Education	-0.027***	-1.581***	-0.012***	-3.914**
	(0.009)	(0.608)	(0.004)	(1.681)
(4) TMT International Experience	-0.009	0.613	-0.003	2.729
	(0.009)	(2.085)	(0.011)	(3.388)
(5) TMT Functional Diversity	0.006	-0.598	-0.005	-7.714
	(0.009)	(2.382)	(0.010)	(6.056)
(6) Multinationality	0.028***	10.835*	-0.028	4.473
	(0.010)	(6.520)	(0.021)	(9.150)
(9) Cultural Distance	0.002	-0.284	-0.001	-0.275
	(0.009)	(0.206)	(0.001)	(0.365)
(10) TMT Age	-0.033***	-9.124**	0.017	-0.102
	(0.009)	(4.069)	(0.025)	(14.274)
(11) TMT Size	0.012	0.119	-0.001***	-0.289
	(0.010)	(0.121)	(0.000)	(0.208)
(12) Firm Age	-0.018*	0.874	-0.054***	-16.340***
	(0.010)	(0.848)	(0.007)	(4.563)
(13) Firm Size	0.178***	3.133***	0.014***	9.915**
	(0.012)	(0.350)	(0.003)	(4.636)
(14) Firm Leverage	-2.767***	-31.414***	-0.183***	-71.790*
	(0.070)	(1.928)	(0.024)	(38.791)
(15) R&D Intensity	-0.918***	-12.578**	-0.063**	-11.788**
	(0.192)	(4.934)	(0.026)	(5.399)
Year dummy	Include	Include		
Constant	0.388***	-1.626	-0.031	-111.941
	(0.072)	(15.987)	(0.107)	(111.335)
Observations	7,627	7,595	7,627	7,595
R-squared	0.194	0.043	0.156	0.063
F	76.18	14.05	23.10	6.197
Number of symbols			1,118	1,114

Note: Standard errors (for GLS models) and Robust standard errors (for fixed-effect models) in parentheses: *** p<0.01, ** p<0.05, * p<0.1

It can be deduced that the effect of TMT educational level on CMNEs' performance remains consistently negatively and significant at $p < 0.01$. However, the effect of TMT tenure, which is statistically positive ($p < 0.01$) in Model 6, turns out to be negative ($P< 0.05$) in M30. It is interesting to find this conflicting effect of TMT tenure, which will be explained and discussed in Chapter 6.

5.6.2 Fixed-effect model

I also conducted a fixed-effect model to test the relationship between TMT attributes and CMNEs' performance by using both ROA and ROE as the proxy of performance respectively. The results of M31 and M32 are shown in Table 5.11. In both cases, the effect of TMT educational level remains consistent with M30 and the main regression result (in M6), while the effect of TMT tenure remains negative, which is contrary to M6. The results in Table 5.11 to a certain extent demonstrate the robustness of my main regression (the relationship between TMT attributes and MNE performance).

5.6.3 One-year lag

To facilitate potential reverse causality, I lagged all of the independent variables by one year to ensure that the treatments (e.g. multinationality) clearly precede the outcome (e.g. performance) (e.g. Abdi & Aulakh, 2018). In particular, M33 shows the results of the GLS regression between TMT attributes and CMNEs' performance (for testing H1a-H1d); M34 shows the results of the GLS regression between TMT attributes and Multinationality (for testing H2a-H2d); M35 and M36 are the regressions between TMT attributes and Multinationality, considering the moderating effects of state ownership and institutional distance (for testing H3a-3d and H4a-4d). The independent variables have been lagged by one year in all of those models.

As shown in Table 5.12, the direction and significance of the coefficients of most of the target variables remain stable and relatively consistent with the ones in the previous regression analyses, thus adding to the robustness of the findings. Specifically, M33 shows that TMT tenure positively affects MNE performance ($\beta = 0.009$ and $p< 0.01$), supporting H1a; M34 shows that TMT tenure ($\beta = 0.006$ and $p< 0.01$) and TMT international experience ($\beta = 0.057$ and $p< 0.01$) both have positive relationships with Multinationality, supporting H2a and H2c; M35 further demonstrates that State ownership negatively moderates the relationship between TMT tenure and Multinationality ($\beta = -0.015$ and $p< 0.05$), supporting H3a; M36 further demonstrates that Formal distance negatively moderates the relationship between TMT international experience and Multinationality (β =-0.036 and p< 0.01), supporting H4c.

Table 5.12 Robust test for H1, H2, H3 and H4

(One-year lag of all the independent variables)

VARIABLES	M33 (1) ROA	M34 (6) multinationality	M35 (6) multinationality	M36 (6) multinationality
(2) TMT Tenure	0.009***	0.006***	0.003*	0.004
	(0.002)	(0.002)	(0.002)	(0.005)
(3) TMT Education	0.001	-0.001	0.003	0.010*
	(0.002)	(0.002)	(0.002)	(0.005)
(4) TMT International Experience	-0.006	0.057***	0.043***	0.162***
	(0.006)	(0.007)	(0.007)	(0.023)
(5) TMT Functional Diversity	0.010	-0.007	0.003	-0.055***
	(0.009)	(0.009)	(0.010)	(0.021)
(6) Multinationality	0.031**			
	(0.014)			
(7) State Ownership			0.064	
			(0.040)	
(2) TMT Tenure * (7) State Ownership			-0.015**	
			(0.007)	
(3) TMT Education * (7) State Ownership			-0.022**	
			(0.009)	
(4) TMT International * (7) State Ownership Experience			0.043	
			(0.047)	
(5) TMT Functional Diversity * (7) State Ownership			-0.030	
			(0.034)	
(8) Formal Distance				-0.013**
				(0.005)
(2) TMT Tenure * (8) Formal Institutional Distance				-0.001
				(0.001)
(3) TMT Education * (8) Formal Institutional Distance				-0.003*
				(0.001)
(4) TMT International Experience * (8) Formal Institutional Distance				-0.036***
				(0.006)
(5) TMT Functional Diversity * (8) Formal Institutional Distance				0.018***
				(0.005)
(9) Cultural Distance	-0.000	0.007***	0.007***	0.006***
	(0.001)	(0.001)	(0.001)	(0.000)
(10) TMT Age	-0.015	-0.057***	-0.018	-0.028***
	(0.012)	(0.012)	(0.012)	(0.007)
(11) TMT Size	0.000	0.001***	0.001***	0.001**

	(0.000)	(0.000)	(0.000)	(0.000)
(12) Firm Age	0.001	-0.006***	-0.006***	-0.005***
	(0.002)	(0.002)	(0.002)	(0.001)
(13) Firm Size	0.006***	0.015***	0.019***	0.012***
	(0.001)	(0.001)	(0.001)	(0.001)
(14) Firm Leverage	-0.113***	0.021***	0.021***	0.002
	(0.005)	(0.005)	(0.005)	(0.003)
(15) R&D Intensity	-0.039***	0.030***	0.048***	0.011
	(0.012)	(0.012)	(0.012)	(0.008)
Year dummy	Include	Include	Include	Include
Constant	0.011	-0.071	-0.324***	-0.073**
	(0.045)	(0.044)	(0.045)	(0.036)
Observations	6,404	6,404	6,404	6,404
R-squared	0.091	0.152	0.188	0.202
F	27.73	52.08	54.64	59.91

Note: Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1

5.6.4 Other tests

In the upper echelons field, researchers have not only recognised the importance of individual characteristics of the TMT but also probed into the diversity of these characteristics (e.g. Barkema & Shvyrkov, 2007; Rivas, 2012; Wang, Libaers, & Jiao, 2015; Chaganti et al., 2016). Considering that the main regression models have investigated the impact of individual work-related characteristics of the TMT, based on the listed manufacturing CMNEs, I tried to extend what I had done by examining the roles of the variation of some of the TMT attributes, which include TMT tenure diversity, TMT education diversity and TMT international experience diversity, in this section. The definition and measurements of the variables of TMT tenure diversity, TMT education diversity and TMT international experience diversity have been discussed in Section 4.5.2.

Based on my sample of the Chinese listed MNEs, Table 5.13 shows the results of GLS regression analysis between the diversification of TMT attributes and MNE performance, as well as between the diversification of TMT attributes and Multinationality.

Table 5.13 Results of GLS regression analysis on the relationship between TMT diversity and MNE performance, and Multinationality

VARIABLES	M37 (1) ROA	M38 (6) multinationality	M39 (6) multinationality	M40 (6) multinationality
TMT Tenure diversity	-0.009***	-0.003**	-0.006***	-0.028***
	(0.002)	(0.002)	(0.002)	(0.007)
TMT Education diversity	-0.029***	0.005	0.009	-0.038***

	(0.008)	(0.008)	(0.008)	(0.013)
TMT International diversity	-0.005	0.069***	0.056***	0.117***
	(0.004)	(0.004)	(0.004)	(0.014)
(7) State Ownership			-0.028**	
			(0.012)	
TMT Tenure diversity * (7) State Ownership			0.017	
			(0.011)	
TMT Education diversity * (7) State Ownership			-0.029	
			(0.020)	
TMT International diversity * (7) State Ownership Experience			0.033	
			(0.025)	
(8) Formal Institutional Distance				-0.023***
				(0.002)
TMT Tenure diversity * (8) Formal Institutional Distance				0.006***
				(0.002)
TMT Education diversity * (8) Formal Institutional Distance				0.012***
				(0.003)
TMT International diversity * (8) Formal Institutional Distance				-0.025***
				(0.004)
(6) Multinationality	0.038***			
	(0.012)			
(9) Cultural Distance	0.003***	0.005***	0.005***	0.006***
	(0.000)	(0.000)	(0.000)	(0.000)
(10) TMT Age	-0.032***	-0.053***	-0.037***	-0.023***
	(0.010)	(0.009)	(0.009)	(0.006)
(11) TMT Size	0.001***	-0.001***	-0.001***	0.000**
	(0.000)	(0.000)	(0.000)	(0.000)
(12) Firm Age	-0.001	-0.015***	-0.009***	-0.001
	(0.002)	(0.002)	(0.002)	(0.001)
(13) Firm Size	0.016***	0.017***	0.018***	0.011***
	(0.001)	(0.001)	(0.001)	(0.000)
(14) Firm Leverage	-0.202***	0.026***	0.023***	0.004
	(0.005)	(0.004)	(0.004)	(0.003)
(15) R&D Intensity	-0.094***	0.022**	0.022**	0.009
	(0.010)	(0.009)	(0.009)	(0.007)
Year dummy	Include	Include	Include	Include
Constant	-0.065*	-0.109***	-0.216***	-0.035
	(0.039)	(0.036)	(0.035)	(0.025)
Observations	7,627	7,627	7,627	7,627
R-squared	0.278	0.216	0.225	0.226
F	127.2	94.99	84.68	85.42

Note: Standard errors in parentheses: *** p<0.01, ** p<0.05, * p<0.1

The results shown in the above table (Table 5.13) indicate the following relationships: (1) the diversity of TMT tenure has a negative impact on MNE performance (β =-0.009, $p< 0.01$); (2) the diversity of TMT educational level has a negative impact on MNE performance (β =-0.029, $p< 0.01$); (3) the diversity of TMT tenure has a negative impact on firms' multinationality (β =-0.003, $p< 0.01$); (4) the diversity of TMT international experience has a positive impact on firms' multinationality (β =0.069, $p< 0.01$); (5) the moderating effects of state ownership on the relationships between the diversities of TMT attributes and multinationality have not been found; (6) Formal institutional distance attenuates the negative relationship between the diversity of TMT tenure and multinationality (the coefficient of the interaction item is statistically significant but becomes positive: β =0.006, $p< 0.01$); (7) Formal institutional distance attenuates the negative relationship between the diversity of TMT education and multinationality (the coefficient of the interaction item is statistically significant but becomes positive: β =0.012, $p< 0.01$); (8) Formal institutional distance aggravates the negative relationship between the diversity of TMT international experience and multinationality (the coefficient of the interaction item is statistically significant and remains negative: β =-0.025, $p< 0.01$).

Categorised by the average of TMT attributes and heterogeneity of the TMT attributes, Table 5.14 provides a summary of the relationship between TMT attributes and CMNEs' performance, TMT attributes and multinationality, and the moderating effects of State ownership and formal institutional distance on the TMT attributes–multinationality relationship.

Table 5.14 Summary of the impact of TMT attributes

Effects	Average			Diversification		
	TMT tenure	TMT education level	TMT international experience	TMT tenure	TMT education level	TMT international experience
Impact on CMNE performance	Positive	Negative	Not found	Negative	Negative	Not found
Impact on Multinationality	Positive	Not found	Positive	Negative	Not found	Positive
Moderating effect of State ownership on the relationship with Multinationality	Negative	Negative	Not found	Not found	Not found	Not found
Moderating effect of Formal institutional distance on the relationship with Multinationality	Not found	Negative	Negative	Positive	Positive	Negative

Chapter 6 Discussion

6.1 Introduction

The previous chapter presented the results based on the data analysis, while this chapter provides a discussion of all the findings in this study. This chapter consists of two main sections. The first section focuses on discussion of the results of individual hypotheses. Firstly, I discuss the impacts from TMT attributes (TMT tenure, TMT educational level, TMT international experience and TMT functional diversity) on CMNE performance. Then, a discussion about the influence of TMT attributes on multinationality is presented, followed by the moderating effects of state ownership and institutional distance. Thirdly, I probe into the relationship between multinationality and CMNEs' performance. Furthermore, the mediating role of multinationality in the relationship of TMT attributes and performance is discussed. The second main section provides a summary of the key relationships that are discussed in my study, with the purpose of delineating the whole picture of my research, along with other notable findings.

6.2 Discussion of the hypotheses testing results

Based on upper echelons theory and institutional theory, my research empirically investigates the relationship between managers' demographic traits and firms' international strategy, and explores their effects on performance. Adopting an institutional perspective, the research examines state ownership (at the firm level) and formal institutional distance (at the country level) in the context of internationalisation, and articulates some key boundary conditions for the previous relationships. The results presented in Chapter 5 indicate that some of the TMT attributes, as micro-foundations, have noteworthy impacts on Chinese firms' strategy and their performance during internationalisation. The impacts of TMT attributes on the CMNEs' international strategy are moderated by firms' governance structure and inter-country institutional distance. Furthermore, the results also show that multinationality, the reflection of CMNEs' international strategy, plays a mediating role between TMT tenure and CMNE performance. The following sections provide detailed interpretations of the findings from the hypotheses test results.

6.2.1 TMT attributes as the micro-foundation of CMNEs' financial performance

6.2.1.1 TMT tenure and performance

Hypothesis 1a (H1a) examines the influence of TMT tenure on CMNEs' performance. It postulates that TMT tenure has a positive impact on an MNE's financial performance. The findings of my study support H1a.

Tenure is the amount of time an individual has been working in the firm. To a great extent, it reflects a person's working experience and ability, as well as his/her relationship with the firm. Previous research has found that the term of a manager's tenure gives his/her more managerial experience and ability to deal with complex issues (Fraser & Greene, 2006; Xu, Yun, et al., 2019). Thus, they are more sophisticated in the management of a firm's daily operation. Moreover, longer tenure also reflects that the manager has higher loyalty to the firm and has more harmonious relations with the firm itself. It further mitigates the operational risk and is conducive to a better firm performance. As stated by Tihanyi et al. (2000) and Li (2018), a long-tenured TMT builds better interactions among its members, thereby helping to reduce the conflicts and contribute to the efficiency of communications within the management team. Consequently, extensive research has illustrated that TMT tenure is beneficial for firm performance (e.g. Lyon & Ferrier, 2002; Mitchell et al., 2016; Li & Cui, 2018).

The positive relationship between TMT tenure and CMNEs' performance found in my study extends the previous research on TMT tenure and performance to an international business context. In the international markets, the business operational circumstances TMT face are more complex and dynamic, which require more competent top executives. My results confirm that longer-tenure TMTs, which are associated with sophisticated managerial experience and superior problem-solving capability, can contribute to better financial performance of the CMNEs.

Notably, although I found that TMT tenure significantly positively affects CMNE performance, the degree of its impact is not high (a 10% increase in TMT average tenure leads to a 0.07% increase in ROA, which is rather small). It demonstrates that firm performance is the result of various factors (Demirbag, Tatoglu, & Glaister, 2007; Clegg et al., 2016), especially for the firms operating internationally.

Moreover, in addition to the significant effect of the average of TMT tenure in the main regression, as shown in Section 5.6.4, I found that the effect of the TMT tenure diversification is also significant on firm performance. In contrast to the positive effect of TMT tenure diversification on performance in developed countries (Cannella et al., 2008), the empirical results in my study show that this effect is negative in the context of Chinese international manufacturing enterprises. It is an interesting finding. Tenure, as a time-dependent variable, reflects a person's mind-set (Le & Kroll, 2017). Hence, when facing an operational issue, managers with different terms of tenure tend to have different attitudes. In particular, people in China share a Confucian culture (Qian, Cao, & Takeuchi, 2013). They are living in a typical collectivist environment emphasising long-term and harmonious interpersonal relationships (Hofstede, 1980; Zutshi & Tan, 2009). However, the managers' different tenures represent different working experiences, different perspectives on working attitudes, and different relationships with the enterprises. Thus, the tenure heterogeneity among top managers may increase the possibilities of communicational conflicts when they make decisions and disrupt the harmony among the team members. Another consequence is that the overall management efficiency is impeded accordingly. Therefore, in contrast to the positive relationship reported by previous studies, the negatively linkage between TMT tenure diversification and CMNE performance found in my empirical results provides another viewpoint when exploring the effects of tenure diversity.

6.2.1.2 TMT educational level and performance

Hypothesis 1b (H1b) examines the impact of TMT educational level on CMNEs' performance. It assumes that TMT educational level has a positive impact on an MNE's financial performance. However, the findings of my study reveal the opposite conclusion. The statistical modelling results do not support my hypothesis but indicate that TMT educational level is negatively associated with performance.

Prior research suggests that educational background, either measured as the number of formal schooling years that an individual has completed or as the post-secondary degrees that he/she holds, is associated with his/her cognitive orientation and knowledge base (Herrmann & Datta, 2005), which provides an indicator for an accumulation of skills and knowledge. Moreover, an individual's educational experience also helps to shape his/her cognitive ability, information integration ability, and decision-making ability (Hambrick & Mason, 1984; Xu, Yun, et al., 2019). It can also be an indicator of managers' learning capability (Cui et al., 2015) and innovation capability (Li, 2017). Therefore, researchers believe that TMT education constitutes a critical intangible resource of an enterprise (Barney, 1991; Teece et al., 1997; Vu, 2020). They contend that higher educational level endows the TMTs with innovativeness and open mindedness, and further equips them with information-processing and problem-solving abilities, which play a vital role for an enterprise in business operations. With these considerations in mind, TMT educational level might improve firm performance.

However, the results in my research point to an opposite conclusion that a higher level of TMT education negatively affects performance. It provides an interesting perspective to look into the relationship between TMT educational level and firm performance. The negative association between TMT educational background and CMNE performance in my study deserves more discussion.

In my sample, the vast majority of average TMT educational level is master's degree or lower, which accounts for 96.12% (shown in Table 6.1). For 30% of TMTs, their average educational level is bachelor's degree or even lower. A possible explanation may lie in the characteristics of the managerial executives as a specific generation in relation to their age and educational background. Because of historical reasons, Chinese people in that generation do not have much experience in formal education. The average age of TMT executives in my sample is 46.9. As shown in Table 6.2, most of the managerial executives are over 40 years old. The age group of 46-50 accounts for the vast majority of my sample. It means that they were born before 1974. The college entrance examination (Gaokao) was resumed in China in October 1977 after the Cultural Revolution. Until the end of the 20th century, formal university education remained restricted to a tiny elite group of the Chinese population. According to the Seventh Census in China in 2020[14] (National Bureau of Statistics, 2020), only 0.5% of the population aged between 40 and 55 in China had tertiary education, whereas the proportion is around 13% in the United States (U.S. Census Bureau). Therefore, in that generation, the popularisation of higher education in China is much lower than that in the developed countries, such as the U.S.A.

Table 6.1 Frequency of TMT average educational level

TMT average educational level	Freq.	Percentage (%)	Cum. (%)

[14] It is the latest population census of China.

Junior College and lower	102	1.33	1.33
Bachelor's Degree and lower (but above Junior College)	2200	28.67	30.00
Master's Degree and lower (but above Bachelor's Degree)	5074	66.12	96.12
Above Master's Degree	298	3.88	100.00
Total	7,674	100	-

Table 6.2 Frequency of TMT average age

TMT average age	Freq.	Percentage (%)	Cum. (%)
Below 40	263	3.43	3.43
41~45	2,093	27.27	30.70
46~50	3,834	49.96	80.66
51~55	1,381	18.00	98.66
56~60	102	1.33	99.99
Over 61	1	0.01	100
Total	7,674	100	-

Notably, however, a low level of formal education does not necessarily equate to poor management capability. Conversely, this generation of managerial executives and entrepreneurs has developed rich business experiences and management know-how through business practice, as well as capabilities to deal with international markets. Moreover, a lower educational level might spur the holders to improve their work performance to make up for the lack of academic qualifications.

Therefore, the findings about the impact of TMT educational level on MNE performance in my study indicate that, due to the context of social development, a highly educated TMT might not be a positive factor in the financial performance of a CMNE.

Neither a higher level of TMT educational background nor the diversified educational level of TMTs is beneficial to CMNEs' performance. Table 5.14 shows a significantly negative relationship between the diversity of TMT educational level and firm performance.

The level of education that an individual has greatly affects his/her cognition, knowledge and abilities to deal with problems. Moreover, members in a team may learn from each other to improve teamwork efficiency (Díaz-Fernández et al., 2014). Therefore, scholars believe that TMTs with diversified education levels are better at dealing with complex issues, making rational strategy, and consequently, promoting the firm's performance (Carpenter et al., 2004). However, this view is likely to overlook the possibility that diversified education may cause workplace cliques (small groups within a team) where the ones with higher levels of educational background might disparage those with lower levels. Further, the heterogeneity disrupts the harmony within the managerial team and leads to internal conflicts, which reduce a firm's performance.

6.2.1.3 TMT international experience and performance

Hypothesis 1c (H1c) examines the impact of TMT international experience on CMNEs' performance. It expects that there is a positive relationship between them. The findings from the full model in Section 5.4.1 show a positive but non-significant relationship between TMT international experience and CMNE performance, which is not consistent with H1c.

International experience can be captured by holding foreign nationality or working/studying in a foreign country, which provides opportunities for the manager to become familiar with the foreign markets, enabling them to understand the cultures, regulations and risks there as well as his/her homeland's (Li, 2018). Accordingly, it reflects the manager's knowledge of dealing with the issues relating to operating in foreign countries (Hutzschenreuter & Horstkotte, 2013). Given that previous research argues that international experience positively contributes to performance outcomes (e.g. Daily et al., 2000; Nielsen, 2010; Piaskowska et al., 2021), the inconclusive finding in my study is surprising, but offers another result based on the context of Chinese multinational enterprises.

On the one hand, the multinationality level of CMNEs is rather low (Rugman et al., 2016), as reflected in my sample where the mean value of *multinationality* is only 0.05. On the other hand, the mean value of *TMT international experience* in my sample is not high either (0.09), indicating that the degree of internationalisation of TMTs is low in CMNEs. Moreover, firm performance is the result of various factors (Demirbag et al., 2007; Clegg et al., 2016). Consequently, it seems reasonable that in China, the impacts of TMT international experience and the diversity of TMT international experience (results shown in Section 5.5.4) on the general financial performance of CMNEs are not important at the current stage.

6.2.1.4 TMT functional diversity and performance

Although Hypothesis 1d (H1d) assumes that the heterogeneity of TMT functional background positively affect CMNEs' performance, it is not supported by my empirical results. The diversity of TMT functional background is generally considered to have an important performance impact. With different functional backgrounds, the teams are endowed with expert advice and network resources based in each member's working experience. Hence, when dealing with operational practice, the teams with different functional backgrounds are able to have more non-overlapping knowledge, professional skills and resources for better performance outputs (Rivas, 2012; Mohr & Batsakis, 2019). Previous works, such as Keck (1997) and Buyl et al. (2011) contended that there is a positive relationship between TMT functional diversity and firm performance.

However, there might be mediating and moderating effects on the relationship between TMT functional diversity and Chinese firm performance (Cannella et al., 2008; Buyl et al., 2011). Aligned with Cannella et al. (2008), I did not find empirical evidence to discover direct significant effects of TMT functional diversity on firms' performance. It is not a negation of the research which believes TMT functional diversity facilitates organisation performance, but an encouragement to explore the contingent effect of TMT functional diversity on MNE performance.

6.2.2 The impacts of TMT attributes on CMNE multinationality

6.2.2.1 TMT tenure and multinationality

Multinationality refers to "the extent to which firms' business activities span across national borders" (Tseng et al., 2007, p. 961). In my study, I consider it a CMNE's international strategy. Clegg et al. (2016) also defined it as the "firm-level multinationality strategy". Hypothesis 2a (H2a) argues that TMT tenure is positively associated with CMNEs' multinationality. This statement is based on two main arguments. (1) Managers who have been working in the organisation for a long time have more identification with the current strategy (Rivas, 2012). Considering that exploring business in foreign markets represents an important strategic direction for MNEs' development, once such an international decision has been made, a TMT with longer tenure is inclined to carry it forward. Thus, MNEs' multinationality will increase. (2) Tenure is also an indicator of an individual's working experience and capability (Tihanyi et al., 2000). A longer term of tenure helps managers to better understand the complexities faced by their firms, and then to accelerate the internationalisation of the firms.

The results of the full model (M12 in Section 5.4.2) show that TMT tenure positively affects firms' multinationality, supporting my hypothesis. The effect remains consistent in the robust analysis as well (shown in M34 in Section 5.6.3). It empirically demonstrates that, in the context of China, TMT tenure is positively associated with the firm's multinationality. In other words, a long-tenured TMT is likely to increase the degree of internationality.

A TMT with higher than average tenure reflects that its members generally have spent many years working in the same firm or that there are members who have worked there for an extremely long time. Based on my study, in either case, the team tends to further the CMNE's multinationality. In the Chinese context, organisations value long-lasting and close *Guanxi*, which is a kind of interpersonal relationship (Qian et al., 2013). It constitutes a competitive resource for a Chinese firm. Within a reciprocal *Guanxi* network, individuals hold values of collective harmony, idea sharing and consensus seeking which effectively smooth over conflicts within working teams (Li, 2017). In a *Guanxi*-oriented Chinese organisation, junior managers tend to show as much respect as possible to their senior colleagues and to avoid conflicts with them when making critical decisions. In addition, *Guanxi* can also develop over time. Working together is an important way of developing *Guanxi* (Lin et al., 2009; Gu & Lu, 2014). With the increase of working years, TMT members become more familiar with each other. The relationship among them becomes more stable and harmonious. The developed inner *Guanxi* network reduces the conflicts within the longer-tenured team as well. Thus, implementation of the internationalisation strategy tends to be more efficient and smooth. Longer tenure also endows the managers with more capabilities and confidence in their professional area. Therefore, whether its members generally have spent many years working in the same firm or there are members who have worked there for an extremely long time, in a *Guanxi*-oriented Chinese organisation, the whole team could be more active and optimistic in making international decisions efficiently and smoothly.

Following the same logic, higher TMT tenure heterogeneity can hinder the harmonious communication within the team and reduce the team's general capabilities for dealing with complex international issues. Consequently, it has a negative impact on CMNEs' multinationality. This assertion is supported by the empirical results of Model 38 in Section 5.6.4.

6.2.2.2 TMT educational level and multinationality

Hypothesis 2b (H2b) assumes that there is a positive relationship between TMT educational level and multinationality, but my results do not support it. Formal education through schooling is a critical way for a person to obtain knowledge and capability (Carpenter & Fredrickson, 2001). Based on the literature, educational level is associated with the cognitive orientation and knowledge base of an individual (Hambrick & Mason, 1984). Many scholars take academic degrees as an indicator of a manager's educational level (Herrmann & Datta, 2005; Song & Ma, 2010; Chaganti et al., 2016; Xu, Yun, et al., 2019). They believe that managers with higher academic degrees are more tolerant and able to deal with the changes and challenges of international markets. These managers are better suited to comprehend difficult strategic situations and find appropriate solutions for challenging scenarios. Equipped with richer knowledge reserves, stronger information-processing ability, greater tolerance and capabilities to cope with uncertainties, they are motivated to pursue a higher degree of internationalisation.

The empirical results in my study show there is no significant linkage between TMT educational level and multinationality, that is, statistical results do not provide support for the original assumption. The results of the robustness tests in Section 5.6 also show that there is no significant relationship between them. Prior research suggests that diversity of education in TMTs is positively related to multinationality (Lee & Park, 2006). However, I did not find support for this in my study. Though the results in my study are inconsistent with previous research (Tihanyi et al., 2000; Herrmann & Datta, 2005), they provide an interesting perspective from which to examine this issue, especially regarding the internationalisation of CMNEs.

Educational experience endows top managers with know-how and capability, but due to years of higher education, they are likely to be engaged in excessive analysis when they are making decisions (Herrmann & Datta, 2005; Elia et al., 2021), which might make them over-cautious. International markets change constantly. An over-rational decision-making process is likely to result in missing some international business opportunities. Therefore, it is reasonable that there is no inextricable linkage between TMT educational level and a firm's multinationality.

Moreover, based on a sample of Chinese MNEs, the results of my study imply that the educational background of managers in China does not matter as much as it does in foreign countries. As I state in Section 6.2.1.2, because of the specific development history of China, many of the entrepreneurs and management executives do not possess much experience in higher tertiary education (such as a Master's degree) before doing business. They are more likely to obtain management knowledge and capabilities through their experience in business practice rather than the formal business education system. This could be why the empirical results in my study do not show any significant linkage between TMT educational level and CMNEs' multinationality.

6.2.2.3 TMT international experience and multinationality

Hypothesis 2c (H2c) examines the impact of TMT international experience on CMNEs' multinationality and proposes that there is a positive relationship between them. This hypothesis is supported by the empirical findings in this study.

International experience, obtained by either studying or working overseas, provides the opportunity for managers to enter foreign markets, and enables them to understand cultures and business environments outside their homeland (Li, 2018). Because of these early contacts with the international environment, internationally experienced TMTs are more likely to be interested in internationalisation and more able to develop such activities, thus leading to a high level of the firms' multinationality.

It is well-known that overseas experience is critical to a firm's internationalisation activities (Le & Kroll, 2017; Mohr & Batsakis, 2019; Elia et al., 2021; Piaskowska et al., 2021). International experience of the TMT's individual members has positive impacts on their foreign market knowledge and increases the team's confidence in dealing with international issues (Hutzschenreuter & Horstkotte, 2013). Empirically, previous research has often found that TMT international experience is positively associated with the MNEs' multinationality. Based on data from 126 U.S. firms in the electronics industry, Tihanyi et al. (2000) found that high average international experience of the TMT is associated with the firm's international diversification. In another study based on a sample of United States-based industrial firms, Carpenter and Fredrickson (2001) found that foreign experience of the TMT members is positively correlated with the firm's international diversification. Focused on American CEOs and U.S. firms, Le and Kroll (2017) found that the length of TMT international experience accelerates MNEs' international expansion. Similarly, based on 91 retail multinational enterprises, Mohr and Batsakis (2019) suggested that international experience is positively related to a firm's internationalisation speed.

However, there is a lack of empirical research regarding the relationship between TMT international experience and multinationality in the context of firms from emerging economies such as China. My study enriches the research about the effect of the TMT's international experience on a firm's international strategy by providing empirical support from Chinese manufacturing enterprises.

Chinese firms are characterised as latecomers to international markets, at least in comparison to their counterparts from developed western countries. However, Chinese firms have penetrated a wide range of international markets with astonishing speed and on a large scale within a short period (Child & Rodrigues, 2005; Kang & Liu, 2007; Yu et al., 2020; Wu et al., 2021). Therefore, there is an issue of whether the empirical findings from the western-based firms regarding the positive association between the TMT's international experience and multinationality are still valid in the context of Chinese firms. Based on a sample of Chinese firms, the empirical support provided by the present study for H2c about the positive impact of TMT international experience on multinationality can effectively address the identified research gap. The empirical results from my study suggest that the international experience of the firms' decision-makers is one of the major contributing factors to the extensive internationalisation of Chinese firms. International experience of the TMTs can play an important role in facilitating the firms' access to the knowledge of international markets as well as helping the firm's capability development in order to deal with cross-cultural issues, which make them feel more confident when facing the decisions related to international expansion. When TMTs are equipped with international experience, the firms will be more likely to gain access to the knowledge associated with foreign markets as well as be better positioned to develop the capabilities required to deal with the issues when operating in the foreign markets. Moreover, international experience enables top managers to approach a problem from different perspectives (Le & Kroll, 2017), so that these managers can be more creative in international expansion. As a result, with a high level of international experience, TMTs would be more capable of identifying and exploiting the opportunities in the foreign markets, as well as being more confident and optimistic about those opportunities, leading to a further increase of international expansion.

The results of the positive relationship between TMT international experience and multinationality to some extent illustrate that compared to the TMTs with little or no international experience who are associated with higher risk due to their unfamiliarity with overseas environments (Herrmann & Datta, 2005), internationally experienced TMTs have more tolerance of the risks when they are facing international operations. It is well-known that the environment changes constantly. The foreign markets are considered complex and uncertain because of the differences from the domestic markets. International experience provides the opportunities for decision-makers to become familiar with the external environment in advance, thus it enables them to be more sensitive to the outside opportunities.

The internationally experienced TMTs are more tolerant of the risks of doing business abroad; meanwhile, they are also sensitive to the opportunities in the foreign markets. Therefore, TMTs of the CMNEs with more international experience are more likely to view their firm's growth from an international rather than a purely domestic perspective and to pursue a multinational strategy.

Furthermore, empirical results in my study show a positive relationship between the diversification of TMT international experience and multinationality. Diversified international experience significantly enhances the decision-makers' managerial knowledge and capability in different environments. TMTs equipped with diversified international experience have more confidence and less uncertainty when they make strategic decisions about international expansion. Along with the empirical results for H2c, based on the sample of CMNEs, it demonstrates that TMT international experience and heterogeneity positively affect firms' multinationality strategy.

6.2.2.4 TMT functional diversity and multinationality

Hypothesis 2d (H2d) assumes that there is a positive relationship between TMT functional diversity and multinationality, but it is not supported by the empirical results in Section 5.4.2 of my study.

Upper echelons theory advocates that the demographic characteristics of top managers can be used as valid indicators of their cognitive frameworks and affect the strategic decisions in organisations (Hambrick & Mason, 1984; Hambrick, 2007). Previous research argues that professional experience brings the individual knowledge and capability in his/her functional area. A TMT with different professional backgrounds contributes to the firm so that it can more effectively deal with environmental complexities. It also enriches the team's resources gained from formal and informal functional networks (Díaz-Fernández et al., 2014). Accordingly, a team with diversified functional experience is able to create more reliable and broader relationships with the external environment, which help the firms to mitigate the challenges stemming from the uncertainty and complexity in the foreign markets (Rivas, 2012; Bany-Ariffin et al., 2014). Therefore, scholars conclude that TMT functional diversity has a positive impact on firms' multinationality (e.g. Rivas, 2012). However, diversification of the functional experience of the TMT is also likely to cause social classification and emotional conflicts, such as internal conflicts and managerial inefficiency (Peyrefitte, Fadil, & Thomas, 2002), which worsens the overall function of the whole team and holds back the enterprise from expanding overseas. Consequently, the relationship between TMT functional diversity and multinationality seems inconstant.

The empirical results of my study do not show a significant relationship between TMT functional diversity and multinationality. They neither support the positive correlation in the previous literature nor offer evidence for negative correlation between them. My results support the argument that for CMNEs, their TMT's diversification in terms of functional experience may improve the resource and capabilities of the managers for decision-making, but not necessarily for the group functioning effectively. Due to this reason, no significant impact from TMT functional diversity on CMNEs' multinationality is found in my study. Considering that both positive and negative impacts of TMT functional diversity on the management group's strategic decisions regarding a firm multinationality have been found in previous literature while no significant linkage exists between them in my empirical results, it calls for more attention to be paid to research on the conditions for TMT functional diversity and multinationality.

6.2.3 The moderating roles of state ownership and formal institutional distance

6.2.3.1 The moderating effect of state ownership

Hypotheses 3a-3d (H3a, H3b, H3c and H3d) examine the moderating effects of firm ownership on the relationships between the four work-related TMT attributes (TMT tenure, TMT educational level, TMT international experience, and TMT functional diversity) and CMNEs' multinational strategy respectively. In Chapter 3, I hypothesised that state ownership negatively moderates the impact of TMT attributes on CMNEs' multinationality. The results from the full model (Model 18 of Table 5.6 in Section 5.4.3) indicate that the moderating effects of state ownership on the relationship between TMT tenure and multinationality (H3a), between TMT education level and multinationality (H3b), as well as between TMT functional diversity and multinationality (H3d), are supported, while the moderating effect of state ownership on the relationship between TMT international experience and multinationality is non-significant which is inconsistent with my assumption (H3c).

The support for H3a, H3b and H3d demonstrates that, for China MNEs, state ownership negatively affects the relationship between some of TMT attributes and firms' multinationality. State ownership of a Chinese firm reflects extra political obligations which diverts the firms from pure economic objectives of internationalisation (Tang, Shu, et al., 2021). First, for the firm with a higher level of state ownership, its TMT not only needs to consider the economic interests of the firm but also needs to pay more attention to political interests. This consequently causes inefficiency in the decision-making about international operations. Second, in order to follow the government's demands, the firm suffers institutional pressures. The redundant institutional hierarchies can reduce decision-making efficiency as well, which constrains their business operations (Zhou et al., 2016). Third, multilevel agency problem (Kalasin et al., 2020; Mariotti & Marzano, 2020; Tang, Shu, et al., 2021) thereby result in delayed responses to the opportunities in foreign markets or even missing them.

Moreover, firms involved in the international markets are under pressure regarding legitimacy in the institutional environments abroad. According to institutional theory, institutions determine the legitimacy of an organisation (Scott, 2003). A similar governance structure to that of the host country enterprises grant legitimacy to the MNEs when they run businesses in host institutional environments (Powell & DiMaggio, 1991). For example, scholars find that when the cross-border mergers and acquisitions launched by a Chinese firm, which is associated with state-owned shares, involve key resources or other sensitive issues, the host country might boycott them due to the considerations of national security (Chen et al., 2016; Li et al., 2019). Accordingly, Chinese firms under a higher level of state ownership might encounter great pressures when expanding their business abroad. The government background poses the risks of national security and unequal competition to the host countries and their local enterprises (Chen et al., 2016; Li et al., 2019). Boycotts by the host governments and enterprises increases the liability of foreignness facing CMNEs (Salomon & Wu, 2012), reduces CMNEs' legitimacy in foreign countries, and raises the thresholds for overseas operations.

The results regarding H3a indicate that state ownership negatively affects the TMT tenure–multinationality relationship. As discussed in Section 6.2.2.1, TMTs with longer service tenure are more likely to enjoy a harmonious relationship and social networks to make them more confident when dealing with international expansion. However, the negative moderating effect of state ownership suggests that in a CMNE that has a higher level of state ownership, a long-tenured TMT needs to pay more attention to the state's interests, and then be more careful about their strategic decisions about the firm's international activities.

The results of H3b show that state ownership weakens the positive impacts from TMT educational level on multinationality. With a higher level of state ownership, an educated TMT tends to take advantage of its knowledge to pursue the vision of the State, so that it is more likely to respond to the multinationality in a passive or reactive way by doing no more than conforming.

The tests for H3d find state ownership also weakens the positive relationship between TMT functional diversity and multinationality. TMTs with diversified functional experience enrich the whole team's ability, especially the operational ability, to deal with risks or threats when doing business abroad. However, the problems of legitimacy in host countries brought by a higher level of state ownership increase the difficulties in the internationalisation of Chinese firms, so that reduces the positive influence from TMT functional diversity on multinationality.

TMT tenure, education level and functional background are indicators of a team's ability to solve operational problems and deal with uncertainties and risks, as well as their know-how reserve and social resources (Tihanyi et al., 2000; Herrmann & Datta, 2005; Bany-Ariffin et al., 2014). Although those TMT attributes enhance the efficiency and confidence of the executive managers when they are dealing with the decisions which can increase firm multinationality, the influence of state ownership to some extent reduces the willingness and increases the difficulties for the TMT to go abroad.

Yet despite all that, the moderating effect of state ownership on the relationship between TMT international experience and multinationality is not supported by the empirical results. The coefficient of *TMT international experience* remains positive and significant in Table 5.6, which indicates a positive relationship between TMT international experience and the multinationality strategy, but the coefficient for the interaction term between *TMT international experience* and *State ownership* is insignificant. The lack of support for H3c indicates that the negative moderating effect of state ownership is invalid in the relationship of TMT international experience and multinationality. It could be because a TMT's cognition of the foreign markets brought by international experience reduces the liability caused by the government background in the international expansion of Chinese enterprises. Both international management ability and the understanding of global markets derived from international experience are somehow different from those caused by other features or experience (e.g., tenure, education background, and functional position). Therefore, the lack of support for H3c emphasises the significance of internationalisation experience in TMTs' internationalisation decision-making.

Unlike the research which focuses on the relationship between state ownership and the outcome of a firm's international strategy (Li et al., 2019; Kalasin et al., 2020), my study takes state ownership as a moderating factor, exploring its effects on the relationships between TMT attributes and multinationality. Based on previous discussions, I believe that TMT attributes significantly affect CMNEs' multinationality. The findings of H3a-H3d further demonstrate that state ownership has an impact on the TMT's international strategic decisions and how this impact works.

6.2.3.2 The moderating effect of formal institutional distance

Hypotheses 4a-4d (H4a, H4b, H4c and H4d) examine the moderating effects of formal institutional distance on the direct relationships between individual TMT attributes in my study and multinationality. H4a-H4d are based on the argument that if the foreign markets are institutionally distant from the home country, it will lead to high environmental uncertainty (Azar & Drogendijk, 2014). Therefore, I assume that formal institutional distance weakens the hypothesised positive relationship between the four TMT attributes (TMT tenure, TMT educational level, TMT international experience, and TMT functional diversity) and CMNEs' multinationality. The empirical results in my study (shown by Model 24 of Table 5.7 in Section 5.4.4) partly support my hypotheses. They suggest that formal institutional distance negatively moderates the impact of TMT educational level, TMT international experience and TMT functional diversity on multinationality, while no moderating effect of formal institutional distance on the relationship between TMT tenure and multinationality is found. In other words, these results support the negative moderating effects of formal institutional distance for H4b, H4c and H4d, showing that institutional distance is an important contextual factor for the direct relationships between TMT attributes and the outcome of a firm's international strategy.

Firms face various difficulties and risks when they are doing business abroad (Kostova et al., 2008). One of the important reasons is that they are exposed to and embedded in institutional environments which are different from their home country. Even though the literature has different classifications of institutions (North, 1990; Scott, 2003), this study focuses on the distance of formal institutions between the home and host countries. Formal institutions, such as political rules and regulatory qualities, represent the external governance environment of the firms. As I discussed before, firm ownership and formal institutions constitute the internal and external governance system of CMNEs.

Based on the literature, the economics strand of the institutional perspective (North, 1990) argues that institutional distance implies a significant increase in the difficulty of resource and knowledge transactions, and then brings higher costs for cross-national operations (Chao & Kumar, 2010; Meyer & Peng, 2016). The sociological strand of institutional theory suggests a larger difference of regulatory regime between host and home countries causes more obstacles for firms to achieve legitimacy in the host country (Scott, 2003). Therefore, as a foreigner from another regulative system, the MNE is subject to difficulties during the process of internationalisation, such as discriminatory and restrictive policies which are imposed by host governments (Lu, Ma, & Xie, 2021). The difference between host and home formal institutional contexts brings unclear regulations and weak enforcement of the policies to firms' international expansion. Further, it might increase costs associated with cross-border operations and reduce the legitimacy caused by the liabilities of foreignness (Chao & Kumar, 2010). The given attributes of a TMT in my research, which are well educated, internationally experienced, or functionally diversified, endow the team with ability and know-how in dealing with overseas operations. Even though those attributes can make the top managers confident and optimistic about their decisions on internationalising to more countries, my empirical results show that the negative impact from formal institutional distance weakens a TMT's impetus to make decisions about internationalisation.

Specifically, empirical results for H3b demonstrate that formal institutional distance negatively affects the relationship between TMT educational level and multinationality, hence a large distance in formal institutions would influence the TMT's assessment of entering the target market. Although tertiary education can endow the top managers with knowledge and ability (Carpenter & Fredrickson, 2001), the risks and uncertainties caused by the difference in formal institutions would make them reluctant about their firm's internationalisation. Therefore, I find a negative moderating effect on the positive relationship between TMT educational level and multinationality in M21.

The results of H3c show that formal institutional distance weakens the positive impacts of TMT international experience on multinationality. With a greater formal institutional distance, even the executives with rich international experience would be relatively inexperienced in dealing with operational issues in the host markets. Accordingly, the TMT would be prudent to make strategic decisions about international expansion, so that the positive TMT international experience–multinationality relationship is weakened by greater formal institutional distance.

The tests for H3d also demonstrate that formal institutional distance negatively affects the relationship between TMT functional diversity and multinationality. For the same reason, a TMT with diversified functional experience enriches the whole team's ability to deal with risks or threats when doing business abroad, but the uncertainty and the liability caused by different formal institutional environments than China reduce the positive influence of TMT functional diversity on multinationality.

The development of the world economy has witnessed an overwhelming trend of cross-border business operations. MNCs from developed countries find themselves in unfamiliar emerging markets, which are highly ambiguous and have unclear policy systems. Likewise, a growing number of MNCs from emerging markets also take great steps to enter the developed countries, which are highly competitive and risky under very different economic systems and institutional rules (van Hoorn & Maseland, 2016). Though it seems that formal institutions do not hinder firms' international expansion directly, my results show that in China, though TMTs featuring particular attributes (such as higher educational level, richer international experience or more diversified functional backgrounds) might tend to operate firm business internationally, they also take the institutional environments into account. MNCs from emerging markets like China have greatly speeded up their internationalisation, but under the influence of the external institutional environment, their TMTs have become more prudent about the multinationality due to increasing formal institutional distance.

Previous research has extensively examined the direct impact of institutions on firms' internationalisation (e.g. Salomon & Wu, 2012; Liou et al., 2016). I extend this research by focusing more on how it matters. I propose and demonstrate that formal institutional distance weakens the positive effects of TMT attributes (TMT educational level, TMT international experience and TMT functional diversity) on multinationality. To the best of my knowledge, although there is research which finds that formal institutional distance has a negative moderating effect on the relationship with MNEs' performance (e.g. Kostova, 1999; Gaur, Delios, & Singh, 2007; Chao & Kumar, 2010), my study is the first to suggest that formal institutional distance also has a negative moderating effect on the relationship between TMT attributes and multinationality strategy.

Moreover, existing studies are dominated by empirical analysis based on samples of MNEs from developed countries expanding to developing countries. Following the growing research about emerging market MNEs (e.g. Buckley et al., 2007) and in response to the calls to include a diverse group of countries in institutional distance research (van Hoorn & Maseland, 2016), the empirical analysis of my study focuses on enterprises in China as one of the leading emerging economies, which provides a unique and important context for re-examining the effect of formal institutional distance on international issues (Shirodkar & Konara, 2017). My results strongly imply that in order to have greater control of the negative impacts that formal institutional distance imposes on firm expansion, executive managers of CMNEs need to take regulatory environments of countries into account when making their decisions on multinationality.

Last but not least, the empirical results of Model 24, along with the results of Model 12, demonstrate that in China the multinationality achieved by TMTs is not only affected by a firm's internal governance structure but also affected by the external formal institutional environments. The support for H4b, H4c and H4d points to the importance of formal institutional distance between countries in determining the multinationality strategy of a CMNE.

6.2.4 The relationship between multinationality and CMNE performance

Scholars have put great efforts into exploring the relationship between multinationality and firm performance (M-P relationship), but their studies have yielded inconsistent or even contradictory results (Li, 2007; De Jong & Van Houten, 2014). Based on the Chinese context, I argue that a U-shaped relationship exists between multinationality and CMNE performance. The empirical results for Hypotheses 5 (H5) support this.

Following the test method recommended by Haans et al. (2016), the coefficients of the terms of *Multinationality* and *Multinationality Squared* shown in Model 27 in Table 5.8 indicate that

CMNE performance decreases first and then increases with the development of firms' internationalisation, thus showing a U-shaped relationship. As an important part of my research framework, this relationship illustrates a significant impact of a CMNE's multinationality on its financial performance. Moreover, in addition to the linear M-P relationship (Hsu et al., 2013; De Jong & Van Houten, 2014) and the inverted U-shaped M-P relationship (Qian et al., 2010; Singh et al., 2010) demonstrated in previous research, my study provides support for another relationship between multinationality and MNE performance which is the U-shape.

According to the institutional theory, firms that are carrying out international activities need to follow the "rules of the game" in host countries, such as political systems, laws and regulations, and governance environments. Thus, during internationalisation they will encounter many differences that could evolve into liabilities for them. At the early stage of internationalisation, as the new entrants, firms need to adjust to those "rules" and bear the costs of the "liabilities" in host countries before making profits there.

Compared to the MNEs from other countries, especially the developed countries, Chinese enterprises are still in the early stage of internationalisation (Feng et al., 2019). With a shorter internationalisation history (Yang & Stoltenberg, 2014; Ramamurti & Hillemann, 2018), the degree of Chinese enterprises' internationalisation is relatively low (Rugman & Verbeke, 2004; Rugman et al., 2016). Therefore, when facing competitors, either MNEs from the developed countries or firms in the host country, Chinese enterprises are in a weaker position and face more difficulties. As Chinese enterprises have little understanding of the host country market and lack international operating experience, when they initiate their "going-abroad" strategy, they must cope with abundant difficulties and costs deriving from, for example, regional differences and institutional obstacles. Consequently, it could lead to reduced firm performance. In addition, the nature of manufacturing industries forces firms to invest a considerable amount at the early stage of the business, such as the investments in factories, research and innovation, and the workforce, which can also cause a reduction in the firm's financial performance.

However, by consistently expanding their internationalised operations, Chinese enterprises can gradually adapt to the political systems of foreign countries, and gain expertise in doing business internationally. With increased internationalisation, their international experience also accumulates. Knowledge, skills, and resources gained from other countries or from their subsidiary corporations can also bring benefits to the headquarters. In addition, the benefits of economies of scale of the manufacturing enterprises gradually accrue after the early investment.

My study's analysis demonstrates that the impact of multinationality on firm performance is prominent and context dependent (Hitt, Tihanyi, et al., 2006). It echoes to the suggestion of extending research beyond the U.S.-based samples (Capar & Kotabe, 2003). For example, studies find an inverted U-shape relationship of M-P, reliant upon the samples from the U.S. or other western countries (Gomes & Ramaswamy, 1999; Chao & Kumar, 2010; Qian et al., 2010; Singh et al., 2010), which might not be equally applicable to organisations from other countries and cultures, such as China.

In my study, the results show that at a low level of multinationality, there will be a negative impact on CMNE performance, while with the improvement of multinationality, its performance will increase. That is, when the Chinese enterprises pass a threshold of internationalisation level, they will be likely to reap the success and gain financial profits from their multinational strategy. Thus, multinationality could have a direct and significant impact on firm performance with a U-shaped relationship.

6.2.5 The mediating role of multinationality

In Hypothesis 6 (H6), I postulate multinationality mediates the relationship between individual TMT attributes and CMNE performance. To my surprise, the mediating effect of multinationality does not seem to be associated with a direct relationship between CMNE financial performance and the three TMT attributes of educational level, international experience, and functional diversity, even though found a direct impact of TMT educational level on this performance and an impact of TMT international experience on multinationality. However, the results show that multinationality mediates the relationship between TMT tenure and CMNE performance, which still to some extent supports my idea. It is in favour of the view that though the attribute of TMT tenure fundamentally affects the financial performance of CMNE, this effect is determined by a certain outcome of strategic choices (Multinationality) made by top executives.

Based on upper echelons theory, the top managers' attributes can be viewed as indicators of their understanding of the environments they face which in turn affect the strategic choices they make for their companies. It has been suggested that the organisation can be considered a reflection of its top managers. That is, organisational outcomes, which include strategic choices and the resulting performance (Carpenter & Fredrickson, 2001), are viewed as a "reflection of the values and cognitive basis of powerful actors in the organization" (Hambrick & Mason, 1984, p. 193).

Compared to the research which focuses on either the direct relationship between certain TMT attributes and firm performance (Bankunda, 2004; Le & Kroll, 2017; Piaskowska et al., 2021) or the relationship between some TMT attributes and firms' internationalisation (Rivas, 2012; Mohr & Batsakis, 2019), my study seeks to shed light on the influencing mechanism between TMT demographic attributes and firm performance.

Based on the principal logic of upper echelons theory, I contend that TMT attributes (TMT tenure, TMT educational level, TMT international experience and TMT functional diversity) play a fundamental role in determining international enterprises' performance and the effects are mediated by enterprises' multinationality. Relying on the three-step mediated regression approach recommended by Baron and Kenny (1986), I find that the mediating effect of multinationality exists in the relationships between TMT tenure and performance. Specifically, among the four TMT attributes, although for three attributes in my study, which are TMT educational level, TMT international experience and TMT functional diversity, the mediation effects of multinationality are not found in their relationships with CMNE performance, the empirical results show that multinationality partially mediates the link between TMT tenure and CMNE performance.

The empirical results in my study have shown that TMT tenure has a positive effect on CMNE performance and the results regarding H6 indicate that multinational strategy plays a significant role in the relationship between the two. It clearly demonstrates that TMT tenure, as an important factor at the micro level, affects CMNE financial outcomes partially through the impact of Multinationality at the firm level. The mediating effect of multinationality reveals for a CMNE how TMT tenure influences its performance. Reliant upon CMNEs' international strategy, TMTs with longer tenure tend to be conducive to a better firm financial performance.

6.3 Summary of the relationships among the variables in the framework

This study seeks to explore the micro-foundation of MNE performance and its influence mechanism. To the best of my knowledge, it is the first empirical study that combines upper echelons theory and institutional theory to attempt to delineate the whole picture of the mechanism of TMT attributes influencing MNEs' financial performance in the context of internationalised Chinese enterprises. TMT attributes constitute the micro-foundation of

CMNEs' performance, while their relationship is partially mediated by a firm's multinationality which is an outcome of the firm's international strategy. Further, both the state ownership at the firm level and formal institutional distance at the country level negatively affect the relationship between the TMT attributes and multinationality. Figure 6.1 summarises the relationships among the main variables in my framework.

The following sections provide a summary of the principal relationships uncovered in my study on the basis of the previous discussions about the results of individual hypotheses. Section 6.3.1 focuses on illustrating the mechanisms of how TMT attributes affect CMNE performance. Then, Section 6.3.2 summarises some other notable findings achieved under my framework.

6.3.1 How TMT attributes affect CMNE performance

First, regarding the direct effect of four TMT attributes on CMNE performance, I hypothesised that TMT tenure, TMT educational level, TMT international experience and TMT functional diversity would have a positive impact on CMNE performance. The empirical results from 1,125 Chinese listed international manufacturing firms provide partial support for my hypotheses. Based on the argument of upper echelons theory that "Organizational outcomes — both strategies and effectiveness — are viewed as reflections of the values and cognitive bases of powerful actors in the organization" (Hambrick & Mason, 1984, p. 193), the results of my study show that TMT tenure and TMT educational level have significant impacts on CMNE performance. On the one hand, the longer TMT tenure is, the better financial performance the CMNE has. On the other hand, the TMT's educational level negatively affects CMNE performance, which is contrary to my hypothesis but leads to an interesting finding regarding the Chinese context. In the context of Chinese listed enterprises, most top managers might not possess formal tertiary education qualifications, but the relatively low education level does not prevent them from building ability and developing understanding of business management from their practical business experiences. In fact, the lower level of formal education can stimulate them to learn more from other sources. Consequently, empirical analytical results show a negative relationship between TMT educational level and CMNEs' performance.

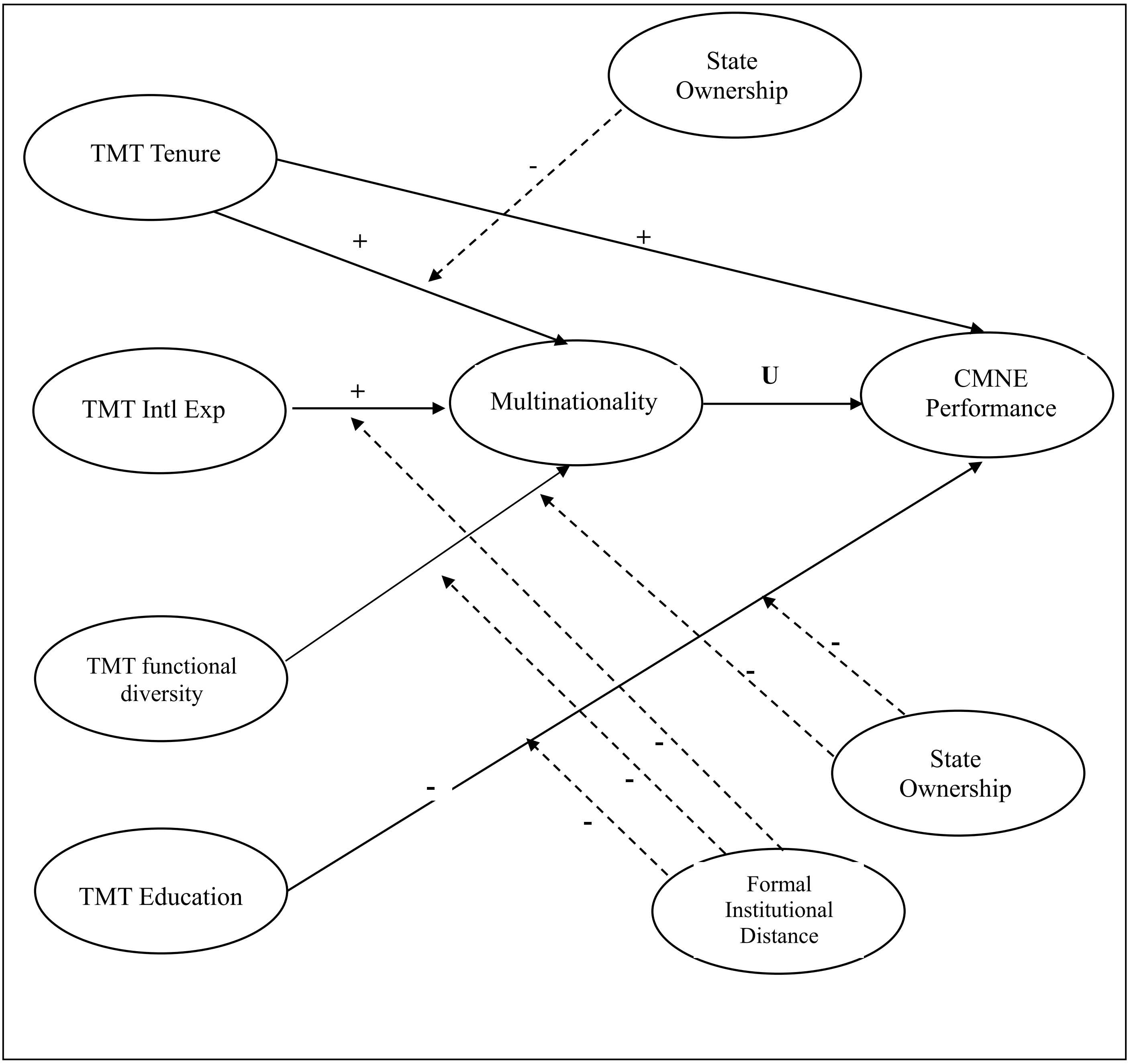

Figure 6.1 Empirically confirmed relationships among the examined constructs in the framework

Next, my study demonstrates that a CMNE's multinationality plays a mediating role between a TMT attribute (that is TMT tenure) and its financial performance. It also provides support for the upper echelons perspective on organisations proposed by Hambrick and Mason (1984) Upper echelons theory asserts the organisation is a reflection of its top managers. My study further specifies that for an international enterprise, the impact on its performance of the TMT is partially through the firm's multinationality. As a firm-level strategy, multinationality mediates the impact of TMT tenure on CMNE performance. TMTs with different lengths of tenure will make different operational decisions related to their multinational level due to their cognition and capability, resources brought by the years they have been working in the firms. Subsequently, the level of multinationality the TMT decides to implement leads to significant impact on the financial performance of its firm. Though research has examined the relationship between TMT attributes (such as tenure or functional background) and its international strategic decisions (Tihanyi et al., 2000; Herrmann & Datta, 2005; Bany-Ariffin et al., 2014; Li, 2018; Pisani et al., 2018), it has seldom been applied in the Chinese context, or extended to the performance outcomes of the international enterprise.

6.3.2 Other achievements of my study

By exploring the influencing mechanisms between TMT attributes and CMNE performance, I have achieved another two major outcomes. One is the influence mechanism of TMT attributes and multinational strategy. The other is the relationship of multinationality and firm performance focusing on the sample of Chinese manufacturing international enterprises. They are presented in the following.

6.3.2.1 Relationship between TMT attributes and multinationality

This study investigates the direct and contingent impact of four work-related TMT attributes on CMNE multinationality, which is a firm-level international strategy. Based on upper echelons theory, I argue that the TMT plays the role of a micro-foundation for a CMNE's performance, and this role is mediated by the firm's multinationality. In my study, the mechanism of TMT attributes' influence on multinationality constitutes an important part of the research framework. The findings contribute to the related literature in several ways. First, consistent with the proposed hypothesis, the findings confirm a positive relationship between TMT tenure and multinationality. They also confirm a positive relationship between TMT international experience and CMNE multinationality. In particular, the positive link between TMT international experience and CMNE multinationality is consistent with previous research (Tihanyi et al., 2000; Herrmann & Datta, 2005; Li, 2018; Pisani et al., 2018), which further extends this conclusion to the Chinese context. It also emphasises the positive role of international experience in firms' internationalisation. For the positive link between TMT tenure and performance, the results provide an alternative insight to prior studies that have argued and found evidence for either the negative or inverted-U-shaped effects of the tenure (many of them are based in an advanced economies context) (Herrmann & Datta, 2005; Agnihotri & Bhattacharya, 2015; Lee et al., 2016). Consequently, this study suggests that tenure reflects capability and know-how in dealing with the challenges and uncertainty during the internationalisation for a Chinese enterprise. It results in the motivation for the firms to expand their international business.

Second, inspired by the implications thereof for existing theoretical and empirical insights on the effect of institutions in emerging markets, I also examined the moderating effects of ownership and formal institutional distance on the relationship between TMT attributes and CMNE multinationality. I took state ownership and formal institutional distance as the internal and external governance environments that the Chinese enterprises face and explored their influence on the link between TMT attributes and multinationality. The empirical results show that the positive effects of TMT tenure on multinationality are lower for firms with higher levels of state ownership and that the positive effects of TMT international experience on multinationality become lower when firms are facing higher institutional distance during internationalisation. Those findings provide support for my assumptions that higher levels of state ownership of the firms and greater formal institutional distance between home and host markets weaken the positive relationships between some TMT attributes and multinationality in the context of Chinese enterprises.

6.3.2.2 Relationship between multinationality and MNE performance

As the other achievement from my research framework, the findings confirmed a U-shaped relationship between multinationality and firm performance (M-P relationship), indicating both negative and positive effects of internationalisation level on CMNE performance. The curvilinear relationship suggests that under a lower level of multinationality, the Chinese firms might suffer decreasing performance, but with the expansion of multinationality, the firms might earn more profits from the international operation. At the early stage, CMNEs suffer more from the costs and liabilities when entering a new foreign market, while with the development, they may accumulate more operational experience about international management, and the advantages of internationalisation, such as marketing expansion and economies of scale, are gradually emerging, which is finally beneficial to a firm's financial returns.

This finding enriches the view in existing research that argues for a linear positive (Hsu et al., 2013; De Jong & Van Houten, 2014) or a negative (Goerzen & Beamish, 2003) or an inverted-U shape (Qian et al., 2008; Singh et al., 2010) of the relationship between multinationality and MNE performance. However, my result does not reject the argument for a S-shaped M-P relationship (Contractor et al., 2003; Lu & Beamish, 2004). According to the finding, it is still hard to say whether the financial performance of CMNEs can keep increasing when they further improve their multinational level over time. It could be due to the limitation of my sample size. After all, the history of Chinese enterprises' internationalisation is shorter than those of the developed countries.

6.3.2.3 Other notable relationships with some of the control variables

In addition, among my control variables, there are some interesting observations. One is that the variable of cultural distance is consistently and significantly positively linked with CMNEs' multinationality (see Tables 5.5, 5.6 and 5.7). This finding conflicts with the argument of the negative association between cultural distance and international diversification of MNEs (Tihanyi, Griffith, & Russell, 2005). According to Johanson and Vahlne (1977) firms tend to initially select culturally similar locations for their foreign direct investments, because a culturally diverse country environment lead to increased risk and uncertainty for an MNE's foreign subsidiaries, which will dramatically increase the difficulties of local operations. It has been theorised that through internationalisation, MNEs aim to transfer their core competencies to new markets, obtain new markets and expand their pool of customers (Dunning, 2001). However, the cultural similarity results in homogeneity of market and customers. Thus, the culturally similar markets are likely to be saturated for many international enterprises including the Chinese ones. In order to realise their international intention, they might prefer to explore culturally different markets. Moreover, the positive linkage between cultural distance and multinationality shows that although the internationalisation of Chinese enterprises started later than that of the enterprises from western countries, they increasingly base their businesses in countries which are different from Chinese culture to gain more market opportunities. Additionally, my results also indicate a TMTs' growing awareness of cultural differences (Tihanyi et al., 2005). As the Chinese economy booms, managers are able to improve their knowledge about foreign markets through various ways, such as media and communication technology, overseas study and experience; thus, they may be more comfortable with and optimistic about entering countries with dissimilar cultures.

Another notable observation in my results is the linkages related to the firm innovation capability variable (*R&D intensity*). The results show that *R&D intensity* has a negative relationship with CMNE performance (*ROA*), but a positive relationship with CMNE international strategy (*Multinationality*). Innovation represents an important dynamic capability (Lawson & Samson, 2001; Teece, 2007). I used it as one of the control variables in my models when examining the effects of TMT attributes. Scholars have extensively investigated the role of innovation capability in firms' internationalisation (e.g. Lawson & Samson, 2001; Zhang et al., 2013; Wang, 2016). The results in my study contrast with those of prior studies that have argued that innovation is a positive driver of MNEs' performance in other contexts (Lawson & Samson, 2001; Azar & Drogendijk, 2014). However, considering its positive relationship with multinationality in my study, it shows that a higher level of CMNE innovation facilitates a firm's multinationality but currently it does not benefit the firm's financial outcomes. Thus, it can be concluded that the innovation of Chinese enterprises is still at a relatively low level; even though a firm's innovation capability positively affects CMNEs by increasing cross-border operations, the higher cost for R&D is not conducive to the improvement of general performance. Indicated by the U-shaped relationship between multinationality and CMNEs' performance, I believe that with the further development of Chinese firms the R&D capability will ultimately demonstrate its benefit to CMNEs in terms of financial performance.

Chapter 7 Conclusions and Implications

7.1 Introduction

The previous chapter provided a detailed discussion on the findings of my research. This chapter is the last chapter of my study. It consists of three main sections with the aim to summarise the findings, contributions, limitations, and future directions. More specifically, Section 7.2 concludes my study by highlighting the theoretical contributions and practical implications from the research findings. Section 7.3 acknowledges the limitations in terms of research methodology and findings, and then provides the recommendations for future research directions.

7.2 Contributions

In this section, I firstly conclude the main findings of my study. Then, the contributions of my study in terms of theoretical contributions and practical implications are presented.

7.2.1 Summary of findings

This study's motivation was to explore the micro-foundations of the performance of multinational enterprises (MNEs) in the context of their internationalisation. Using the perspectives of upper echelons theory and institution theory, it delineated a mechanism influencing the Chinese MNEs' performance . Playing the role of micro-level factors, TMT tenure and TMT educational level have significant impact on CMNEs' financial performance. Moreover, the influence of TMT tenure on CMNE performance is partly mediated by the firm's multinationality.

Pursuing outstanding performance is an ultimate goal of enterprises, especially of MNEs, so investigating the factors influencing MNE performance has drawn great research attention but a consistent conclusion has not been reached (Matysiak & Bausch, 2012; Ng & Sears, 2017). I believe that the inconsistent results in the prior literature are due in part to the fact that existing studies have focused largely on the firm-level factors and ignored the indirect effects on MNEs' performance. Therefore, to address the gap in this research area, in this study I sought to shed light on the issue by introducing the demographic characteristics of top managers as the micro influencing factors and then examined the underlying mechanism of their influence on CMNEs' performance. Upper echelons theory considers the demographic characteristics of TMTs to be indicators of their cognition and capability. In my study, I assessed the role of some work-related attributes, i.e. TMT tenure, TMT educational level, TMT international experience, and TMT functional diversity, on the relationship with CMNEs' performance as well as on these firms' multinationality strategy.

In general, my findings present a more complete picture of the complex relationships between TMT attributes, international strategy, institutional factors, and firm performance. Firstly, this study found that TMT attributes do play a critical role in influencing CMNEs' performance, but it depends on what the attributes are. Among the four work-related attributes, two of them have significant impacts on performance. TMTs with longer tenure in a CMNE are more likely to possess a higher level of management know-how and resources which make them more capable of operating internationally; thus, the results from my study show a positive link between TMT tenure and CMNE performance. Moreover, this study has surprisingly found that TMTs with a higher level of educational degrees result in lower CMNE financial performance. It contributes to the argument that in the developing countries like China with generally low levels of education, a low formal education might stimulate executives' learning aspirations when they face an international business environment, which is beneficial to the performance instead. However, this surprising education level–performance association might occur only in a particular period of time due to specific circumstances in China. Thirdly, with regard to strategic implications, my study demonstrates that CMNE's multinationality plays a mediating role in the mechanism influencing performance. It found that the mediating role exists in the linkage between TMT tenure and CMNE performance. Fourthly, the findings from the present study have also established the boundary conditions for the international decision-making by TMTs. More specifically, for a CMNE with a higher degree of state ownership, the facilitating role of a long-tenured TMT on multinationality will be reduced. Not only that, when facing higher formal country distance, the positive relationship between TMT international experience and multinationality will be weakened as well.

7.2.2 Theoretical contributions

Based on large-scale longitudinal data of CMNEs and drawing from upper echelons theory and institutional theory as the theoretical lenses, the study aimed to investigate the mechanisms through which TMT attributes influence MNE performance by examining the linkages of TMT attributes with multinationality as well as with firm and country-level institutional factors. In response to the call for "more systematic integration of the literature on TMTs into other theoretical perspectives in IB" (Cuypers et al., 2022, p. 497), my study makes the following contributions to the current literature:

1. Enriching the research on MNE performance in the internationalisation context

The findings from this study contribute to the research on the antecedents of firm performance in several significant ways as discussed in the following. First, the study highlights the role of TMT attributes as micro-foundations of Chinese MNEs' performance, and thus enriches the research on TMTs that has focused on IB issues, specifically, the research in which TMT elements are an antecedent of IB outcomes (Cuypers et al., 2022). The findings from this study demonstrate that for CMNEs, TMT demographic characteristics (TMT tenure and TMT educational level), which have a significant impact on CMNEs' financial performance, can be considered as the micro-foundations of their internationalisation strategy and performance outcomes. Second, by following the norms of upper echelons research, this study tried to shed light on the black box of MNE performance with regard to the important underlying processes and causal mechanisms through which an individual's demographic characteristics have an impact on firm's performance. This study extended existing relevant research by conceptualise the indirect relationships among TMT attributes, multinationality and firm performance. Existing research has examined the impact of TMT attributes either on MNEs' international strategic action or on their performance. For example, using a mixed U.S. and European sample, Rivas (2012) finds that TMT functional diversity and TMT tenure have positive effects on a firm's multinational level. Mohr and Batsakis (2019) demonstrate that there is an inverted U-shaped relationship between TMT international experience and a firm's internationalisation speed. Specifically focusing on the role of chief executive officer, Le and Kroll (2017) found that managers' international experience positively affects firm performance. Without considering the context of international operations, Xu, Yun, et al. (2019) found that TMT tenure has a significant positive effect on firm performance. In my study, I attempted to make connections among TMT attributes, multinationality, and performance. By building this connection, it shed light on the whole picture of the mechanism of how the work-related personal attributes of a firm's TMT affect its financial performance. The empirical results from the present study found that multinationality mediated the impact of TMT tenure on CMNE performance but not of the other three attributes. Even so, it still makes the connection among a certain TMT attribute, a firm's international strategy and its financial performance.

2. Contribution to Hambrick and Mason’s (1984) framework

This study contributes to the upper echelons literature in three ways. First, it enriches the empirical research on the linkage between TMT attributes and multinationality. As an important part of Hambrick and Mason’s (1984) framework, they proposed that TMT attributes have a direct impact on firms’ operational strategies. Based on the samples from CMNEs, I empirically found that TMT tenure and TMT international experience positively influence CMNEs’ performance, but there were no significant relationships found between TMT educational level and CMNEs’ performance and between TMT functional diversity and CMNEs’ performance. It enriches such research in the context of Chinese internationalisation.

Second and most importantly, my study empirically analysed the links between TMT attributes, multinationality and CMNE performance based on Hambrick and Mason's (1984) framework. Existing upper echelons research about the impact of TMT attributes on firm outcomes is dominated by studies of either certain TMT attribute(s) and firm strategy or TMT attributes and firm performance. Prior research suggests that impact from TMT attributes on firm performance is by way of the strategic action the firm takes (Tihanyi et al., 2000; Nielsen, 2010), but to the best of my knowledge, there is no research examining the relationships between TMT attributes, firm strategy and performance. To address this shortcoming, this study proposed and empirically examined the assertion that multinationality mediates the impact of a certain TMT attribute (TMT tenure) on CMNEs’ financial performance, although among the four TMT attributes discussed in my study, a mediating effect only exists between TMT tenure and CMNE performance.

In addition, in responding to the call to “think more carefully about who constitutes the TMT” (Cuypers et al., 2022, p. 502), this study provides a clear description of who constitutes the TMTs in my study. This is another contribution to Hambrick and Mason’s (1984) framework. Scholars have identified various constructions of TMTs in their empirical studies (Tushman & Rosenkopf, 1996; Tihanyi et al., 2000; Pitcher & Smith, 2001; Rivas, 2012). Given my research questions and the context of the management practice of Chinese enterprises that significantly differs from the research which for example focuses on the Chief Executive Officer (CEO) (Pitcher & Smith, 2001) or board members (Singh et al., 2010), this study defines the TMT as comprising the people who have substantive decision-making authority and are listed in the annual reports. I believe this structure of the TMT can be used in future research.

3. Revealing the institutionally contingent conditions when TMTs make international decisions

Drawing from institutional theory, this study explores the contingent conditions of the linkage between TMT attributes and a firm's multinationality. Scholars have tried answering the question of how executive managers affect firms' strategic actions (e.g. Rivas, 2012; Baronchelli, Cassia, & Piantoni, 2015). They suggest that the effects of different TMT characteristics on strategic decision-making are likely to be determined by various factors. However, previous research has only identified firm-level factors (such as previous performance or the product features) and some other top managers' personalities (Díaz-Fernández, González-Rodríguez, & Simonetti, 2016; Mohr & Batsakis, 2019; Tang, Nadkarni, et al., 2021) as influential factors. It is undeniable that a firm's strategic decisions, which are made by the TMT, are made in specific environments where the firm operates, but there is no research addressing this (Crossland & Hambrick, 2007). Thus, previous research regarding factors moderating the attributes–multinationality relationship has largely overlooked these factors relating to firms' operating environment. To fill this research gap, Crossland and Hambrick (2007, 2011) examined the role of informal and formal national-level institutions in the constraints of different executives. Furthering their research, by integrating institutional theory into the upper echelons perspective, this study introduced two contextual factors of state ownership and formal institutional distance to the conceptual framework, contributing to the development of institutional theory in organisational research from a focus on the top-down models of institutional effects toward more interactive models of institutional processes (Scott, 2005). These two institutional factors constitute important governance environments either internal or external to the multinational enterprise. Specifically, this study found that a higher proportion of state ownership and larger distance of formal institutions between China and host countries impede the TMT's decision to expand overseas operations. Under these circumstances, the positive effects of some TMT attributes on multinationality are reduced. My empirical analysis based on CMNEs extends current research by demonstrating that firm-level and country-level institutional factors have impacts on TMTs' strategic decisions of multinationality.

4. Finding a U-shaped M-P relationship based on CMNEs

As one part of my research framework, the finding regarding the relationship between multinationality and performance (M-P relationship) contributes to the literature in two aspects. First, a mounting body of research has examined the M-P relationship, but little consensus has been reached. In addition to the positively or negatively linear M-P relationship and the inverted U-shaped M-P relationship demonstrated in previous research (e.g. Goerzen & Beamish, 2003; Singh et al., 2010; De Jong & Van Houten, 2014), my study provides support for another type of relationship between multinationality and MNE performance which is the U-shape. By extending the U-shaped M-P relationship to the sample of Chinese multinational enterprises, this study provides insights into how the financial performance of an MNE in an emerging market can be explained by its multinationality level. Research based on the MNEs from developed countries argues that the multinational strategy helps firms to reach markets that are not as easily accessible within their home country by making full use of their home-based firm-specific advantages (such as the economy of scale) in foreign countries, especially the developing ones (Gomes & Ramaswamy, 1999; Chao & Kumar, 2010; Qian et al., 2010; Singh et al., 2010). Therefore, they believe that an increased level of firm multinationality brings more profits to the MNE. When firm's multinationality reaches a certain threshold, its performance will decline due to increasing costs and the risks of overseas operations. However, less is known about the situation of the MNEs from developing countries. I provide insight into this issue based on samples from the Chinese market. Unlike MNEs from developed economies such as the U.S. and Germany, the history and experience of CMNEs' internationalisation are relatively short. In addition, based on the institutional theory, firms carrying out international activities need to follow the "rules of the game" in host countries (North, 1990). Thus, CMNEs may encounter more difficulties and higher risks when engaging in FDI, incurring more costs while they become familiar with the host countries. By introducing a sample of Chinese international manufacturing enterprises, the findings of this study suggest a U-shaped relationship between multinationality and firm performance, which complements the theoretical practice based on the study of western multinational corporations and deepens the understanding of the international diversification behaviour of emerging market enterprises. Further, findings from this study suggest that the international diversification of Chinese MNEs may have its own path and provide new evidence for the internationalisation theory of Chinese enterprises. Moreover, the results are based on the empirical analysis of a longitudinal dataset of 1,125 CMNEs from 2007 to 2019. The large-scale dataset makes the results more reliable and valuable regarding the theoretical contributions.

To sum up, my study makes distinctive contributions to the current literature in the following four major aspects: (1) It enriches the IB literature by focusing on the antecedents of firm performance in a context of firms' internationalisation; (2) It for the first time provides empirical evidence for the relationships between TMT attributes, strategic activities and performance from the perspective of the upper echelons theory proposed by Hambrick and Mason (1984); (3) It reveals the contingency factors and boundary conditions between TMT attributes and the outcomes of firms' international strategy (multinationality) with regard to the institutional environment both internal and external to the firm; and (4) It enriches the literature about the linkage between multinationality and performance.

7.2.3 Practical implications

Practical applications implied by research are considered a major category of its contribution (Hällgren, 2012). The findings of my study have several implications for managerial practice. As one of the most important emerging economies, China's foreign investment ranks second in the world. Enterprises seek substantial returns when they decide to expand their businesses abroad. Knowing about the micro-level antecedents of MNE performance and their influential mechanisms will be meaningful for international business practice. Thus, this study contributes to the practical field in the following four ways.

1. TMT attributes as the foundation of CMNEs' international performance

How to improve firms' performance is a long-standing and complex topic for top managers, while, as the key decision-maker of the enterprises, the TMT itself constitutes the foundation of the firm's performance. Previous research has investigated the influence of a TMT's different attributes on firm operations and suggested that significant relationships exist between some of the TMT attributes and firm performance (Díaz-Fernández et al., 2014; Chaganti et al., 2016; Wang et al., 2016; Xu, Huang, & Pan, 2019). Compared with the firm whose business operates in a single market, the MNE faces a more complicated environment. It needs to deal with the challenges and risks from both domestic and international markets. Therefore, the influence from TMT attributes on MNE performance seems even more critical and complex. In my study, based on a large quantity of longitudinal data, which covers 56,188 unique top managers' profiles from 1,125 CMNEs during the years 2007 to 2019, I found that TMT tenure and educational level have significant influences on CMNE performance, which means both of these TMT attributes affect Chinese multinational firms' financial performance. For the international enterprise practices, especially in China, my empirical results provide a strategic direction for the firm to pay more attention to its TMT foundation for an excellent performant. To be more specific, when the firm builds its TMT, for the sake of its performance, tenure and educational level of the candidates should be given appropriate emphasis.

2. The composition of a “superior” management team

In light of the findings regarding the role of TMT attributes in MNEs’ financial performance, this study provides practical insights into the composition of TMTs in order for the firm to better explore international opportunities and achieve superior performance. This research, in particular, has highlighted the role of the top team’s tenure and international experience in my framework. Based on the findings of my study, it is noticeable that the tenure of TMT in CMNEs plays an even more critical role in international operations. Among the attributes discussed in my study, it is the one that has direct impacts on both firms’ multinationality and financial performance. For Chinese international enterprises, they can consider their executive candidate pool in a proactive and purposive manner. For example, firms can try to increase the service years of their top managers, such as improvements in talent retention, so as to achieve the purpose of improving enterprise performance. This study also advances our understanding of the internationalisation strategy of Chinese firms. A team associated with longer tenure or richer international experience may lead to a higher level of firm multinationality. Therefore, if the board of the enterprise aims to expand its international business, longer-tenured TMT members or the members who are associated with previous international experience tend to contribute more to this goal.

3. Going global is not a quick fix

The findings from this study provide an important practical implication for enterprises that are extending business abroad: going global will be beneficial to their general financial performance in the long term, but they might suffer a decline before the profits improve. It also reflects that “going abroad” is a long-term strategy of the enterprise which will not bring much economic benefit in the short term. As “latecomers” in the international markets (Clegg et al., 2016; Buckley et al., 2018; Li et al., 2019), Chinese firms incur greater costs first, especially for firms in the manufacturing area. With the increasing multinationality, the operating experience, knowledge and economy of scale gained from different host markets will ultimately cover the costs and bring profits to CMNEs. While firms’ international activities directly result from the TMT's decisions, the findings from my study in turn will be beneficial for executives' decision-making. Once aware of the U-shaped M-P relationship, they can develop more purposive operational strategies, which are in accordance with the development of the firm.

4. Essential factors in the institutional environment

Countries' corporate ownership structures and formal institutional environments have significant implications for CMNEs' international investment policies. Exploring the moderating effects of firms' state ownership and formal institutional distance in the relationship between TMT attributes and multinationality, this study revealed that under the different pressures from either internal or external governance environments, top managers of CMNEs will make different judgments on their firm's international strategic activities. Based on the findings of my study, a higher level of state ownership reduces the positive impacts from some TMT attributes on multinationality, and so does the longer informal institutional distance between the host country and China. To this end, CMNEs can make a better use of the moderating effects of institutional governance to adjust the impacts on the decision-making of their top managers. CMNEs need to be aware that the governance system of state-owned enterprises might not be conducive to TMTs making multinational decisions, even if they are feature longer tenure, higher educational level or diverse functional backgrounds. Likewise, when the formal institutions in the host market are significantly different from those in the domestic market, TMTs may be more reluctant to expand their firm's business to multiple foreign markets.

7.3 Limitations and directions for future research

This study was designed with the purpose of investigating the micro-foundations of MNE performance in an internationalisation context and its influence mechanism. Based on the empirical analysis of a dataset of 7,676 firm-year observations of 1,125 publicly listed CMNEs operating in the manufacturing sector during the period from 2007 to 2019, this study provides insights on several fronts, including: which attributes of TMTs have significant effects on CMNE performance and firm multinationality respectively, the role of multinationality in the attributes–performance relationships, and how institutional factors both internal and external to the firm act as boundary conditions for the attributes–multinationality-performance relationships. The findings of my study advance the related literature by identifying the impacts of specific TMT attributes on a CMNE's performance and its multinationality. The findings also provide practical implications for Chinese international enterprises. At the same time, this study has been constrained by a number of limitations and overcoming these limitations will lead to avenues for future research.

7.3.1 Research limitations

1. An unavoidable limitation due to sample selection

This study is based on the information from listed Chinese companies that have engaged in foreign direct investment during the observation period. My analysis covered a sample of 1,125 CMNEs. However, by the end of 2019, statistics show that more than 27,500 Chinese firms had established subsidiaries abroad (MOFCOM, PRC, 2019). Additionally, the sample for my study was constrained to the industrial sector of manufacturing. Although international business research has focused on manufacturing firms (e.g. Grant, 1987; Chang & Rhee, 2011), other studies have also controlled the effects of different industrial sectors in their research on organisational performance (Carpenter et al., 2001; Lyon & Ferrier, 2002; Kafouros et al., 2012). I have discussed the rationale for my sample selection in Section 4.4, to explain why unlisted CMNEs, as well as CMNEs in other industrial sectors, were excluded from the analysis.

2. Limitations due to information missing on TMT attributes

Four variables of work-related TMT attributes were included in the study as the independent variables, and all of the data for these TMT attributes were collected from the archived databases and the annual reports, public disclosure, and the websites of the listed companies in the sample. This data collection inevitably led to missing information, because some top managers' personal information could not be found in public sources. Moreover, limitations also exist with regard to the variable measurements. For example, I measured TMT international experience as a dummy variable to indicate whether a top manager has international experience. If a top manager has foreign nationality, or has foreign experience of either working or studying abroad, it was concluded that he/she possesses international experience. However, it only measured the existence of the international experience. To be more specific, there could be an issue about considering foreign nationality as international experience. A person's foreign nationality might not be an accurate indicator that he or she has enough overseas experience. He/she may only hold the non-Chinese nationality due to some personal reasons but not have lived abroad. In addition, given that it is not compulsory for listed enterprises to disclose the details about top managers' foreign experience, I could only capture the information according to each manager's resumé if it was accessible. Thus, it is understandable that there could be missing values for this important variable.

3. Limitations associated with research design

This study was designed to examine the influence from TMT attributes on CMNEs' performance. Based on upper echelons theory, I proposed that a firm's multinationality, as an important international strategy, mediates the relationships between four TMT attributes and the CMNE's performance. Specifically, it was hypothesised that the respective impacts of TMT tenure, TMT educational level, TMT international experience and TMT functional diversity on CMNEs' performance are all mediated by multinationality. Multinationality is a critical decision-making issue for an MNE. Internationalisation aims to expand the firm's business (investment) across the borders into different geographic locations. Multinationality, as "the extent to which firms' business activities span across national borders" (Tseng et al., 2007, p. 961), reflects the internationalisation degree that the firm has achieved. A CMNE can take a low-level multinational strategy or a higher level one. In my research framework, I hypothesised that this strategic choice is affected by different TMT attributes.

However, multinationality is only one of the firm strategies, even it is very important, especially for the firm engaging in internationalisation. It has to be acknowledged that TMT attributes can have impacts on performance through the other firm-specific strategies, which are also shown in the framework of Hambrick and Mason (1984), such as acquisition, backward integration, forward integration and financial leverage. Therefore, in the relationship between the four TMT attributes and CMNEs' performance, there might be other factors which can mediate these linkages but are not mentioned in my study. Such missing variables may partly explain why I have not found mediation effects of multinationality on the relationships between the three TMT attributes (TMT educational level, TMT international experience, and TMT functional diversity) and CMNEs' performance. The mediation effect of multinationality was only partially found in the relationship between TMT tenure and CMNEs' performance.

7.3.2 Directions for future research

This study focused on exploration of how TMT attributes act as the micro-foundation to affect CMNEs' performance in an internationalisation context. Taking the perspectives of upper echelons theory and institutional theory, it examined the role of multinationality as one of the key MNE strategies that mediates the relationship between some TMT attributes and firm performance. Addressing the limitations that are specified above can lead to several avenues for future research.

First, considering the issues of the sample coverage in my study, although the size of the longitudinal dataset used in my study is enormous, especially compared to cross-sectional data or other primary data, such as the data from questionnaires, future studies could replicate this investigation with more firms and in a broader industrial context. To enlarge the longitudinal data by covering more companies in a wider range of home countries or industrial sectors in future studies would be helpful to verify or generalise my findings.

Moreover, the role of TMTs can also be examined in other contexts. For example, future research can investigate how TMTs from different countries react when facing institutional influence. The experience or qualities of managers from emerging countries might differ from those from the developed world. Therefore, even when facing the same environmental factors, managers may make very different decisions. In this context, future research could examine the influence from institutional factors on the relationship between TMT attributes and multinationality based on the TMTs located in other country contexts.

Second, given the potential inaccessibility of data from secondary sources for personal attributes, it would be worthwhile for future research to obtain data about TMT attributes through other sources, such as from employing survey or interview techniques. Taking the variable of TMT international experience as an example, scholars can examine in more detail the effect of TMT international experience on an enterprise's international operations by specifying the duration or the type of the experience, such as what kind of international experience the individual has had, how many years he/she lived or worked abroad, and whether the top managers have experience in as the firm's FDI destination country.

Third, this study has examined whether the impacts from TMT attributes on CMNE performance are mediated by a firm's multinationality. However, due to the complexity of MNE operations, this study was unable to include the mediating effects from other firm-specific strategies, resulting a relatively weak explanatory power of multinationality as the mediator. It would be worthwhile for future research to improve the conceptual framework, for example by examining to what extent multinationality could mediate those relationships, or even finding a more significant influential path. Such research could provide a more thorough understanding regarding the mechanisms of TMT attributes, which play roles as the micro-foundation in the process of a firm's internationalisation.

7.4 Concluding remarks

As the last chapter of this study, Chapter 7 presented the research contributions and limitations on the basis of summarising a discussion of the findings. The study stems from these important questions regarding MNEs' performance in association with their international operations: what are the micro-foundations that affect CMNEs' performance in a context of firms' internationalisation and how do they work? With these questions in mind, I started the research. Taking upper echelons theory and institutional theory as the main theoretical basis, I proposed that TMT attributes have significant impacts on CMNEs' performance and that these impacts are mediated by multinationality. Moreover, the relationships between four TMT attributes and multinationality are moderated by the internal and external institutional factors. Generally speaking, the empirical results based on the longitudinal dataset supported my hypotheses.

Providing value to scholars and the world of international business motivated my study. To conclude the research, I presented both the theoretical contributions and practical implications in this chapter. In addition, in the last section of this chapter, I have outlined the limitations existing in my study, mainly in sample selection, variable measurements, and research methodology. Potential directions for future research were also provided to overcome these limitations.

The ultimate purpose of firm operations is to enhance firms' prospects of long-term success and survival, and it is particularly so for the CMNEs which are facing a plethora of challenges caused by different operational environments but with less international experience due to their shorter internationalisation history. Research on the factors that influence the overall performance of MNEs and how they work has attracted extensive interest from scholars (e.g. Carpenter & Sanders, 2004; Fang & Zou, 2009; Abdi & Aulakh, 2018). An exploration of the influence of TMT attributes on MNEs' performance and the role played by the enterprise's internationalisation decisions as well as the institutional factors was an interesting but complex task. While my study might not be comprehensive enough due to various limitations, I strongly believe that this is a topic worthy of making long-term and in-depth efforts.

References

Abdi, M., & Aulakh, P. S. (2012). Do country-level institutional frameworks and interfirm governance arrangements substitute or complement in international business relationships. *Journal of International Business Studies, 43*(5), 477-497. doi:10.1057/jibs.2012.11

Abdi, M., & Aulakh, P. S. (2018). Internationalization and performance: Degree, duration, and scale of operations. *Journal of International Business Studies, 49*(7), 832. doi:10.1057/s41267-018-0146-8

Abell, P., Felin, T., & Foss, N. (2008). Building micro-foundations for the routines, capabilities, and performance links. *Managerial and Decision Economics, 29*(6), 489-502. doi:https://doi.org/10.1002/mde.1413

Agnihotri, A., & Bhattacharya, S. (2015). Determinants of export intensity in emerging markets: An upper echelon perspective. *Journal of World Business, 50*(4), 687-695. doi:https://doi.org/10.1016/j.jwb.2014.11.001

Agnihotri, A., & Bhattacharya, S. (2019). Top management team regional diversity and internationalization. *International Journal of Cross Cultural Management, 19*(3), 333-352. doi:10.1177/1470595819890363

Aguilera, R., Duran, P., Heugens, P. P. M. A. R., Sauerwald, S., Turturea, R., & VanEssen, M. (2021). State ownership, political ideology, and firm performance around the world. *Journal of World Business, 56*(1), 101113. doi:https://doi.org/10.1016/j.jwb.2020.101113

Aguinis, H., & Edwards, J. R. (2014). Methodological Wishes for the Next Decade and How to Make Wishes Come True. *Journal of Management Studies, 51*(1), 143-174. doi:https://doi.org/10.1111/joms.12058

Aguinis, H., Gottfredson, R. K., & Joo, H. (2013). Best-Practice Recommendations for Defining, Identifying, and Handling Outliers. *Organizational Research Methods, 16*(2), 270-301. doi:doi: 10.1177/1094428112470848

Aharoni, Y., Tihanyi, L., & Connelly, B. L. (2011). Managerial decision-making in international business: A forty-five-year retrospective. *Journal of World Business, 46*(2), 135-142. doi:https://doi.org/10.1016/j.jwb.2010.05.001

Allan, G. A., & Skinner, C. J. (1991). *Handbook for research students in the social sciences*: Falmer Press.

Allison, P. (1978). Measures of Inequlity. *American Sociological Review, 43*, 865-880. doi:10.2307/2094626

Amin, M., Jianfeng, W., & Tu, R. (2019). Signaling value of top management team: Evidence from Chinese initial public offerings on US markets. *Chinese Management Studies, 13*(3), 531-549. doi:10.1108/CMS-04-2017-0097

Ang, S. H. (2014). *Research design for business & management*. London: Sage Publications Ltd.

Annavarjula, M., & Mohan, R. (2009). Impact of technological innovation capabilities on the market value of firms. *Journal of Information and Knowledge Management, 8*(3), 241-250. doi:10.1142/S0219649209002361

Añón Higón, D., & Manjón Antolín, M. (2012). Multinationality, foreignness and institutional distance in the relation between R&D and productivity. *Research Policy, 41*(3), 592-601. doi:https://doi.org/10.1016/j.respol.2011.12.007

Autio, E., Sapienza, H. J., & Almeida, J. G. (2000). Effects of age at entry, knowledge intensity, and imitability on international growth. *The Academy of Management Journal, 43*(5), 909-924. doi:10.2307/1556419

Azar, G., & Drogendijk, R. (2014). Psychic distance, innovation, and firm performance. *Management International Review, 54*(5), 581-613. doi:10.1007/s11575-014-0219-2

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*, 101864. doi:https://doi.org/10.1016/j.ibusrev.2021.101864

Bai, T., Du, J., & Solarino, A. M. (2018). Performance of foreign subsidiaries "in" and "from" Asia: A review, synthesis and research agenda. *Asia Pacific Journal of Management, 35*(3), 607-638. doi:10.1007/s10490-017-9552-x

Banalieva, E. R., & Dhanaraj, C. (2013). Home-region orientation ¡n international expansion strategies. *Journal of International Business Studies, 44*(2), 89-116. doi:10.1057/jibs.2012.33

Bankunda, G. (2004). Corporate managers' international orientation and the export performance of firms in Uganda. *Eastern Africa Social Science Research Review, 20*(1), 27-50. doi:10.1353/eas.2004.0001

Bantel, K. A., & Jackson, S. E. (1989). Top management and innovations in banking: Does the composition of the top team make a difference? *Strategic Management Journal, 10*(S1), 107-124. doi:https://doi.org/10.1002/smj.4250100709

Bany-Ariffin, A. N., McGowan Jr, C. B., Tunde, M. B., & Shahnaz, A. S. (2014). Top management characteristics and firm's international diversification activities: Evidence from a developing nation. *Pertanika Journal of Social Sciences & Humanities, 22*(S), 39-54. Retrieved from http://ezproxy.massey.ac.nz/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=hlh&AN=108671080&site=eds-live&scope=site

Barkema, H. G., Geroski, P., & Schwalbach, J. (1997). Managerial compensation, strategy and firm performance: an introduction. *International Journal of Industrial Organization, 15*(4), 413-416. doi:10.1016/S0167-7187(96)01026-0

Barkema, H. G., & Shvyrkov, O. (2007). Does top management team diversity promote or hamper foreign expansion? *Strategic Management Journal, 28*(7), 663-680. doi:https://doi.org/10.1002/smj.604

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99-120. doi:10.1177/014920639101700108

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173-1182. doi:10.1037/0022-

3514.51.6.1173

Baronchelli, G., Cassia, F., & Piantoni, M. (2015). TMT international orientation and firm internationalisation: Evidence from Italy. *International Journal of Management Practice, 8*(4), 296-310. doi:10.1504/IJMP.2015.073477

Barron, J. M., Chulkov, D. V., & Waddell, G. R. (2011). Top management team turnover, CEO succession type, and strategic change. *Journal of Business Research, 64*(8), 904-910. doi:https://doi.org/10.1016/j.jbusres.2010.09.004

Batsakis, G., & Theoharakis, V. (2021). Achieving the paradox of concurrent internationalization speed: Internationalizing rapidly in both breadth and depth. *Management International Review, 61*(4), 429-467. doi:10.1007/s11575-021-00453-y

Bausch, A., & Krist, M. (2007). The effect of context-related moderators on the internationalization-performance relationship: Evidence from meta-analysis. *MIR: Management International Review, 47*(3), 319-347. Retrieved from http://www.jstor.org/stable/40658211

Becker, M. C. (2004). Organizational routines: A review of the literature. *Industrial and Corporate Change, 13*(4), 643-677. doi:10.1093/icc/dth026

Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational research: A qualitative analysis with recommendations. *Organizational Research Methods, 8*(3), 274-289. doi:10.1177/1094428105278021

Berry, H. (2006). Shareholder valuation of foreign investment and expansion. *Strategic Management Journal, 27*(12), 1123-1140. doi:10.1002/smj.561

Berry, H., Guillen, M. F., & Zhou, N. (2010). An institutional approach to cross-national distance. *Journal of International Business Studies, 41*(9), 1460-1480. doi:10.1057/jibs.2010.28

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. doi:10.1057/s41267-018-0182-4

Blau, P. M. (1977). *Inequality and heterogeneity*: Glencoe, IL: Free Press.

Boeker, W. (1997a). Executive migration and strategic change: The effect of top manager movement on product-market entry. *Administrative Science Quarterly, 42*(2), 213-236. doi:10.2307/2393919

Boeker, W. (1997b). Strategic change: The influence of managerial characteristics and organizational growth. *Academy of Management Journal, 40*(1), 152-170. doi:10.2307/257024

Boone, C., Lokshin, B., Guenter, H., & Belderbos, R. (2018). Top management team nationality diversity, corporate entrepreneurship, and innovation in multinational firms. *Strategic Management Journal, 40*(2), 277-302. doi:10.1002/smj.2976

Brouthers, K. D. (2013). Institutional, cultural and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies, 44*(1), 1-13. doi:10.1057/jibs.2012.22

Buchner, A., Espenlaub, S., Khurshed, A., & Mohamed, A. (2018). Cross-border venture capital investments: The impact of foreignness on returns. *Journal of International Business Studies, 49*(5), 575-604. doi:10.1057/s41267-017-0116-6

Buckley, P. J., Clegg, L. J., Cross, A., Liu, X., Voss, H., & Zheng, P. (2007). The determinants of Chinese outward foreign direct investment. *Journal of International Business Studies, 38*(4), 499-518. doi:10.1057/jibs.2008.102

Buckley, P. J., Clegg, L. J., Voss, H., Cross, A. R., Liu, X., & Zheng, P. (2018). A retrospective and agenda for future research on Chinese outward foreign direct investment. *Journal of International Business Studies, 49*(1), 4-23. doi:10.1057/s41267-017-0129-1

Burillo, S. J., & Moreno, J. J. J. (2013). The role of the top management team in the choice of entry modes – theoretical perspective. *Entrepreneurial Business and Economics Review, 1*(2), 51-58. doi:10.15678/EBER.2013.010205

Buyl, T., Boone, C., Hendriks, W., & Matthyssens, P. (2011). Top management team functional diversity and firm performance: The moderating role of CEO characteristics. *Journal of Management Studies, 48*(1), 151-177. doi:10.1111/j.1467-6486.2010.00932.x

Cai, L., Liu, Q., & Yu, X. (2013). Effects of top management team heterogeneous background and behavioural attributes on the performance of new ventures. *Systems Research and Behavioral Science, 30*(3), 354-366. doi:10.1002/sres.2176

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. doi:10.1057/jibs.2011.45

Cannella, A. A., Park, J.-H., & Lee, H.-U. (2008). Top management team functional background diversity and firm performance: Examining the roles of team member colocation and environmental uncertainty. *Academy of Management Journal, 51*(4), 768-784. doi:10.2307/20159538

Capar, N., & Kotabe, M. (2003). The relationship between international diversification and performance in service firms. *Journal of International Business Studies, 34*(4), 345-355. doi:10.1057/ palgrave.jibs.8400036

Carpenter, M. A. (2002). The implications of strategy and social context for the relationship between top management team heterogeneity and firm performance. *Strategic Management Journal, 23*(3), 275-284. doi:10.1002/smj.226

Carpenter, M. A., & Fredrickson, J. W. (2001). Top management teams, global strategic posture, and the moderating role of uncertainty. *Academy of Management Journal, 44*(3), 533-545. doi:10.5465/3069368

Carpenter, M. A., Geletkanycz, M. A., & Sanders, W. G. (2004). Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition. *Journal of Management, 30*(6), 749-778. doi:10.1016/j.jm.2004.06.001

Carpenter, M. A., Pollock, T. G., & Leary, M. M. (2003a). Testing a model of reasoned risk-taking: governance, the experience of principals and agents, and global strategy in high-technology IPO firms. *Strategic Management Journal, 24*(9), 803-820. doi:https://doi.org/10.1002/smj.338

Carpenter, M. A., Pollock, T. G., & Leary, M. M. (2003b). Testing a model of reasoned risk-taking: Governance, the experience of principals and agents, and global strategy in high-technology IPOs firms. *Strategic Management Journal, 24*(9), 803-820. doi:10.1002/smj.338

Carpenter, M. A., & Sanders, W. G. (2004). The effects of top management team pay and firm internationalization on MNC performance. *Journal of Management, 30*(4), 509-528. doi:10.1016/j.jm.2004.02.001

Carpenter, M. A., Sanders, W. G., & Gregersen, H. B. (2001). Bundling human capital with organizational context: The impact of international assignment experience on multinational firm performance and CEO pay. *Academy of Management Journal, 44*(3), 493-511. doi:10.5465/3069366

Carroll, G. R., & Harrison, J. R. (1998). Organizational Demography and Culture: Insights from a Formal Model and Simulation. *Administrative Science Quarterly, 43*(3), 637-667. doi:10.2307/2393678

Celo, S., & Chacar, A. (2015). International coherence and MNE performance. *Journal of International Business Studies, 46*, 620-628. doi:10.1057/jibs.2015.4

Certo, S. T., Lester, R. H., Dalton, C. M., & Dalton, D. R. (2006). Top management teams, strategy and financial performance: A meta-analytic examination. *Journal of Management Studies, 43*(4), 813-839. doi:10.1111/j.1467-6486.2006.00612.x

Chaganti, R. S., Zimmerman, M. A., Kumaraswamy, A., Maggitti, P., & Arkles, J. B. (2016). TMT characteristics, Time-To-IPO and firm performance. *Journal of Management & Public Policy, 7*(2), 37-56.

Chang, S.-J., & Rhee, J. H. (2011). Rapid FDI expansion and firm performance. *Journal of International Business Studies, 42*(8), 979-994. doi:10.1057/jibs.2011.30

Chao, M. C.-H., & Kumar, V. (2010). The impact of institutional distance on the international diversity-performance relationship. *Journal of World Business, 45*(1), 93-103. doi:10.1016/j.jwb.2009.04.005

Chen, V. Z., Li, Y., & Hambright, S. (2016). Regulatory institutions and Chinese outward FDI: An empirical review. *Multinational Business Review, 24*(4), 302-333. doi:10.1108/MBR-09-2015-0044

Chen, V. Z., Musacchio, A., & Li, S. (2018). A Principals-Principals Perspective of Hybrid Leviathans: Cross-Border Acquisitions by State-Owned MNEs. *Journal of Management, 45*(7), 2751-2778. doi:10.1177/0149206318764293

Cheng, L. T. W., Chan, R. Y. K., & Leung, T. Y. (2010). Management demography and corporate performance: Evidence from China. *International Business Review, 19*(3), 261-275. doi:https://doi.org/10.1016/j.ibusrev.2009.12.007

Child, J., & Rodrigues, S. B. (2005). The internationalization of Chinese firms: A case for theoretical extension? *Management & Organization Review, 1*(3), 381-410. doi:10.1111/j.1740-8784.2005.0020a.x

Chittoor, R., Aulakh, P. S., & Ray, S. (2015). What drives overseas acquisitions by indian firms? A behavioral risk-taking perspective. *Management International Review, 55*(2), 255-275. doi:10.1007/s11575-015-0238-7

Chowdhury, S. K., & Endres, M. L. (2021). The influence of regional economy- and industry-level environmental munificence on young firm growth. *Journal of Business Research,* *134*, 29-36. doi:https://doi.org/10.1016/j.jbusres.2021.05.017

Clark, D. R., Li, D., & Shepherd, D. A. (2018). Country familiarity in the initial stage of foreign market selection. *Journal of International Business Studies, 49*(4), 442-472. doi:10.1057/s41267-017-0099-3

Clegg, J., Lin, H. M., Voss, H., Yen, I. F., & Shih, Y. T. (2016). The OFDI patterns and firm performance of Chinese firms: The moderating effects of multinationality strategy and external factors. *International Business Review, 25*, 971-985. doi:10.1016/j.ibusrev.2016.01.010

Coase, R. H. (1937). The Nature of the Firm. *Economica, 4*(16), 386-405. doi:10.1111/j.1468-0335.1937.tb00002.x

Collins, J. M. (1990). A market performance comparison of US firms active in domestic, developed and developing countries. *Journal of International Business Studies, 21*(2), 271-287. doi:10.1057/palgrave.jibs.8490335

Contractor, F. J., Kundu, S. K., & Hsu, C.-C. (2003). A three-stage theory of international expansion: The link between multinationality and performance in the service sector. *Journal of International Business Studies, 34*(1), 5-18. doi:10.1057/palgrave.jibs.8400003

Cook, R. D., & Weisberg, S. (1982). Criticism and influence analysis in regression. *Sociological Methodology, 13*, 313-361. doi:10.2307/270724

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

Crossland, C., & Hambrick, D. C. (2007). How national systems differ in their constraints on corporate executives: A study of CEO effects in three countries. *Strategic Management Journal, 28*(8), 767-789. doi:10.1002/smj.610

Crossland, C., & Hambrick, D. C. (2011). Differences in managerial discretion across countries: how nation-level institutions affect the degree to which CEOs matter. *Strategic Management Journal, 32*(8), 797-819. doi:10.1002/smj.913

Cuervo-Cazurra, A., Inkpen, A., Musacchio, A., & Ramaswamy, K. (2014). Governments as owners: State-owned multinational companies. *Journal of International Business Studies, 45*(8), 919-942. doi:10.1057/jibs.2014.43

Cui, L. (2016). The primacy of institutional explanation of Chinese outward FDI: Is it understated or overstated? *Management and Organization Review, 12*(3), 457-467. doi:10.1017/mor.2016.22

Cui, L., & Jiang, F. (2010). Behind ownership decision of Chinese outward FDI: Resources and institutions. *Asia Pacific Journal of Management, 27*(4), 751-774. doi:10.1007/s10490-009-9136-5

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. doi:10.1057/jibs.2012.1

Cui, L., Li, Y., Meyer, K. E., & Li, Z. (2015). Leadership Experience Meets Ownership Structure: Returnee Managers and Internationalization of Emerging Economy Firms.

Management International Review, 55(3), 355-387. doi:10.1007/s11575-014-0221-8

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. doi:10.1016/j.jwb.2013.12.003

Cuypers, I. R. P., Patel, C., Ertug, G., Li, J., & Cuypers, Y. (2022). Top management teams in international business research: A review and suggestions for future research. *Journal of International Business Studies, 53*(3), 481 - 515. doi:10.1057/s41267-021-00456-9

Daily, C. M., Certo, S. T., & Dalton, D. R. (2000). International experience in the executive suite: The path to prosperity? *Strategic Management Journal, 21*(4), 515-523. doi:10.1002/(SICI)1097-0266(200004)21:4<515::AID-SMJ92>3.0.CO;2-1

Dastidar, P. (2009). International corporate diversification and performance: Does firm self-selection matter? *Journal of International Business Studies, 40*(1), 71-85. doi:10.1057/palgrave.jibs.2008.57

De Jong, G., & Van Houten, J. (2014). The impact of MNE cultural diversity on the internationalization-performance relationship: theory and evidence from European multinational enterprises. *International Business Review, 23*(1), 313-326. doi:10.1016/j.ibusrev.2013.05.005

Demirbag, M., Tatoglu, E., & Glaister, K. W. (2007). Factors influencing perceptions of performance: The case of western FDI in an emerging market. *International Business Review, 16*(3), 310-336. doi:10.1016/j.ibusrev.2007.02.002

DePoy, E., & Gitlin, L. N. (2011). *Introduction to Research: Understanding and Applying*

Multiple Strategies (4 ed.): Mosby, Inc. .

Díaz-Fernández, M. C., González-Rodríguez, M. R., & Pawlak, M. (2014). Top management demographic characteristics and company performance. *Industrial Management & Data Systems, 114*(3), 365-386. doi:10.1108/IMDS-04-2013-0210

Díaz-Fernández, M. C., González-Rodríguez, M. R., & Simonetti, B. (2015). Top management team's intellectual capital and firm performance. *European Management Journal, 33*(5), 322-331. doi:https://doi.org/10.1016/j.emj.2015.03.004

Díaz-Fernández, M. C., González-Rodríguez, M. R., & Simonetti, B. (2016). The role played by job and non-job-related TMT diversity traits on firm performance and strategic change. *Management Decision, 54*(5), 1110-1139. doi:10.1108/MD-10-2015-0464

DiMaggio, P. J., & Powell, W. W. (2000) The iron cage revisited institutional isomorphism and collective rationality in organizational fields. In*: Vol. 17. Advances in Strategic Management* (pp. 143-166).

Dorozynska, A., & Dorozynski, T. (2015). Human capital and FDI in central and eastern europe. *Managing Global Transitions, 13*(2), 151-170.

Dunning, J. H. (1981). *International production and the multinational enterprise*. London ; Boston: Allen & Unwin.

Dunning, J. H. (1993). *Multinational enterprises and the global economy*. Wokingham: Addison-Wesley.

Dunning, J. H. (2001). The eclectic (OLI) paradigm of international production: Past, present and future. *International Journal of the Economics of Business, 8*(2), 173-190. doi:10.1080/13571510110051441

Dunning, J. H. (2006). Towards a new paradigm of development: Implications for the determinants of international business activity. *Transnational Corporations, 15*(1), 173-227. Retrieved from https://www.scopus.com/inward/record.uri?eid=2-s2.0-32944465527&partnerID=40&md5=bde7fed5f1dfd43415838bb95a3d9631

Durbin, J. (1954). Errors in variables. *Review of the International Statistical Institute, 22*(1/3), 23-32. doi:https://doi.org/10.2307/1401917

Eberhard, M., & Craig, J. (2013). The evolving role of organisational and personal networks in international market venturing. *Journal of World Business, 48*(3), 385-397. doi:https://doi.org/10.1016/j.jwb.2012.07.022

Eden, L., & Miller, S. R. (2004) Distance matters: Liability of foreignness, institutional distance and ownership strategy. In*: Vol. 16. Advances in International Management* (pp. 187-221).

Elia, S., Greve, P., Vallone, T., & Castellani, D. (2021). The micro-foundations of industrial diversification through foreign acquisitions: The multifaceted role of CEO experience. *Long Range Planning*. doi:10.1016/j.lrp.2021.102104

Ener, H. (2019). Do prior experiences of top executives enable or hinder product market entry? *Journal of Management Studies, 56*(7), 1345-1376. doi:10.1111/joms.12401

Estrin, S., Baghdasaryan, D., & Meyer, K. E. (2009). The impact of institutional and human resource distance on international entry strategies. *Journal of Management Studies, 46*(7), 1171-1196. doi:10.1111/j.1467-6486.2009.00838.x

Evert, R. E., Payne, G. T., Moore, C. B., & McLeod, M. S. (2018). Top management team characteristics and organizational virtue orientation: An empirical examination of IPO firms. *Business Ethics Quarterly, 28*(4), 427-461. doi:10.1017/beq.2018.3

Fang, E., & Zou, S. (2009). Antecedents and consequences of marketing dynamic capabilities in international joint ventures. *Journal of International Business Studies, 40*, 742-761. doi:10.1057/jibs.2008.96

Felin, T., & Foss, N. (2006). Individuals and Organizations: Thoughts on a Micro-Foundations Project for Strategic Management and Organizational Analysis. In D. J. Ketchen & D. D. Bergh (Eds.), *Research Methodology in Strategy and Management* (Vol. 3, pp. 253-288): Emerald Group Publishing Limited.

Felin, T., Foss, N. J., & Ployhart, R. E. (2015). The Microfoundations Movement in Strategy and Organization Theory. *Academy of Management Annals, 9*(1), 575-632. doi:10.5465/19416520.2015.1007651

Feng, D., Chen, Q., Song, M., & Cui, L. (2019). Relationship between the degree of internationalization and performance in manufacturing enterprises of the Yangtze river delta region. *Emerging Markets Finance and Trade, 55*(7), 1455-1471. doi:10.1080/1540496x.2018.1547190

Feng, W.-c., Kandlur, D., Saha, D., & Shin, K. (1999). BLUE: A new class of active queue management algorithms. *Computer Science Technical Report*, 1-27.

Fernhaber, S. A., Mcdougall-Covin, P. P., & Shepherd, D. A. (2009). International entrepreneurship: leveraging internal and external knowledge sources. *Strategic Entrepreneurship Journal, 3*(4), 297-320. doi:10.1002/sej.76

Filatotchev, I., & Piesse, J. (2009). R&D, internationalization and growth of newly listed firms: European evidence. *Journal of International Business Studies, 40*(8), 1260-1276. doi:10.1057/jibs.2009.18

Finkelstein, S. (1992). Power in top management teams: dimensions, measurement, and validation. *Academy of Management journal. Academy of Management, 35*(3), 505-538. doi:10.2307/256485

Finkelstein, S., & Hambrick, D. C. (1990). Top-management-team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly, 35*(3), 484-503. doi:10.2307/2393314

Foo, M.-D., Sin, H.-P., & Yiong, L.-P. (2006). Effects of team inputs and intrateam processes on perceptions of team viability and member satisfaction in nascent ventures. *Strategic Management Journal, 27*(4), 389-399. doi:10.1002/smj.514

Foss, N. J., & Pedersen, T. (2019). Microfoundations in international management research: The case of knowledge sharing in multinational corporations. *Journal of International Business Studies, 50*(9), 1594-1621. doi:10.1057/s41267-019-00270-4

Fraser, S., & Greene, F. J. (2006). The effects of experience on entrepreneurial optimism and uncertainty. *Economica, 73*(290), 169-192. doi:10.111 /j.1468-0335.2006.00488.x

Freedman, D. A. (2009). *Statistical models: Theory and practice*: Cambridge University Press.

Gaur, A. S., Delios, A., & Singh, K. (2007). Institutional environments, staffing strategies, and subsidiary performance. *Journal of Management, 33*(4), 611-636. doi:10.1177/0149206307302551

Gaur, A. S., Pattnaik, C., Singh, D., & Lee, J. Y. (2019). Internalization advantage and subsidiary performance: The role of business group affiliation and host country characteristics. *Journal of International Business Studies, 50*(8), 1253–1282. doi:10.1057/s41267-019-00236-6

Gelo, O., Diana, B., & Benetka, G. (2008). Quantitative and qualitative research: beyond the debate. *Integrative Psychological and Behavioral Science*(3), 266-290. doi:10.1007/s12124-008-9078-3

Georgakakis, D., Greve, P., & Ruigrok, W. (2017). Top management team faultlines and firm performance: Examining the CEO-TMT interface. *The Leadership Quarterly, 28*(6), 741-758. doi:10.1016/j.leaqua.2017.03.004

Geringer, J. M., Beamish, P. W., & daCosta, R. C. (1989). Diversification strategy and internationalization: Implications for MNE performance. *Strategic Management Journal, 10*(2), 109-119. doi:10.1002/smj.4250100202

Glaum, M., & Oesterle, M.-J. (2007). 40 years of research on internationalization and firm performance: more questions than answers? *Management International Review, 47*(3), 307-317. doi:10.1007/s11575-007-0018-0

Goerzen, A. (2007). Alliance networks and firm performance: The impact of repeated partnerships. *Strategic Management Journal, 28*(5), 487-509. doi:10.1002/smj.588

Goerzen, A., & Beamish, P. W. (2003). Geographic scope and multinational enterprise performance. *Strategic Management Journal, 24*(13), 1289-1306. doi:10.1002/smj.357

Goerzen, A., & Beamish, P. W. (2005). The effect of alliance network diversity on multinational enterprise performance. *Strategic Management Journal, 26*(4), 333-354. doi:10.1002/smj.447

Gomes, L., & Ramaswamy, K. (1999). An empirical examination of the form of the relationship between multinationality and performance. *Journal of International Business Studies, 30*(1), 173-187. doi:10.1057/palgrave.jibs.8490065

Gordon, S. S., Stewart Jr, W. H., Sweo, R., & Luker, W. A. (2000). Convergence versus strategic reorientation: The antecedents of fast-paced organizational change. *Journal of Management, 26*(5), 911-945. doi:10.1177/014920630002600508

Graham, J. W. (2012). *Missing data: Analysis and design*.

Grant, R. M. (1987). Multinationality and Performance among British Manufacturing Companies. *Journal of International Business Studies, 18*(3), 79-89. doi:10.1057/palgrave.jibs.8490413

Greve, P., Biemann, T., & Ruigrok, W. (2015). Foreign executive appointments: A multilevel examination. *Journal of World Business, 50*(4), 674-686. doi:10.1016/j.jwb.2014.10.012

Greve, P., Nielsen, S., & Ruigrok, W. (2009). Transcending borders with international top management teams: A study of European financial multinational corporations. *European Management Journal, 27*(3), 213-224. doi:https://doi.org/10.1016/j.emj.2008.10.001

Groves, T., Hong, Y., McMillan, J., & Naughton, B. (1994). Autonomy and Incentives in Chinese State Enterprises. *The Quarterly Journal of Economics, 109*(1), 183-209. doi:10.2307/2118432

Gu, Q., & Lu, J. (2011). Effects of inward investment on outward investment: The venture capital industry worldwide 1985–2007. *Journal of International Business Studies, 42*, 263-284. doi:10.1057/jibs.2010.51

Gu, Q., & Lu, X. (2014). Unraveling the mechanisms of reputation and alliance formation: A study of venture capital syndication in China. *Strategic Management Journal, 35*. doi:10.1002/smj.2117

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. doi:10.1057/jibs.2009.47

Guo, G. (2017). Demystifying variance in performance: A longitudinal multilevel perspective. *Strategic Management Journal, 38*(6), 1327-1342. doi:https://doi.org/10.1002/smj.2555

Gupta, A. K., & Govindarajan, V. (2002). Cultivating a global mindset. *Academy of Management Executive, 16*(1), 116-126. doi:10.5465/ame.2002.6640211

Gupta, A. K., & Gupta, N. (2019). Innovation and culture as a dynamic capability for firm performance: A study from emerging markets. *Global Journal of Flexible Systems Management, 20*(4), 323-336. doi:10.1007/s40171-019-00218-5

Haans, R. F. J., Pieters, C., & He, Z.-L. (2016). Thinking about U: Theorizing and testing U- and inverted U-shaped relationships in strategy research. *Strategic Management Journal, 37*(7), 1177-1195. doi:10.1002/smj.2399

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2011). *Multivariate Data Analysis, Seventh Edition*: Pearson Education Asia Limited and China Machine Press.

Haleblian, J., & Finkelstein, S. (1993). Top management team size, ceo dominance, and firm performance: The moderating roles of environmental turbulence and discretion. *The Academy of Management Journal, 36*(4), 844-863. doi:10.2307/256761

Hällgren, M. (2012). The construction of research questions in project management. *International Journal of Project Management, 30*(7), 804-816. doi:https://doi.org/10.1016/j.ijproman.2012.01.005

Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of Management Review, 32*(2), 334-343. doi:10.5465/AMR.2007.24345254

Hambrick, D. C., Cho, T. S., & Chen, M.-J. (1996). The influence of top management team heterogeneity on firms' competitive moves. *Administrative Science Quarterly, 41*(4), 659-684. doi:10.2307/2393871

Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review, 9*(2), 193-206. doi:10.5465/AMR.1984.4277628

Harrison, D. A., & Klein, K. J. (2007). What's the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of Management Review, 32*(4), 1199-1228. doi:10.5465/AMR.2007.26586096

Harrison, D. A., Price, K. H., & Bell, M. P. (1998). Beyond relational demography: Time and the effects of surface- and deep-level diversity on work group cohesion. *Academy of Management Journal, 41*(1), 96-107. doi:10.2307/256901

Harrison, D. A., Price, K. H., Gavin, J. H., & Florey, A. T. (2002). Time, Teams, and Task Performance: Changing Effects of Surface- and Deep-Level Diversity on Group Functioning. *Academy of Management Journal, 45*(5), 1029-1045. doi:10.5465/3069328

Hausman, J. A. (1978). Specification tests in Econometrics. *Econometrica, 46*(6), 1251–1271. doi:https://doi.org/10.2307/1913827

Hejazi, W., & Santor, E. (2010). Foreign asset risk exposure, DOI, and performance: An analysis of canadian banks. *Journal of International Business Studies, 41*(5), 845-860. doi:10.1057/jibs.2009.86

Hennart, J.-F., Sheng, H. H., & Carrera, J. M. (2017). Openness, international champions, and the internationalization of Multilatinas. *Journal of World Business, 52*(4), 518-532. doi:https://doi.org/10.1016/j.jwb.2016.08.005

Herrmann, P., & Datta, D. K. (2005). Relationships between top management team characteristics and international diversification: An empirical investigation. *British Journal of Management, 16*(1), 69-78. doi:10.1111/j.1467-8551.2005.00429.x

Herrmann, P., & Datta, D. K. (2006). CEO Experiences: Effects on the choice of FDI entry mode. *Journal of Management Studies, 43*(4), 755-778. doi:10.1111/j.1467-

6486.2006.00610.x

Hitt, M. A., Bierman, L., Uhlenbruck, K., & Shimizu, K. (2006). The importance of resources in the internationalization of professional service firms: The good, the bad, and the ugly. *Academy of Management Journal, 49*(6), 1137-1157. doi:10.2307/20159824

Hitt, M. A., Hoskisson, R. E., Ireland, R. D., & Harrison, J. S. (1991). The effects of acquisitions on R&D inputs and outputs. . *Academy of Management Journal, 34*, 693-706.

Hitt, M. A., Hoskisson, R. E., & Kim, H. (1997). International diversification: Effects on innovation and firm performance in product-diversified firms. *Academy of Management Journal, 40*(4), 767-798. Retrieved from http://www.jstor.org/stable/256948 .

Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2007). *Strategic management: Competitiveness and globalization* (7 Ed.). OH: South-Western.: Mason.

Hitt, M. A., Lee, H.-u., & Yucel, E. (2002). The importance of social capital to the management of multinational enterprises: Relational networks among Asian and western firms. *Asia Pacific Journal of Management, 19*(2-3), 353-372. doi:10.1023/a:1016247920461

Hitt, M. A., Tihanyi, L., Miller, T., & Connelly, B. (2006). International diversification: Antecedents, outcomes, and moderators. *Journal of Management, 32*(6), 831-867. doi:10.1177/0149206306293575

Hofstede, G. (1980). *Culture's consequences: International differ ences in work-related values*. CA: Sage.: Beverly Hills.

Hofstede, G. (2001). Culture's recent consequences: Using dimension scores in theory and research. *International Journal of Cross Cultural Management, 1*, 11-17. doi:10.1177/147059580111002

Hofstede, G. (2010). The GLOBE debate: Back to relevance. *Journal of International Business Studies, 41*(8), 1339-1346. doi:10.1057/jibs.2010.31

Homberg, F., & Bui, H. T. M. (2013). Top Management Team Diversity:A Systematic Review. *Group & Organization Management, 38*(4), 455-479. doi:10.1177/1059601113493925

Horwitz, S. K., & Horwitz, I. B. (2007). The Effects of Team Diversity on Team Outcomes: A Meta-Analytic Review of Team Demography. *Journal of Management, 33*(6), 987-1015. doi:10.1177/0149206307308587

House, R. J. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*: Thousand Oaks: Sage.

Hsu, W.-T., Chen, H.-L., & Cheng, C.-Y. (2013). Internationalization and firm performance of SMEs: The moderating effects of CEO attributes. *Journal of World Business, 48*(1), 1-12. doi:10.1016/j.jwb.2012.06.001

Huang, Y., Xie, E., Li, Y., & Reddy, K. S. (2017). Does state ownership facilitate outward FDI of Chinese SOEs? Institutional development, market competition, and the logic of interdependence between governments and SOEs. *International Business Review, 26*(1), 176-188. doi:https://doi.org/10.1016/j.ibusrev.2016.06.005

Hunter, J. E. (1986). Cognitive ability, cognitive aptitudes, job knowledge, and job performance. *Journal of Vocational Behavior, 29*(3), 340-362. doi:10.1016/0001-

8791(86)90013-8

Hutzschenreuter, T., & Horstkotte, J. (2013). Performance effects of international expansion processes: The moderating role of top management team experiences. *International Business Review, 22*(1), 259-277. doi:10.1016/j.ibusrev.2012.04.006

Hutzschenreuter, T., Pedersen, T., & Volberda, H. W. (2007). The role of path dependency and managerial intentionality: A perspective on international business research. *Journal of International Business Studies, 38*(7), 1055-1068. doi:10.1057/palgrave.jibs.8400326

Hutzschenreuter, T., & Voll, J. C. (2008). Performance effects of "added cultural distance" in the path of international expansion: The case of German multinational enterprises. *Journal of International Business Studies, 39*(1), 53-70. doi:10.1057/palgrave.jibs.8400312

Hymer, S. H. (1976). The international operations of national firms: A study of foreign direct investment. In: Cambridge, MA: MIT Press.

Ioulianou, S. P., Leiblein, M. J., & Trigeorgis, L. (2020). Multinationality, portfolio diversification, and asymmetric MNE performance: The moderating role of real options awareness. *Journal of International Business Studies*. doi:10.1057/s41267-020-00357-3

Jackson, S. E., Joshi, A., & Erhardt, N. L. (2003). Recent Research on Team and Organizational Diversity: SWOT Analysis and Implications. *Journal of Management, 29*(6), 801-830. doi:https://doi.org/10.1016/S0149-2063(03)00080-1

Jaw, Y.-L., & Lin, W.-T. (2009). Corporate elite characteristics and firm's internationalization: CEO-level and TMT-level roles. *The International Journal of Human Resource Management, 20*(1), 220-233. doi:10.1080/09585190802528797

Jiang, Y., Peng, M. W., Yang, X., & Mutlu, C. C. (2015). Privatization, governance, and survival: MNE investments in private participation projects in emerging economies. *Journal of World Business, 50*(2), 294-301. doi:https://doi.org/10.1016/j.jwb.2014.10.006

Johanson, J., & Vahlne, J.-E. (1977). The internationalization process of the firm—a model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies, 8*(1), 23-32.

Johnston, J. (1972). *Econometric methods*. New York: McGraw-Hill.

Kaczmarek, S., & Ruigrok, W. (2013). In at the Deep End of Firm Internationalization: Nationality Diversity on Top Management Teams Matters. *Management International Review, 53*(4), 513-534. doi:10.1007/s11575-012-0159-7

Kafouros, M. I., Buckley, P. J., & Clegg, L. J. (2012). The effects of global knowledge reservoirs on the productivity of multinational enterprise: The role of international depth and breadth. *Research Policy, 41*, 848-861. doi:10.1016/j.respol.2012.02.007

Kalasin, K., Cuervo-Cazurra, A., & Ramamurti, R. (2020). State ownership and international expansion: The S-curve relationship. *Global Strategy Journal, 10*(2), 386-418. doi:10.1002/gsj.1339

Kang, L., Peng, F., Zhu, Y., & Pan, A. (2018). Harmony in diversity: Can the One Belt One Road initiative promote China's outward foreign direct investment? *Sustainability*(9), 3264. doi:10.3390/su10093264

Kang, Y. (2018). Regulatory institutions, natural resource endowment and location choice of emerging-market FDI: A dynamic panel data analysis. *Journal of Multinational Financial Management, 45*, 1-14. doi:10.1016/j.mulfin.2018.04.003

Kang, Y., & He, X. (2018). Institutional forces and environmental management strategy: Moderating effects of environmental orientation and innovation capability. *Management and Organization Review, 14*, 577-605. doi:10.1017/mor.2017.56

Kang, Y., & Jiang, F. (2012). FDI location choice of Chinese multinationals in East and Southeast Asia: Traditional economic factors and institutional perspective. *Journal of World Business, 47*(1), 45-53. doi:10.1016/j.jwb.2010.10.019

Kang, Y., & Liu, W. (2007). Internationalisation patterns of Chinese firms: Entry mode, location, and government influence. *Journal of International Business Strategy, 11*(6), 439-441. doi:10.1016/0011-2275(71)90267-0

Karolyi, G. A., & Liao, R. C. (2017). State capitalism's global reach: Evidence from foreign acquisitions by state-owned companies. *Journal of Corporate Finance, 42*, 367-391. doi:https://doi.org/10.1016/j.jcorpfin.2016.02.007

Katz, R. (1982). The effects of group longevity on project communication and performance. *Administrative Science Quarterly, 27*(1), 81-104.

Kaufmann, D., Kraay, A., & Mastruzzi, M. (2006). The worldwide governance indicators project: Answering the critics. *World Bank Policy Research Working Paper No. 4149*, 34.

Keck, S. L. (1997). Top Management Team Structure: Differential Effects by Environmental Context. *Organization Science, 8*(2), 143-156. Retrieved from http://www.jstor.org/stable/2635307

Kedia, B. L., & Bilgili, T. V. (2014). *Top management team composition and the choice of foreign market location and entry mode*. Paper presented at the Cambridge Conference Business & Economics, Cambridge,UK.

Kennedy, P. (1979). *A guide to econometrics*. Cambridge, MA: MIT Press.

Kim, E. H., Morse, A., & Zingales, L. (2006). What has mattered to Economics since 1970. *Journal of Economic Perspectives, 20*(4), 189-202. doi:https://doi.org/10.1257/jep.20.4.189

Kim, J., & Park, J. (2013). Foreign direct investment and country-specific human capital. *Economic Inquiry, 51*(1), 198-210. doi:10.1111/j.1465-7295.2012.00478.x

Kimberly, J. R., & Evanisko, M. J. (1981). Organizational innovation: the influence of individual, organizational, and contextual factors on hospital adoption of technological and administrative innovations. *Academy of Management journal. Academy of Management, 24*(4), 689-713. doi:10.2307/256170

Kirca, A. H., Hult, G. T. M., Deligonul, S., Perryy, M. Z., & Cavusgil, S. T. (2010). A Multilevel Examination of the Drivers of Firm Multinationality: A Meta-Analysis. *Journal of Management, 38*(2), 502-530. doi:10.1177/0149206310369177

Kirca, A. H., Hult, G. T. M., Roth, K., Cavusgil, S. T., Perryy, M. Z., Akdeniz, M. B., . . . White, R. C. (2011). Firm-specific assets, multinationality, and financial performance: A meta-analytic review and theoretical integration. *Academy of Management Journal, 54*(1), 47-72. doi:10.5465/amj.2011.59215090

Kirkman, B. L., Lowe, K. B., & Gibson, C. B. (2006). A quarter century of Culture's Consequences: a review of empirical research incorporating Hofstede's cultural values framework. *Journal of International Business Studies, 37*(3), 285-320. doi:10.1057/palgrave.jibs.8400202

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. doi:10.1057/palgrave.jibs.8490394

Kor, Y. Y. (2006). Direct and interaction effects of top management team and board compositions on R&D investment strategy. *Strategic Management Journal, 27*(11), 1081-1099. doi:10.1002/smj.554

Kor, Y. Y., & Mahoney, J. T. (2005). How dynamics, management, and governance of resource deployments influence firm-level performance. *Strategic Management Journal, 26*(5), 489-496. doi:10.1002/smj.459

Kostova, T. (1999). Transnational transfer of strategic organizational practices: A contextual perspective. *Academy of Management Review, 24*(2), 308-324. doi:10.5465/amr.1999.1893938

Kostova, T., Beugelsdijk, S., Scott, W. R., Kunst, V. E., Chua, C. H., & van Essen, M. (2020). The construct of institutional distance through the lens of different institutional perspectives: Review, analysis, and recommendations. *Journal of International Business Studies, 51*(4), 467-497. doi:10.1057/s41267-019-00294-w

Kostova, T., & Roth, K. (2002). Adoption of an organizational practice by subsidiaries of multinational corporations: Institutional and relational effects. *Academy of Management Journal, 45*(1), 215-233. doi:10.2307/3069293

Kostova, T., Roth, K., & Dacin, M. T. (2008). Institutional theory in the study of multinational corporations: A critique and new directions. *Academy of Management Review, 33*(4), 994-1006. doi:10.5465/AMR.2008.34422026

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. doi:10.5465/AMR.1999.1580441

Kramer, R. M. (1991). Intergroup relations and organizational dilemmas: the role of categorization processe. *Research on Organizational Behavior, 13*, 191–228.

Kumar, S. M. V. (2009). The relationship between product and international diversification: The effects of short-run constraints and endogeneity. *Strategic Management Journal, 30*(1), 99-116. doi:10.1002/smj.724

Kumar, V., Borah, S. B., Sharma, A., & Akella, L. Y. (2021). Chief marketing officers' discretion and firms' internationalization: An empirical investigation. *Journal of International Business Studies, 52*(3), 363-387. doi:10.1057/s41267-020-00378-y

Lawson, B., & Samson, D. (2001). Developing innovation capability in organisations: A dynamic capabilities approach. *International Journal of Innovation Management, 5*(3), 377-400. doi:10.1142/S1363919601000427

Lazzarini, S. G., & Musacchio, A. (2018). State ownership reinvented? Explaining performance differences between state-owned and private firms. *Corporate Governance: An International Review, 26*(4), 255-272. doi:https://doi.org/10.1111/corg.12239

Le, S., & Kroll, M. (2017). CEO international experience: Effects on strategic change and firm performance. *Journal of International Business Studies, 48*(5), 573-595. doi:10.1057/s41267-017-0080-1

Lee, H.-U., & Park, J.-H. (2006). Top team diversity, internationalization and the mediating effect of international alliances. *British Journal of Management, 17*(3), 195-213. doi:10.1111/j.1467-8551.2006.00501.x

Lee, S. H., & Makhija, M. (2009). Flexibility in internationalization: is it valuable during an economic crisis? *Strategic Management Journal, 30*(5), 537-555. doi:10.1002/smj.742

Lee, W. S., Kim, I., & Moon, J. (2016). Determinants of restaurant internationalization: an upper echelons theory perspective. *International Journal of Contemporary Hospitality Management, 28*(12), 2864-2887. doi:10.1108/IJCHM-02-2015-0048

Li, J., Li, P., & Wang, B. (2019). The liability of opaqueness: State ownership and the likelihood of deal completion in international acquisitions by Chinese firms. *Strategic Management Journal, 40*(2), 303-327. doi:10.1002/smj.2985

Li, J., Xia, J., & Lin, Z. (2017). Cross-border acquisitions by state-owned firms: How do legitimacy concerns affect the completion and duration of their acquisitions? *Strategic Management Journal, 38*(9), 1915-1934. doi:10.1002/smj.2609

Li, J., Xia, J., Shapiro, D., & Lin, Z. (2018). Institutional compatibility and the internationalization of Chinese SOEs: The moderating role of home subnational institutions. *Journal of World Business, 53*(5), 641-652. doi:https://doi.org/10.1016/j.jwb.2018.02.002

Li, L. (2007). Multinationality and performance: A synthetic review and research agenda. *International Journal of Management Reviews, 9*(2), 117-139. doi:10.1111/j.1468-2370.2007.00205.x

Li, M., & Wong, Y.-Y. (2003). Diversification and economic performance: An empirical assessment of Chinese firms. *Asia Pacific Journal of Management, 20*(2), 243-265. doi:10.1023/A:1023804904383

Li, P.-Y. (2017). The impact of the top management teams' knowledge and experience on strategic decisions and performance. *Journal of Management and Organization, 23*(4), 504-523. doi:10.1017/jmo.2016.24

Li, P.-Y. (2018). Top management team characteristics and firm internationalization: The moderating role of the size of middle managers. *International Business Review, 27*(1), 125-138. doi:10.1016/j.ibusrev.2017.05.011

Li, P.-Y., & Lo, F.-Y. (2017). Top management teams' managerial resources and international diversification: The evidence under an uncertain environment. *Management Decision, 55*(9), 1999-2017. doi:10.1108/MD-06-2016-0364

Li, Y., & Cui, L. (2018). The influence of top management team on Chinese firms' FDI ambidexterity. *Management and Organization Review, 14*(3), 513-542. doi:10.1017/mor.2017.47

Li, Y., Vertinsky, I. B., & Li, J. (2014). National distances, international experience, and venture capital investment performance. *Journal of Business Venturing, 29*(4), 471-489. doi:10.1016/j.jbusvent.2013.08.002

Lin, Y., Shi, W., Prescott, J. E., & Yang, H. (2019). In the eye of the beholder: Top managers' long-term orientation, industry context, and decision-making processes. *Journal of Management, 45*(8), 3114-3145. doi:10.1177/0149206318777589

Lin, Z., Peng, M. W., Yang, H., & Sun, S. L. (2009). How do networks and learning drive M&As? An institutional comparison between China and the United States. *Strategic Management Journal, 30*(10), 1113-1132. doi:10.1002/smj.777

Lind, J. T., & Mehlum, H. (2007). *UTEST: Stata Module to Test for a U-Shaped Relationship*. Boston: MA: Boston College Department of Economics.

Lind, J. T., & Mehlum, H. (2010). With or without U? The appropriate test for a U-shaped relationship. *Oxford Bulletin of Economics and Statistics, 72*(1), 109-118. doi:https://doi.org/10.1111/j.1468-0084.2009.00569.x

Liou, R.-S., Chao, M. C.-H., & Ellstrand, A. (2017). Unpacking Institutional Distance: Addressing Human Capital Development and Emerging-Market Firms' Ownership Strategy in an Advanced Economy. *Thunderbird International Business Review, 59*(3), 281-295. doi:10.1002/tie.21839

Liou, R.-S., Chao, M. C.-H., & Yang, M. (2016). Emerging economies and institutional quality: Assessing the differential effects of institutional distances on ownership strategy. *Journal of World Business, 51*(4), 600-611. doi:10.1016/j.jwb.2016.03.001

Little, R. J. A., & Rubin, D. B. (2002). *Statistical Analysis with Missing Data, Second Edition*. Canada: John Wiley & Sons, Inc.

Liu, K., Li, J., Hesterly, W., & Cannella, A. (2012). Top management team tenure and technological inventions at post-IPO biotechnology firms. *Journal of Business Research, 65*(9), 1349-1356. doi:https://doi.org/10.1016/j.jbusres.2011.09.024

Liu, X., Chizema, A., & Lu, J. (2014). Top executive compensation, regional institutions and Chinese OFDI. *Journal of World Business, 49*(1), 143-155. doi:10.1016/j.jwb.2013.04.004

Liu, X., Gao, L., Lu, J., & Lioliou, E. (2016). Environmental risks, localization and the overseas subsidiary performance of MNEs from an emerging economy. *Journal of World Business, 51*(3), 356-368. doi:10.1016/j.jwb.2015.05.002

Lopes, T. d. S., Casson, M., & Jones, G. (2019). Organizational innovation in the multinational enterprise: Internalization theory and business history. *Journal of International Business Studies, 50*(8), 1338. doi:10.1057/s41267-018-0156-6

Lu, J., Liu, X., Filatotchev, I., & Wright, M. (2014). The impact of domestic diversification and top management teams on the international diversification of Chinese firms. *International Business Review, 23*(2), 455-467. doi:https://doi.org/10.1016/j.ibusrev.2013.07.002

Lu, J. W., & Beamish, P. W. (2001). The internationalization and performance of SMEs. *Strategic Management Journal, 22*(6-7), 565-586. doi:10.1002/smj.184

Lu, J. W., & Beamish, P. W. (2004). International diversification and firm performance: The s-curve hypothesis. *Academy of Management Journal, 47*(4), 598-609. doi:10.5465/20159604

Lu, J. W., Ma, H., & Xie, X. (2021). Foreignness research in international business: Major streams and future directions. *Journal of International Business Studies*. doi:10.1057/s41267-021-00465-8

Lu, Y., Zhou, L., Bruton, G., & Li, W. (2010). Capabilities as a mediator linking resources and the international performance of entrepreneurial firms in an emerging economy. *Journal of International Business Studies, 41*(3), 419-436. doi:10.1057/jibs.2009.73

Luo, Y. (2003). Industrial dynamics and managerial networking in an emerging market: the case of China. *Strategic Management Journal, 24*(13), 1315-1327. doi:https://doi.org/10.1002/smj.363

Luo, Y., & Tung, R. L. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies, 38*, 481-498. doi:0.1057/palgrave.jibs.8400275

Luo, Y., Xue, Q., & Han, B. (2010). How emerging market governments promote outward FDI: Experience from China. *Journal of World Business, 45*(1), 68-79. doi:https://doi.org/10.1016/j.jwb.2009.04.003

Lyles, M., Li, D., & Yan, H. (2014). Chinese outward foreign direct investment performance: The role of learning. *Management and Organization Review, 10*(3), 411-437. doi:10.1017/S1740877600004381

Lyon, D. W., & Ferrier, W. J. (2002). Enhancing performance with product-market innovation: the influence of the top management team. *Journal of Managerial Issues, 14*(4), 452-469. Retrieved from https://www.jstor.org/stable/40604404

Mahalanobis, P. C., Bose, R. C., & Roy, S. N. (1937). Normalization of statistical variates and the use of rectangular co-ordinates in the theory of sampling distributions. *Sankhay, 3*, 1-40.

Maitland, E., & Sammartino, A. (2015). Managerial cognition and internationalization. *Journal of International Business Studies, 46*(7), 733-760. doi:10.1057/jibs.2015.9

Marinova, S., Child, J., & Marinov, M. (2012). Institutional field for outward foreign direct investment: A theoretical extension? In J. Child, T. Laszlo, M. D. Timothy, & P. Torben (Eds.), *Institutional Theory in International Business and Management* (Vol. 25, pp. 233-261): Emerald Group Publishing Limited.

Mariotti, S., & Marzano, R. (2019). Varieties of capitalism and the internationalization of state-owned enterprises. *Journal of International Business Studies, 50*(5), 669-691. doi:10.1057/s41267-018-00208-2

Mariotti, S., & Marzano, R. (2020). Relational ownership, institutional context, and internationalization of state-owned enterprises: When and how are multinational co-owners a plus? *Global Strategy Journal, 10*(4), 779-812. doi:10.1002/gsj.1379

Marshall, V., Brouthers, L., & Keig, D. (2020). RIMS: A new approach to measuring firm internationalization. *Journal of International Business Studies, 51*, 1133-1141. doi:10.1057/s41267-020-00320-2

Martinez, C. A., & Williams, C. (2012). An extended view of institutional domains and implications for the multinational enterprise. In C. Williams, T. Laszlo, M. D. Timothy, & P. Torben (Eds.), *Institutional Theory in International Business and Management* (Vol. 25, pp. 43-63): Emerald Group Publishing Limited.

Martinsons, M. G. (1993). Outsourcing information systems: A strategic partnership with risks. *Long Range Planning, 26*(3), 18-25. doi:10.1016/0024-6301(93)90003-X

Mata, J., & Alves, C. (2018). The survival of firms founded by immigrants: Institutional distance between home and host country, and experience in the host country. *Strategic Management Journal, 39*(11), 2965-2991. doi:10.1002/smj.2945

Mata, J., & Freitas, E. (2012). Foreignness and exit over the life cycle of firms. *Journal of International Business Studies, 43*(7), 615-630. doi:10.1057/jibs.2012.21

Matysiak, L., & Bausch, A. (2012). Antecedents of MNE performance: Blinded by the obvious in 35 years of literature. *Multinational Business Review, 20*(2), 178-211. doi:10.1108/15253831211238230

Meyer, J., & Rowan, B. (1977). Institutional Organizations: Formal Structure as Myth and Ceremony. *American Journal of Sociology, 83*, 440-463.

Meyer, K. E., Estrin, S., Bhaumik, S. K., & Peng, M. W. (2009). Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal, 30*(1), 61-80. doi:https://doi.org/10.1002/smj.720

Meyer, K. E., & Peng, M. W. (2016). Theoretical foundations of emerging economy business research. *Journal of International Business Studies, 47*(1), 3-22. doi:10.1057/jibs.2015.34

Michel, A., & Shaked, I. (1986). Multinational corporations vs. Domestic corporations: Financial performance and characteristics. *Journal of International Business Studies, 17*(3), 89-100. doi:10.1057/palgrave.jibs.8490435

Michel, J. G., & Hambrick, D. C. (1992). Diversification posture and top management team characteristics. *Academy of Management Journal, 35*, 9–37.

Mihalache, O. R., Jansen, J. J. J. P., Van Den Bosch, F. A. J., & Volberda, H. W. (2012). Offshoring and firm innovation: The moderating role of top management team attributes. *Strategic Management Journal, 33*(13), 1480-1498. doi:10.1002/smj.1983

Mike, W., Igor, F., E., H. R., & W., P. M. (2005). Guest editors' introduction strategy research in emerging economies: Challenging the conventional wisdom. *Journal of Management Studies, 42*(1), 1-33.

Milanov, H., & Fernhaber, S. A. (2014). When do domestic alliances help ventures abroad? Direct and moderating effects from a learning perspective. *Journal of Business Venturing, 29*(3), 377-391. doi:https://doi.org/10.1016/j.jbusvent.2013.05.004

Milliken, F. J., & Martins, L. L. (1996). Searching for Common Threads: Understanding the Multiple Effects of Diversity in Organizational Groups. *Academy of Management Review, 21*(2), 402-433. doi:10.5465/amr.1996.9605060217

Mitchell, R., Boyle, B., Nicholas, S., Maitland, E., & Zhao, S. (2016). Boundary conditions of a curvilinear relationship between decision comprehensiveness and performance: The role of functional and national diversity. *Journal of Business Research, 69*(8), 2801-2811. doi:10.1016/j.jbusres.2015.12.049

Mohr, A., & Batsakis, G. (2019). The contingent effect of TMT international experience on firms' internationalization speed. *British Journal of Management, 30*(4), 869-887. doi:10.1111/1467-8551.12293

Morck, R., & Yeung, B. (1991). Why investors value multinationality. *The Journal of Business, 64*(2), 165-187. Retrieved from https://www.jstor.org/stable/2353061

Morck, R., Yeung, B., & Zhao, M. (2008). Perspectives on China's outward foreign direct investment. *Journal of International Business Studies, 39*(3), 337-350. doi:10.1057/palgrave.jibs.8400366

Nadolska, A., & Barkema, H. (2014). Good learners: How top management teams affect the success and frequency of acquisitions. *Strategic Management Journal, 35*, 1483-1507. doi:10.1002/smj.2172

Nakamura, A., & Nakamura, M. (1981). On the relationships among several specification error tests presented by Durbin, Wu, and Hausman. *Econometrica, 49*(6), 1583–1588. doi:https://doi.org/10.2307/1911420

Naranjo-Gil, D., Hartmann, F., & Maas, V. S. (2008). Top management team heterogeneity, strategic change and operational performance. *British Journal of Management, 19*(3), 222-234. doi:10.1111/j.1467-8551.2007.00545.x

Ng, E. S., & Sears, G. J. (2017). The glass ceiling in context: the influence of CEO gender, recruitment practices and firm internationalisation on the representation of women in management. *Human Resource Management Journal, 27*(1), 133-151. doi:10.1111/1748-8583.12135

Nguyen, Q. T. K., & Rugman, A. M. (2015). Internal equity financing and the performance of multinational subsidiaries in emerging economies. *Journal of International Business Studies, 46*(4), 468-490. doi:10.1057/jibs.2014.64

Nielsen, B. B., & Nielsen, S. (2011). The role of top management team international orientation in international strategic decision-making: The choice of foreign entry mode. *Journal of World Business, 46*(2), 185-193. doi:10.1016/j.jwb.2010.05.003

Nielsen, B. B., & Nielsen, S. (2013). Top management team nationality diversity and firm performance: A multilevel study. *Strategic Management Journal, 34*(3), 373-382. doi:10.1002/smj.2021

Nielsen, B. B., & Raswant, A. (2018). The selection, use, and reporting of control variables in international business research: A review and recommendations. *Journal of World Business, 53*(6), 958-968. doi:10.1016/j.jwb.2018.05.003

Nielsen, S. (2010). Top management team internationalization and firm performance. *Management International Review, 50*(2), 185-206. doi:10.1007/s11575-010-0029-0

North, D. C. (1990). *Institutions, institutional change, and economic performance*. Cambridge ; New York: Cambridge University Press.

Oliver, C. (1991). Network Relations and Loss of Organizational Autonomy. *Human Relations, 44*(9), 943-961. doi:10.1177/001872679104400903

Oliver, C. (1997a). The influence of institutional and task environment relationships on organizational performance: The Canadian construction industry. *Journal of Management Studies, 34*(1), 99-124. doi:10.1111/1467-6486.00044

Oliver, C. (1997b). Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal, 18*(9), 697-713. doi:10.1002/(SICI)1097-0266(199710)18:9<697::AID-SMJ909>3.0.CO;2-C

Oviatt, B. M., & McDougall, P. P. (2005). Toward a theory of international new ventures. *Journal of International Business Studies, 36*(1), 29-41. doi:10.1057/palgrave.jibs.8400128

Panibratov, A., & Klishevich, D. (2020). Dynamic capabilities during the internationalization of MNCs from post-socialist emerging markets. *Multinational Business Review, 28*(3), 307-331. doi:10.1108/MBR-06-2019-0052

Pelled, L. H., Eisenhardt, K. M., & Xin, K. R. (1999). Exploring the black box: An analysis of work group diversity, conflict, and performance. *Administrative Science Quarterly, 44*(1), 1-28. doi:10.2307/2667029

Peng, M. W. (2004). Identifying the big question in international business research. *Journal of International Business Studies, 35*(2), 99-108. doi:10.1057/palgrave.jibs.8400077

Peng, M. W. (2012). The global strategy of emerging multinationals from China. *Global Strategy Journal, 2*(2), 97-107. doi:https://doi.org/10.1002/gsj.1030

Peng, M. W., & Luo, Y. (2000). Managerial ties and firm performance in a transition economy: The nature of a micro-macro link. *Academy of Management Journal, 43*(3), 486-501. doi:10.2307/1556406

Peng, M. W., Wang, D. Y. L., & Jiang, Y. (2008). An institution-based view of international business strategy: a focus on emerging economies. *Journal of International Business Studies, 39*(5), 920-936. doi:10.1057/palgrave.jibs.8400377

Peyrefitte, J., Fadil, P. A., & Thomas, A. S. (2002). The influence of managerial experiences on large firm internationalization. *International Journal of Management, 19*(3), 495-502. doi:10.3354/meps038109

Piaskowska, D., Trojanowski, G., Tharyan, R., & Ray, S. (2021). Experience Teaches Slowly: Non-linear Effects of Top Management Teams' International Experience on Post-acquisition Performance. *British Journal of Management, 0*, 1-29. doi:10.1111/1467-8551.12544

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

Pisani, N., Muller, A., & Bogăţan, P. (2018). Top management team internationalization and firm-level internationalization: The moderating effects of home-region institutional diversity and firm global focus. *Journal of International Management, 24*(3), 239-256. doi:10.1016/j.intman.2018.01.002

Pitcher, P., & Smith, A. D. (2001). Top management team heterogeneity: Personality, power, and proxies. *Organization Science, 12*(1), 1-18. doi:10.1287/orsc.12.1.1.10120

Powell, A., & DiMaggio, P. (1991). *The new institutionalism in organizational analysis*. Chicago: University of Chicago Press.

Powell, K. S. (2014). From M-P to MA-P: Multinationality alignment and performance. *Journal of International Business Studies, 45*(2), 211-226. doi:10.1057/jibs.2013.63

Qian, C., Cao, Q., & Takeuchi, R. (2013). Top management team functional diversity and organizational innovation in China: The moderating effects of environment. *Strategic Management Journal, 34*(1), 110-120. doi:https://doi.org/10.1002/smj.1993

Qian, G., Khoury, T. A., Peng, M. W., & Qian, Z. (2010). The performance implications of intra-and inter-regional geographic diversification. *Strategic Management Journal, 31*(9), 1018-1030. doi:10.1002/smj.855

Qian, G., Li, L., Li, J., & Qian, Z. (2008). Regional diversification and firm performance. *Journal of International Business Studies, 39*(2), 197-214. doi:10.1057/palgrave.jibs.8400346

Raisch, S., Birkinshaw, J., Probst, G., & Tushman, M., L. . (2009). Organizational ambidexterity: Balancing exploitation and exploration for sustained performance. *Organization Science, 20*(4), 685-695. doi:10.1287/orsc.1090.0428

Rajapathirana, R. P. J., & Hui, Y. (2018). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation and Knowledge, 3*(1), 44-55. doi:10.1016/j.jik.2017.06.002

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

Reeb, D., Sakakibara, M., & Mahmood, I. P. (2012). From the Editors: Endogeneity in international business research. *Journal of International Business Studies, 43*(3), 211-218. doi:10.1057/jibs.2011.60

Ren, M., Manning, S., & Vavilov, S. (2019). Does state ownership really matter? The dynamic alignment of China's resource environment and firm internationalization strategies. *Journal of International Management*. doi:10.1016/j.intman.2019.02.001

Reuber, A. R., & Fischer, E. (1997). The influence of the management team's international experience on the internationalization behaviors of SMEs. *Journal of International Business Studies, 28*(4), 807-825. doi:10.1057/palgrave.jibs.8490120

Richard, O., & Shelor, R. (2002). Linking top management team age heterogeneity to firm performance: Juxtaposing two mid-range theories. *International Journal of Human Resource Management, 13*, 958-974. doi:10.1080/09585190210134309

Rivas, J. L. (2012). Diversity & internationalization: The case of boards and TMT's. *International Business Review, 21*(1), 1-12. doi:10.1016/j.ibusrev.2010.12.001

Rugman, A. M. (1981). *Inside the multinationals : The economics of internal markets*: Croom Helm, London.

Rugman, A. M., Nguyen, Q. T. K., & Wei, Z. (2016). Rethinking the literature on the performance of Chinese multinational enterprises. *Management and Organization Review, 12*(2), 269-302. doi:10.1017/mor.2016.13

Rugman, A. M., & Verbeke, A. (2004). A perspective on regional and global strategies of multinational enterprises. *Journal of International Business Studies, 35*(1), 3-18. doi:10.1057/palgrave.jibs.8400073

Salomon, R., & Wu, Z. (2012). Institutional distance and local isomorphism strategy. *Journal of International Business Studies, 43*, 343-367. doi:10.1057/jibs.2012.3

Sanders, W. G., & Carpenter, M. A. (1998). Internationalization and firm governance: The roles of CEO compensation, top team composition, and board structure. *Academy of Management Journal, 41*(2), 158-178. doi:10.2307/257100

Sauvant, K. P., & Chen, V. Z. (2014). China's regulatory framework for outward foreign direct investment. *China Economic Journal, 7*(1), 141-163. doi:10.1080/17538963.2013.874072

Schwartz, S. (1994). *Beyond individualism/collectivism; new cultural dimensions of values*: Thousand Oaks: Sage.

Schwartz, S. (2006). A theory of cultural value orientations. *Comparative Sociology, 5*, 137-182. doi:10.1163/156913306778667357

Scott, W. R. (1995). *Institutions and organizations*. Thousand Oaks, CA: Sage Publishing.

Scott, W. R. (2003). *Organizations : rational, natural, and open systems* (5th ed ed.): Prentice Hall.

Scott, W. R. (2005). *Institutional theory: Contributing to a theoretical research program* (A. D. Smith & M. A. Hitt Eds.). New York: Oxford University Press.

Scott, W. R. (2008). *Institutions and organizations*. CA: Sage: Thousand Oaks.

Shenkar, O. (2012). Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences. *Journal of International Business Studies, 43*(1), 1-11. doi:10.1057/jibs.2011.40

Sher, P. J., & Yang, P. Y. (2005). The effects of innovative capabilities and R&D clustering on firm performance: The evidence of Taiwan's semiconductor industry. *Technovation, 25*(1), 33-43. doi:10.1016/S0166-4972(03)00068-3

Shirodkar, V., & Konara, P. (2017). Institutional distance and foreign subsidiary performance in emerging markets: Moderating effects of ownership strategy and host-country experience. *Management International Review, 57*(2), 179-207. doi:10.1007/s11575-016-0301-z

Short, J. C., McKelvie, A., Ketchen Jr., D. J., & Chandler, G. N. (2009). Firm and industry effects on firm performance: A generalization and extension for new ventures. *Strategic Entrepreneurship Journal, 3*(1), 47-65. doi:https://doi.org/10.1002/sej.53

Singh, D. A., Gaur, A. S., & Schmid, F. P. (2010). Corporate diversification, TMT experience, and performance：Evidence from German SMEs. *Management International Review, 50*(1), 35-56. doi:10.1007/s11575-009-0025-4

Slangen, A. H. L., & Beugelsdijk, S. (2010). The impact of institutional hazards on foreign multinational activity: A contingency perspective. *Journal of International Business Studies, 41*(6), 980-995. doi:10.1057/jibs.2010.1

Smith, K. G., Collins, C. J., & Clark, K. D. (2005). Existing Knowledge, Knowledge Creation Capability, and the Rate of New Product Introduction in High-Technology Firms. *Academy of Management Journal, 48*(2), 346-357. doi:10.5465/amj.2005.16928421

Song, S., & Ma, F. (2010). *Characteristics of TMT and technological innovation: An empirical study based on the resource-based listed companies*. Paper presented at the 2010 International Conference on Internet Technology and Applications, Wuhan, China.

Conference retrieved from http://ezproxy.massey.ac.nz/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=edseee&AN=edseee.5566483&site=eds-live&scope=site

Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *Academy of Management Review, 20*(3), 571-610. doi:10.5465/amr.1995.9508080331

Sullivan, D. (1994). Measuring the degree of internationalization of a firm. *Journal of International Business Studies, 25*(2), 325-342. doi:10.1057/palgrave.jibs.8490203

Taguchi, N. (2018). Description and explanation of pragmatic development: Quantitative, qualitative, and mixed methods research. *System, 75*, 23-32. doi:10.1016/j.system.2018.03.010

Tan, J., & Tan, D. (2005). Environment-strategy co-evolution and co-alignment: A staged model of Chinese SOEs under transition. *Strategic Management Journal, 26*(2), 141-157. doi:10.1002/smj.437

Tang, R. W., Shu, C., & Zhou, K. Z. (2021). State ownership of Chinese firms and their outward foreign direct investment: Political and economic contingencies. *Asia Pacific Journal of Management*. doi:10.1007/s10490-021-09756-y

Tang, S., Nadkarni, S., Wei, L., & Zhang, S. X. (2021). Balancing the Yin and Yang: TMT gender diversity, psychological safety, and firm ambidextrous strategic orientation in Chinese high-tech SMEs. *Academy of Management Journal, 64*(5), 1578-1604. doi:10.5465/AMJ.2019.0378

Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal, 28*(13), 1319-1350. doi:10.1002/smj.640

Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal, 18*(7), 509-533.

Tihanyi, L., Ellstrand, A. E., Daily, C. M., & Dalton, D. R. (2000). Composition of the top management team and firm international diversification. *Journal of Management, 26*(6), 1157-1177. doi:10.1177/014920630002600605

Tihanyi, L., Griffith, D. A., & Russell, C. J. (2005). The effect of cultural distance on entry mode choice, international diversification, and MNE performance: A meta-analysis. *Journal of International Business Studies, 36*(3), 270-283. doi:10. 1057/palgrave.jibs.8400136

Tseng, C.-H., Tansuhaj, P., Hallagan, W., & McCullough, J. (2007). Effects of firm resources on growth in multinationality. *Journal of International Business Studies, 38*(6), 961-974. doi:10.1057/palgrave.jibs.8400305

Tsui, A. S., Ashford, S. J., Clair, L. S., & Xin, K. R. (1995). Dealing with discrepant expectations: Response strategies and managerial effectiveness. *Academy of Management Journal, 38*, 1515-1543. doi:10.2307/256842

Tushman, M. L., & Rosenkopf, L. (1996). Executive succession, strategic reorientation and performance growth: A longitudinal study in the U.S. cement industry. *Management Science, 42*(7), 939-953. doi:10.1287/mnsc.42.7.939

Uotila, J., Maula, M., Keil, T., & Zahra, S. A. (2009). Exploration, exploitation, and financial performance: Analysis of S&P 500 corporations. *Strategic Management Journal, 30*(2), 221-231. doi:10.1002/smj.738

van Hoorn, A., & Maseland, R. (2016). How institutions matter for international business: Institutional distance effects vs institutional profile effects. *Journal of International Business Studies, 47*(3), 374-381. doi:10.1057/jibs.2016.2

van Veen, K., & Marsman, I. (2008). How international are executive boards of European MNCs? Nationality diversity in 15 European countries. *European Management Journal, 26*(3), 188-198. doi:https://doi.org/10.1016/j.emj.2007.12.001

Venaik, S., Midgley, D. F., & Devinney, T. M. (2005). Dual paths to performance: The impact of global pressures on MNC subsidiary conduct and performance. *Journal of International Business Studies, 36*(6), 655-675. doi:10.1057/palgrave.jibs.8400164

Vermeulen, F., & Barkema, H. (2002). Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation. *Strategic Management Journal, 23*(7), 637-653. doi:10.1002/smj.243

Vernon, R. (1971). Sovereignty at bay: The multinational spread of U. S. enterprises. *The International Executive, 13*(4), 1-3. doi:10.1002/tie.5060130401

Vogiatzoglou, K. (2016). Free market institutions and FDI performance in emerging asian economies. *International Journal of Management and Economics, 52*(1), 43-58. doi:10.1515/ijme-2016-0026

Vu, H. M. (2020). A review of dynamic capabilities, innovation capabilities, entrepreneurial capabilities and their consequences. *Journal of Asian Finance, Economics and Business, 7*(8), 485-494. doi:10.13106/JAFEB.2020.VOL7.NO8.485

Wally, S., & Baum, J. R. (1994). Personal and structural determinants of the pace of strategic decision making. *Academy of Management Journal, 37*(4), 932-956. doi:10.2307/256605

Wally, S., & Becerra, M. (2001). Top management team characteristics and strategic changes in international diversification: The case of U.S. multinationals in the european community. *Group & Organization Management, 26*(2), 165-188. doi:10.1177/1059601101262003

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. doi:10.1057/jibs.2012.18

Wang, G., Holmes, R. M., Oh, I. S., & Zhu, W. (2016). Do CEOs matter to firm strategic actions and firm performance? A meta-analytic investigation based on upper echelons theory. *Personnel Psychology, 69*(4), 775-862. doi:10.1111/peps.12140

Wang, G., Jiang, X., Yuan, C.-H., & Yi, Y.-Q. (2013). Managerial ties and firm performance in an emerging economy: Tests of the mediating and moderating effects. *Asia Pacific Journal of Management, 30*(2), 537-559. doi:10.1007/s10490-011-9254-8

Wang, H., & Qian, C. (2011). Corporate philanthropy and corporate financial performance: The roles of stakeholder response and political access. *Academy of Management Journal, 54*(6), 1159-1181. doi:10.5465/amj.2009.0548

Wang, M. (2016). The role of innovation capability in the australian courier industry.

International Journal of Innovation Management, 20(7), 1-18. doi:10.1142/S1363919616500705

Wang, T., Libaers, D., & Jiao, H. (2015). Opening the black box of upper echelons in China: TMT attributes and strategic flexibility. *Journal of Product Innovation Management, 32*(5), 685-703. doi:10.1111/jpim.12152

Wang, X., & Dass, M. (2017). Building innovation capability: The role of top management innovativeness and relative-exploration orientation. *Journal of Business Research, 76*, 127-135. doi:10.1016/j.jbusres.2017.03.019

White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for Heteroskedasticity. *Econometrica, 48*(4), 817–838. doi:https://doi.org/10.2307/1912934

Wiersema, M. F., & Bantel, K. A. (1992). Top management team demography and corporate strategic change. *Academy of Management Journal, 35*(1), 91-121.

Williams, C., & Vrabie, A. (2018). Host country R&D determinants of MNE entry strategy: A study of ownership in the automobile industry. *Research Policy, 47*(2), 474-486. doi:10.1016/j.respol.2017.12.001

Williams, R. J., Hoffman, J. J., & Lamont, B. T. (1995). The influence of top management team characteristics on M-form implementation time. *Journal of Managerial Issues, 74*(4), 466-480.

Williamson, J. (1985). More on Choosing the Right Rules for Exchange-rate Management. *World Economy, 8*(1), 81-83. doi:10.1111/j.1467-9701.1985.tb00379.x

Wooldridge, J. M. (2020). *Introductory econometrics : A modern approach* (Seventh edition ed.): Cengage.

Wu, D.-M. (1973). Alternative tests of independence between stochastic regressors and disturbances. *Econometrica, 41*(4), 733–750. doi:https://doi.org/10.2307/1914093

Wu, J., & Ang, S. H. (2020). Network complementaries in the international expansion of emerging market firms. *Journal of World Business, 55*(2), 101045. doi:https://doi.org/10.1016/j.jwb.2019.101045

Wu, J., & Chen, X. (2014). Home country institutional environments and foreign expansion of emerging market firms. *International Business Review, 23*(5), 862-872. doi:https://doi.org/10.1016/j.ibusrev.2014.01.004

Wu, J., Wood, G., & Khan, Z. (2021). Top management team's formal network and international expansion of Chinese firms: The moderating role of state ownership and political ties. *International Business Review, 30*(3), 101803. doi:https://doi.org/10.1016/j.ibusrev.2021.101803

Xia, J., Ma, X., Lu, J. W., & Yiu, D. W. (2014). Outward foreign direct investment by emerging market firms: A resource dependence logic. *Strategic Management Journal, 35*(9), 1343-1363. doi:https://doi.org/10.1002/smj.2157

Xie, Q. (2014). CEO tenure and ownership mode choice of Chinese firms: The moderating roles of managerial discretion. *International Business Review, 23*(5), 910-919. doi:https://doi.org/10.1016/j.ibusrev.2014.02.003

Xu, D., & Shenkar, O. (2002). Institutional distance and the multinational enterprise. *Academy* *of Management Review, 27*(4), 608-618. doi:10.5465/AMR.2002.7566108

Xu, J., Huang, D., & Pan, Y. (2019). Intra-firm subsidiary grouping and MNC subsidiary performance in China. *Journal of International Management, 25*(2). doi:10.1016/j.intman.2018.10.001

Xu, J., Yun, K., Yan, F., Jang, P., Kim, J., & Pang, C. (2019). A study on the effect of TMT characteristics and vertical dyad similarity on enterprise achievements. *Sustainability, 11*(10), 2913-2928. doi:10.3390/su11102913

Yang, J. Y., Lu, J. W., & Jiang, R. (2017). Too slow or too fast? Speed of fdi expansions, industry globalization, and firm performance. *Long Range Planning, 50*(1), 74-92. doi:10.1016/j.lrp.2016.06.001

Yang, X., & Stoltenberg, C. D. (2014). A review of institutional influences on the rise of made-in-china multinationals. *International Journal of Emerging Markets, 9*(2), 162-180. doi:10.1108/IJoEM-09-2012-0095

Yang, Y., & Driffield, N. (2012). Multinationality-Performance relationship: A meta-analysis. *Management International Review, 52*(1), 23-47. doi:10.1007/s11575-011-0095-y

Yilmaz, K. (2013). Comparison of quantitative and qualitative research traditions: Epistemological, theoretical, and methodological differences. *European Journal of Education, 48*(2), 311-325. doi:10.1111/ejed.12014

Yiu, D. W., Lau, C., & Bruton, G. D. (2007). International venturing by emerging economy firms: The effects of firm capabilities, home country networks, and corporate entrepreneurship. *Journal of International Business Studies, 38*(4), 519-540. doi:10.1057/palgrave.jibs.8400278

Yu, Y., Hu, X., Wang, Y., & Ward, P. (2020). A patulous progress: International entrepreneurship effects on chinese born-global firm performance. *Sustainability (Switzerland), 12*(12), 1-19. doi:10.3390/SU12145508

Yuan, L., Pangarkar, N., & Wu, J. (2016). The interactive effect of time and host country location on Chinese MNCs' performance: An empirical investigation. *Journal of World Business, 51*(2), 331-342. doi:10.1016/j.jwb.2015.11.006

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

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

Zhang, J. A., Garrett-Jones, S. A. M., & Szeto, R. (2013). Innovation capability and market performance: The moderating effect of industry dynamism. *International Journal of Innovation Management, 17*(2), 1-35. doi:10.1142/S1363919613500047

Zhang, S., & Li, X. (2008). Managerial ties, firm resources, and performance of cluster firms. *Asia Pacific Journal of Management, 25*(4), 615-633. doi:10.1007/s10490-008-9090-7

Zhang, X., Xie, L., Li, J., & Cheng, L. (2019). "Outside in": Global demand heterogeneity and dynamic capabilities of multinational enterprises. *Journal of International Business Studies*, 1. doi:10.1057/s41267-019-00252-6

Zhou, K. Z., Gao, G. Y., & Zhao, H. (2016). State ownership and firm innovation in china: An integrated view of institutional and efficiency logics. *Administrative Science Quarterly, 62*(2), 375-404. doi:10.1177/0001839216674457

Zhou, L., Wu, W.-p., & Luo, X. (2007). Internationalization and the performance of born-global SMEs: the mediating role of social networks. *Journal of International Business Studies, 38*(4), 673-690. doi:10.1057/palgrave.jibs.8400282

Zimmerman, M. A. (2008). The Influence of Top Management Team Heterogeneity on the Capital Raised through an Initial Public Offering. *Entrepreneurship Theory and Practice, 32*(3), 391-414. doi:10.1111/j.1540-6520.2008.00233.x

Zukin, S., & DiMaggio, P. (1990). *Structures of capital: The social organisation of the economy*. Cambridge: Cambridge University Press.

Zutshi, R. K., & Tan, W. L. (2009). Impact of culture on 'partner selection criteria' in East Asian international joint ventures. *International Entrepreneurship and Management Journal, 5*(4), 369-393. doi:10.1007/s11365-008-0076-1

MASSEY UNIVERSITY
TE KUNENGA KI PŪREHUROA
UNIVERSITY OF NEW ZEALAND

GRADUATE RESEARCH SCHOOL

STATEMENT OF CONTRIBUTION
DOCTORATE WITH PUBLICATIONS/MANUSCRIPTS

We, the student and the student's main supervisor, certify that all co-authors have consented to their work being included in the thesis and they have accepted the student's contribution as indicated below in the Statement of Originality.

Student name:	YE Mingzhu
Name and title of main supervisor:	Associate Professor KANG Yuanfei
In which chapter is the manuscript/published work?	the work has not published yet
What percentage of the manuscript/published work was contributed by the student?	100%

Describe the contribution that the student has made to the manuscript/published work:
The work was fully composed by the student under the supervion of the supervisors. More specifically, the student decided on the research topic after many discussions with the supervisors. Following the instructions from the supervisors, the student did the literature review, collected the data, finished the empirical analysis, as well as wrote the whole thesis.

Please select one of the following three options:

○ **The manuscript/published work is published or in press**
Please provide the full reference of the research output:

○ **The manuscript is currently under review for publication**
Please provide the name of the journal:

◉ **It is intended that the manuscript will be published, but it has not yet been submitted to a journal**

Student's signature:		Main supervisor's signature:	Yuanfei Kang <y.kang@massey.ac.nz> Digitally signed by Yuanfei Kang <y.kang@massey.ac.nz> DN: cn=Yuanfei Kang <y.kang@massey.ac.nz>, c=NZ, ou=School of Management, email=y.kang@massey.ac.nz Reason: I have reviewed this document Date: 2023.09.22 17:41:34 +12'00'

This form should appear at the end of each thesis chapter/section/appendix submitted as a manuscript/ publication or collected as an appendix at the end of the thesis.