

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

Essays on Managerial Foreign Experience and Corporate Behaviours in China

A thesis presented in partial fulfilment of the requirements for
the degree of Doctor of Philosophy in Finance at Massey University,

Palmerston North, New Zealand

Zixiong Sun
2021

Abstract

Managerial foreign experience is a type of resource which allows managers to think globally and act locally. This thesis contributes to the literature on how foreign experienced managers impact corporate behaviour in China, the world's largest emerging market. The first essay examines how managers with foreign experience influence corporate risk-taking. I find that foreign experienced managers are positively associated with corporate risk-taking. This relationship only robustly exists among private firms rather than state-owned enterprises (SOEs). The excess risk-taking through foreign experienced managers is positively related to Tobin's Q, indicating that foreign experienced managers increase firm value through value-enhancing projects, which benefits shareholders. The second essay concentrates on the relationship between managerial foreign experience and earnings quality. I find that foreign experienced managers improve corporate earnings quality, and this improvement is more pronounced in private firms. Moreover, I document that the improved earnings quality is an important mechanism for which foreign experienced managers increase stock returns and decrease agency costs. The third essay in the thesis investigates the relationship between foreign experienced managers and corporate labour investment. I find foreign experienced managers are more likely to recruit and retain high skilled employees, which in turn increases labour cost for firms in total. The positive relationship between managerial foreign experience and labour cost is significant in both SOEs and private firms. Foreign experienced managers may focus on employees' wellbeing to complete political goals in SOEs while they are more likely to retain and attract high skilled employees to benefit shareholders' value in private firms. I further document that the increased labour costs through managerial foreign experience can influence firm value positively. However, it also increases the labour stickiness cost. Overall, this thesis documents the benefits and costs of hiring foreign experienced managers in firms.

Acknowledgement

I acknowledge everyone who assisted me to complete this thesis.

I would like to thank my supervisors Professor Hamish Anderson and Associate Professor Jing Chi. To Hamish, you started being my supervisor since my Master studies. You guided me into the research with your extraordinary knowledge, your patience, and continuous support. To Jing, thanks for your continuous encouragement and support. You always could find my mistakes in research which were easy to make but hard to find. Together as a team, I appreciate both of your efforts on my research, I really enjoyed working with both of you. I would also extend my gratitude to Mark Woods for his technical support, and Fong Mee Chin and Maryke Bublitz for their data and administrative assistance.

Special thanks go to some staff at Massey University for valuable comments and compassionate advice, including Dr Jing Liao, Dr Ji Wu and Professor Ben Marshall. I also appreciate the comments from discussants and participants at the Vietnam Symposium in Banking and Finance via zoom, 2021; the New Zealand Finance Meeting Doctoral Symposium in Auckland, 2019; the New Zealand Finance Colloquium in Auckland, 2020; the New Zealand Finance Colloquium in Tauranga, 2021; the School of Economics and Finance Seminars at Massey University. Their feedback definitely has positive effect on the overall quality of this thesis.

To the PhD fellows team, thanks for your supports and laugh every time when I suffered the hardship and pain. Thanks to my other friends, your support and understanding are the key power to push me move forward.

My special thanks to my family, including my parents, Xiaoang Yang and Lixia Wang, my grandma, Yulan Yang and my aunt, Xiaohong Sun. Thanks for your unconditional love, this journey would not have been possible without your supports and encouragements.

Finally, I would like to thank Zixiong Sun, you did it well. The man who loves playing sports, particularly tennis, also has his ambition and lots of grits for his next chapter, his next mountain. No matter what lies ahead, he will apply the same or even more focus and passionate, the same ethic standard, and all the lessons he has learned or is going to learn along the way.

Table of Contents

Abstract.....	2
Acknowledgement	3
List of Table.....	9
CHAPTER 1	11
INTRODUCTION	11
1.1 Essay one	13
1.2 Essay two	14
1.3 Essay three	15
1.4 Research outputs from the thesis	16
1.5 Structure of the thesis.....	17
CHAPTER 2	18
ESSAY ONE.....	18
2.1. Introduction.....	20
2.2. Literature review and empirical prediction	25
2.3. Data and methodology	28
2.3.1 Data description	28
2.3.2 Risk-taking measures	31
2.3.3 Control variables.....	31
2.3.4 Methodology	33
2.4. Empirical results	34
2.4.1 Summary statistics	34
2.4.2 Managerial foreign experience and firm risk-taking.....	34
2.4.3 Endogeneity and robustness checks	36
2.4.3.1 Instrumental variables (IV) test.....	36
2.4.3.2 Transition sample with difference-in-differences (DID) analysis.....	37
2.4.3.3 Self-selection bias	38
2.4.3.4 Additional controls and high-dimension of fixed effects.....	40
2.4.4 Channels through which managerial foreign experience influences risk-taking	41
2.4.5 Do different types of foreign experience matter?	43
2.4.5.1 Practical vs educational, long-term vs short-term.....	43
2.4.5.2 Countries with advanced management practices or better corporate governance.....	44
2.4.6 Does firm corporate governance or external circumstances matter?	45
2.4.6.1 Corporate governance	45
2.4.6.2 Local economy and institutional environment.....	46

2.4.7 Does risk-taking by managers with foreign experience add firm value?	47
2.4.8 Stock return volatility	48
2.5. Conclusion	50
Appendix.....	52
Appendix A. Variable definitions	52
Appendix B. Correlation matrix.....	54
Appendix C. Covariate balance check for PSM sample	55
CHAPTER 3	72
ESSAY TWO.....	72
3.1. Introduction.....	74
3.2. Literature review and hypothesis development.....	79
3.2.1 Literature review	79
3.2.2 Hypothesis development	80
3.3. Data and methodology	82
3.3.1 Data	82
3.3.2 Earnings quality measurements	83
3.3.3 Methodology	84
3.4. Results.....	86
3.4.1 Summary statistics	86
3.4.2 Empirical results	86
3.4.3 Endogeneity checks.....	88
3.4.3.1 <i>Difference-in-differences (DID) analysis</i>	89
3.4.3.2 <i>Instrumental variables (IV) test</i>	90
3.4.3.3 <i>Heckman two-stage analysis</i>	91
3.4.3.4 <i>Additional omitted variable checks</i>	91
3.4.4 Different types of foreign experience	93
3.4.5 Reputational concerns	94
3.4.6 Channel tests	96
3.4.7 SOEs vs private firms	97
3.4.8 Monitoring effects.....	98
3.4.9 Earnings quality, stock returns and agency costs.....	101
3.4.10 Robustness check: Earnings persistence	102
3.5. Conclusion	103
Appendixes	104
Appendix A	104
Appendix B	106

<i>Appendix C</i>	107
CHAPTER 4	124
ESSAY THREE.....	124
4.1. Introduction.....	126
4.2. Literature review and hypothesis development.....	132
4.2.1 Literature review.....	132
4.2.2 Hypothesis development.....	133
4.3. Data and methodology	134
4.3.1 Labour costs measures.....	135
4.3.2 Methodology.....	135
4.4. Results.....	137
4.4.1 Endogeneity checks	137
4.4.1.1 Instrumental variables test	137
4.4.1.2 Difference-in-difference analysis.....	138
4.4.1.3 Other fixed effects.....	140
4.4.2 Potential mechanisms.....	140
4.4.2.1 High skilled employees.....	141
4.4.2.2 Labour market competition.....	142
4.4.2.3 Employee protection	143
4.4.3 The effect of government intervention.....	144
4.4.3.1 Do foreign experienced managers improve employees' wellbeing?	145
4.4.3.2 Does managerial foreign experience increase total factor productivity?	146
4.4.3.3 Do political connections matter?.....	147
4.4.4 Additional tests	148
4.4.5. Labour cost and shareholder value.....	149
4.4.6. Managerial foreign experience and labour cost stickiness.....	150
4.4.7 Robustness test.....	152
4.5. Conclusion	153
Appendix.....	155
Appendix A Variable definition.....	155
CHAPTER 5	175
CONCLUSION.....	175
References.....	177
References for chapter 1	178
References for chapter 2	180
References for chapter 3	186

References for chapter 4 193

List of Table

Chapter 2 Essay one

Table 1: Descriptive statistics	57
Table 2. Managerial foreign experience and corporate risk-taking	59
Table 3. Instrumental variables (IV) test	60
Table 4. DID analysis	61
Table 5. Robustness checks	62
Table 6. Channels through which FE influence risk-taking	63
Table 7. Different types of foreign experience	65
Table 8. Advanced management practice or better corporate governance	66
Table 9. Managerial foreign experience and firm risk-taking among firms with different corporate governance and external environment	67
Table 10. Risk-taking and firm value enhancing	68
Table 11. Stock return volatility	70

Chapter 3 Essay two

Table 1. Summary statistics	108
Table 2. Managerial foreign experience and earnings quality	109
Table 3. DID analysis	110
Table 4. Instrumental variables test	111
Table 5. Heckman two-stage analysis.....	112
Table 6. Additional omitted variable checks	113
Table 7. Different types of foreign experience	114
Table 8. Reputational concerns.....	115
Table 9. Channel tests	116
Table 10. SOEs vs Private firms	118
Table 11. Monitoring effect	120
Table 12. Impact of earnings quality on stock returns and agency costs.....	121
Table 13. Robustness test: Earnings persistent	123

Chapter 4 Essay three

Table 1. summary statistics.....	157
Table 2. Baseline results	158
Table 3. Instrumental variable test.....	160
Table 4. Difference-in-differences test	162
Table 5. Other fixed effects	164
Table 6. Efficient wage channel.....	167
Table 7. Employee protection	168
Table 8. The effect of government intervention	169
Table 9 The effect of political connection	170
Table 10. Impact of firm characteristics	171

Table 11. Labour cost and shareholder value	172
Table 12. Managerial foreign experience and labour costs stickiness.....	173
Table 13. Robustness checks	174

CHAPTER 1

INTRODUCTION

This chapter provides an overview of this thesis. It discusses the motivation and contribution for each essay, and outlines the structure for the remainder of the thesis.

Upper echelons theory argues that individual's characteristics have significant impact on corporate behaviour (Hambrick and Mason, 1984). One of the key characteristics is managers who lived and worked in foreign countries. The prevalence of firms with managers having foreign experience increases with internationalisation. Further, managers with foreign experience may endow firms with new knowledge including corporate governance and management knowledge which benefit their firms. For example, Giannetti, Liao and Yu, (2015) show that directors with foreign experience transfer their new knowledge and managerial skills, which lead to better corporate governance within their firms. In addition, resource dependence theory, assumes that manager's action can reduce uncertainty from external factors to organizational performance, providing supportive evidence for upper echelons theory (Pfeffer and Salancik, 1978). Based upon the upper echelons and resource dependence theories, this thesis investigates how managerial foreign experience influences corporate behaviours in China.

I focus on China, the world's largest emerging market for several reasons. The Chinese government enacted a series of allowance policies to attract foreign experienced talents to live and work in China. Studying the effects of foreign experienced managers on Chinese market benefits policymakers to gauge the success of policies encouraging Chinese expatriates to return home. Moreover, after years of staying overseas, the foreign social norms and legal standard may distinguish foreign experienced managers from domestic managers, in terms of managerial decision-making and legal and moral standard. The advanced knowledge and skills

they gained from foreign countries may be crucial to corporate success, which benefits investors' value. For example, Chaoyang Zhang, a celebrity in China who acts as both chairman and CEO of SOHU, an internet technology company, studied and worked at MIT before returning to China. In 2017, SOHU was ranked as top 10 IT enterprises in China and then, Zhang was nominated as one of the top 40 most successful returnees over 40 years in 2018. In addition, China's unique settings also allow us to examine the inducement effect of government intervention on the relationship between individual's characteristics and corporate behaviour. The inducement effect of government intervention may affect foreign experienced managers' career concerns, which in turn may impact differently their behaviours between state owned enterprises (SOEs) and private firms.

This thesis consists of three essays and contributes to the literature on managerial foreign experience in emerging markets. The first essay examines the relationship between foreign experienced managers and corporate risk-taking. Essay two tests whether managerial foreign experience influence corporate accounting quality. While, the final essay focuses on the relationship between managers with foreign experience and corporate labour investment. The remainder of this chapter proceeds as follows. The next three sections present an overview of each of the three essays in the thesis, particularly outline the contribution of each essay to the existing literature. Section 1.4 lists the research outputs from the thesis. Section 1.5 describes the structure of the remainder of the thesis.

1.1 Essay one

Faccio, Marchica and Mura (2016) argue that an individual's characteristics significantly impact corporate risk-taking. The first essay in the thesis, using a sample period from 2008-2017, mainly considers 1) whether managerial foreign experience influences corporate risk-taking significantly, 2) whether the ownership structure impacts the relationship between managerial foreign experience and corporate risk-taking significantly, 3) whether the countries they gained foreign experience matters when they take on risk, and 4) how the relationship affects shareholders' value.

After endogeneity checks, the essay documents the influence of managerial foreign experience on corporate risk-taking is statistically and positively significant and economically meaningful only in private firms. The result is consistent with Jiang and Kim (2015), who argue that managers in SOEs have priority to complete political goals such as the stability of social development and sustainability for further political promotions and perks. Given foreign experienced executives have fewer political ties (Giannetti et al., 2015), they may be politically motivated to focus on these political goals to strengthen their promotion chances, rather than engaging in riskier value-enhancing projects in SOEs. I then identify two channels through which foreign experienced managers increase corporate risk-taking, including the degree of corporate internationalization as measured by foreign sales and overseas mergers and acquisitions (M&A) activities, and second, through raising short-term debt to fund long-term investment. Further, managers who gain their foreign experience from countries or regions with advanced management practices and better corporate governance have greater influence on corporate risk-taking. Moreover, I find evidence that foreign experienced managers' risk-taking behaviour is a mechanism for private firms to enhance their value, which benefits shareholders. In addition, I document that foreign experienced managers also increases the volatility of stock returns over the short run (e.g. less than a year).

My study contributes to the literature in several ways. First, my study is the first with combined outcomes of managerial foreign experience on overall firms' risk-taking level, rather than focusing on a single risky activity (e.g. corporate innovation). Second, most of the previous studies document the positive effect of managerial foreign experience on firm performance (e.g. Giannetti et al., 2015; Dai, Kong and Liu, 2018; and Yuan and Wen, 2018). The study documents both the benefits and potential costs of hiring foreign experienced managers to shareholders. Third, in addition to managers general skills (e.g. tenure and career path), the findings support the argument that managers specialized skills (e.g. managerial foreign experience) also have significant impact on corporate performance. Fourth, the results have important implications not only for China but also for other emerging markets with weak legal systems and less developed labour markets.

1.2 Essay two

The second essay discusses whether foreign experienced managers affect corporate accounting quality. Giannetti et al. (2015) highlight that foreign experienced directors can improve corporate governance significantly by providing better monitoring function, using advanced corporate governance knowledge from overseas. My study investigates whether managers with international experience can improve earnings quality from agent-principle perspectives.

The baseline result of this essay reveals that managerial foreign experience has positive and significant effect on earnings quality. This result is confirmed after endogeneity checks, including difference-in-differences approach, instrumental variables (IVs) test, the Heckman two-stage procedure, managers' fixed effects with two-stage least square (2SLS) analysis and regression analysis with additional control variables. I identify three channels through which managerial foreign experience improves earnings quality, including foreign ownership, dividend payment and overseas investment. The positive relationship between managerial foreign experience and earnings quality mainly exists when managers gain their experience

from countries that have low earnings management and low corruption. After considering ownership structure, I further document that the inducement effect of managerial foreign experience on earnings quality is largely decreased in SOEs and firms with political connections. Finally, I find that the positive association between foreign experienced managers and earnings quality can influence stock returns positively while reducing agency costs significantly.

This essay contributes to the literature on earnings quality. While, previous literature mainly focuses on firm level characteristics and ownership structure (Liu and Lu, 2007; Ji, Ahmed and Lu, 2015; Deng, Li and Liao, 2017; Chen, Cheng, Hao and Liu, 2020), I focus on managerial characteristics, in particular, managerial foreign experience and show that human capital of top managers also significantly affects corporate accounting quality. Moreover, I provide evidence to emphasize the importance of ‘brain gain’ effect, which argues that foreign experienced executives transition superior knowledge and advanced governance practices from where they gained in overseas to domestic firms (e.g. Giannetti et al., 2015; Liao, Ma and Yu, 2017; Illiev and Roth, 2018; Dai et al., 2018). My study highlights an important channel of knowledge spillover effect on firm performance.

1.3 Essay three

The third essay examines the relationship between managerial foreign experience and corporate labour investment. Given employee is an important type of stakeholder, it is worth investigating whether foreign experienced managers have different policies of labour investment, in terms of employees’ wages and employee structure, and how these policies affect firm performance and shareholders’ value.

The empirical result indicates that foreign experienced managers increase labour cost significantly. This result is confirmed with a set of endogeneity checks, including IV test, DID

analysis, and additional fixed effects (firm fixed effects and CEO fixed effects). I suggest that the efficient wage channel, where managers pay higher wages to retain and attract high skilled employees (Kong, Wang and Zhang, 2020), as well as improved employee protection (Atanassov and Kim, 2009) are two potential mechanisms for foreign experienced managers to increase labour cost. Further, foreign experienced managers have significant and positive impact on labour costs in both SOEs and private firms. However, I find the purpose differs between these types of firms. Foreign experienced managers focus on completing political goals (e.g. responsible for employees' wellbeing) for potential future political promotions in SOEs, whereas improving firm performance (e.g. increase total factor productivity) for shareholders' value maximization in private firms. Finally, I document that the increase labour cost by foreign experienced managers is associated with high Tobin's Q but generates greater labour cost stickiness (Anderson, Banker and Janakiraman, 2003).

My study contributes to the literature in several ways. First, I exhibit another dimension of how foreign experienced managers influence corporate behaviours. Previous literature argues that foreign experienced executives influence firm performance through transitioning the superior knowledge and advanced skills they gained from foreign countries to local firms (Giannetti et al., 2015; Yuan and Wen, 2018; Dai, Kong and Liu, 2018). Apart from that, I provide evidence to show that their impact on employees and the teams they build also affect firm performance significantly. Second, I indicate that micro factors (e.g. managerial foreign experience) also significantly impact corporate labour investment, while previous corporate labour investment studies (Cui, John, Pang and Wu, 2018; Kong et al., 2020; Wei, Hu and Chen, 2020; Klasa, Maxwell and Ortiz-Molina, 2009) primarily focus on the macro factors (e.g. policy reform, bargaining power from unionization).

1.4 Research outputs from the thesis

Essay one has been presented at:

- New Zealand Finance Meeting Doctoral Symposium in Auckland (2019)
- New Zealand Finance Colloquium in Tauranga (2021)

Essay two has been presented at:

- New Zealand Finance Colloquium in Auckland (2020)
- School of Economics and Finance Seminar at Massey University (2020)

Essay three has been presented at:

- School of Economics and Finance Seminar at Massey University (2021)
- Vietnam Symposium in Banking and Finance via zoom (2021)

1.5 Structure of the thesis

The remainder of this thesis is structured as follows. Chapter 2 contains details of essay one, which examines the impact of managerial foreign experience and corporate risk-taking. The relationship between managerial foreign experience and corporate accounting quality is investigated in Chapter 3. Chapter 4 contains the third essay on the interaction between managerial foreign experience and corporate labour investment. Chapter 5 concludes the thesis by outlining the main findings, implications of each of the three essays and a discussion about future research on managerial foreign experience.

CHAPTER 2

ESSAY ONE

This chapter presents the first essay, investigating the relationship between managerial foreign experience and corporate risk-taking. A brief overview of the motivations, key findings and contributions are provided in Section 2.1. Literature review and hypothesis development are then discussed in Section 2.2. Section 2.3 outlines in details about data and methodology used in the essay. The regression analyses, including the baseline analysis, endogeneity checks and subsample tests are presented in Section 2.4. Section 2.5 concludes this chapter. The reference list for this chapter is reproduced in the final section of this thesis.

Managerial foreign experience and corporate risk-taking: Evidence from China

Abstract

This study investigates the relationship between managerial foreign experience and corporate risk-taking. We find that foreign experienced managers in Chinese firms are positively associated with corporate risk-taking and that this mainly exists in private firms rather than in state owned enterprises (SOEs). In privately owned firms, the degree of corporate internationalization and funding long-term investment with short-term debt are potential channels through which foreign experienced managers affect corporate risk-taking. Moreover, the positive association is more pronounced for managers' practical, rather than, educational, foreign experience and for managers who gain their foreign experience from countries or regions with advanced management practices and better corporate governance. Short-term visiting experience has no impact on corporate risk-taking. Additionally, the relationship is more persistent among private firms with better corporate governance or weak external environments and monitoring. Further, evidence shows that the risk-taking behaviour from foreign experienced managers is an important mechanism for companies to enhance their value. Finally, the increased risk-taking from foreign experienced managers increases short run stock return volatility.

JEL Classification Codes: G32, G34

Keywords: Managerial foreign experience; Corporate risk-taking; Ownership structure; China

2.1. Introduction

In the wake of internationalisation, the presence of managers with valuable foreign experience within companies is increasingly common and offers a heightened interest for companies when employing such managers. While prior studies find that managers and/or board members with foreign experience significantly affects international involvement (Sambharya, 1996), corporate performance (Giannetti, Liao and Yu, 2015), corporate social responsibility (Zhang, Kong and Wu, 2018), innovation (Yuan and Wen, 2018), investment efficiency (Dai, Kong and Liu, 2018) and corporate tax avoidance (Wen, Cui and Ke, 2020), their impact on corporate risk-taking is less clear. Further, even if managers with overseas experience do tilt firms towards greater risk-taking, it is unclear how this strategy is achieved and whether such increases in corporate risk-taking lead to enhanced value and performance.

Managers with foreign experience may influence corporate risk-taking in two opposite directions. On the one hand, existing literature argues that people who go abroad are less risk averse (Payan, Svensson, and Høgevoid, 2012). Further, executives with foreign experience may help firms access foreign markets, and improve corporate governance (Giannetti et al., 2015; Dai, et al., 2018; and Conyon, Haß, Vergauweand Zhang, 2019). Both the increased access to overseas businesses opportunities and improved corporate governance may encourage firms to undertake more riskier value-enhancing projects. Further, the eyeball effect model suggests that the highly remunerated foreign experienced managers receive greater attention from various parties on their performance, and this attention induces them to seek riskier, higher return strategies to match their high compensation (Yuan et al., 2018).

On the other hand, foreign experienced managers may take less risk due to politically motivated career concerns. In addition to wealth maximisation, SOEs are tasked with the key goals of maximizing social (Li and Yamada, 2015) and business environment stability (Ng, Yuce, and Chen, 2009). Under the career concerns model, Jiang and Kim (2015) argue that as top

executives in SOEs are government appointed, their corporate decision-making is politically motivated to obtain further promotion after their tenure (Feldman, Kang, Li and Saxena, 2021). Given foreign experienced executives have fewer political ties (Giannetti et al., 2015), the career concern model predicts that foreign experienced managers may be motivated to improve their future promotion chances by strengthen their political ties through focusing on social and political based goals, rather than wealth maximization. As such, foreign experienced managers in SOEs may have less incentive to engage in riskier value-enhancing projects.

We concentrate on the Chinese market to address this issue for several reasons. First, due to the rapid development of economy since 1970s, China is a globally significant market. However, as an emerging market, several issues remain such as weak investor protection and legal systems, high ownership concentration and less developed labour markets (Sun and Wilson, 2003; Liu and Lu, 2007; Berkman, Cole and Fu 2010). As such, investigating the factors (e.g. managerial foreign experience) which could alleviate these issues are more important for emerging markets rather than developed markets. Second, ownership structures in Chinese enterprises are unique, with the government playing an important role in SOEs. As discussed above, individual characteristics such as foreign experience, may differently influence corporate decision-making in SOEs and private firms.

Using the volatility of return on assets (ROA) and return on sales (ROS) as measures of corporate risk-taking, our baseline results show that managerial foreign experience are more likely to be associated with greater risk-taking activities in private firms. However, for SOEs the baseline results reveal a negative association between foreign experienced managers and risk-taking.

To mitigate potential endogeneity issues, we apply a set of endogeneity checks including instrumental variables with two-stage least square (2SLS) model and difference-in-differences

analysis. We further check for self-selection bias and robustness with propensity score matching (PSM) approach, and controlling for individual's other characteristics (i.e. age, gender and duality) with high-dimension of fixed effects based on PSM sample. Overall, our four identification tests confirm the positive relationship between managerial foreign experience and corporate risk-taking persists in private firms. In addition, the endogeneity and robustness checks show that no significant relationship between managerial foreign experience and corporate risk-taking in SOEs. This suggests that ownership structure influences the effect of individual managerial characteristics.

For private firms, we examine how managerial foreign experience affects corporate risk-taking. We identify two potential channels: first, through developing the degree of corporate internationalization as measured by foreign sales and overseas mergers and acquisitions (M&A) activities, and second, through raising short-term debt to fund long-term investment.

Next, we examine what types of foreign experience and institutional settings matter. Specifically, overseas work experience has a stronger effect than overseas educational experience on corporate risk-taking, whereas short-term overseas experience does not influence corporate risk-taking. Using hand-collected data on the countries or regions where the top managers gained their experience, we find the association is stronger for those whose experience is from countries or regions with top managerial practices and better corporate governance. Further, we find that the impact of managerial foreign experience on corporate risk-taking is more pronounced for those firms with better corporate governance, and those operating in poor provincial economies or with poor institutional monitoring.

Moreover, we find evidence that increased risk-taking from foreign experienced top managers is a channel for firms to enhance firm value. This suggests that private firms may seek to

employ foreign experienced managers to encourage their firms to undertake riskier value-enhancing projects.

Finally, we find that the higher ROA and ROS volatility, caused by managerial foreign experience, also increase stock return volatility in the short run. This effect is particularly significant for firms with foreign experienced managers during their first year of tenure. However, the higher stock return volatility dissipates over the long run. Consistent with Bayesian learning model, the short run increase in stock return volatility is indicative of the learning and stock price reassessment by market participants when foreign experienced managers are appointed (Pan, Wang and Weisbach, 2015).

Our study is related to a growing literature exploring how foreign experienced talents affect corporate decision-making in China (e.g. Giannetti et al., 2015; Dai et al., 2018; Yuan et al., 2018; Cao, Sun and Yuan, 2019). All of these papers document the positive effects of foreign experienced talents on firm performance. We indicate both the benefits and potential costs of hiring foreign experienced managers. We find that managerial foreign experience plays a positive role on value-enhancing riskier projects for private firms. However, the risk-taking behaviour causes higher short run stock volatility. Our study also highlights the role of ownership structure in explaining the influence of individual characteristics on firm performance.

Closest to our study is Yuan et al. (2018) who find that foreign experienced managers improve innovation through advanced human capital. In contrast, our paper documents that apart from the human capital, foreign experienced managers can increase corporate risk-taking through risky investment strategies other than innovation. Further, given innovation is a key goal of the Chinese government with related firms receiving resource support to drive innovation (Lin, Fu and Fu, 2017; Cao, Cumming and Zhou, 2020), corporate innovation may not properly reflect

corporate risk-taking across different ownership structures. For example, prior literature shows SOEs can be both more innovative (Choi, Lee and Williams, 2011) and have lower earnings volatility (Boubakri Cosset and Saffar, 2013) than that in private firms.

As the number of Chinese travelling abroad for study and work has increased dramatically in recent decades, our study also has important implications for both government and investors. Our evidence shows government policy makers should continue to encourage foreign experienced talents to work in China. Investors should weigh up the benefits and risks associated with firms hiring foreign experienced top managers, which include, increased involvement in value enhancing risky activities and higher short run stock volatility. Further, we contribute to the argument on whether generalized or specialized managers' skills are more important to companies. Previous studies (Murphy and Zábajník, 2007; Aivazian, Lai and Rahaman, 2013 etc.) argue that general managerial skills such as managers' tenure and career paths have significant impact on firms' outcome. In line with Conyon et al. (2019), the results of this study suggest that specialized managers' skill (i.e. managerial foreign experience) also have significant impact on corporate outcomes, and, in particular, on corporate risk-taking.

Finally, our results have important implications not only for China but also for other emerging markets with weak legal systems and less developed labour markets. By appointing foreign returnees as top managers, firms in emerging markets can enhance their value through value-enhancing riskier strategies.

The remainder of this paper is structured as follows. Section 2 presents the related literature and empirical prediction. Section 3 describes the data and methodology. Section 4 provides empirical results and the conclusion is presented in Section 5.

2.2. Literature review and empirical prediction

Our study builds on two streams of research in the existing literature. The first stream is corporate risk-taking. Faccio, Marchica and Mura (2016) posit that, as their first priority, in perfect capital markets, managers should maximise firms' market value, and therefore, an individual's characteristics should not influence risk-taking. However, Faccio et al. (2016) argue that when agency problems and information asymmetry are present, an individual's characteristics may influence firms' investment policy. Under such circumstances, individual characteristics such as age (Vroom and Pahl, 1971), gender (Khaw, Liao, Tripe, and Wongchoti, 2016; Bernile, Bhagwat and Yonker, 2018), and behavioural aspects such as overconfidence (Malmendier and Tate, 2005; Malmendier and Tate, 2008; Li and Tang, 2010), may influence company investment policy. Further, Jensen and Meckling (1976) highlight that ownership structure significantly impacts firm risk-taking. Specifically, firm risk-taking is negatively influenced by state ownership (Fogel, Morck and Yeung, 2008; Boubakri et al., 2013), whereas it is positively influenced by foreign ownership (John, Litov and Yeung, 2008; Boubakri et al., 2013).

Second, there is a limited stream of literature on the hiring foreign experienced talents. Foreign experience is a type of human capital which is valuable and difficult to imitate by others, and such experience helps managers think globally and act locally (Coff, 1997; Carpenter, Sander and Gregersen, 2000). Managers with foreign experience can benefit firms through the transference of knowledge and skills, providing business trends and foreign corporate governance standards, which in turn enhance firm value and performance (Giannetti et al., 2015; Miletkov, Poulsen and Wintoki, 2017; Iliev and Roth, 2018). The spillover from international experience facilitates research and development, and technology transfers (Filatotchev, Liu, Buck and Wright, 2009; Yuan et al., 2018), while also benefitting firms through the accessing of foreign markets, and the development of international market networks (Edström and

Galbraith, 1977; Sambharya, 1996; Tihanyi, Ellstrand and Daily, 2000; Blomstermo, Eriksson, Lindstrand and Sharma, 2004; Athanassiou and Nigh, 2005; Herrmann and Datta, 2005; Suutari and Makela, 2007; Nelsen, 2009). Given such benefits, since the 1990s the Chinese government is eager to attract talented personnel with overseas experience and have enacted a series of allowance policies¹ to attract talents with foreign experience to live and work in China. The policies provide such returnee talents with benefits including freedom of residence registry in any city in China, medical care, insurance and living allowances. As a result, more and more foreign experienced talents have been successfully employed through the allowance policies, playing a positive role in many innovative and expertized areas.

Since a firm's top managers are the key drivers of corporate decisions, strategy and performance, it is anticipated that managerial foreign experience will affect corporate risk-taking in alternative ways from local managers. Foreign experience top management could positively influence corporate risk-taking for a number of reasons, including personal risk-aversion level, a greater degree of overseas investments, improved corporate governance and the 'eyeball' effects mentioned by Yuan et al. (2018).

First, studies indicate that executives' personal characteristics (e.g. CEOs with private pilot licenses) and past experiences (e.g. military or natural disasters experience) influence corporate decision-making significantly (Benmelech and Frydman, 2015; Cain and Mckeeon, 2016; Bernile, Bhagwat and Rau, 2017; Knüpfer, Elias and Matti, 2017; Feng and Johansson, 2018). Previous literature find that an individual's degree of risk aversion is negatively associated with their experience of studying or moving abroad due to higher costs, and uncertainties including leaving one's comfort zones (e.g. social connections); and cultural distance among countries (Payan et al.,2012; Li, Olson, and Frieze, 2013; Yang, 2015). The negative association between

¹ For example, "The Thousand Talent Plan" enacted in 2008.

foreign experienced managers and their personal risk aversion may tilt corporate risk-taking positively.

Second, managers with foreign experience may benefit firms through foreign market connections with their overseas business network (Canyon et al., 2019). Developing new business in foreign markets is risky due to the higher information cost (Root, 1987), organizational and administrative costs (Kogut and Singh, 1988), expropriation risk (Gatignon and Anderson, 1988) and increased information asymmetry (Grote and Rücker, 2007).

Third, Giannetti et al. (2015) show that executives' foreign experience can improve corporate governance. John et al. (2008) argue that firms with better governance systems can encourage managers to pursue riskier value-enhancing investment policies. As such, we believe the improved corporate governance through managerial foreign experience may contribute to riskier value-enhancing strategies.

Finally, in an emerging market like China, talented personnel with overseas experience are a scarce resource. According to the 'eyeball' effect suggested in Yuan et al. (2018), managers with foreign experience are treated as superstars in China, especially those returning from more developed countries. They receive many benefits under the Chinese government and provincial talent policies but are under great pressure to produce results. Their performance is generally assessed annually. To prove their worthiness, managers with foreign experience may seek riskier strategies in their pursuit for higher returns. For all these reasons we conjecture that:

Hypothesis 1. *Ceteris paribus*, the incremental effect of managerial foreign experience increases corporate risk-taking.

Nonetheless, ownership structure could constrain foreign experienced managers' incentives to implement risk-taking strategies. For example, as top SOE managers' appointments, future political promotions and perks are controlled by the government (Jiang et al., 2015), then

compared to private firm managers, SOE managers are likely to prioritise political goals, such as maintaining social and business environment stability (Li et al., 2015; Ng et al., 2009). Given foreign experienced executives have fewer political ties (Giannetti et al., 2015), they may be politically motivated to focus on these political goals to strengthen their promotion chances rather than engaging in riskier value-enhancing projects. As such, we postulate:

Hypothesis 2. The positive effect of managerial foreign experience on corporate risk-taking is weakened in SOEs.

2.3. Data and methodology

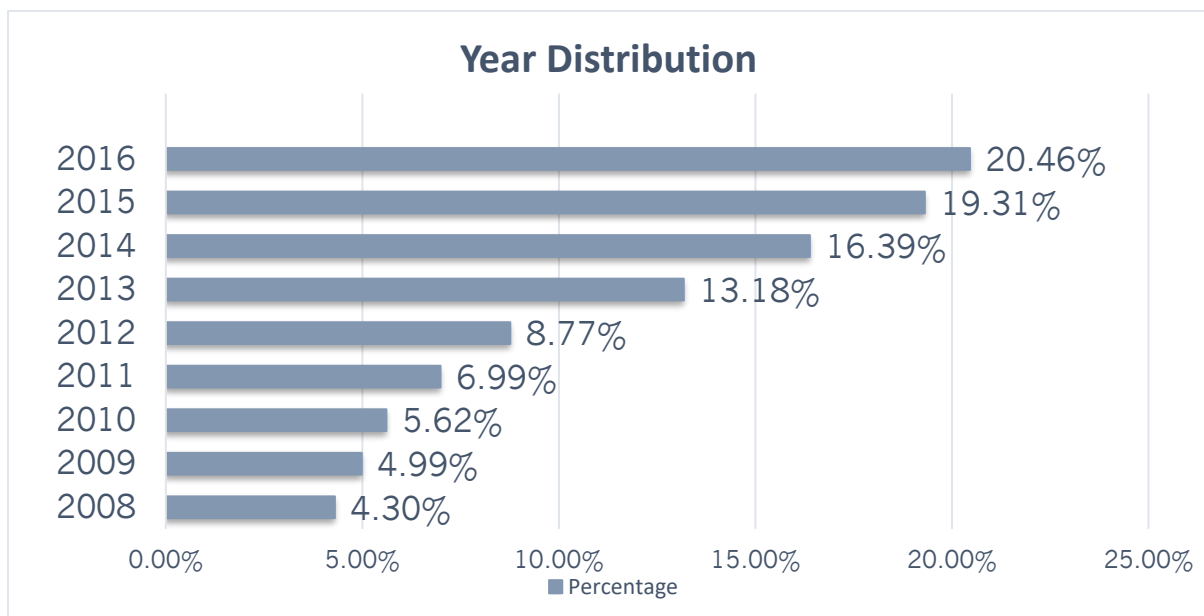
2.3.1 Data description

We retrieve the data of this paper from the China Stock Market & Accounting Research Database (CSMAR). The initial sample includes firms listed on all four boards in China's markets, which are the Shanghai Stock Exchange (SHSE), the Shenzhen Stock Exchange (SZSE) main board, the SZSE small and medium enterprise board (SMEs) and the SZSE ChiNext board from 2008 to 2017². Financial firms are excluded. Additionally, due to the three-year rolling standard model required to calculate the risk-taking measures, the sample period of managerial foreign experience data is from 2008 to 2015. After removing observations with missing values, the total number of firm-year observations is 15,922. Following Chen, Ezzamel and Cai (2011) and Dai et al. (2018), the managerial foreign experience (*FE dummy*), is a dummy variable equal to one if a firm's chairman, vice chairman³ and/or CEO has foreign experience. Unlike US listed companies, the majority of firms listed in China have a separate chairmanship and CEO since both of the positions are powerful in firm decision-making (Shen and Lin, 2009). In particular, among these firms, more than half of the chairmen work full time,

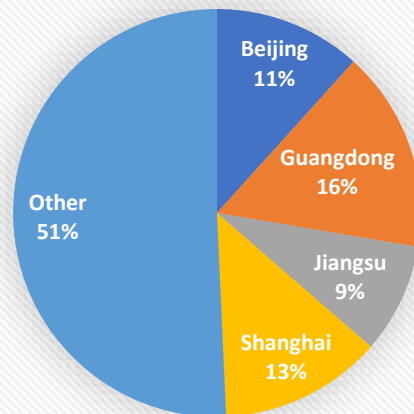
² The CSMAR commences coverage of managerial foreign experience data from 2008 and data for the ChiNext market starts in 2009 since it started trading on October 30, 2009.

³ Vice chairman is also a full-time position which looks after company's daily operation in Chinese firms. Chen et al. (2011) define vice chairman as a powerful position.

acting as legal representatives and being responsible for firms' daily operations (Kato and Long, 2006). Hence, both the chairmen and CEOs' foreign experience are included as the main independent variable. According to the charts below, the number of foreign experienced managers is increased across the sample period, from 4.3% in 2008 to 20.46% in 2016. Moreover, Guangdong, Shanghai, Beijing and Jiangsu are the top 4 provinces and cities where foreign experienced managers work in on returning to China. The majority of the managers work in the manufacturing industry, indicating that manufacturing industry have high demand of high skilled managers. It may also because majority of the firms are listed in manufacturing industry in China. The last chart shows the managerial foreign experience sample distribution by countries or regions they gained experience from. Over 40% of the managers gained their experience from the US, followed by 9% of the managers who gained their experience from HongKong.

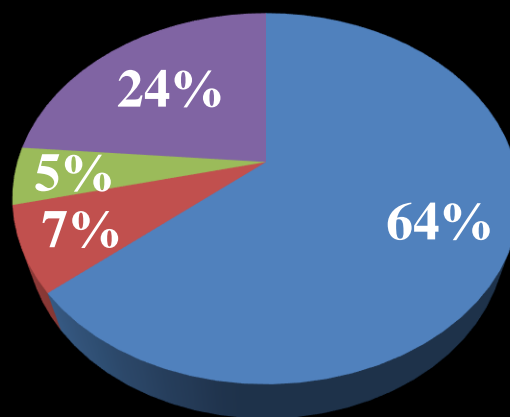


Province distribution

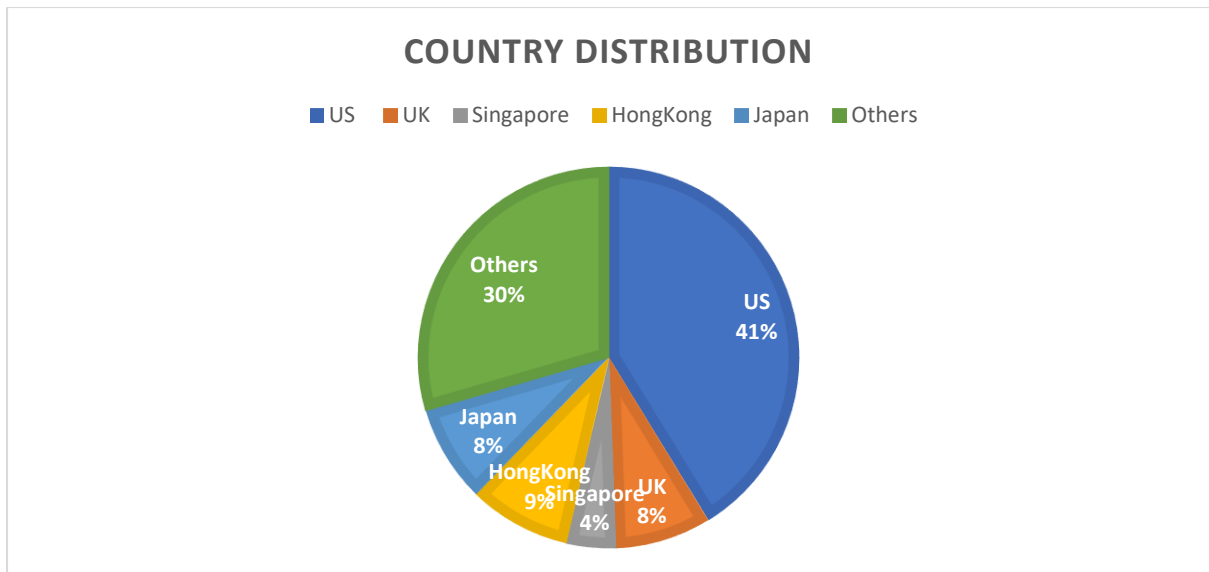


■ Beijing ■ Guangdong ■ Jiangsu ■ Shanghai ■ Other

Industry Distribution



■ Manufacturing ■ IT
■ Wholesale and Retail ■ Others



2.3.2 Risk-taking measures

Following previous studies (John et al., 2008; Boubakri et al., 2013; Khaw et al., 2016), two measurements are used to proxy for corporate risk-taking. In particular, return on assets (ROA) standard deviation (*risk1*) and return on sales (ROS) standard deviation (*risk2*) are calculated by using a rolling standard model. Following previous studies (Boubakri et al., 2013; Faccio et al., 2016), *risk1* and *risk2* are measured by three-year periods (one contemporaneous and two leading periods). The choice of a three-year window to measure earnings volatility is consistent with the three-year terms for which managers are appointed in China. According to John et al. (2008), riskier projects contribute to higher earnings volatility, which is an indicator for a firm's level of risk-taking from operations. In comparison with the ROA measurement, ROS reduces sensitivity to inflation, accounting conventions and management through time (D'Souza & Megginson 1999; Fan, Wong and Zhang, 2007). In section 4.8, we also apply other risk-taking measures including daily stock returns volatility to check robustness.

2.3.3 Control variables

Ownership structure is crucial for firms in response to risk-taking (Boubakri et al., 2013). We control for state ownership (*SOE*) with a dummy variable equal to one if a firm's ultimate

controller is the state or state-owned enterprises, otherwise zero. Regarding corporate governance control, we include ownership concentration (*top1*, *top 2-5*), board size (*bsize*) and board independence (*indeperc*) as control variables. The variable, *top1* refers to the largest shareholding and *top 2-5* represents the second to fifth largest shareholdings. According to Khaw et al. (2016), the largest shareholding is positively correlated with risk-taking, whereas the other large shareholders (second to fifth largest shareholdings) are expected to undermine risk-taking behaviours. Additionally, *bsize* is captured by the natural logarithm of the total number of directors on the board, while *indeperc* is the ratio equal to the number of independent directors over the total number of directors on the board. According to previous studies (Eisenberg, Sundgren and Wells, 1998; Huang and Wang, 2015; Cheng, 2008), *bsize* is negatively related to corporate risk-taking whereas *indeperc* is positively related to corporate risk-taking, as smaller boards and higher composition of independent directors provide stronger monitoring to management teams, forcing them to engage in riskier decision-making and hence maximizing firm value and shareholder wealth. We also control for foreign ownership which is expected to be positively related to corporate risk-taking (Boubakri et al., 2013). Foreign ownership (*FO*) is defined as the number of shares held by foreign investors over the total shares in issue.

We use *roa* to measure profitability as Faccio, Marchica and Mura (2011) indicate that less profitable firms may take greater risk. Consistent with Khaw et al. (2016), we control for *leverage*, which is measured as total debt divided by total assets. Boubakri et al. (2013) highlight that higher financial leverage is associated with higher corporate risk-taking. In addition, we control for *sale growth* defined as the annual growth rate of sales, which captures the effects from operating activities and growth opportunities and is expected to be positively related to corporate risk-taking (Khaw et al., 2016). We also apply *firm size* and *firm age* to capture the influences from firm characteristics. Previous studies (John et al., 2008; Faccio et

al., 2011; Boubakri et al., 2013 etc.) illustrate that smaller and/or younger firms have more incentives to take on higher risk, than larger and/or more mature firms. We measure *firm size* and *firm age* as the natural logarithm of total assets and the natural logarithm of one plus the years between establishment of the firm and year of observation, respectively⁴. All the variables are defined in Appendix A, and all continuous variables are winsorized at the 1% and 99%, and the correlation matrix is presented in Appendix B. Appendix C indicates the summary statistics categorized by *FE dummy*. Firms with foreign experienced managers have significantly higher risk-taking, foreign ownership, firm profitability, and firm size.

2.3.4 Methodology

Following previous studies (e.g. Boubakri et al., 2013; Faccio et al, 2016), we run an ordinary least squares (OLS) regression. To reduce potential endogeneity issues, we employ firm-year fixed effects and cluster standard errors by industry level in our regression. The basic model is presented in Equation 1:

$$\begin{aligned}
 risk_ &= \alpha + \beta_1 FE\ dummy + \beta_2 SOE + \beta_3 top1 + \beta_4 top2 - 5 + \beta_5 FO + \beta_6 bsize \\
 &+ \beta_7 indeperc + \beta_8 roa + \beta_9 leverage + \beta_{10} salegrowth + \beta_{11} firmsize \\
 &+ \beta_{12} firmage + Firm + Year + \varepsilon
 \end{aligned} \tag{1}$$

where α_i represents the intercept, ε is an error term. The dependent variable *risk_* is our measures for corporate risk-taking, as outlined in Section 3.2, while *FE dummy* is the explanatory variable, which measures managerial foreign experience. Control variables include *SOE*, *top1*, *top2-5*, *FO*, *bsize*, *indeperc*, *roa*, *leverage*, *salegrowth*, *firmsize*, *firmage*, and *Firm* and *Year* fixed effects.

⁴ Based on previous studies (Vroom et al., 1971; Faccio et al., 2016), executive's age and gender may influence firm risk-taking. We will check robustness by adding managers' other characteristics in Section 4.3.2.

2.4. Empirical results

In this section, we report our results based on the methodology described above.

2.4.1 Summary statistics

Table 1 reports the summary statistics with mean and median differences between private firms and SOEs. In the full sample, 10.8% of firms have managers with foreign experience. When comparing mean and median differences between private firms and SOEs, we find that all variables are significantly different. Private firms have higher earnings volatilities than SOEs, indicating that private firms take more risk than SOEs. The significant result of *FE dummy* shows that foreign experienced managers are more likely to work in private firms rather than in SOEs. Moreover, SOEs have higher largest shareholdings, whereas private firms have higher second to fifth largest shareholdings, revealing a higher ownership concentration in SOEs than in private firms. Further, SOEs have higher financial leverage, consistent with prior findings that Chinese SOEs have easier access to bank financing (Huang et al., 2015).

[Insert Table 1 here]

2.4.2 Managerial foreign experience and firm risk-taking

Table 2 shows the baseline OLS regression results. In the whole sample regression, the coefficients of *FE dummy* are positively but insignificantly related to *risk1* and *risk2*. As discussed in the hypothesis section, the career concern model suggests SOE foreign experienced managers focus on political goals rather than value-enhancing risky projects for future promotion. Therefore, the incentives for foreign experienced managers to undertake riskier projects may be tilted towards private firms rather than SOEs. As such, we split our sample into private firms and SOEs subsamples. In the sample of private firms, the estimated coefficients of *FE dummy* are positively and significantly correlated with *risk1* and *risk2* at the 1% and 10% levels, respectively. The result indicates that managerial foreign experience are

more likely to take risk in private firms which is in line with **Hypothesis 1**. In terms of economic significance, the coefficients for *FE dummy* in private firms subsample (0.008 and 0.052 for *risk1* and *risk2*, respectively) and its corresponding standard deviations (0.342) indicate private firms with foreign experienced managers, on average, have 8.3% and 15.3% higher ROA and ROS volatility, respectively, than firms without foreign experienced managers⁵. In addition to the *FE dummy*, *roa* is negatively associated with risk taking, which is consistent with Faccio et al. (2011) who argue that less profitable firms are more likely to take risk. Moreover, *leverage* is positively and significantly related to risk-taking measures, indicating that firms use financial leverage as a source to invest in riskier projects (Boubakri et al. 2013).

However, in the SOEs subsample, the coefficients of the *FE dummy* are negatively and significantly correlated with *risk1* and *risk2* at the 10% and 5% levels, respectively. The negative coefficients of the *FE dummy* in SOEs indicate that foreign experienced managers in SOEs are less likely to undertake riskier value enhancing projects, which is consistent with **Hypothesis 2**. The coefficients of *FE dummy* in SOEs subsample (-0.005 and -0.026 for *risk1* and *risk2*, respectively) and its corresponding standard deviation (0.259) indicate SOEs with foreign experienced managers, on average, have 4.3% and 8.1% lower volatility of ROA and ROS, respectively, than firms without foreign experienced managers. This may be due to the potential career concern for foreign experienced managers to strengthen their political ties and secure future promotions. Given the contradictory influence of managerial foreign experience on corporate risk-taking between private firms and SOEs, it is not surprising that the *FE dummy* is insignificantly related to risk-taking measures in the full sample analysis. Therefore, we will address the endogeneity issues in private firms and SOEs separately in the following sections.

⁵ We use the approach of the coefficient of a variable multiplied by the standard deviation of the variable, divided by the mean value of the dependent variable to calculate the economic significance.

[Insert Table 2 here]

2.4.3 Endogeneity and robustness checks

2.4.3.1 Instrumental variables (IV) test

To mitigate the endogeneity issues caused by reverse causality and omitted variables, we adopt IV test using 2SLS analysis. Following Dai et al. (2018), we construct two instrumental variables, *British* and *Christian*. The first instrument, *British* is a dummy variable which equals one for firms located in provinces that a concession or leased provincial territory was established by Great Britain during the latter days of the Qing Dynasty, otherwise zero⁶. The second instrument, *Christian* is the number of colleges for each province that were built by Christian missionaries up to 1920. The imported Western culture and Christian values may affect local values. For instance, residents in these areas are more likely to know about foreign culture and have increased opportunities to go abroad. In addition, foreign experienced talents may prefer to live and work in provinces where they are affected by the foreign culture. Given both of our instruments are based on the information from roughly 100 years ago, they should have no direct influence on the current risk-taking decisions of firms. The F-statistic rejects the hypothesis that our instruments are weak and invalid.

Table 3 presents the IV test results. In the first stage, the coefficient of both *British* and *Christian* are positively and significantly associated with *FE dummy* at the 5% and 1% level, respectively, suggesting that our instrumental variables are highly correlated with firms appointing foreign experienced managers. For the second stage results, the coefficients of predicted *FE dummy* are positively and significantly related to risk-taking measures at the 1% level in the subsample of private firms, whereas they are insignificantly related to risk-taking measures in SOEs subsample.

⁶ These British concessions and leased territories were distributed in Fujian, Hubei, Jiangxi, Jiangsu, Guangdong, Shandong, Tianjin and Shanghai.

[Insert Table 3 here]

2.4.3.2 Transition sample with difference-in-differences (DID) analysis

We further address the endogeneity issues with a DID framework based on CEO turnover⁷. Following Huang and Kisgen (2013), we identify treatment group as firms with transitions from a non-foreign experienced CEO to a foreign experienced CEO. Meanwhile, the control group consists of firms transitioning from a non-foreign experienced CEO to another non-foreign experienced CEO. We then build our DID sample as firm-year observations 2 years before and 2 years after a CEO transition⁸, excluding the transition year t . Our DID model is as follow^{9,10}:

$$\begin{aligned} risk_{i,t} = & \beta_0 + \beta_1 post_t * transition_i + \beta_2 post_t + \beta_3 transition_i + \\ & \sum_k \beta_k Controls_{k,i,t} + \varepsilon_{i,t} \end{aligned} \quad (2)$$

where the dependent variable $risk_{i,t}$ represents our measures for corporate risk-taking; $post_t$ is an indicator variable which equals one if firm-year observations are after the CEO transition and zero otherwise; $transition_i$ is an indicator variable which equals one if firm i 's transition year t is a non-foreign experienced to foreign experienced CEO transition and zero if firm i 's transition year t does not involve any foreign experienced CEOs.

We expect β_1 to be positive and significant if our estimation is valid. The results are shown in Table 4. In line with our conjecture, the estimated β_1 is positively and significantly associated with risk-taking measures at the 10% significance level in the subsample of private firms, indicating that newly appointed foreign experienced top managers increase corporate risk-

⁷ Following Yao, Wang, Sun, Liao and Cheng (2020), we design our DID test with CEO turnover as the CEO transition is more frequent than that of chairman, allowing for more observations in the sample.

⁸ Following Yao et al. (2020), we apply 2-year windows, before and after CEO turnover to incorporate more firms in the sample selection.

⁹ In line with Huang et al. (2013), we obtain year fixed effects instead of parallel trend check in our DID analysis as the CEO turnovers occur in different time for different firms.

¹⁰ Due to the high correlation between $transition$ and firm fixed effects, we apply industry fixed effects, instead of firm fixed effects to avoid potential bias, and the standard errors are clustered by firm in the DID analysis.

taking at a significantly higher rate than newly appointed top managers without foreign experience in private firms. However, the coefficients on *post*transition* are negatively but insignificantly correlated with risk-taking measures in SOEs subsample, suggesting that managerial foreign experience is not associated with the increase in corporate risk-taking in SOEs.

[Insert Table 4 here]

In an unreported table, we follow Faccio et al. (2016) and apply an additional transition test with PSM analysis by only including firms which transition from having no foreign experienced managers to having a foreign experienced manager as treatment group. We then build the control group with PSM approach based on a function of firm-level characteristics. The control group is selected from firms without hiring any foreign experienced managers across the whole sample period. The results remain the same with DID analysis across both private firms and SOEs subsamples. The table is available on request.

2.4.3.3 Self-selection bias

As the number of foreign experienced top managers is small relative to the total sample, using the full sample is likely to be noisy and have endogeneity concerns, where foreign experience observations may not be exogenously random. For instance, Giannetti et al. (2015) indicate that foreign experienced managers may select firms with better corporate governance to work in, as these firms' governance standards may be closer to those in western countries.

As such, we use propensity score matching (PSM) to address the selection concern and robustness check. We first run a probit model, predicting the likelihood of appointing foreign experienced managers with a group of characteristics and firm level variables. The function of PSM is to create two sample groups incorporating a similar level of specific controls between

firms with foreign experienced managers and firms without foreign experienced managers. The probit regression model is expressed in Equation 3.

$$\begin{aligned}
 FE\ executives &= \alpha + \beta_1\ top1 + \beta_2\ top2 - 5 + \beta_3\ FO + \beta_4\ bsize + \beta_5\ indeperc + \beta_6\ roa \\
 &+ \beta_7\ leverage + \beta_8\ salegrowth + \beta_9\ firmsize + \beta_{10}\ firmage + Industry \\
 &+ Year + \varepsilon
 \end{aligned} \tag{3}$$

Further, we use the propensity scores estimated in Equation 1 to implement a one-to-one PSM procedure, creating a treatment group with foreign experienced managers and a matching group without foreign experienced managers. The reduced sample size provides an opportunity to compare the treatment group to statistically similar matching group with a matching algorithm. The PSM sample is randomly assigned if firms in the treatment group have the same propensity category with those firms in the matching group (d'Agostino, 1998).

Based on the probit model, we produce a panel data to investigate the relationship between foreign experienced managers and corporate risk-taking. Panel A of Table 5 presents results for the PSM analysis with 2,448 and 990 firm-year observations in private firms and SOEs respectively. Appendix D compares the PSM treatment and matching groups. The differences in the variables used in the PSM matching process for the treatment and matched groups are all insignificant across panels A and B, indicating a well-matched sample. In Panel A of Table 5, the *FE dummy* is positively and significantly related to the *risk1* and *risk2* risk-taking measures at the 5% level in private firms. In line with our conjecture, this result highlights that firms with foreign experienced managers are more likely to be associated with greater risk-taking. This finding provides additional evidence for the argument that different managerial characteristics influence firm risk-taking (Faccio et al., 2016).

Consistent with our prediction, the *FE dummy* is insignificantly related to the risk-taking measures in SOEs, indicating that managerial foreign experience is less pronounced to risk-

taking in SOEs. Compared to foreign experienced managers in private firms, those in SOEs may take political goals such as maintaining social (Li et al., 2015) and business environment stability (Ng et al., 2009) as their priorities to address their future career concerns (Jiang and Kim, 2015).

[Insert Table 5 here]

2.4.3.4 Additional controls and high-dimension of fixed effects

Although we have confirmed a positive relationship between managerial foreign experience and corporate risk-taking in private firms, we need to verify whether this relationship holds after controlling for individual's other characteristics and the high-dimension of fixed effects. Therefore, we add additional fixed effects (including firm, industry and year fixed effects) and additional controls including CEOs' age, gender, duality and chairman's age¹¹ based on PSM sample for further robustness check. According to Panel B of Table 5, in the subsample of private firms, the coefficients of *FE dummy* are positively and significantly related to risk-taking measures at the 10% and 5% levels, respectively. In contrast, the *FE dummy* is insignificantly related to risk-taking measures in SOEs subsample. The results confirm that the influence of managerial foreign experience on corporate risk-taking is not affected by the CEO's and chairman's other personal characteristics and is robust to more restrictive fixed effect controls.

Finally, in an unreported table (available on request), we follow Khaw et al. (2016) and Boubakri, Mansi and Saffar (2013) by using a weighted least square model¹² and other alternative risk-taking measures¹³ to further check for robustness. In using these models, we

¹¹ All the additional variables are defined in Appendix A. We do not control for chairmen's gender due to the high collinearity between CEO's gender and Chairmen's gender.

¹² In the weighted least square model, each observation is weighted by the number of firm-year observations for each province in China.

¹³ We use additional proxies for corporate risk-taking including the ROA range and the ROS range. The ROA (ROS) range, is calculated as the difference between the maximum and minimum ROAs (ROSs) over three-year periods.

find our baseline results remain unchanged. Overall, the results confirm that the positive relationship between managerial foreign experience and corporate risk-taking in private firms is robust.

Overall, our endogeneity and robustness checks confirm **Hypothesis 1** and are in line with **Hypothesis 2**. As the results for SOEs show no significant relationship between foreign experience managers and risk-taking after controlling for endogeneity, we focus only on private firms in the remainder of the paper.

2.4.4 Channels through which managerial foreign experience influences risk-taking

We now examine possible channels through which managerial foreign experience affects risk-taking. Malhotra, Lin and Farrell (2016) list three challenges for firms entering foreign markets, which are cultural differences, geographic distances and institutional differences. Previous literature indicates that entering a foreign market may increase information costs, organizational and administrative costs, expropriation risk and information asymmetry (Root, 1987; Kogut et al., 1988; Gatignon et al., 1988; Grote et al., 2007). Further, due to the differences in business environments and regulations, Edamura, Haneda, Inui, Tan and Todo (2014) highlight that overseas M&A is a costly and time-consuming processes, which can be defined as a risky decision with a high level of complexity and uncertainty (Lim and Lee, 2016). In addition, Chen, Li, Wang and Zhang (2019) discuss the risky decision of using short-term debt to finance long-term investments, in which the need for the frequent roll-over of financing arrangements increases liquidity risk. As such, we use the degree of firms' internationalization and the mismatch between short-term debt and long-term investment (*mismatch*) as proxies for potential channels for foreign experienced managers to influence corporate risk-taking.

We use foreign sales (*FS*) and foreign M&A (*FMA*) to measure the degree of firms' internationalization. Foreign sales (*FS*) is a dummy variable which is equal to one if a firm has

foreign revenue in the observation year, otherwise zero. Following Edamura et al. (2014), *FMA* is a dummy variable which is equal to one if a firm engages in foreign M&A in a given year, otherwise zero. Additionally, following Chen et al. (2019), *mismatch* is a dummy variable which is equal to one if firms meet the following conditions in a given year: 1) the change of current liabilities is greater than the change of current assets; 2) capital expenditure is greater than the change of non-current liabilities; and 3) capital expenditure is greater than zero. Otherwise, *mismatch* equals to zero.

To design our test, we follow the approach adopted by Ferreira and Laux (2007) and Cosset, Somé and Valéry (2016) and separate the *FS*, *FMA* and *mismatch* that is explained by managerial foreign experience and the rest which is unrelated to managerial foreign experience, respectively. First, we regress the channel proxies on managerial foreign experience alone and extract both the predicted values and residuals, respectively. According to Panel A of Table 6, firms with foreign experienced managers are more likely to have foreign sales, overseas M&A and to finance long-term investments with short-term debt. Second, we replace the *FE dummy* in Equation 1 with both the fitted values and residuals of our channel proxies. In Panel B of Table 6, the coefficients of *FS predicted*, *FMA predicted* and *mismatch predicted* are all positively and significantly associated with *risk1* and *risk2* across the 1% to 10% significance level. The results suggest that managerial foreign experience affects corporate risk-taking through strategies that increase the degree of internationalization and the financing of long-term investments with short-term debt.

[Insert Table 6 here]

2.4.5 Do different types of foreign experience matter?

2.4.5.1 Practical vs educational, long-term vs short-term

It is possible that different types of foreign experience influence corporate risk-taking differently. Yuan et al. (2018) find that managerial foreign study experience is more pronounced in influencing corporate innovation than managerial foreign work experience. Due to ‘brain gain’ effect, foreign practical, rather than educational experience may have stronger effect on corporate risk-taking, as practical experience provides better opportunities for individuals to observe and practice the advanced knowledge and skills of other countries. Moreover, Zhang et al. (2018) emphasize that only foreign long-term experience has significant influence on CSR, whereas foreign short-term experience has no significant influence on CSR, indicating that the length of time staying overseas is an important element in determining the impact of foreign experience on firm behaviour and performance. We estimate the model by dividing the *FE dummy* into different types of foreign experience. The results are shown in Table 7. Consistent with our conjecture, the results show that managerial foreign practical experience, rather than study experience, has a more pronounced impact on corporate risk-taking. Further, we find that managerial foreign short-term visiting experience does not influence corporate risk-taking. While going overseas for work or study reflects an appetite for higher personal risk-taking, long-term overseas commitments are likely to reflect a greater personal appetite for risk-taking when compared to short-term overseas experience as the former requires courage to overcome difficulties such as high costs and uncertainties, including leaving one’s comfort zone with social connections; and cultural distance among countries (Payan et al., 2012; Li, et al 2013; Yang, 2015).

[Insert Table 7 here]

2.4.5.2 Countries with advanced management practices or better corporate governance

The legal environment in different countries may affect managers' behaviour differently. Foreign experienced managers may benefit firms through bringing advanced knowledge and a higher standard of legal regulation. Giannetti et al. (2015) indicate that directors who gain their foreign experience from countries or regions with advanced management practices or better corporate governance have a positive effect on firms' internationalization and hence improve corporate governance. John et al. (2008) find that better corporate governance has a positive effect on investing in riskier value enhancing projects. Here we test whether managers who gain foreign experience from countries with advanced management practices or better corporate governance are more likely to undertake higher risks.

Bloom et al. (2012) rank managerial practice across countries by capturing the exertion of management techniques on cost reduction and quality improvement of firms' productivity and valuation. Based on the managerial practice index presented by Bloom et al. (2012), we define the top three countries¹⁴ in which managers gained their foreign experience from, as a dummy variable (*High MP*) equal to one, otherwise zero. Moreover, La Porta et al. (1998) rank the quality of corporate governance in a variety of dimensions such as anti-director rights, mandatory dividends and creditor rights. Following La Porta et al. (1998) and Giannetti et al. (2015), we define the countries with the highest anti-director rights score¹⁵ from which managers gained their foreign experience, as a dummy variable (*High CG*) equal to one, otherwise zero.

According to Table 8, top managers who gain experience in countries or regions with advanced management practices or better corporate governance have positive and significant correlation

¹⁴The top three countries based on Bloom et al. (2012) managerial practice index are the US, Japan and Germany.

¹⁵ According to La Porta et al. (1998), countries or regions with the highest anti-director rights score include Canada, Hong Kong, India, Pakistan, South Africa, the United Kingdom, the United States and Chile.

with corporate risk-taking in private firms. Interestingly, the significance of the *FE dummy* disappears in all the models, which suggests that the impact of foreign experience in the main results is strongest where managers gained their experience in countries or regions with advanced management practice or better corporate governance. Our results indicate that the positive and significant relationship between managerial foreign experience and corporate risk-taking appears to be affected by the quality of management practice and corporate governance in different countries or regions.

[Insert Table 8 here]

Overall, our results are consistent with existing studies that different types of foreign experience influence corporate performance and value differently (Giannetti et al., 2015; Yuan et al., 2018; and Zhang et al., 2018).

2.4.6 Does firm corporate governance or external circumstances matter?

In this section, we investigate whether firm's internal corporate governance and their external institutional environments, impact foreign experienced managers on risk-taking differently. Following Li and Zeng (2019), we divide our private firm sample into sub-samples, based on the median value of corporate governance and external environment measures, respectively.

2.4.6.1 Corporate governance

First, we investigate whether the quality of corporate governance matters. John et al. (2008) indicate that when managers are well monitored with better corporate governance, they focus more on beneficial risky projects rather than on private interests. Giannetti et al. (2015) provide evidence that managerial foreign experience has positive effect on corporate governance. Therefore, the improved corporate governance, explained by managers' foreign experience may also facilitate managers to take care of minority shareholders' interests through investing in riskier value-enhancing projects.

Bhagat and Black (2001) argue that independent directors are expected to better monitor management compared with other directors on a board. The China Securities Regulatory Commission requires firms to have at least one-third of board directors as independent directors (CSRC, 2002). The main role of independent directors is to monitor management and it has to be independent from firms' managers, employees or major shareholders (Conyon and He, 2011). Therefore, we define the percentage of independent directors as a measure of corporate governance quality. The other measures of corporate governance we use are the percentage of top management ownership over total number of shares issued and CEO duality (*CEO_Duality*). Dixon, Guariglia and Vijayakumaran (2017) argue that managerial ownership can align managers' incentives with shareholders' interests, resulting in an increase of firm value and a decrease in agency problems and costs. In addition, Tuggle, Sirmon, Reutzel and Bierman (2010) indicate that the existence of CEO duality weakens the monitoring function of the board. According to Panel A of Table 9, the impact of managerial foreign experience on corporate risk-taking is only significant for firms with better corporate governance (i.e. firms with the ratio of independent directors and managerial ownership above the median and for firms without CEO duality). The results indicate that the influence of managerial foreign experience on corporate risk-taking is moderated by corporate governance quality. Foreign experienced managers are more likely to take on risk in firms with better internal governance mechanisms.

2.4.6.2 Local economy and institutional environment

According to Khaw et al., (2016), provinces such as Zhejiang and Guangdong in the eastern regions have better external governance and institutional environments. However, the external governance and institutional environments in the western regions such as Tibet and Qinghai are less developed. According to Chen, Cumming, Hou and Lee (2016), better external monitoring can facilitate corporate transparency and reduce corporate fraud opportunity and

agency problems. On the other hand, weak external monitoring may lead to high agency costs, opaque corporate transparency, and thereby decreasing firm value and investors' wealth.

Although the Chinese government provides ample support for western regions, the economy in the western areas still falls behind than that in eastern areas (Wong, Miao, Cui and Tang, 2018). The influence of managerial foreign experience may be more pronounced among firms with less developed external environment and monitoring, as such firms have a greater need for well-trained talented managers to overcome poor external settings and enhance firm performance.

We use provincial GDP growth and institutional ownership to measure provincial economies and external monitoring. GDP growth is conventionally used to measure the economic growth and development of each province (Chen, Cheng, Hao and Liu, 2019). A higher value of GDP growth indicates a better developed local economy. Institutional ownership provides monitoring mechanisms. Higher percentage of institutional ownership indicates better external corporate governance (Li et al., 2019). According to Panel B of Table 9, the coefficients of *FE dummy* are only/or more significant among firms in the below-median subsamples where the local economy or external monitoring is weak. This result indicates that firms located in weak provincial economies or under substandard monitoring benefit more from foreign experienced managers than do those located in strong provincial economies and sound monitoring.

[Insert Table 9 here]

2.4.7 Does risk-taking by managers with foreign experience add firm value?

Thus far, we find that managerial foreign experience leads to greater risk-taking in private firms. The next question is whether the type of higher risk-taking associated with managerial foreign experience is value enhancing. Giannetti et al. (2015) find that managerial foreign experience is positively associated with firm value. However, the channels through which managerial

foreign experience influences firm value are overlooked. According to John et al. (2008) and Faccio et al. (2011), higher corporate risk-taking is also likely to increase firm value. Aligning previous empirical evidences with our result showing that foreign experienced managers have a positive influence on corporate risk-taking, we argue that the high corporate risk-taking might therefore be the channel through which foreign experienced managers enhance firm value.

To test this, we calculate *Tobin's Q* as a measure of firm value. Consistent with Yuan et al. (2018), it is the sum of market value of equity and the book value of total liability to the book value of total assets. Further, we use the method applied in Section 4.5 to produce the predicted value and residuals of *FE dummy* (see Panel A of Table 10) to capture the explanatory variables in *risk1* and *risk2* models, respectively. The regression models are presented in Equation 4:

$$\begin{aligned}
 \text{Tobin's } Q = & \alpha + \beta_1 \text{ FE dummy fitted value} + \beta_2 \text{ FE dummy residuals} + \beta_3 \text{ top1} + \beta_4 \text{ top2} \\
 & - 5 + \beta_5 \text{ FO} + \beta_6 \text{ bsize} + \beta_7 \text{ indeperc} + \beta_8 \text{ roa} + \beta_9 \text{ leverage} \\
 & + \beta_{10} \text{ salegrowth} + \beta_{11} \text{ firmsize} + \beta_{12} \text{ firmage} + \text{Firm} + \text{Year} + \varepsilon \quad (4)
 \end{aligned}$$

The results of the estimation are shown in Panel B of Table 10. The coefficients of *FE dummy fitted value* are positively and significantly related to *Tobin's Q* at the 10% level in both models. The positive and significant results reveal that risk-taking is an important mechanism for which the top managers with foreign experience enhance firm value¹⁶.

[Insert Table 10 here]

2.4.8 Stock return volatility

Our risk-taking measures focus on the fluctuation of accounting profitability. In this section, we test whether managerial foreign experience caused firm performance (ROA and ROS)

¹⁶ In an unpublished table, we also consider foreign experienced managers' tenure. We find that foreign experienced top managers with short-term tenure contracts have a stronger effect on corporate risk-taking than the ones with long-term contracts, which supports the eyeball effect. However, foreign experienced managers with both short-term and long-term tenure impact firm value indifferently, suggesting that the tenure effect has no significant influence on foreign experienced managers to improve firm value through riskier-value enhancing projects.

fluctuation influences stock return volatility. Pan et al. (2015) argues that when new managers can significantly change firm performance, stock returns will be more volatile as the market learns the ability of new managers and reassesses future profits accordingly. Since we find foreign experienced managers increase volatility of accounting profitability significantly, there may be a causal positive relationship between managerial foreign experience and stock return volatility. Following Bernile et al. (2018), we measure stock returns volatility (*risk3*) with the standard deviation of daily stock returns multiplied by the square root of 252. The results are shown in Table 12. Panel A reports the results of the baseline OLS regressions, IV test and DID analysis. In line with our main results, the coefficients of *FE dummy* are positively and significantly related to *risk3* in private firms, whereas it is negatively and significantly related to *risk3* in SOEs. However, after endogeneity checks only the result in private firms subsample remains significant. The results are in line with our conjecture that managerial foreign experience has a stronger impact on the stock volatility in private firms, rather than SOEs.

Pan et al. (2015) also argue that under Bayesian learning model, the increased stock return volatility will dissipate over the top managers' tenure. In particular, the pace of the decline is even faster if the managers' ability is crucial in value creation. Consistent with Pan et al. (2015) and given the positive association between managerial foreign experience and enhanced firm value, we expect the increase in stock return volatility is more pronounced in the short run rather than the long run. To test this, we examine firms who transition from having non-foreign experienced managers to foreign experienced managers. We create a dummy variable (*FE succession*) which equals one if the new foreign experienced managers are in the first year of their tenure, otherwise zero. According to Panel B of Table 12, the coefficient of *FE succession* is positive and significant on current years stock returns volatility. However, the significance of *FE succession* disappears in the year_{t+1}, confirming our expectations.

Overall, our results indicate that appointing managers with foreign experience increases stock return volatility in private firms as the market learns and updates its assessment on managers' ability. Moreover, the increased fluctuation of stock return is mitigated with foreign experienced managers' tenure.

[Insert Table 12 here]

2.5. Conclusion

We examine the impact of managerial foreign experience on corporate risk-taking. Using the proxies of earnings volatility, we find that firms with foreign experienced top managers undertake a greater level of risk and that this is only the case for private companies rather than for SOEs. Foreign experienced managers are politically motivated to implement political goals in SOEs rather than engaging in riskier value enhancing projects.

We document two channels through which foreign experienced top managers may increase corporate risk-taking, which are; increasing the degree of internationalization, and the mismatch between short-term debt and long-term investment. Further, the evidence shows that this impact is stronger when the nature of managers' foreign experience is practical, rather than educational and when their experience has been gained in countries or regions with the most advanced management practices or better corporate governance. In contrast, managerial foreign short-term visiting experience does not influence corporate risk-taking. The empirical evidence also suggests that the positive impact of managerial foreign experience on corporate risk-taking is stronger among firms with better internal corporate governance and those operating in poorer external institutional environments. Finally, our results also emphasize that high risk-taking is an important channel through which foreign experienced managers enhance firm value and appointing foreign experienced managers increase stock return volatility for short run.

This study benefits firms by highlighting that managerial characteristics, and in particular the managerial foreign experience, influences corporate risk-taking, at least in private firms, and this higher risk-taking improves their firm's value. These findings are especially useful for companies seeking to improve their value enhancing risk-taking strategies. Further, these findings are also beneficial to policymakers in gauging the success of policies encouraging Chinese expatriates to return home.

Appendix

Appendix A. Variable definitions

This appendix presents the variable definitions.

Variable	Definition
Dependent variable	
<i>risk1</i>	Firm's earnings volatility (ROA standard deviation) over three-year overlapping periods
<i>risk2</i>	The volatility of return on sales (ROS) over three-year overlapping periods
<i>risk3</i>	The standard deviation of daily stock returns multiplied by the square root of 252
<i>Tobin's Q</i>	The sum of market value of equity and book value of total liability to the book value of total assets
Explanatory variable	
<i>FE dummy</i>	A dummy variable equal to 1 if a firm's chairman, vice chairman or CEO has foreign experience, otherwise 0
<i>working</i>	A dummy variable equal to 1 if a firm's chairman, vice chairman or CEO has foreign working experience, otherwise 0
<i>studying</i>	A dummy variable equal to 1 if a firm's chairman, vice chairman or CEO has foreign study experience, otherwise 0
<i>short-term</i>	A dummy variable equal to 1 if a firm's chairman, vice chairman or CEO has foreign short-term visiting experience, otherwise 0. The definition of short-term visiting experience is retrieved from managers' resume
<i>High MP</i>	A dummy variable equal to 1 if managers gained their foreign experience in top three countries based on Bloom et al. (2012), which are US, Japan and Germany, otherwise 0
<i>High CG</i>	A dummy variable equal to 1 if managers gained their foreign experience in countries or regions with best investor protection based on La Porta et al. (1998), otherwise 0
<i>FE succession</i>	A dummy variable equals 1 if the new foreign experienced managers are in the first year of their tenure, otherwise 0
Other variables	
<i>SOE</i>	A dummy variable equal to 1 if a firm is controlled by the state or state-owned enterprises, otherwise 0
<i>top1</i>	The largest shareholding over the number of shares outstanding
<i>top2-5</i>	The sum of the second to fifth largest shareholding to the number of shares outstanding
<i>FO</i>	The number of foreign owned shares over the total number of shares
<i>bsize</i>	The natural logarithm of total number of directors on the board
<i>ideperc</i>	The number of independent directors over the total number of directors on the board
<i>roa</i>	A proxy measured by return on assets, which equals to earnings before interests and tax over total assets
<i>leverage</i>	Total debt divided by total assets
<i>salegrowth</i>	The annual growth rate of sales
<i>firmage</i>	The natural logarithm of one plus the years between establishment of the firm and year observation
<i>firmsize</i>	The natural logarithm of total assets

<i>British</i>	A dummy variable that equals 1 if firms are located in provinces where Great Britain built a concession or territory in the late Qing dynasty, otherwise 0
<i>Christian</i>	The number of colleges for each province that were built by Christian missionaries up to 1920
<i>post</i>	A dummy variable that equals 1 if firm-years are after the CEO transition, otherwise 0
<i>transition</i>	A dummy variable that equals 1 if a firm experiences a transition from a non-foreign experienced CEO to a foreign experienced CEO, and 0 if a firm experiences a CEO transition without any foreign experienced CEOs involved
<i>CEO_Age</i>	The natural logarithm of CEO's age
<i>CEO_Gender</i>	A dummy variable equal to 1 if a CEO is male, otherwise 0
<i>CEO_Duality</i>	A dummy variable equal to 1 if the chairman and CEO of a firm are the same person, otherwise 0
<i>Chairman_Age</i>	The natural logarithm of chairman's age
<i>FS</i>	A dummy variable equal to 1 if a firm has foreign sale in a certain year, otherwise 0
<i>FMA</i>	A dummy variable equal to 1 if a firm has overseas M&A activities in a certain year, otherwise 0
<i>mismatch</i>	A dummy variable equal to 1 if a firm meets the following conditions in a given year: 1) the change of current liabilities is greater than the change of current assets; 2) capital expenditure is greater than the change of non-current liabilities; and 3) capital expenditure is greater than zero. Otherwise, <i>mismatch</i> equals to 0
<i>Management Ownership</i>	The percentage of top management ownership over total number of shares issued
<i>GDP growth</i>	Provincial GDP growth based on the province where firm's headquarters are based
<i>Institutional ownership</i>	The number of shares held by institutional investors over the total number of shares

Appendix B. Correlation matrix

This appendix presents correlation matrix across the baseline analysis. The variable descriptions are summarized in Appendix A.

	<i>FE</i>	<i>SOE</i>	<i>top1</i>	<i>top2-5</i>	<i>FO</i>	<i>bsize</i>	<i>indeperc</i>	<i>roa</i>	<i>leverage</i>	<i>salegrowth</i>	<i>firmsize</i>	<i>firmage</i>
<i>FE</i>	1											
<i>dummy</i>	1											
<i>SOE</i>	-0.101	1										
<i>top1</i>	-0.005	0.192	1									
<i>top2-5</i>	0.097	-0.248	-0.313	1								
<i>FO</i>	0.138	-0.106	0.082	0.121	1							
<i>bsize</i>	-0.009	0.248	0.029	0.014	-0.028	1						
<i>indeperc</i>	0.011	-0.062	0.045	-0.003	0.013	-0.451	1					
<i>roa</i>	0.045	-0.107	0.118	0.134	0.054	0.017	-0.020	1				
<i>leverage</i>	-0.070	0.281	0.034	-0.211	-0.091	0.136	-0.016	-0.394	1			
<i>sale</i>										1		
<i>growth</i>	0.011	-0.047	0.037	0.076	0.014	-0.021	0.014	0.204	0.035	1		
<i>firmsize</i>	0.019	0.345	0.290	-0.064	-0.044	0.271	0.027	0.054	0.381	0.037	1	
<i>firmage</i>	-0.044	0.187	-0.156	-0.197	-0.071	0.021	-0.038	-0.107	0.227	-0.015	0.110	1

Appendix D. Data statistics by managerial foreign experience

This appendix shows the data summary statistics categorized by managerial foreign experience.

Variables		NonFE	FE	NonFE-FE
	obs		Mean	MeanDiff
<i>risk1</i>	15,922	0.029	0.032	-0.003***
<i>risk2</i>	15,922	0.092	0.103	-0.011
<i>SOE</i>	15,922	0.449	0.288	0.161***
<i>top1</i>	15,922	0.359	0.357	0.002
<i>top25</i>	15,922	0.161	0.197	-0.035***
<i>FO</i>	15,922	0.006	0.028	-0.022***
<i>bsize</i>	15,922	2.163	2.157	0.006
<i>indeperc</i>	15,922	0.37	0.372	-0.002
<i>roa</i>	15,922	0.044	0.053	-0.010***
<i>leverage</i>	15,922	0.466	0.416	0.050***
<i>salegrowth</i>	15,922	0.193	0.212	-0.019
<i>firmsize</i>	15,922	21.877	21.955	-0.078**
<i>firmage</i>	15,922	2.684	2.630	0.054***

Appendix C. Covariate balance check for PSM sample

Appendix C shows the results of covariate balance checks on the mean difference between treatment group and matched group. Panel A and Panel B show the results on private firms and SOEs, respectively.

Panel A private firms				
	Mean			
	Non-FE	FE	Difference	p-value
<i>top1</i>	0.341	0.344	0.003	0.600
<i>top2-5</i>	0.2	0.203	0.003	0.430
<i>FO</i>	0.045	0.049	0.003	0.486
<i>bsize</i>	2.14	2.14	0.000	0.520
<i>indeperc</i>	0.373	0.373	0.000	0.980
<i>roa</i>	0.057	0.058	0.001	0.693
<i>leverage</i>	0.381	0.380	-0.001	0.694
<i>salegrowth</i>	0.244	0.235	-0.009	0.690
<i>firmsize</i>	21.624	21.579	-0.045	0.286
<i>firmage</i>	2.604	2.602	-0.002	0.904

Panel B SOEs				
	Mean			
	Non-FE	FE	Difference	p-value
<i>top1</i>	0.379	0.388	0.008	0.381
<i>top2-5</i>	0.181	0.180	-0.001	0.885
<i>FO</i>	0.005	0.006	0.001	0.899
<i>bsize</i>	2.19	2.21	0.002	0.329
<i>indeperc</i>	0.368	0.369	0.001	0.855
<i>roa</i>	0.044	0.043	-0.001	0.837
<i>leverage</i>	0.496	0.510	0.014	0.263
<i>salegrowth</i>	0.165	0.158	-0.007	0.817
<i>firmsize</i>	22.767	22.886	0.119	0.228
<i>firmage</i>	2.71	2.700	-0.001	0.529

Tables

Table 1: Descriptive statistics

Table 1 includes the summary statistics of variables used in the analysis and provides the mean and median difference tests between private firms and SOEs. The description of the variables is displayed in Appendix A.

Variables	Full sample			Private firms		SOEs		Privates vs SOEs	
	Obs	Mean	median	Mean	median	Mean	Median	Mean diff	Median diff
Earnings volatility measures									
<i>risk1</i>	15,922	0.032	0.017	0.034	0.018	0.030	0.015	0.004***	0.003***
<i>risk2</i>	15,922	0.102	0.030	0.116	0.032	0.083	0.027	0.033***	0.005***
<i>risk3</i>	15,922	0.032	0.029	0.033	0.030	0.031	0.023	0.002***	0.007***
Managerial foreign experience variable									
<i>FE dummy</i>	15,922	0.108	0.000	0.135	0.000	0.072	0.000	0.063***	0.000***
Other variables									
<i>top1</i>	15,922	0.360	0.339	0.334	0.308	0.392	0.388	-0.059***	-0.080***
<i>top2-5</i>	15,922	0.165	0.145	0.19	0.176	0.133	0.098	0.057***	0.078***
<i>FO</i>	15,922	0.010	0.000	0.016	0.000	0.002	0.000	0.014***	0.000***
<i>bsize</i>	15,922	2.162	2.197	2.120	2.197	2.219	2.200	-0.099***	-0.003***
<i>indeperc</i>	15,922	0.333	0.370	0.373	0.333	0.367	0.333	0.007***	0.000***
<i>roa</i>	15,922	0.045	0.042	0.051	0.048	0.037	0.034	0.014***	0.014***
<i>leverage</i>	15,922	0.460	0.458	0.406	0.392	0.532	0.545	-0.126***	-0.153***
<i>salegrowth</i>	15,922	0.195	0.104	0.218	0.121	0.165	0.086	0.053***	0.035***
<i>firmsize</i>	15,922	21.886	21.736	21.503	21.399	22.39	22.212	-0.887***	-0.813***
<i>firmage</i>	15,922	2.678	2.773	2.616	2.708	2.761	2.833	-0.144***	-0.125***
<i>Tobin's Q</i> ¹⁷	15,921	2.086	2.020	3.104	2.330	2.150	1.655	0.954***	0.675***

¹⁷ Due to the missing value, one of the observations of *Tobin's Q* is dropped off in private firms' subsample.

Table 2. Managerial foreign experience and corporate risk-taking

Table 2 reports the results of OLS regressions with the whole sample, and the subsamples of the private firms and SOEs, consisting of 15,922, 9,051 and 6,871 firm-year observations, respectively. Fixed effects are controlled by firm and year and standard errors are clustered by industry.

$$risk_ = \alpha + \beta_1 FEdummy + \beta_2 SOE + \beta_3 top1 + \beta_4 top2-5 + \beta_5 FO + \beta_6 bsize + \beta_7 indeperc + \beta_8 roa + \beta_9 leverage + \beta_{10} salegrowth + \beta_{11} firmsize + \beta_{12} firmage + Firm + Year + \varepsilon.$$

The variable descriptions are reported in Appendix A. We exclude *SOE* from regression equation when running the Private and SOEs subsamples. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	Full sample	Full sample	Private firms	Private firms	SOEs	SOEs
	<i>risk1</i>	<i>risk2</i>	<i>risk1</i>	<i>risk2</i>	<i>risk1</i>	<i>risk2</i>
<i>constant</i>	0.299*** (7.829)	1.307*** (3.014)	0.278*** (6.126)	0.954** (2.568)	0.181*** (4.645)	0.483 (1.487)
<i>FE dummy</i>	0.002 (0.932)	0.016 (1.198)	0.008*** (3.485)	0.052* (2.103)	-0.005* (-1.995)	-0.026** (-2.857)
<i>SOE</i>	0.002 (0.430)	0.016 (0.668)				
<i>top1</i>	-0.021** (-2.215)	-0.080 (-1.473)	-0.024** (-2.782)	-0.048 (-0.909)	-0.025* (-1.751)	-0.034 (-0.998)
<i>top2-5</i>	0.001 (0.105)	0.028 (0.948)	-0.006 (-0.436)	-0.025 (-0.332)	-0.003 (-0.204)	0.015 (0.259)
<i>FO</i>	-0.013 (-1.431)	-0.000 (-0.009)	-0.016* (-1.894)	-0.011 (-0.440)	0.014 (1.138)	0.027 (1.055)
<i>bsize</i>	0.002 (0.431)	-0.043* (-2.119)	-0.005 (-1.040)	-0.074* (-2.023)	0.008 (0.958)	0.015 (0.669)
<i>indeperc</i>	0.011 (1.379)	0.002 (0.036)	-0.010 (-1.217)	-0.121* (-1.780)	0.014 (1.040)	0.050 (1.304)
<i>roa</i>	-0.110*** (-8.582)	-0.569*** (-6.456)	-0.078*** (-4.519)	-0.619*** (-5.386)	-0.140*** (-6.261)	-0.467*** (-4.725)
<i>leverage</i>	0.063*** (8.638)	0.155*** (4.018)	0.057*** (3.795)	0.115** (2.174)	0.047*** (4.049)	0.149** (2.911)
<i>salegrowth</i>	-0.001 (-1.573)	-0.036*** (-4.654)	0.000 (0.115)	-0.037*** (-3.558)	-0.002* (-2.034)	-0.026*** (-2.977)
<i>firmsize</i>	-0.014*** (-8.365)	-0.051** (-2.714)	-0.013*** (-3.709)	-0.036 (-1.651)	-0.009*** (-4.899)	-0.030 (-1.645)
<i>firmage</i>	0.006 (0.958)	-0.021 (-0.746)	0.014 (1.299)	0.056 (1.248)	0.008 (1.286)	0.064* (1.951)
Observations	15,922	15,922	9,051	9,051	6,871	6,871
Adjusted R-squared	0.104	0.073	0.071	0.061	0.111	0.074
Firm	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes

Table 3. Instrumental variables (IV) test

Table 3 presents the result of IV test, consisting of 9,051 and 6,871 firm-year observations in private firms and SOEs, respectively. The fixed effects are controlled by firm, and year. The standard errors are clustered by industry.

$$risk_ = \alpha + \beta_1 FEdummy + \beta_2 top1 + \beta_3 top2-5 + \beta_4 FO + \beta_5 bsize + \beta_6 indeperc + \beta_7 roa + \beta_8 leverage + \beta_9 salegrowth + \beta_{10} firmsize + \beta_{11} firmage + Firm + Year + \varepsilon.$$

The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	Private firms			SOEs		
	First stage	<i>risk1</i>	<i>risk2</i>	First stage	<i>risk1</i>	<i>risk2</i>
<i>constant</i>	-3.653*** (-7.544)	0.429*** (7.673)	1.980*** (4.784)	-1.905*** (-3.414)	0.267*** (4.859)	0.896 (1.407)
<i>FE dummy</i>		0.383*** (3.875)	2.049*** (3.011)		0.085 (1.588)	0.268 (1.259)
<i>British</i>	0.093*** (2.644)			0.124** (2.386)		
<i>Christian</i>	0.061*** (3.696)			0.058*** (2.700)		
<i>top1</i>	0.421*** (3.281)	-0.050*** (-3.540)	-0.191* (-1.871)	-0.686*** (-3.535)	-0.017 (-1.120)	-0.015 (-0.355)
<i>top2-5</i>	0.562*** (3.323)	-0.049** (-2.217)	-0.256* (-2.087)	1.293*** (5.788)	-0.020 (-0.980)	-0.040 (-0.522)
<i>FO</i>	1.014 (1.322)	-0.013 (-1.461)	0.004 (0.140)	1.904 (11.334)***	0.015 (1.204)	0.029 (1.161)
<i>bsize</i>	0.565*** (4.955)	-0.047*** (-3.732)	-0.304*** (-3.930)	-0.652*** (-4.708)	0.016* (1.783)	0.041 (1.298)
<i>indeperc</i>	0.920** (2.381)	-0.078*** (-3.782)	-0.492** (-2.775)	-1.097** (-2.198)	0.023 (1.569)	0.076 (1.364)
<i>roa</i>	0.229 (0.760)	-0.094*** (-4.454)	-0.709*** (-7.403)	-0.353 (-0.785)	-0.136*** (-6.541)	-0.449*** (-4.716)
<i>leverage</i>	-0.287*** (-2.860)	0.077*** (5.820)	0.235*** (3.607)	-0.546*** (-3.653)	0.053*** (4.576)	0.171** (2.716)
<i>salegrowth</i>	0.016 (0.543)	-0.001 (-1.518)	-0.045*** (-4.555)	-0.013 (-0.274)	-0.001* (-1.758)	-0.025** (-2.602)
<i>firmsize</i>	0.025 (1.321)	-0.016*** (-4.761)	-0.054** (-2.603)	0.162*** (7.215)	-0.012*** (-6.656)	-0.040 (-1.696)
<i>firmage</i>	-0.019 (-0.433)	0.011 (0.985)	-0.017 (-0.293)	-0.484*** (-5.846)	-0.014 (-0.998)	-0.050 (-0.640)
Observations	9,051	9,051	9,051	6,871	6,871	6,871
Adjusted R-squared	0.039	0.074	0.064	0.068	0.114	0.077
Firm	No	Yes	Yes	No	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
F-test(χ^2)	17.940***			14.263***		

Table 4. DID analysis

Table 4 reports the result for DID analysis, consisting of 712 and 1,036 firm-year observations in private firms and SOEs, respectively. Fixed effects are controlled by industry and year and standard errors are clustered by firm.

$$risk_ = \alpha + \beta_1 post*transition + \beta_2 post + \beta_3 transition + \beta_4 top1 + \beta_5 top2-5 + \beta_6 FO + \beta_7 bsize + \beta_8 indeperc + \beta_9 roa + \beta_{10} leverage + \beta_{11} salegrowth + \beta_{12} firmsize + \beta_{13} firmage + industry + Year + \varepsilon.$$

The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	Private firms	Private firms	SOEs	SOEs
	<i>risk1</i>	<i>risk2</i>	<i>risk1</i>	<i>risk2</i>
<i>constant</i>	0.195*** (3.293)	1.251** (2.290)	0.154*** (3.673)	0.493*** (2.627)
<i>post*transition</i>	0.015* (1.696)	0.117* (1.694)	-0.005 (-0.992)	-0.025 (-1.521)
<i>post</i>	-0.001 (-0.257)	0.001 (0.018)	0.007 (1.404)	0.031 (1.176)
<i>transition</i>	0.006 (0.689)	0.045 (0.641)	0.008 (1.357)	0.018 (1.170)
<i>top1</i>	-0.007 (-0.445)	-0.207 (-1.056)	0.024* (1.687)	0.049 (0.979)
<i>top2-5</i>	-0.001 (-0.043)	-0.244 (-0.862)	0.023 (1.246)	0.072 (1.011)
<i>FO</i>	0.015 (0.555)	-0.062 (-0.265)	-0.030 (-0.684)	-0.083 (-0.578)
<i>bsize</i>	-0.004 (-0.388)	0.135 (1.261)	0.009 (0.841)	0.037 (0.657)
<i>indeperc</i>	0.007 (0.174)	0.502 (1.461)	-0.002 (-0.046)	-0.147 (-1.276)
<i>roa</i>	-0.147** (-1.989)	-1.275*** (-2.610)	-0.200*** (-2.775)	-0.941*** (-2.928)
<i>leverage</i>	0.015 (0.914)	-0.107 (-0.822)	0.045** (2.079)	0.095 (1.435)
<i>salegrowth</i>	-0.001 (-0.184)	0.017 (0.379)	-0.007*** (-3.084)	-0.029** (-2.439)
<i>firmsize</i>	-0.007*** (-2.991)	-0.066*** (-3.117)	-0.009*** (-3.379)	-0.028** (-2.363)
<i>firmage</i>	-0.001 (-0.104)	-0.009 (-0.098)	0.010* (1.863)	0.043* (1.744)
Observations	712	712	1,036	1,036
Adjusted R-squared	0.117	0.121	0.201	0.165
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Table 5. Robustness checks

Table 5 presents the result of robustness checks. Panel A shows the result of PSM sample analysis, consisting of 2,448 and 990 firm-year observations in private firms and SOEs, respectively. Fixed effects are controlled by firm and year and standard errors are clustered by industry. Panel B presents the result including individual's other characteristics with high dimension of fixed effects based on PSM sample analysis, consisting of 2,448 and 990 firm-year observations in private firms and SOEs, respectively. The fixed effects are controlled by firm, industry and year. The standard errors are clustered by industry.

$$risk_ = \alpha + \beta_1 FEdummy + \beta_2 top1 + \beta_3 top2-5 + \beta_4 FO + \beta_5 bsize + \beta_6 indeperc + \beta_7 roa + \beta_8 leverage + \beta_9 salegrowth + \beta_{10} firmsize + \beta_{11} firmage + Firm + Year + \varepsilon.$$

$$risk_ = \alpha + \beta_1 FEdummy + \beta_2 top1 + \beta_3 top2-5 + \beta_4 FO + \beta_5 bsize + \beta_6 indeperc + \beta_7 roa + \beta_8 leverage + \beta_9 salegrowth + \beta_{10} firmsize + \beta_{11} firmage + \beta_{12} CEO_Age + \beta_{13} CEO_Gender + \beta_{14} CEO_Duality + \beta_{15} Chairman_Age + Firm + Industry \& Year + \varepsilon.$$

The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A				
	Private firms	Private firms	SOEs	SOEs
	<i>risk1</i>	<i>risk2</i>	<i>risk1</i>	<i>risk2</i>
constant	0.176** (2.601)	0.301 (0.687)	0.444*** (4.414)	0.527 (1.063)
FE dummy	0.011** (2.918)	0.059** (2.507)	0.001 (0.335)	-0.004 (-0.322)
Observations	2,448	2,448	990	990
Adjusted R-squared	0.053	0.063	0.044	0.026
Controls	Yes	Yes	Yes	Yes
Firm	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Panel B				
	Private firms	Private firms	SOEs	SOEs
	<i>risk1</i>	<i>risk2</i>	<i>risk1</i>	<i>risk2</i>
constant	0.019 (0.366)	0.555 (1.395)	0.394* (2.038)	0.466 (0.920)
FE dummy	0.016* (1.938)	0.075** (2.135)	-0.003 (-0.904)	-0.006 (-0.719)
CEO_Age	0.032*** (5.880)	-0.020 (-0.464)	0.001 (0.050)	0.014 (0.318)
CEO_Gender	0.003 (0.424)	-0.007 (-1.480)	-0.001 (-0.322)	-0.006 (-0.515)
CEO_Duality	0.000 (0.062)	-0.015 (-0.771)	0.006 (0.852)	0.004 (0.239)
Chair_Age	-0.011 (-1.735)	-0.078 (-1.488)	0.033*** (4.615)	0.054* (2.019)
Observations	2,448	2,448	990	990
Adjusted R-squared	0.124	0.390	0.238	0.273
Controls	Yes	Yes	Yes	Yes
Firm	Yes	Yes	Yes	Yes

Industry and Year	Yes	Yes	Yes	Yes
--------------------------	-----	-----	-----	-----

Table 6. Channels through which FE influence risk-taking

Table 6 presents the results for channel tests with 9,051 firm-year observations in private firms. Panel A presents the regression for collecting fitted values and residuals and Panel B presents the channel test results. The Fixed effects are controlled by firm and year and standard errors are clustered by industry.

$$risk_ = \alpha + \beta_1 predicted\ value + \beta_2 residuals + \beta_3 top1 + \beta_4 top2-5 + \beta_5 FO + \beta_6 bsize + \beta_7 indeperc + \beta_8 roa + \beta_9 leverage + \beta_{10} salegrowth + \beta_{11} firmsize + \beta_{12} firmage + Firm + Year + \varepsilon.$$

The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A	Private firms <i>Foreign_Sale</i>	Private firms <i>Foreign M&A</i>	Private firms <i>Mismatch</i>
<i>constant</i>	-0.786*** (-6.258)	-1.356*** (-39.669)	-0.042 (-0.507)
<i>FE dummy</i>	0.300*** (5.856)	0.405*** (13.497)	0.063** (2.291)
Observations	9,051	9,051	8,940
Pseudo R-squared	0.027	0.019	0.016
Year	Yes	Yes	Yes

Panel B	Private firms <i>risk1</i>	Private firms <i>risk2</i>	Private firms <i>risk1</i>	Private firms <i>risk2</i>	Private firms <i>risk1</i>	Private firms <i>risk2</i>
<i>constant</i>	0.272*** (5.031)	1.116** (2.541)	0.280*** (5.287)	1.185** (2.703)	0.129** (2.391)	0.322 0.688
<i>FS predicted</i>	0.066*** (3.226)	0.424* (1.948)				
<i>FS residuals</i>	-0.001 (-0.703)	-0.015 (-1.339)				
<i>FMA predicted</i>			0.087*** (3.752)	0.501** (2.243)		
<i>FMA residuals</i>			0.000 (0.154)	0.008** (2.351)		
<i>Mismatch predicted</i>					0.327*** (3.330)	2.090* (2.006)
<i>Mismatch residuals</i>					-0.001*** (-3.801)	-0.014** (-2.593)
<i>top1</i>	-0.020** (-2.565)	-0.031 (-0.600)	-0.020** (-2.536)	-0.030 (-0.563)	-0.020** (-2.547)	-0.033 (-0.590)

<i>top2-5</i>	-0.006 (-0.459)	-0.026 (-0.350)	-0.006 (-0.443)	-0.024 (-0.321)	-0.004 (-0.320)	-0.014 (-0.187)
<i>FO</i>	-0.015 (-1.726)	-0.010 (-0.380)	-0.015 (-1.696)	-0.008 (-0.293)	-0.016 (-1.525)	-0.014 (-0.291)
<i>bsize</i>	-0.004 (-0.781)	-0.070* (-2.035)	-0.004 (-0.800)	-0.070* (-2.044)	-0.003 (-0.703)	-0.068* (-1.990)
<i>indeperc</i>	-0.008 (-0.953)	-0.124* (-1.900)	-0.008 (-0.942)	-0.119* (-1.767)	-0.003 (-0.306)	-0.085 (-1.254)
<i>roa</i>	-0.077*** (-4.313)	-0.614*** (-5.658)	-0.077*** (-4.307)	-0.615*** (-5.656)	-0.074*** (-4.338)	-0.570*** (-5.445)
<i>leverage</i>	0.058*** (3.878)	0.130** (2.400)	0.058*** (3.870)	0.130** (2.390)	0.058*** (3.862)	0.137** (2.414)
<i>salegrowth</i>	0.000 (0.017)	-0.038*** (-3.552)	0.000 (0.002)	-0.038*** (-3.560)	-0.000 (-0.260)	-0.039*** (-3.396)
<i>firmsize</i>	-0.013*** (-3.837)	-0.043* (-1.846)	-0.014*** (-3.946)	-0.043* (-1.919)	-0.013*** (-3.946)	-0.046* (-1.984)
<i>firmage</i>	0.014 (1.207)	-0.004 (-0.070)	0.014 (1.198)	-0.006 (-0.107)	0.013 (1.069)	-0.013 (-0.235)
Observations	9,051	9,051	9,051	9,051	8,940	8,940
Adjusted R-squared	0.073	0.064	0.075	0.065	0.075	0.065
Firm	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes

Table 7. Different types of foreign experience

Table 7 presents the results for the different types of foreign experience, consisting of 9,051 firm-year observations in private firms. Fixed effects are controlled by firm and year and standard errors are clustered by industry.

$$risk_{it} = \alpha + \beta_1 working/studying/short-term + \beta_2 top1 + \beta_3 top2-5 + \beta_4 FO + \beta_5 bsize + \beta_6 indeperc + \beta_7 roa + \beta_8 leverage + \beta_9 salegrowth + \beta_{10} firmsize + \beta_{11} firmage + Firm + Year + \varepsilon$$

The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	Private firms <i>risk1</i>	Private firms <i>risk2</i>
Panel A foreign practical experience		
<i>working</i>	0.007** (2.908)	0.060* (1.766)
Controls	Yes	Yes
Observations	9051	9051
Adjusted R-squared	0.072	0.064
Firm	Yes	Yes
Year	Yes	Yes
Panel B foreign educational experience		
<i>studying</i>	0.004* (1.970)	0.018 (1.462)
Controls	Yes	Yes
Observations	9051	9051
Adjusted R-squared	0.071	0.062
Firm	Yes	Yes
Year	Yes	Yes
Panel C foreign short-term experience		
<i>short-term</i>	-0.007 (-1.260)	0.069 (0.556)
Controls	Yes	Yes
Observations	9051	9051
Adjusted R-squared	0.071	0.062
Firm	Yes	Yes
Year	Yes	Yes

Table 8. Advanced management practice or better corporate governance

Table 8 presents the result for *High MP* and *High CG* with 9,051 firm-year observations in private firms. Fixed effects are controlled by firm and year and standard errors are clustered by industry.

$$risk_{it} = \alpha + \beta_1 FE_{dummy} + \beta_2 High\ MP/High\ CG + \beta_3 top1 + \beta_4 top2-5 + \beta_5 FO + \beta_6 bsize + \beta_7 indeperc + \beta_8 roa + \beta_9 leverage + \beta_{10} salegrowth + \beta_{11} firmsize + \beta_{12} firmage + Firm + Year + \varepsilon$$

The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	Private firms <i>risk1</i>	Private firms <i>risk2</i>	Private firms <i>risk1</i>	Private firms <i>risk2</i>
<i>constant</i>	0.286*** (5.408)	1.212** (2.758)	0.288*** (5.303)	1.229** (2.722)
<i>FE dummy</i>	-0.001 (-0.189)	-0.024 (-1.026)	0.001 (0.373)	-0.015 (-1.105)
<i>High MP</i>	0.016* (1.826)	0.132* (1.746)		
<i>High CG</i>			0.011* (2.093)	0.100* (2.061)
<i>top1</i>	-0.020** (-2.730)	-0.035 (-0.729)	-0.020** (-2.592)	-0.033 (-0.640)
<i>top2-5</i>	-0.005 (-0.359)	-0.017 (-0.209)	-0.006 (-0.457)	-0.025 (-0.341)
<i>FO</i>	-0.016 (-1.688)	-0.016 (-0.488)	-0.016* (-1.777)	-0.015 (-0.534)
<i>bsize</i>	-0.003 (-0.689)	-0.065* (-2.010)	-0.003 (-0.765)	-0.069* (-2.045)
<i>indeperc</i>	-0.007 (-0.834)	-0.113 (-1.622)	-0.008 (-0.998)	-0.125* (-1.889)
<i>roa</i>	-0.075*** (-4.068)	-0.604*** (-5.901)	-0.077*** (-4.285)	-0.615*** (-5.702)
<i>leverage</i>	0.058*** (3.830)	0.132** (2.391)	0.058*** (3.902)	0.133** (2.432)
<i>salegrowth</i>	-0.000 (-0.021)	-0.038*** (-3.530)	-0.000 (-0.015)	-0.038*** (-3.595)
<i>firmsize</i>	-0.014*** (-3.925)	-0.044* (-1.921)	-0.014*** (-3.920)	-0.043* (-1.907)
<i>firmage</i>	0.014 (1.185)	-0.003 (-0.058)	0.013 (1.177)	-0.007 (-0.129)
Observations	9,051	9,051	9,051	9,051
Adjusted R-squared	0.074	0.067	0.073	0.065
Firm	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Table 9. Managerial foreign experience and firm risk-taking among firms with different corporate governance and external environment

Table 9 reports the relationship between managerial foreign experience and corporate risk-taking across different corporate governance qualities and external environment settings. In Panels A-B, we split our full private firm sample into two sub-sample based on the medians of independent directors, managerial ownership, CEO duality, provincial GDP growth, and institutional ownership respectively. The high\low sub-sample for each panel contains firm-year observations with above\below-median in response to each variable. Fixed effects are controlled by firm and year and standard errors are clustered by industry.

$$risk_ = \alpha + \beta_1 FE\ dummy + \beta_2 top1 + \beta_3 top2-5 + \beta_4 FO + \beta_5 bsize + \beta_6 indeperc + \beta_7 roa + \beta_8 leverage + \beta_9 salegrowth + \beta_{10} firmsize + \beta_{11} firmage + Firm + Year + \varepsilon.$$

The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A: Corporate governance				
	<i>risk1</i>		<i>risk2</i>	
	High	Low	High	Low
Independent directors				
<i>FE dummy</i>	0.012** (2.796)	0.004 (1.662)	0.058* (1.759)	0.010 (0.518)
observations	4,344	4,707	4,344	4,707
Adjusted R-squared	0.106	0.030	0.084	0.042
Managerial Ownership				
<i>FE dummy</i>	0.010** (2.767)	0.005 (1.631)	0.037** (2.308)	0.034 (1.324)
observations	4,525	4,525	4,525	4,525
Adjusted R-squared	0.023	0.104	0.043	0.082
CEO duality				
<i>FE dummy</i>	Yes 0.017 (1.492)	No 0.026** (2.196)	Yes 0.031 (0.510)	No 0.042** (2.267)
observations	2,896	6,155	2,896	6,155
Adjusted R-squared	0.051	0.076	0.091	0.057
Panel B: external environments				
	<i>risk1</i>		<i>risk2</i>	
	High	Low	High	Low
GDP growth				
<i>FE dummy</i>	0.007 (1.364)	0.013*** (3.322)	0.062 (1.153)	0.075** (2.320)
observations	4,463	4,588	4,463	4,588
Adjusted R-squared	0.055	0.049	0.054	0.063
Institutional ownership				
<i>FE dummy</i>	0.006 (1.664)	0.009** (2.597)	0.029 (1.093)	0.087** (2.152)
observations	4526	4525	4526	4525
Adjusted R-squared	0.046	0.075	0.032	0.079

Table 10. Risk-taking and firm value enhancing

Table 10 presents the result for consequences of high risk-taking on firm value in private firms with 9,050 firm-year observations. Panel A reports the results only between *FE dummy* and risk-taking measures. Panel B presents the results for predicted values and residuals. Fixed effects are controlled by firm and year and standard errors are clustered by industry.

$$\text{Tobin's } Q = \alpha + \beta_1 \text{ FE dummy fitted value} + \beta_2 \text{ FE dummy residuals} + \beta_3 \text{ top1} + \beta_4 \text{ top2-5} + \beta_5 \text{ FO} + \beta_6 \text{ bsize} + \beta_7 \text{ indeperc} + \beta_8 \text{ roa} + \beta_9 \text{ leverage} + \beta_{10} \text{ salegrowth} + \beta_{11} \text{ firmsize} + \beta_{12} \text{ firmage} + \text{Firm} + \text{Year} + \varepsilon.$$

The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A		
	Private firms	Private firms
	<i>risk1</i>	<i>risk2</i>
<i>constant</i>	0.037*** (24.250)	0.110*** (8.376)
<i>FE dummy</i>	0.007** (2.825)	0.052** (2.324)
Observations	9,050	9,050
Adjusted R-squared	0.004	0.003
Firm	Yes	Yes
Year	Yes	Yes

Panel B		
	Private firms	Private firms
	<i>Tobin's Q</i>	<i>Tobin's Q</i>
<i>constant</i>	30.608*** (11.924)	31.686*** (12.909)
<i>FE dummy fitted value (risk1)</i>	28.975* (1.889)	
<i>FE dummy residuals (risk1)</i>	3.652*** (9.328)	
<i>FE dummy fitted value (risk2)</i>		4.141* (1.977)
<i>FE dummy residuals (risk2)</i>		0.410** (2.507)
<i>top1</i>	1.077* (1.983)	1.017* (1.861)
<i>top2-5</i>	1.689*** (6.691)	1.679*** (6.578)
<i>FO</i>	-0.088 (-0.248)	-0.145 (-0.414)
<i>bsize</i>	0.480** (2.516)	0.495** (2.517)
<i>indeperc</i>	1.128** (2.830)	1.149*** (2.968)

<i>roa</i>	4.813*** (3.922)	4.786*** (3.886)
<i>leverage</i>	1.300** (2.707)	1.458** (2.732)
<i>salegrowth</i>	0.127** (2.786)	0.142*** (3.034)
<i>firmsize</i>	-1.570*** (-14.048)	-1.601*** (-14.079)
<i>firmage</i>	0.099 (0.567)	0.153 (0.794)
Observations	9,050	9,050
Adjusted R-squared	0.427	0.424
Firm	Yes	Yes
Year	Yes	Yes

Table 11. Stock return volatility

Table 11 reports the results of daily stock return volatility. Panel A shows the results for OLS regressions in the whole sample, and the subsamples of the private firms and SOEs, IV test and DID analysis, consisting of 15,922, 9,051 and 6,871 firm year observations. Panel B reports the results for foreign experienced managers transition tests in private firms, consisting of 1,347 and 1,125 firm year observations across the models, respectively. Fixed effects are controlled by firm and year and standard errors are clustered by industry.

$$risk3 = \alpha + \beta_1 FE\ dummy + \beta_2 top1 + \beta_3 top2-5 + \beta_4 FO + \beta_5 bsize + \beta_6 indeperc + \beta_7 roa + \beta_8 leverage + \beta_9 salegrowth + \beta_{10} firmsize + \beta_{11} firmage + Firm + Year + \varepsilon.$$

$$risk3 = \alpha + \beta_1 FE\ succession + \beta_2 top1 + \beta_3 top2-5 + \beta_4 FO + \beta_5 bsize + \beta_6 indeperc + \beta_7 roa + \beta_8 leverage + \beta_9 salegrowth + \beta_{10} firmsize + \beta_{11} firmage + Firm + Year + \varepsilon.$$

The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A									
	Baseline results			IV test				DID Analysis	
	Whole sample	Private firms	SOEs	Private firms		SOEs		Private firms	SOEs
	<i>risk3</i>	<i>risk3</i>	<i>risk3</i>	First stage	<i>risk3</i>	First stage	<i>risk3</i>	<i>risk3</i>	<i>risk3</i>
<i>constant</i>	0.050*** (8.611)	0.045*** (8.623)	0.057*** (5.364)	-3.653*** (-7.544)	0.303*** (22.347)	-1.905*** (-3.414)	0.056*** (5.278)	0.073*** (11.521)	0.084*** (17.827)
<i>FE dummy</i>	0.000 (0.126)	0.001* (1.899)	-0.001*** (-3.812)		0.414*** (21.616)		0.003 (0.422)		
<i>post*transition</i>								0.002** (2.028)	-0.001 (-0.712)
<i>post</i>								0.000 (0.406)	0.000 (0.677)
<i>transition</i>								0.001 (1.071)	-0.001 (-0.926)
<i>British</i>				0.093*** (2.644)		0.124** (2.386)			
<i>Christian</i>				0.061*** (3.696)		0.058*** (2.700)			

Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	15,922	9,051	6,871	9,051	9,051	6,871	6,871	712	1,036
Adjusted R-squared	0.765	0.748	0.797	0.039	0.197	0.068	0.796	0.655	0.704
Firm	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
F-test(χ^2)				17.940***		14.263***			

Panel B

	<i>risk3</i>	<i>risk3_{t+1}</i>
<i>constant</i>	0.077*** (6.438)	0.093*** (7.886)
<i>FE succession</i>	0.001*** (4.110)	0.000 (0.116)
Observations	1,347	1,125
Adjusted R-squared	0.721	0.749
Controls	Yes	Yes
Firm	Yes	Yes
Year	Yes	Yes

CHAPTER 3

ESSAY TWO

This chapter presents the second essay, investigating the relationship between managerial foreign experience and corporate earnings quality. A brief overview of the motivations, key findings and contributions are provided in Section 3.1. Literature review and hypothesis development are then discussed in Section 3.2. Section 3.3 outlines in details about data and methodology used in the essay. The regression analyses, including the baseline analysis, endogeneity checks and subsample tests are presented in Section 3.4. Section 3.5 concludes this chapter. The reference list for this chapter is reproduced in the final section of this thesis.

Does managerial foreign experience improve accounting information quality? Evidence from China

Abstract

We show managerial foreign experience exhibits a positive effect on earnings quality which is robust to endogeneity checks and alternative earnings quality measure. The positive relationship is driven by managers with long, rather than short-term foreign experience and when they gain their experience in low earnings management and low corruption countries. We identify three channels through which managerial foreign experience improves earnings quality, including foreign ownership, dividend payment and overseas investment. We then show the inducement effect of managerial foreign experience is largely decreased in firms with strong government influence and political connections. Further, the external monitoring also moderate the effect of managerial foreign experience on earnings quality. Finally, this improved earnings quality is positively associated with stock returns and agency costs reduction. Together, these results highlight the importance of managerial foreign experience for firm accounting information quality.

JEL Classification Codes: G34, L33

Keywords: Managerial foreign experience, Earnings quality, Corporate governance

3.1. Introduction

Firm-level corporate governance practices are more important in emerging markets with weak regulatory environments (Klapper and Love, 2004), and factors which improve accounting information quality are likely to be more critical to investors and regulators in emerging, compared to developed markets (Bae, Bailey and Mao, 2006). Appointing directors with foreign experience is a factor shown to improve corporate governance outcomes in emerging markets, including improved information environments and lower earnings manipulation (e.g. Giannetti, Liao and Yu, 2015; Liao, Ma and Yu 2017; Iliev and Roth, 2018). However, little is known whether top management with foreign experience also impact their firms' corporate governance and information environment, which is surprising given that top managers are responsible for all areas of firm performance (Aggarwal and Samwick, 2003). This paper helps fill this gap by investigating whether, and if so, how and why managerial foreign experience affect corporate earnings quality in the largest emerging markets, China.

Top managers with foreign experience may affect corporate earnings quality for several reasons. First, managers with foreign experience are exposed to other countries' governance practices, accounting standards and legal systems (Iliev et al., 2018). On returning from working or studying overseas, these managers may bring advanced corporate governance practices to their firms, which alleviate the likelihood of earnings manipulation (Giannetti et al., 2015). Second, managers with foreign experience in emerging markets are relatively rare human resources and are highly visible in their firms, which heightens their reputational concerns (Wen, Cui and Ke, 2020), thereby inducing them to improve, rather than damage earnings quality.

Alternatively, managers with foreign experience may be unable to improve earnings quality, particularly in some circumstances. For example, if managers gained their experience from

countries with poorer corporate governance practices and moral standards, they may be unable to improve firm performance (Giannetti et al., 2015; Liao et al., 2017). Further, in addition to managers' personal foreign experience capital, certain settings may impact their ability to improve earnings quality. For instance, when a firm already enjoys the benefits of good external or internal monitoring, there will be less scope for foreign experienced managers to enact significant positive change in earnings quality. Finally, in addition to wealth maximisation, state owners encumber SOE managers with additional political and social goals (Yuan et al., 2018). As the government controls SOE managers' future promotions and perks (Jiang and Kim, 2015; Cao Lemmon, Pan, Qian and Tian, 2019), managers may focus their attention on these additional goals, which crowds out supplementary goals such as improving earnings quality or corporate governance, from their list of priorities.

China is an ideal setting to investigate the impact of foreign experienced managers on earnings quality. First, although China is now the world's second largest economy, it is still an emerging market with weak investor protection and corporate governance practices (Jiang et al., 2015). Foreign institutional investors, and particularly those from stronger investor protection countries (Aggrawal, Erel and Ferreira, 2011) and foreign experienced directors (Iliev et al., 2018), improve the corporate governance practices in their firms. Further, firms with better corporate governance are shown to have better earnings quality (Jiang, Lee and Anandarajan, 2008). We extend these lines of research by investigating whether managerial foreign experience is an alternative channel for improving earnings quality. Second, since the 1990s, the Chinese government has enacted policies targeting talents with foreign experience to live and work in China (Giannetti et al., 2015). However, due to underdeveloped corporate governance practices, it is still unclear whether foreign experienced managers can play a significant role in the emerging markets. Thus, studying the effect of managerial foreign experience on firm performance and behaviour is beneficial for policy makers for both Chinese

and other emerging markets. Third, while the literature primarily focuses on foreign experienced directors in China (e.g. Giannetti et al., 2015; Dai, Kong and Liu, 2018; Zhang Kong and Wu, 2018; Wen et al., 2020), it is largely silent on the influence of foreign experienced managers in China. While Yuan and Wen (2018) show foreign experienced managers positively influence corporate innovation in Chinese firms, the questions on whether and how managerial foreign experience influences corporate performance or behaviour in emerging markets are still underexplored.

To estimate the relationship between managerial foreign experience and corporate earnings quality, we manually collect returnee managers' foreign experience information from individuals' resume and internet sources, including their foreign educational, practical and short-term visiting experience and the host countries in which they gained their foreign experience. We use an indicator variable to capture whether a firm has foreign experienced top managers. The measures of earnings quality are based on the level of discretionary accruals and accruals quality. Using a sample between 2008 and 2016, we document a positive and significant relationship between managerial foreign experience and corporate earnings quality. This relationship is confirmed by a set of endogeneity checks, including difference-in-differences approach, instrumental variables (IVs) test, the Heckman two-stage procedure, managers' fixed effects with two-stage least square (2SLS) analysis and regression analysis with additional control variables. We further confirm the robustness with an alternative earnings quality measure and find that managerial foreign experience is positively associated with earnings persistence.

Using hand-collected data, we then show the positive relationship is more pronounced for top managers with long-term foreign experience, and amongst those who gain their foreign experience from countries/regions with low earnings management and low corruption, supporting our argument that foreign experienced managers can learn and bring advanced

corporate governance practices from countries with higher governance standards. Moreover, we find significant relationship between managerial foreign experience and analyst coverage (positive) (Yu, 2008) and tax avoidance (negative) (Wen et al., 2020), indicating that foreign experienced managers have reputational concerns, which may induce them to improve earnings quality.

Next, we test how managers with foreign experience affect earnings quality. We identify three potential channels including through encouraging more foreign ownership, through ameliorating dividend policy and through investing in foreign countries.

Further tests indicate that the relationship between managerial foreign experience and earnings quality is more pronounced in private firms rather than SOEs, and in firms with no political connections (PC). In addition, managers with foreign experience have a greater impact on earnings quality for firms associated with weaker audit quality. Finally, we document that the improved earnings quality by foreign experienced managers affect stock returns positively and agency costs negatively. Overall, our findings are consistent with the conjecture that top managers with foreign experience play a positive and significant role in corporate behaviour.

Our study contributes to the literature in several ways. First, our findings enrich the literature on earnings quality. Existing literature primarily focuses on firm level characteristics and ownership structure (Liu et al., 2007; Ji, Ahmed and Lu, 2015; Deng, Li and Liao, 2017; Chen, Cheng, Hao and Liu, 2019). We show that by learning from advanced governance practices and transferring superior knowledge, managers with foreign experience can improve earnings quality significantly in an emerging economy. Although, Giannetti et al. (2015) provide a subsample test and find a negative relationship between foreign experienced directors and earnings management, the effect of foreign experienced managers on earnings quality, including the channels and the welfare implications of improved earnings quality through

foreign experienced top management are largely unclear¹⁸. Moreover, our study highlights the different dimensions of foreign experience (e.g. the countries where foreign experienced managers resided) which influence the relationship between managerial foreign experience and earnings quality.

Second, our study sheds light on an important effect of human capital traits (see more details in Hambrick and Mason, 1984), in particular, executive' foreign experiences on corporate behaviour in emerging markets. Recent studies show that foreign experienced managers significantly impact corporate decision-making (Yuan et al., 2018; Duan, Hou and Rees, 2020). We show that managerial foreign experience can improve earning quality, which also supports policymakers' decisions to attract foreign experienced talents to live and work in emerging markets. Further, our study is also distinguished from literature based on developed countries. For example, studies find that for companies in developed markets, foreign directors are associated with intentional financial misreporting, higher agency conflicts and lower shareholder returns due to low board meeting attendance and high information asymmetry (Masulis, Wang and Xie, 2012; Hahn and Lasfer, 2016).

Third, our results provide an additional factor on the explaining of how knowledge and corporate governance practices flow to firms. Previous literature focuses on the effect of foreign institutional investors on corporate governance (Aggarwal et al., 2011; Guadalupe, Kuzmina, and Thomas, 2012; Bena, Ferreira, Matos and Pires, 2017; Luong, Moshirian, Nguyen and Zhang, 2017). Given the high barriers faced by foreign institutional investors in many emerging markets, hiring foreign experienced managers may be a more feasible alternative for firms seeking to improve corporate governance practices. In addition, our

¹⁸ Du, Jian and Lai (2017) also find a negative relationship between foreign directors and earnings management, however their study is very different to ours. Du et al. (2017) look at foreigners as directors in Chinese firms, while we look at Chinese national returnees who are top managers.

findings contribute to the implication of ‘brain gain’. Previous literature indicates that directors’ foreign experience results in the ‘brain gain’ effect by transmitting superior knowledge and advanced governance practices to firms (e.g. Giannetti et al., 2015; Liao et al., 2017; Illiev et al., 2018; Dai et al., 2018). Our study shows that managerial foreign experience also results in a similar ‘brain gain’ effect in emerging markets.

The remainder of the paper is structured as follows. Section 2 presents literature review and hypothesis development. Section 3 introduces the data and methodology. Section 4 provides empirical results and Section 5 provides the conclusion of this paper.

3.2. Literature review and hypothesis development

3.2.1 Literature review

Our study draws on two streams of literature. The first is on earnings quality where the literature finds executives’ characteristics influence earnings quality, including gender (Barua, Davidson, Rama and Thiruvadi, 2010; Srinidhi, Gul and Tsui, 2011; Belot and Serve, 2018; Zalata, Ntim, Aboud and Gyapong, 2019), political connection (Chaney, Faccio and Parsley, 2011; Al-Dhamari and Ismail, 2015), overconfidence (Hsieh, Bedard and Johnstone, 2014), and managerial ability (Demerjian, Lev, Lewis and McVay, 2013). The Chinese institutional setting may also incentivize firms to manipulate earnings, as accounting information is a critical element in the Chinese regulators’ administrative governance of listed firms (Liu et al., 2007). For example, firms must report positive net profits for three consecutive years before becoming IPO candidates (szse.cn). In addition, minimum return on equity (ROE) hurdles must be met to gain approval for rights issues, while companies reporting net losses over three sequential years are marked as candidates for potential stock exchange delisting by Chinese regulators (Chen and Yuan, 2004; Haw, Qi, Wu and Wu, 2005; Liu et al., 2007). Also, as provincial GDP influences government officials’ promotion opportunities, local government

officials may persuade local government-controlled firms to inflate earnings when the province's GDP growth lags national or adjacent provincial GDP growth levels (Chen et al., 2019). As such, Chinese firms face critical earnings-based goals for significant milestone events, as well as avoiding delisting threats which may encourage earnings management.

The second stream is on firms hiring foreign experienced talents. Studies show that a person's decision-making behavior may be influenced by their overseas experience resulting in knowledge and skills transference from overseas to their home countries (Bhagwati and Hamada, 1974). Literature shows that the accumulation of expertise abroad, stemmed from foreign experienced directors, could support companies with better corporate governance and improved firm performance (Giannetti, et al., 2015). Khanna (2009) emphasizes that young managers' overseas experience (either educational and/or practical) in developed countries can help deficient firms meet international standards of corporate governance. Further, studies also find that hiring directors with foreign experience can help firms with better information environment, investment efficiency, corporate social responsibility (CSR), governance practices and decrease stock price crash risk and tax avoidance (Liao et al., 2017; Dai et al., 2017; Yuan et al., 2018; Zhang et al., 2018; Iliev et al., 2018; Cao et al., 2019; Wen et al., 2020). Furthermore, appointing managers with foreign experience may influence corporate innovation, overseas investments and the location choice of foreign initial public offering listing (Yuan et al., 2018; Conyon, Haß, Vergauwe and Zhang, 2019; Duan et al., 2020).

3.2.2 Hypothesis development

Upper echelons theory (Hambrick et al., 1984), indicates a significant relation between organizational outcomes and top managers' characteristics. Recent studies show that individual's past experiences influence corporate decision-making (Benmelech and Frydman, 2015; Bernile, Bhagwat and Rau, 2017; Feng and Johansson, 2018). We anticipate foreign experienced managers may improve earnings quality for several reasons. First, international

experience exposes managers to advanced governance and management practices and diverse accounting standards and legal systems (Illiev et al., 2018). Returnee top managers bring those advanced governance practices, knowledge and skills to their firms, which alleviates the likelihood of earnings manipulation (Giannetti et al., 2015). Indeed, previous literature provides evidence that returnee directors who gain their experience in countries with advanced management practices, better investor protection and lower earnings management have a more pronounced impact on firms' performance and information environment (e.g. Giannetti et al., 2015; Liao et al., 2017). We therefore anticipate that returnee top managers who are responsible for all areas of firm performance (Aggarwal and Samwick, 2003), will similarly improve their firm's information environment.

Second, Yuan et al. (2018) argue foreign experienced talents in China are treated as "super stars" who receive high compensation, but also attract considerable attention and monitoring from different parties (such as employers, employees and institutional investors) which creates the "eyeball effect". In comparison with domestic managers, they are more likely to be scrutinized by the media and masses (Wen et al., 2020) and therefore earnings manipulation detected by regulators may cause serious damage to foreign experienced managers' reputations. Thus, managers with foreign experience are more likely to enhance earnings quality to preserve their reputational image. Given such reasons, we state our hypothesis as follows:

H1a. *Ceteris paribus*, top managers with foreign experience are positively associated with earnings quality.

While we conjecture a positive relationship between managerial foreign experience and earnings quality, foreign experienced managers may be unable to positively improve earnings quality for several reasons. First, Liao et al. (2017) highlight that directors who gained their experience from countries with high earning management are not able to positively improve

their firm's corporate information environment. Thus, if top managers gained their experience from countries with poor standards, they may not have benefited from learning advanced corporate governance practices and therefore be unable to transfer such practices to their firms. Additionally, the monitoring setting of firms may affect foreign experienced managers' ability to significantly improve earnings quality. For example, as audit quality positively influences earnings quality (Lennox, Wu and Zhang, 2016), foreign experienced managers will have less scope to enact significant positive changes to earnings quality when their firm already has stronger external audit oversight. Similarly, as independent directors are shown to improve earnings quality (Siagian and Tresnaningsih, 2011), managers with foreign experience will have less scope to improve earnings quality in firms that already benefit from better internal monitoring. Third, managers in SOEs who wish to enhance their future political promotions and perks after their tenure (Jiang et al., 2015; Cao et al., 2019) will seek to prioritize government social and economic development goals (Yuan et al., 2018). These additional goals may crowd out supplementary goals such as improving earnings quality and corporate governance.

H1b: *Ceteris paribus*, top managers with foreign experience are negatively associated with earnings quality.

3.3. Data and methodology

3.3.1 Data

We obtain the data from the China Stock Market & Accounting Research Database (CSMAR). The sample comprises firms listed on all four boards in China's markets, which are the Shanghai Stock Exchange (SHSE), the Shenzhen Stock Exchange (SZSE) main board, the SZSE Median and Small Enterprises board (SMEs) and the SZSE ChiNext from 2008¹⁹ to

¹⁹ The data coverage is from 2003 to 2016, as the calculation of accruals quality needs a rolling window with 5 prior years.

2016²⁰. Financial firms are excluded. After removing observations with missing values, the total number of firm-year observations is 12,287.

Jiang et al., (2015) argue that the chairman in Chinese listed firms is the most powerful managerial position that is heavily involved in daily corporate operations. This sharply contrasts with western firms where the chairman primarily fills a governance, rather than operational role. As such, we define foreign experienced top managers as CEO, chairman and vice chairman²¹, who have worked or studied outside mainland China. In addition to managers' foreign experience data from the CSMAR database, we manually collect information on managers' academic backgrounds, names of the countries they worked or studied in and residency information from their resumes available on the CSMAR database. We cross-check the sample with Baidu (<http://baike.baidu.com>), Sina (<http://finance.sina.com.cn>), and annual reports retrieved from the companies' websites. Further, similar to Yuan et al. (2018), we rule out non-pure foreign experiences by excluding individuals whose experiences were from foreign branches of Chinese firms (an office of a Chinese firm overseas etc.) or worked for Chinese branches of foreign firms (an office of a foreign firm in China etc.). Thus, managerial foreign experience (*FE dummy*) is a dummy variable which equals to one if a firm's chairman, vice chairman, or CEO has foreign experience.

3.3.2 Earnings quality measurements

Previous studies have developed a battery of earnings quality measures, such as earnings smoothing, change in accounts receivable to change in revenues, financial statement complexity, financial report restatement²². Following Sun et al. (2012), we use the most two

²⁰ CSMAR commences coverage of managerial foreign experience data from 2008 and data for the ChiNext market started since trading commenced on October 30, 2009.

²¹ Vice chairman is also a full-time position which looks after a company's daily operation in the Chinese market. Chen, Ezzamel and Cai (2011) define vice chairman as a powerful position.

²² We acknowledge more earnings quality measures in the literature. For further details, please review Chen, Hope, Li and Wang (2011).

conventional variables to measure earnings quality in this paper, namely discretionary accruals (*DACC*) and accruals quality (*AQ*).

Following the modified Jones (1991) method, we measure *DACC* as follows:

$$\frac{TAC_{i,t}}{Assets_{i,t-1}} = k_1 \frac{1}{Assets_{i,t-1}} + k_2 \frac{\Delta SALES_{i,t}}{Assets_{i,t-1}} + k_3 \frac{PPE_{i,t}}{Assets_{i,t-1}} + \varepsilon_{i,t} \quad (1)$$

where for each firm_{*i*}-year_{*t*} observation, *TAC*_{*i,t*} is the total accruals (net income less operating cash flows), *Assets*_{*i,t-1*} represents total assets in year *t-1*, $\Delta SALES_{i,t}$ measures change in sales for each year, *PPE*_{*i,t*} equals net fixed assets. We use ordinary least square (OLS) to estimate Equation 1 for firms in each industry classified by the CSRC and extract the residuals. The higher value of *DACC* corresponds to the lower level of earnings quality.

Following previous studies (Dechow and Dichev, 2002; and Francis, LaFond, Olsson and Schipper, 2005), we use accruals quality as the second measure of earnings quality, which we first regress *TAC*_{*i,t*} with lagged, current and forward values of operating cash flow (*CFO*), change in sales and *PPE* for each industry and year. Specifically,

$$\begin{aligned} \frac{TAC_{i,t}}{Assets_{i,t-1}} = & \alpha_0 + k_1 \frac{CFO_{i,t-1}}{Assets_{i,t-1}} + k_2 \frac{CFO_{i,t}}{Assets_{i,t-1}} + k_3 \frac{CFO_{i,t+1}}{Assets_{i,t-1}} + k_4 \frac{\Delta SALES_{i,t}}{Assets_{i,t-1}} + \\ & k_5 \frac{PPE_{i,t}}{Assets_{i,t-1}} + \varepsilon_{i,t} \end{aligned} \quad (2)$$

We then compute the standard deviation of residuals from Equation 2 with five-year window (*t-4, t*) as the accruals quality. The higher value of *AQ* indicates the lower level of earnings quality.

3.3.3 Methodology

To test our hypothesis, the following equation is applied for the regression models²³:

²³ All continuous variables are winsorized at the 1% and 99%.

$$\begin{aligned}
DACC/AQ = & \alpha + \beta_1 FE\ dummy + \beta_2 soe + \beta_3 top1 + \beta_4 top2 - 5 + \beta_5 bsize \\
& + \beta_6 indeperc + \beta_7 duality + \beta_8 big4 + \beta_9 bmeeting + \beta_{10} roa \\
& + \beta_{11} leverage + \beta_{12} firmsize + \beta_{13} firmage + \varepsilon
\end{aligned} \tag{3}$$

where both *DACC* and *AQ* are the measures of earnings quality and the *FE dummy* is our main independent variable to capture managerial foreign experience. Following previous studies (e.g. Fan and Wong, 2002; Xie, Davidson and Dadalt, 2003; Liu et al., 2007; Kuo, Ning and Song, 2014), we use *soe*, a dummy variable that equals to one if the ultimate controller of the firm is the state or state-owned enterprises, and zero otherwise; ownership concentration, captured by the largest and the second to fifth largest shareholdings (*top1* and *top 2-5*); board size, standardized by the natural logarithm of the number of directors on board (*bsize*); the ratio of independent directors to total directors (*indeperc*); CEO duality (*duality*), a dummy variable which equals to one if the chairman and CEO are appointed as the same person, otherwise zero; audit quality (*big4*), a dummy variable equal to one if a firm hires the audit service from top 4 auditors²⁴ in China, otherwise zero; the frequency of board meeting, measured by the natural logarithm of the board meeting frequency each year (*bmeeting*); profitability captured by return on assets (*roa*); firm's financial leverage (*leverage*); firm size, measured by the natural logarithm of total assets (*firm size*); and firm age, captured by the natural logarithm of one plus the years between establishment of the firm and year observation as firm-specific controls²⁵. Following Cohen, Dey and Lis (2008) and Kuo et al. (2014), we use industry-year fixed effect to test the relation between foreign experienced managers and earnings quality in China, and the standard errors are clustered by firms.

²⁴ The top 4 auditors are Deloitte, Ernst and Young, KPMG and PricewaterhouseCoopers.

²⁵ All the variable definitions are in Appendix A, and the correlation matrix is presented in Appendix B.

3.4. Results

3.4.1 Summary statistics

Table 1 reports the summary statistics. According to Panel A, on average, 11.2% of the sample have foreign experienced top managers. In addition, 47.5% of the firm-year observations are state owned firms, revealing a heavy intervention from the government in the Chinese listed firms. The mean of largest shareholding is 35.3%, indicating a concentrated ownership structure in China. In contrast, the mean of total shareholdings held by the second to fifth largest shareholders is 16.1%, which is significantly lower than the largest shareholders. In Table 1 Panel B, univariate tests show that firms with foreign experienced top managers have lower *DACC* and *AQ*, indicating better earnings quality. Moreover, managers with foreign experience are more likely to work in private firms than SOEs. Meanwhile, *top 2-5* and *indeperc* are higher in firms with foreign experienced top managers, revealing better corporate governance and investor protection. The *roa* is higher for firms with foreign experienced senior managers, which is consistent with Giannetti et al. (2015) who argue that managerial foreign experience can improve firm performance.

[Insert Table 1 here]

3.4.2 Empirical results

Table 2 reports the results of panel data regression analyses. The coefficients of *FE dummy* are significantly and negatively related to both *DACC* and *AQ* at the 5% level, suggesting that firms with foreign experienced managers have better earnings quality. In terms of economic significance, the coefficients of *FE dummy* on *DACC* (-0.012) and *AQ* (-0.007) indicate firms with foreign experienced top managers, on average, have 54% lower discretionary accruals and

3.34% better accruals quality, respectively²⁶. By supporting better corporate governance (Giannetti et al., 2015), foreign experienced managers are less likely to engage in earnings manipulation, which in turn improves the quality of earnings. Interestingly, the coefficient of *soe* is negatively associated with *AQ*, indicating that the state-owned firms have better earnings quality. Moreover, the positive and significant relationship between *AQ* and *top1* is in line with our expectation that ownership concentration negatively influences earnings quality. Additionally, the coefficient of *top2-5* is positively related to *AQ*, which differs from our expectation. As discussed in Table 1, the proportion of the second to fifth largest shareholdings is much lower than that of the largest shareholdings. As a result, instead of the monitoring role, the second to fifth largest shareholders may collude with the largest shareholder (Cai, Hillier and Wang, 2015) which reduces the quality of earnings. The positive and significant coefficient of *indeperc* on *AQ* indicates that the monitoring role of independent directors may not be efficient in China, which is consistent with previous studies (Hu, Karim, Lin and Tan, 2020; Wu and Dong, 2021). Further, the coefficient of *big4* is positively related to earnings quality measured by *DACC*, suggesting that the quality of auditor matters for influencing corporate earnings quality (Huang, Lin and Hairston, 2019). In addition, the coefficient of *bmeeting* on *DACC* is positive and significant which may be caused by the endogeneity issue as discussed in a later section.

[Insert Table 2 here]

While we find a significant relationship between managerial foreign experience and earnings quality, self-selection bias or observed factors may confound our results given that foreign experienced managers may not be randomly distributed (Yuan et al., 2018). Therefore, we cross-check our baseline results with the propensity score matching (PSM) approach which

²⁶ The economic significance is calculated as the coefficient of an independent variable times the standard deviation of the independent variable divided by the mean value of the dependent variable.

first applies a probit model to estimate the likelihood of hiring foreign experienced managers by absorbing a set of firm-level characteristics. The probit model estimates a propensity score for each observation and produces a one-on-one matching without replacement. Equation 4 shows the probit model:

$$\begin{aligned}
 FE\ dummy = & \alpha + \beta_1 soe + \beta_2 top1 + \beta_3 top2 - 5 + \beta_4 bsize \\
 & + \beta_5 indeperc + \beta_6 duality + \beta_7 big4 + \beta_8 bmeeting + \beta_9 roa \\
 & + \beta_{10} leverage + \beta_{11} firmsize + \beta_{12} firmage + \varepsilon
 \end{aligned} \tag{4}$$

Table 2 reports the results of PSM analysis, consisting of 2,346 firm-year observations and the covariate balance check is reported in Appendix C. All the control variables are statistically indifferent, indicating a well-matched sample between treatment group and control group. The result shows that the *FE dummy* is negatively and significantly related to *DACC* and *AQ* at the 1% and 10% level, respectively. This result confirms that the positive relationship between managerial foreign experience and earnings quality is not affected by observed self-selection bias.

3.4.3 Endogeneity checks

Although we find a significant relationship between foreign experienced top managers and earnings quality, the results may be subject to endogeneity concerns, including reverse causality and omitted variables. To address these concerns, we apply a set of techniques including differences-in-differences approach, instrumental variables test, Heckman two-stage analysis, CEO fixed effects using the 2SLS method and controlling for additional variables.

3.4.3.1 Difference-in-differences (DID) analysis

First, we employ a DID framework around CEO turnover to identify the effect of managerial foreign experience on earnings quality²⁷. Specifically, following Huang and Kisgen (2013), we first identify firms that transition from having a non-foreign experienced CEO to a foreign experienced CEO (treatment group). Next, we identify firms that undergo a non-foreign experienced CEO to another non-foreign experienced CEO transition (control group). We then build our DID sample as firm-year observations 2 years before and 2 years after a CEO transition²⁸, excluding the transition year t . Our DID model is as follows²⁹:

$DACC_{i,t}$ or $AQ_{i,t}$

$$= \beta_0 + \beta_1 post_t * transition_i + \beta_2 post_t + \beta_3 transition_i + \sum_k \beta_k Controls_{k,i,t} + \varepsilon_{i,t} \quad (5)$$

where $post_t$ is an indicator variable coded one if firm-year observations are after the CEO transition and zero otherwise; $transition_i$ is an indicator variable coded one if a firm i 's transition year t is a non-foreign experienced to foreign experienced CEO transition and zero if a firm i 's transition year t does not involve any foreign experienced CEOs.

If H_1 holds, i.e. managerial foreign experience improves earnings quality, the coefficient of the interaction term $post_t * transition_i$, will be significantly negative. Table 3 presents the results of our DID test. In line with our conjecture, the estimated coefficients on $post_t * transition_i$ are negative and significant across the measures of earnings quality, indicating that managerial foreign experience can significantly improve earnings quality, ruling out the possibility that

²⁷ Following Yao, Wang, Sun, Liao and Cheng (2020), we select CEO turnover in DID test as the CEO transition is more frequent than that of chairman, which allows us to obtain more observations in the test.

²⁸ We incorporate 2 years before and after transition to obtain more firms in our sample selection.

²⁹ Similar with Huang et al. (2013), we control for year fixed effects instead of parallel trend check in our DID analysis as the CEO turnovers occur in different dates for different companies.

our results are affected by reverse causality³⁰. Moreover, the coefficient of *bmeeting* on *DACC* is insignificant, confirming that the positive and significant coefficient of *bmeeting* on *DACC* is caused by endogeneity issues.

[Insert Table 3 here]

3.4.3.2 Instrumental variables (IV) test

In this section, we adopt IV test with 2SLS analysis to further address endogeneity concerns. First, Dai et al. (2018) argue that foreign experienced talents are more likely to live and work in provinces which are influenced by foreign cultures. Following Dai et al. (2018) and Zhang et al. (2018), we argue that provinces which had a British concession or was a leased territory during the Qing Dynasty are more likely to be influenced by foreign culture. As a result, firms located in these provinces are more likely to have foreign experienced returnees. Following Yang and Ye (1993), we use the dummy variable *british*, which is one if a province had a British concession or was a leased territory during the latter days of the Qing Dynasty, otherwise zero³¹. Further, following Giannetti et al. (2015), we employ our second IV (*policy*) which is based on the event of the allowance policies³² designed to attract highly skilled talents to work in China. Different provinces enact their allowance policies at different times, and the introduction of provincial policies is an exogenous influence on the supply of foreign experienced talents, but these policies do not impact corporate earnings quality. Thus, *policy* is a dummy variable which equals to one in years of the allowance policy implementation for each province, and zero otherwise.

³⁰ In an unreported table, we rerun our DID test by excluding the CEO turnover caused by dismissal, resignation and position transfer, as these turnovers might be endogenous (e.g. firms might change CEOs for specific purposes). The results remain the same after excluding the potential endogenous CEO turnovers, confirming the robustness of our DID test.

³¹ These British concessions and leased territories were distributed in Fujian, Hubei, Jiangxi, Jiangsu, Guangdong, Shandong, Tianjing and Shanghai.

³² We use the Thousand Talents Plan, enacted in 2008 as the event. Each province started the event in different time, which allows us to build our instrument variable.

Table 4 reports the IV test results. In the first stage result, the coefficients of both *british* and *policy* are positively and significantly associated with *FE dummy* at the 5% level, respectively, indicating that our instruments are highly correlated with firms appointing managers with foreign experience. The F-statistic rejects the hypothesis that our instruments are weak. In the second stage results, the coefficients of *FE dummy* are negatively and significantly related to *DACC* and *AQ* at the 1% and 5% level, respectively. Therefore, our results are robust after considering reverse causality and omitted variables.

[Insert Table 4 here]

3.4.3.3 Heckman two-stage analysis

To address the concern that the positive correlation between foreign experienced senior managers and earnings quality is caused by unobserved correlated variables, we employ the Heckman two-stage model. The first stage analysis is the same as the probit model applied in the PSM method. The Inverse Mills Ratio (*mills*) is estimated based on the probit model to capture all unobserved correlated variables, and then we rerun Equations 3 including *mills*. The results of Table 5 highlight that the negative and significant coefficients still hold after controlling *mills*, confirming the positive relationship between managerial foreign experience and earnings quality. In addition, the coefficient of *mills* in *DACC* regression is negative and significant at the 5% level, indicating that the unobserved factors that motivate firms to hire foreign experienced managers is positively correlated to earnings quality.

[Insert Table 5 here]

3.4.3.4 Additional omitted variable checks

To further address the endogeneity issues caused by omitted variables, we first focus on individuals' other characteristics. As managers' foreign experience is practically orthogonal to other individual's characteristics, we follow Gormley and Matsa (2014, p.644), Hegde and

Mishra (2019) and Mishra (2021) in using the 2SLS strategy within the CEO fixed effects framework to address the endogeneity issues caused by omitted individuals' characteristics. In the first step of this framework, we extract residuals by regressing both of our dependent variables on all control variables with CEO, industry and year fixed effects, respectively. In the second step, we regress both group-average residuals (*Resid DACC* and *Resid AQ*) estimated in the first step on *FE dummy* and all the controls including industry and year fixed effects, respectively. The results are reported in Panel A of Table 6. The coefficients of *FE dummy* are negatively and significantly associated with *Resid DACC* and *Resid AQ* at the 5% level, indicating that our result is robust to potential bias due to omitted individuals' characteristics³³.

We then concentrate on foreign experienced directors and other firm level characteristics. We add foreign experienced directors³⁴ (*FE_directors*) as they negatively influence earnings management (Giannetti, et al., 2015). Other additional firm level controls include institutional ownership (*insti*)³⁵, *tunneling*³⁶, *financial distress*³⁷ and *financial constraints*³⁸. Velury and Jenkins (2006) find a positive relationship between institutional ownership and the quality of reported earnings. Liu et al. (2007) indicate that tunneling is one of the incentives for controlling shareholders to manipulate earnings, while Bisogno and Luca (2015) find that financial distressed firms are more likely to mask earnings for portraying better financial performance. Moreover, Linck, Netter and Shu (2013) argue that financially constrained firms

³³ In untabulated results, we repeat the same process using chairman fixed effects and the results are qualitatively similar.

³⁴ We measure foreign experienced directors (*FE_directors*) as the ratio of directors with foreign experience in the board to total directors.

³⁵ We measure *insti* as the percentage of ownership held by institutional investors.

³⁶ Following Liu et al. (2007), *tunnelling* is measured as other receivables over total assets.

³⁷ We apply Altman's (2002) Z score for financial distress measure. The Z score is calculated as: Z score = 0.717*working capital + 0.847*retained ratio + 3.107* roa + 0.420*equity/ liability + 0.998*sales turnover.

³⁸ We measure firms' financial constraints using the WW index (Whited and Wu, 2006), which is calculated as: WW index = -0.091*operating cash flow to total assets ratio - 0.062* dummy for dividend payment + 0.021*leverage - 0.044* *firm size* + 0.1021*industry annual growth - 0.035 * firm annual growth.

are more likely to inflate earnings which enable them to raise additional funds for investing activities.

After controlling for foreign experienced directors and additional firm level characteristics (see Panel B of Table 6), the coefficients of *FE dummy* remain negative and are significantly related to *DACC* and *AQ* at the 10% and 5% levels, respectively, confirming the robustness of our finding.

[Insert Table 6 here]

3.4.4 Different types of foreign experience

Managers who gain different types of foreign experience may influence earnings quality differently. For example, Liao et al. (2017) find that directors who gained their foreign experience from countries/regions with lower earnings management (based on earnings management index generated by Leuz, Nanda, and Wysocki's, 2003) have a more pronounced influence in shaping corporate information environment. Moreover, previous studies indicate that managers with foreign long-term (working or studying) experience have a more pronounced influence on CSR than that of foreign short-term visiting experience (Zhang et al., 2018). We categorize *FE dummy* by different types of foreign experience to test whether foreign experience type matters.

In Panel A of Table 7, the coefficients of *Low EM* (defined as managers who gained their foreign experience from countries/regions with low level of earnings management index³⁹) are negatively and significantly related to *DACC* and *AQ* at the 5% and 10% level, respectively. However, the coefficients of *High EM* are both insignificant across the models. Moreover, the coefficients of *Low corruption*, defined as managers who gained their foreign experience from

³⁹ Based on Leuz et al. (2003), countries/regions with earnings management score of less than 21 are defined as having a low level of earnings management (*Low EM*), while 22 or higher indicates high level of earnings management (*High EM*).

countries/regions with low level of corruption⁴⁰, are more pronounced on *DACC* and *AQ* than those of *High corruption*. The above results indicate that countries/regions where top managers gained their foreign experience from, matters in shaping earnings quality. Further, according to Panels B of Table 7, foreign long-term experience (*FE long-term*)⁴¹ influences firms' earning quality, while foreign short-term visiting experience (*FE short-term*) does not.

Overall, we provide evidence that top managers with experience in countries/regions with lower earnings management and lower level of corruption, improve their firm's earnings quality more. In addition, we find foreign long-term experience matters more than foreign short-term experience in improving earnings quality.

[Insert Table 7 here]

3.4.5 Reputational concerns

In the hypothesis development section, we argue that managers with foreign experience may improve earnings quality due to reputational concerns. Due to the “superstar” and “eyeball effect”, foreign experienced top managers may face extra attention from various parties, including the media, which leads to higher reputational concerns than those without foreign experience (Yuan et al., 2018; Wen et al., 2020). Previous studies argue that analyst coverage plays an external monitoring role of managers' behavior (Jensen and Meckling, 1976, p.353; Healy and Palepu, 2001). As analysts are financial experts, they are better placed to detect managers' misbehaviors (such as earnings management and corporate fraud) and reveal the misbehaviors through their appearance in public media (Yu, 2008; Chen, Cumming, Hou and Lee, 2016). Therefore, we first measure managers' reputational concerns with analyst coverage.

⁴⁰ Based on Leuz et al. (2003), countries/regions with corruption index of higher than 8 are defined as having a low level of corruption (*Low corruption*), while 7 or lower are defined as having a high level of corruption (*High corruption*).

⁴¹ Following Zhang et al. (2018), we define both foreign practical and educational experiences as foreign long-term experience.

Following Li and Zeng (2019) and Yu (2008), we use the number of analysts in firms (*Analysts*) and abnormal analyst coverage (*Ab_Analysts*) as proxies of analyst coverage. The first proxy, *Analysts*, is defined as the natural logarithm of one plus the number of analysts following a firm in the current year. The second proxy, *Ab_Analysts* is measured by the residuals from the regression model of the number of analysts following a firm versus firm size, return on assets in previous year, growth of assets, net cash proceeds from financing activities scaled by total assets, and the standard deviation of a firm's operating cash flow from year $t-5$ to year $t-1$. Moreover, given tax avoidance may generate reputational costs and is subject to outside scrutiny (Gallemore, Maydew and Thornock, 2014), we then employ the propensity of tax avoidance as a measure of reputational concerns. Following Desai and Dharmapala (2006, 2009), we use book-tax differences (*BTD*) and abnormal book-tax differences (*Ab_BTD*) as proxies of tax avoidance. The first proxy, *BTD*, is calculated as the differences between accounting income and taxable income scaled by the lagged end-of-year total assets. To rule out tax avoidance explained by earnings management, *Ab_BTD* is computed as the residuals of regression between *BTD* and total accruals⁴².

We report the results of reputational concerns⁴³ in Table 8. In Panel A, the coefficients of *FE dummy* are both significantly and positively related to analyst coverage measures at the 10% and 1% levels, respectively, which shows managers with foreign experience gain more analyst coverage and attention, and therefore heightened reputational concerns. In addition, in Panel B, the coefficients on *FE dummy* are both significantly and negatively related to tax avoidance measures at the 5% level, indicating firms with foreign experienced top managers are less likely to engage in tax avoidance, possibly due to reputational concern (Wen et al., 2020). Overall,

⁴² Total accrual is the gap between net income and operating cash flows scaled by lagged value of total assets.

⁴³ Given there are multidimensions of reputational costs, our proxies of reputational concerns only capture some of these reputational cost dimensions.

our results suggest that reputational concerns may induce managers with foreign experience to improve earnings quality.

[Insert Table 8 here]

3.4.6 Channel tests

In this section, we test potential channels through which managerial foreign experience improve earnings quality. Ben-Nasr, Boubakri and Cosset (2015) find that firms with foreign investors are associated with better quality of accounting information due to the prevention of resource expropriation by controlling shareholders. In addition, previous studies indicate that firms with dividend payouts are associated with more persistent earnings, greater earnings informativeness, lower volatility of accruals quality and less earnings management (Skinner and Soltes, 2011; Tong and Miao, 2011, and Deng et al., 2017; He, Ng, Zaiats and Zhang, 2017). Moreover, Gu and Semba (2016) find that firms with overseas investment is positively associated with earnings quality through decreasing earnings management risk. Therefore, we employ foreign ownership (*FO*), dividend payouts (*Div*) and overseas investment (*Overseas_aff*) as possible channels for foreign experienced managers to influence corporate earnings quality. Following Giannetti et al. (2015), *FO* is the number of shares held by foreign investors over the total number of shares issued. The dummy variable *Div* is one if a firm pays cash dividends and zero otherwise, while *Overseas_aff* is a dummy variable equal to one if a firm has affiliated firms in foreign countries⁴⁴, otherwise zero.

We adopt the approach of Ferreira and Laux (2007) and Cosset, Somé and Valéry (2016) and separate the *FO*, *Div* and *Overseas_aff* that is explained by managerial foreign experience, and the rest which is unrelated to managerial foreign experience, respectively. First, we run regressions with the channel measures on managerial foreign experience alone and extract the

⁴⁴ We exclude affiliated firms located in ‘tax haven’ countries.

predicted values and residuals, respectively. The results in Panel A of Table 9, show firms with foreign experienced managers are positively associated with the proportion of foreign ownership, the likelihood of paying dividends, and having overseas affiliated firms. Second, the *FE dummy* in Equation 3 is replaced by both the fitted values and residuals of our channel proxies. According to Panel B of Table 9, the coefficients of *fv FO*, *fv Div* and *fv Overseas_aff* are all negatively and significantly associated with *DACC* and *AQ* at the 1% or 5% level, respectively. The results indicate that managerial foreign experience improves earnings quality through facilitating foreign ownership, paying dividends and investing in foreign countries.

[Insert Table 9 here]

3.4.7 SOEs vs private firms

Previous studies highlight that the positive and significant relationship between managerial foreign experience and CSR, innovation and tax avoidance only exist in private firms rather than in SOEs (Zhang et al., 2016; Yuan et al., 2018; and Wen et al., 2020). As discussed earlier, due to political promotions and perks, SOE top managers focus on the additional political goals required by their government owners (Jiang et al., 2015; Cao et al., 2019) and this may crowd out supplementary goals, such as of improving earnings quality and governance. As a result, the positive impact of managerial foreign experience on earnings quality might be less pronounced in SOEs. In addition, corporate governance may be improved significantly in SOEs due to substantial support from the government, the earnings quality in SOEs may be optimized as SOEs have less incentives to manipulate earnings for performance boosting. Therefore, foreign experienced managers may have less effect on improving earnings quality in SOEs.

To test our conjecture, we divide our sample between SOEs and private firms and re-run the regression of Equation 3. In Table 10, Panel A presents our subsample results, consisting of 7,213 firm-year observations in SOEs and 5,074 firm-year observations in private firms,

respectively. The coefficients of *FE dummy* are negative but insignificantly related to *DACC* and *AQ* among SOEs, and negatively and significantly related to *DACC* and *AQ* among private firms. This suggests that the effect of managerial foreign experience on earnings quality is more pronounced in private firms compared with SOEs, consistent with our conjecture.

Further, to investigate how political connections impact the relationship between managerial foreign experience and earnings quality, we divide the private firms into those with, and without political connections⁴⁵. We define a firm with political connection if either the chairman or CEO is politically connected.

The results in Panel B of Table 10 show the effect of managerial foreign experience on earnings quality is more evident for firms without political connections. This finding is consistent with Li et al. (2020), who argue that politically connected firms prefer to improve firm performance through rent-seeking activities (i.e. government support and local market protection). As a result, they are also heavily influenced by government intervention and bribery due to the cost of rent seeking, which mitigates the effect of managerial foreign experience on corporate earnings quality.

[Insert Table 10 here]

3.4.8 Monitoring effects

In this section, we test whether several conditions, including audit quality and corporate governance quality, impact the relationship between foreign experienced managers and earnings quality differently. Following Li et al. (2019), we divide our sample into sub-samples, based on the median value of each measure.

⁴⁵ Following Li, Shan, Tian and Hao (2020), we only focus on private firms because SOEs are expected to be politically connected as their ultimate controller is either central or local governments or SOEs.

4.8.1 External monitoring

By comparing pre-audit earnings and audited earnings, Lennox et al. (2016) find a positive and significant relationship between audit quality and earnings quality. Managers with foreign experience would have greater scope to positively influence earnings quality in firms whose earnings quality is not already higher as a result of higher quality audit processes. In this study, we use both audit firm ranking and audit fees as measures of audit quality. Huang et al. (2019) highlight that the ranking of accounting firms is an indicator of earnings quality. Specifically, higher ranked auditors are more likely to deflate discretionary accruals and give modified audit opinions. We expect managerial foreign experience to influence earnings quality more in firms with lower ranked auditing companies due to weak external audit quality. Moreover, to obtain and retain new clients, auditors may charge lower fees in early years of audit engagement and expect to recoup the losses in later years of the audit engagement (DeAngelo, 1981). The maintenance of auditor - client relationship with lower audit fees may cause lower quality of auditing, which in turn lowers earnings quality (Gul, Jaggi and Krishnan, 2007). Therefore, we expect the positive relationship between foreign experienced managers and earnings quality to be more pronounced in firms with low audit fees.

Following Huang et al. (2019), we employ the yearly ranking of top 100 accounting companies⁴⁶, disclosed by the Chinese Institute of Certified Public Accountants as the measure of accounting firm ranks. In addition, we define audit fees as the natural logarithm of one plus total audit fees by firm each year. According to Panels A and B of Table 11, the coefficients *FE dummy* are only negatively and significantly related to both *DACC* and *AQ* when the accounting firms are ranked below the median. At the same time, the absolute value of estimated coefficients of *FE dummy* are greater for the sub-sample of listed firms with low

⁴⁶ We exclude listed accounting firms which are not on the ranking list.

ranked accounting companies, than those with high ranked accounting companies. Further, the coefficients of *FE dummy* are only negatively and significantly related to both *DACC* and *AQ* when firms' audit fees are below the median. Meanwhile, the absolute value of the coefficients of *FE dummy* are greater in the low audit fees sub-sample than in the corresponding high audit fees sub-sample. Overall, our results suggest that foreign experienced managers have greater influence on earnings quality in firms that have weaker external monitoring.

4.8.2 Internal monitoring

We then examine whether the quality of corporate governance matters. Bhagat and Black (2001) indicate that independent directors play a more significant role in monitoring management, in comparison with other directors, while Siagian and Tresnaningsih (2011) show that independent directors improve earnings quality for firms in an emerging market. Accordingly, we apply the ratio of independent directors to total directors as a measure of corporate governance quality. We anticipate that foreign experienced managers will have less scope to improve earnings quality in firms with above median ratio of independent directors. In Panel C of Table 11, the coefficients on *FE dummy* are only negative and significant when firms' independent directors are below the median. In addition, the absolute value of estimated coefficients of *FE dummy* are greater for the sub-sample of listed firms with low level of independent directors, than those with high proportion of independent directors. The result indicates that managerial foreign experience has greater influence on earnings quality when firms' corporate governance quality is low.

Overall, our results highlight that the relationship between managerial foreign experience and earnings quality is more pronounced in firms with either weak external or weak internal monitoring, as those firms may have more space for foreign experienced managers to cover the shortage of monitoring effect.

[Insert Table 11 here]

3.4.9 Earnings quality, stock returns and agency costs

So far, we find that managerial foreign experience contributes to better earnings quality. We now explore whether the improved earnings quality associated with managerial foreign experience impacts firm stock returns and agency costs. Previous literature finds a positive relationship between earnings quality and stock returns (Chan, Chan, Jegadeesh and Lakonishok, 2001; and Deng, et al., 2017), and a negative relationship between earnings quality and agency costs (Gul, Lynn and Tsui, 2002). If managerial foreign experience is associated with better quality of earnings, investors might expect better earnings informativeness on firm performance. As a result, stock returns would respond more to the earnings information in firms with foreign experienced managers. In addition, high-quality earnings can reduce agency costs by decreasing information asymmetry. Therefore, the positive association between managerial foreign experience and earnings quality may influence stock returns positively and agency costs negatively.

To test this, we adopt the method applied in Section 4.6. We first run regressions between *FE dummy* and earnings quality and then use annual stock returns (*return*) and agency costs⁴⁷ (*agency_costs*) as dependent variables, and the predicted values and residuals of *FE dummy* (see Panel A of Table 12) as the independent variables to investigate whether the improved earnings quality due to managerial foreign experience could increase stock returns and decrease agency costs. The regression model of the second step is presented in Equation 6:

⁴⁷ Following Ang, Cole and Lin (2000) and Singh and Davidson (2003), we measure *agency_costs* as selling expenses plus administrative expenses over annual sales.

$$\begin{aligned}
\text{return or agency_cost} = & \alpha + \beta_1 \text{ FE dummy fitted} + \beta_2 \text{ FE dummy residuals} + \\
& \beta_3 \text{ soe} + \beta_4 \text{ top1} + \beta_5 \text{ top2} - 5 + \beta_6 \text{ bsize} + \beta_7 \text{ indeperc} + \beta_8 \text{ duality} + \beta_9 \text{ big4} + \\
& \beta_{10} \text{ bmeeting} + \beta_{11} \text{ roa} + \beta_{12} \text{ leverage} + \beta_{13} \text{ firmsize} + \beta_{14} \text{ firmage} + \varepsilon \quad (6)
\end{aligned}$$

The coefficients of fitted value shown in Panel B of Table 12, are positively and significantly associated with stock returns, and negatively and significantly associated with agency costs at the 5% level respectively, indicating that the improvement of earnings quality is an important mechanism for which foreign experienced top managers promote stock returns and reduce agency costs.

[Insert Table 12 here]

3.4.10 Robustness check: Earnings persistence

For robustness, we consider persistence of earnings which is an important indicator for earnings quality (Ye, Zhang and Rezaee, 2010). If foreign experienced managers can improve earnings quality, the earnings should be more persistent. Following Krishnan and Parsons (2008), we measure earnings persistence in the following model:

$$\begin{aligned}
EP_{t+1} = & \alpha + \beta_1 \text{ FE dummy} + \beta_2 EP_t + \beta_3 \text{ FE dummy} * EP_t + \beta_4 \text{ soe} + \beta_5 \text{ top1} + \\
& \beta_6 \text{ top2} - 5 + \beta_7 \text{ bsize} + \beta_8 \text{ indeperc} + \beta_9 \text{ duality} + \beta_{10} \text{ big4} + \beta_{11} \text{ bmeeting} + \\
& \beta_{12} \text{ leverage} + \beta_{13} \text{ firmsize} + \beta_{14} \text{ firmage} + \varepsilon \quad (7)
\end{aligned}$$

where EP_t is operating income scaled by total assets at the beginning of the year for firm i in year t and EP_{t+1} is operating income scaled by total assets at the end of the year for firm i in year t . We expect the interaction term, $\text{FE dummy} * EP_t$, to be positively and significantly related to EP_{t+1} ⁴⁸.

⁴⁸ Due to the high collinearity between EP_t and roa , we exclude roa in the regression equation.

The coefficient of $FE\ dummy * EP_t$ shown in Table 13 is positively and significantly associated with EP_{t+1} at the 1% level, both with and without controls, suggesting that managerial foreign experience can improve earnings persistence. Overall, the results confirm that the relationship between managerial foreign experience and earnings quality is robust.

[Insert Table 13 here]

3.5. Conclusion

This study examines the effect of managerial foreign experience on earnings quality. Specifically, we provide evidence that the presence of foreign experienced top managers induces an improvement in earnings quality, particularly for those managers who gained their foreign experience from countries/regions with low level of earnings management or corruption, and with long-term rather than short-term foreign experience. Our results support the view that foreign experienced talents may have reputational concerns and can transfer superior knowledge and advanced governance practices to their firms. We identify three potential channels, including increasing foreign ownership, dividends and investing offshore, through which managers with foreign experience enhance earnings quality. We also examine the effect of foreign experienced managers in relation to different firm traits which reveals that the positive effects are primarily observed by private firms and firms without political connections. Finally, we document that the positive relationship between managerial foreign experience and earnings quality affect stock returns positively and agency costs negatively.

Our results provide important implications for policy makers and investors on the benefit of earnings quality enhancement by foreign experienced managers. Our study is also likely to be generalizable to other emerging markets with weak investor protection and governance practices. In particular, encouraging foreign experienced talents to return and serve in their home country can be an important mechanism for improving corporate earnings quality.

Appendixes
Appendix A
Variable definitions

This appendix presents the variable definitions.

Variable	Definition
Dependent variables	
<i>DACC</i>	Discretionary accruals, calculated as total accrual less the fitted normal accrual
<i>AQ</i>	Accrual quality, calculated as the standard deviations of residuals from the equation of current accruals based on operating cash flow
Explanatory variables	
<i>FE dummy</i>	A dummy variable that equals 1 if a firm's chairman, vice chairman or CEO has foreign experience, otherwise 0
<i>Low EM</i>	A dummy variable that equals 1 if managers gained experience from countries/regions with low earnings management index based on Leuz et al. (2003), otherwise 0, see details in section 4.4
<i>High EM</i>	A dummy variable that equals 1 if managers gained experience from countries/regions with high earnings management index based on Leuz et al. (2003), otherwise 0, see details in section 4.4
<i>Low corruption</i>	A dummy variable that equals 1 if managers gained experience from countries/regions with high corruption index based on Leuz et al. (2003), otherwise 0, see details in section 4.4
<i>High corruption</i>	A dummy variable that equals 1 if managers gained experience from countries/regions with low corruption index based on Leuz et al. (2003), otherwise 0, see details in section 4.4
<i>FE long-term</i>	A dummy variable that equals 1 if managers gained either foreign working or studying experience, otherwise 0
<i>FE short-term</i>	A dummy variable that equals 1 if managers gained foreign short-term visiting experience, otherwise 0. The definition of short-term visiting experience is retrieved from managers' resume
Other variables	
<i>soe</i>	A dummy variable that equals 1 if the ultimate controller of the firm is the state or state-owned enterprises, otherwise 0
<i>top1</i>	The largest shareholding over the number of shares outstanding
<i>top2-5</i>	The sum of the second to fifth largest shareholding to the number of shares outstanding
<i>bsize</i>	The natural logarithm of total number of directors on the board
<i>ideperc</i>	The number of independent directors over the total number of directors on the board
<i>duality</i>	A dummy variable that equals 1 if a firm's chairman and CEO are the same person, otherwise 0
<i>big4</i>	A dummy variable that equals 1 if a firm hires the audit service of a top 4 auditor in China, otherwise 0
<i>bmeeting</i>	The nature logarithm of number of board meetings held in each year
<i>roa</i>	A proxy measured by return on assets, which equals to earnings before interests and tax over total assets
<i>leverage</i>	Total debt divided by total assets
<i>firmage</i>	The natural logarithm of one plus the differences between current year and the year in which the firm was established
<i>firmsize</i>	The natural logarithm of total assets
<i>policy</i>	A dummy variable that equals 1 in the years following the implementation of the 'Thousands of plan' policy in each province, otherwise 0
<i>british</i>	A dummy variable that equals 1 if firms located in provinces where Great Britain built a concession or territory in the late Qing dynasty, otherwise 0

<i>post</i>	A dummy variable that equals 1 if firm-years are after the CEO transition, otherwise zero
<i>transition</i>	A dummy variable that equals 1 if a firm experiences a transition from non-foreign experienced CEO to foreign experienced CEO, and 0 if a firm experiences a CEO transition without any foreign experienced CEOs involved
<i>FE_directors</i>	The percentage of foreign experienced directors serving on board
<i>Insti</i>	The percentage of institutional ownership
<i>tunnelling</i>	The ratio of other receivables over total assets
<i>financial distress</i>	Z score = $0.717 * \text{working capital} + 0.847 * \text{retained ratio} + 3.107 * \text{roa} + 0.420 * \text{equity/liability} + 0.998 * \text{sales turnover}$, (Altman, 2002)
<i>financial constraints</i>	WW index = $-0.091 * \text{operating cash flow to total assets ratio} - 0.062 * \text{dummy for dividend payment} + 0.021 * \text{leverage} - 0.044 * \text{firm size} + 0.1021 * \text{industry annual growth} - 0.035 * \text{firm annual growth}$, (Whited and Wu, 2006)
<i>FO</i>	The percentage of foreign ownership
<i>Div</i>	A dummy variable that equals 1 if a firm pays cash dividend, otherwise 0
<i>Overseas_aff</i>	A dummy variable equals to 1 if a firm has affiliated firms in foreign countries, otherwise 0
<i>Analysts</i>	The natural logarithm of 1 plus the number of analysts following a firm
<i>Ab_Analysts</i>	The residuals extracted from regression model of the number of analysts following a firm versus firm size, return on assets in previous year, growth of assets, net cash proceeds from financing activities scaled by total assets, and the standard deviations of a firm's operating cash flow from year <i>t-5</i> to year <i>t-1</i>
<i>BTD</i>	The differences between accounting income and taxable income, over total assets in previous year
<i>Ab_BTD</i>	The residuals extract from regression between BTD and total accruals
<i>return</i>	Firms' annual stock returns retrieved from CSMAR
<i>agency_costs</i>	The ratio of selling expenses plus administrative expenses over sales
<i>EP</i>	The ratio of operating income over total assets

Appendix B
Correlation metrics

All the variables are defined in Appendix A. The total number of observations is 12,287.

	<i>DACC</i>	<i>AQ</i>	<i>FE dummy</i>	<i>soe</i>	<i>top1</i>	<i>top2-5</i>	<i>bsize</i>	<i>indeperc</i>	<i>duality</i>	<i>big4</i>	<i>bmeeting</i>	<i>roa</i>	<i>leverage</i>	<i>firmsize</i>	<i>firmage</i>
<i>DACC</i>	1.000														
<i>AQ</i>	0.037	1.000													
<i>FE dummy</i>	-0.019	-0.031	1.000												
<i>soe</i>	0.010	-0.087	-0.115	1.000											
<i>top1</i>	0.022	0.011	-0.014	0.264	1.000										
<i>top2-5</i>	0.029	0.033	0.085	-0.121	-0.308	1.000									
<i>bsize</i>	0.025	-0.079	-0.012	0.243	0.065	0.085	1.000								
<i>indeperc</i>	0.006	0.039	0.017	-0.059	0.013	-0.022	-0.422	1.000							
<i>duality</i>	-0.009	0.016	-0.008	-0.221	-0.112	0.032	-0.163	0.079	1.000						
<i>big4</i>	0.082	0.042	0.043	-0.112	-0.032	0.082	-0.040	0.061	0.026	1.000					
<i>bmeeting</i>	-0.017	-0.042	0.100	0.106	0.155	0.118	0.114	0.020	-0.058	0.016	1.000				
<i>roa</i>	0.113	-0.019	0.033	-0.065	0.122	0.079	0.035	-0.036	-0.005	-0.042	0.074	1.000			
<i>leverage</i>	-0.027	0.090	-0.041	0.144	0.072	-0.060	0.090	0.000	-0.059	0.156	0.029	-0.357	1.000		
<i>firmsize</i>	0.096	-0.128	0.073	0.238	0.333	0.088	0.248	0.029	-0.101	0.197	0.333	0.124	0.261	1.000	
<i>firmage</i>	0.002	0.095	0.003	-0.002	-0.161	0.014	-0.049	0.001	-0.026	0.085	0.001	-0.034	0.072	0.046	1.000

Appendix C

Covariate balance check for PSM analysis

All the variables are defined in Appendix A. The total number of observations is 2,346.

Variables	Mean		MeanDiff	p-value
	Non FE	FE		
	(1)	(2)	(2)-(1)	
<i>soe</i>	0.415	0.413	-0.002	0.900
<i>top1</i>	0.343	0.341	-0.002	0.782
<i>top2-5</i>	0.166	0.167	0.001	0.757
<i>bsize</i>	2.157	2.165	0.008	0.321
<i>indeperc</i>	0.373	0.372	-0.001	0.645
<i>duality</i>	0.167	0.160	-0.007	0.656
<i>big4</i>	0.146	0.142	-0.004	0.769
<i>bmeeting</i>	2.360	2.358	-0.002	0.863
<i>roa</i>	0.047	0.044	-0.003	0.332
<i>leverage</i>	0.485	0.489	0.004	0.634
<i>firmsize</i>	22.484	22.467	-0.017	0.774
<i>firmage</i>	2.843	2.845	0.002	0.873

Table 1 . Summary statistics

Table 1 reports the results of summary statistics and univariate tests. All the variables are defined in Appendix A.

Panel A					
	Obs	Mean	Std. Dev.	Min	Max
<i>AQ</i>	12,287	0.066	0.079	0.005	0.519
<i>DACC</i>	12,287	-0.007	0.140	-0.478	0.510
<i>FE dummy</i>	12,287	0.112	0.315	0.000	1.000
<i>soe</i>	12,287	0.475	0.499	0.000	1.000
<i>top1</i>	12,287	0.353	0.151	0.091	0.751
<i>top2-5</i>	12,287	0.161	0.110	0.011	0.463
<i>bsize</i>	12,287	2.159	0.200	1.609	2.708
<i>indeperc</i>	12,287	0.371	0.053	0.300	0.571
<i>duality</i>	12,287	0.169	0.375	0.000	1.000
<i>big4</i>	12,287	0.066	0.248	0.000	1.000
<i>bmeeting</i>	12,287	2.306	0.338	1.609	3.219
<i>roa</i>	12,287	0.042	0.065	-0.218	0.237
<i>leverage</i>	12,287	0.470	0.218	0.049	1.019
<i>firmsize</i>	12,287	22.004	1.287	19.167	25.82
<i>firmage</i>	12,287	2.737	0.353	1.386	3.367

Panel B				
	mean		Difference	p-value
	Non-FE	FE	Difference	
	(1)	(2)	(2)-(1)	
<i>AQ</i>	0.067	0.059	-0.008	0.000***
<i>DACC</i>	-0.006	-0.015	-0.021	0.031**
<i>soe</i>	0.605	0.413	-0.192	0.000***
<i>top1</i>	0.349	0.341	-0.008	0.121
<i>top2-5</i>	0.137	0.167	0.030	0.000***
<i>bsize</i>	2.174	2.165	-0.009	0.163
<i>indeperc</i>	0.369	0.372	0.003	0.070*
<i>duality</i>	0.170	0.160	-0.010	0.387
<i>big4</i>	0.058	0.142	0.084	0.000***
<i>bmeeting</i>	2.307	2.358	0.051	0.000***
<i>roa</i>	0.036	0.044	0.008	0.000***
<i>leverage</i>	0.518	0.489	-0.029	0.000***
<i>firmsize</i>	22.137	22.467	0.330	0.000***
<i>firmage</i>	2.842	2.845	0.003	0.762

Table 2. Managerial foreign experience and earnings quality

Table 2 reports the results of OLS regression analysis and PSM analysis, consisting of 12,287 and 2,346 firm-year observations, respectively. The dependent variables are *DACC* and *AQ*, the measurements of earnings quality, and the test variable is *FE dummy*. Fixed effects are controlled by industry and year and standard errors are clustered by firm across two models. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	Basic model		PSM	
	<i>DACC</i>	<i>AQ</i>	<i>DACC</i>	<i>AQ</i>
<i>FE dummy</i>	-0.012** (-2.465)	-0.007** (-2.215)	-0.018*** (-2.885)	-0.006* (-1.677)
<i>soe</i>	0.001 (0.315)	-0.011*** (-4.218)	0.008 (1.124)	-0.011*** (-3.022)
<i>top1</i>	-0.008 (-0.656)	0.045*** (4.459)	-0.036 (-1.311)	0.055*** (3.588)
<i>top2-5</i>	0.025 (1.592)	0.063*** (4.834)	-0.012 (-0.356)	0.091*** (4.912)
<i>bsize</i>	0.003 (0.337)	-0.006 (-1.011)	0.016 (0.732)	-0.004 (-0.321)
<i>indeperc</i>	0.024 (0.788)	0.053** (2.409)	0.121* (1.85)	0.007 (0.184)
<i>duality</i>	-0.000 (-0.084)	0.001 (0.296)	0.003 (0.380)	0.002 (0.550)
<i>big4</i>	-0.033*** (-5.455)	-0.004 (-0.875)	-0.043*** (-4.238)	0.006 (0.681)
<i>bmeeting</i>	0.031*** (7.356)	0.004 (1.518)	0.034*** (3.606)	-0.000 (-0.022)
<i>roa</i>	0.200*** (6.901)	0.041** (2.131)	0.195*** (2.768)	-0.014 (-0.436)
<i>leverage</i>	-0.026*** (-2.640)	0.053*** (5.928)	-0.010 (-0.394)	0.039*** (2.967)
<i>firmsize</i>	0.012*** (6.604)	-0.014*** (-8.973)	0.008** (2.124)	-0.011*** (-5.389)
<i>firmage</i>	0.006 (0.931)	0.029*** (5.941)	0.001 (0.095)	0.019*** (2.751)
<i>Constant</i>	-0.343*** (-7.990)	0.229*** (7.276)	-0.313*** (-3.434)	0.213*** (3.865)
Observations	12,287	12,287	2,346	2,346
Adjusted R-squared	0.030	0.087	0.025	0.067
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Table 3. DID analysis

Table 3 reports the results of the DID analysis, consisting of 796 firm-year observations. The dependent variables are *DACC* and *AQ*, and the test variable is $post_i * transition_i$. Fixed effects are controlled by industry and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	<i>DACC</i>	<i>AQ</i>
<i>post*transition</i>	-0.070** (-2.257)	-0.030** (-2.529)
<i>post</i>	0.002 (0.200)	-0.004 (-1.017)
<i>transition</i>	-0.035* (-1.867)	-0.028** (-2.196)
<i>soe</i>	0.000 (0.033)	-0.014 (-1.294)
<i>top1</i>	-0.000 (-0.003)	0.074** (2.428)
<i>top2-5</i>	-0.051 (-0.868)	0.113*** (2.834)
<i>bsize</i>	0.022 (0.603)	0.019 (0.972)
<i>indeperc</i>	0.150 (1.567)	0.131* (1.751)
<i>duality</i>	-0.021* (-1.763)	0.000 (0.040)
<i>big4</i>	0.027* (1.778)	0.006 (0.576)
<i>bmeeting</i>	0.019 (0.848)	0.008 (0.551)
<i>roa</i>	0.168 (1.405)	0.058 (1.307)
<i>leverage</i>	-0.024 (-0.568)	0.083** (1.994)
<i>firmsize</i>	0.008 (1.164)	-0.021*** (-3.110)
<i>firmage</i>	-0.017 (-0.636)	0.042*** (2.647)
<i>Constant</i>	-0.281* (-1.724)	0.235* (1.852)
Observations	796	796
Adjusted R-squared	0.042	0.123
Industry	Yes	Yes
Year	Yes	Yes

Table 4. Instrumental variables test

Table 4 reports the results of 2SLS instrumental variables analysis, consisting of 12,287 firm-year observations. The dependent variables are *DACC* and *AQ*, and the test variable is *FE dummy*. Fixed effects are controlled by industry and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	First stage	<i>DACC</i>	<i>AQ</i>
<i>FE dummy</i>		-0.218*** (-3.774)	-0.109** (-2.519)
<i>british</i>	0.066** (1.969)		
<i>policy</i>	0.137** (2.065)		
<i>soe</i>	-0.434*** (-11.482)	-0.012** (-2.218)	-0.018*** (-4.279)
<i>top1</i>	-0.018 (-0.139)	-0.009 (-0.735)	0.044*** (4.434)
<i>top2-5</i>	0.707*** (4.151)	0.049*** (2.752)	0.070*** (4.710)
<i>bsize</i>	-0.054 (-0.548)	0.001 (0.136)	-0.006 (-0.944)
<i>indeperc</i>	-0.080 (-0.228)	0.015 (0.500)	0.054** (2.457)
<i>duality</i>	-0.197*** (-4.280)	-0.007 (-1.632)	-0.003 (-0.826)
<i>big4</i>	0.035 (0.691)	0.033*** (7.859)	0.003 (1.035)
<i>bmeeting</i>	0.448*** (7.346)	-0.011 (-1.404)	0.007 (1.141)
<i>roa</i>	-0.024 (-0.086)	0.201*** (7.027)	0.049*** (2.600)
<i>leverage</i>	-0.235** (-2.368)	-0.031*** (-2.964)	0.054*** (5.753)
<i>firmsize</i>	0.103*** (6.132)	0.014*** (6.776)	-0.013*** (-7.026)
<i>firmage</i>	-0.073 (-1.098)	-0.003 (-0.590)	0.029*** (6.210)
<i>Constant</i>	-3.100*** (-6.771)	-0.358*** (-8.333)	0.224*** (6.997)
Observations	12,287	12,287	12,287
Industry	Yes	Yes	Yes
Year	Yes	Yes	Yes
Adjusted R-squared	0.071	0.028	0.078
F-statistic (χ^2)	15.45***		

Table 5. Heckman two-stage analysis

Table 5 reports the results of the Heckman two-stage analysis, consisting of 12,287 firm-year observations. The dependent variables are *DACC* and *AQ*, and the test variable is *FE dummy*. Fixed effects are controlled by industry and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	<i>DACC</i>	<i>AQ</i>
<i>FE dummy</i>	-0.012** (-2.332)	-0.007** (-2.334)
<i>soe</i>	0.154** (2.179)	-0.079 (-1.594)
<i>top1</i>	-0.004 (-0.291)	0.043*** (4.209)
<i>top2-5</i>	-0.224* (-1.903)	0.173** (2.110)
<i>bsize</i>	0.021* (1.710)	-0.015* (-1.661)
<i>indeperc</i>	0.055* (1.664)	0.040* (1.714)
<i>duality</i>	0.067** (2.147)	-0.029 (-1.337)
<i>big4</i>	-0.188*** (-2.626)	0.064 (1.262)
<i>bmeeting</i>	0.020*** (2.903)	0.009** (2.008)
<i>roa</i>	0.201*** (6.945)	0.040** (2.097)
<i>leverage</i>	0.055 (1.433)	0.017 (0.625)
<i>firmsize</i>	-0.025 (-1.452)	0.002 (0.153)
<i>firmage</i>	0.028** (2.328)	0.019** (2.281)
<i>mills</i>	-0.416** (-2.164)	0.184 (1.371)
<i>Constant</i>	1.076 (1.633)	-0.397 (-0.865)
Observations	12,287	12,287
Adjusted R-squared	0.030	0.088
Industry	Yes	Yes
Year	Yes	Yes

Table 6. Additional omitted variable checks

Table 6 reports the regression results by CEO fixed effects with 2SLS analysis and results containing additional variables, consisting of 12,287 and 12,215 firm-year observations, respectively. The dependent variables include *DACC*, *Resid DACC*, *AQ*, and *Resid AQ* and the test variable is *FE dummy*. Panel A reports the results of CEO fixed effects with 2SLS analysis and Panel B presents the results including additional control variables. Fixed effects are selected among CEO, industry and year across Panels A and B and standard errors are clustered by firms. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A				
	First stage	Second stage	First stage	Second stage
	<i>DACC</i>	<i>Resid DACC</i>	<i>AQ</i>	<i>Resid AQ</i>
<i>FE CEO</i>		-0.012** (-2.465)		-0.007** (-2.215)
Controls	Yes	Yes	Yes	Yes
Observations	12,287	12,287	12,287	12,287
Adjusted R-squared	0.018	0.095	0.043	0.06
CEO	Yes	No	Yes	No
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Panel B				
	<i>DACC</i>	<i>AQ</i>		
<i>FE dummy</i>	-0.008* (-1.650)	-0.007** (-2.301)		
<i>FE_directors</i>	-0.106*** (-3.251)	0.035 (1.552)		
<i>Insti</i>	-0.007 (-0.349)	-0.033*** (-2.632)		
<i>tunnelling</i>	-0.069 (-1.067)	-0.003 (-0.087)		
<i>financial distress</i>	-0.001 (-0.723)	0.006*** (3.634)		
<i>financial constraints</i>	0.338*** (5.980)	0.019 (0.713)		
<i>Constant</i>	-0.387*** (-8.679)	0.179*** (5.742)		
Controls	Yes	Yes		
Observations	12,215	12,215		
Adjusted R-squared	0.041	0.086		
Industry	Yes	Yes		
Year	Yes	Yes		

Table 7. Different types of foreign experience

Table 7 reports the results of different types of foreign experience, consisting of 12,287 firm-year observations. The dependent variables are *DACC* and *AQ*, the measurements of earnings quality, and the test variables are *Low EM*, *High EM*, *Low corruption*, *High corruption*, *FE long-term* and *FE short-term*, respectively. Panel A reports the results on managers who gained their foreign experience from countries with low and high earnings management index and corruption index. Panel B presents the results of foreign long-term and short-term visiting experience. Fixed effects are controlled by industry and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A				
	<i>DACC</i>	<i>AQ</i>	<i>DACC</i>	<i>AQ</i>
<i>Low EM</i>	-0.013** (-2.299)	-0.006* (-1.728)		
<i>High EM</i>	-0.015 (-1.598)	-0.008 (-1.051)		
<i>Low corruption</i>			-0.010** (-2.015)	-0.007** (-2.288)
<i>High corruption</i>			-0.059* (-1.813)	-0.003 (-0.415)
Constant	-0.343*** (-7.988)	0.500*** (3.741)	-0.345*** (-8.028)	0.229*** (7.272)
Controls	Yes	Yes	Yes	Yes
Observations	12,287	12,287	12,287	12,287
Adjusted R-squared	0.030	0.028	0.030	0.087
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Panel B				
	<i>DACC</i>	<i>AQ</i>		
<i>FE long-term</i>	-0.015*** (-2.832)	-0.005* (-1.749)		
<i>FE short-term</i>	0.007 (0.418)	-0.005 (-0.610)		
Constant	-0.344*** (-8.021)	0.229*** (7.273)		
Controls	Yes	Yes		
Observations	12,287	12,287		
Adjusted R-squared	0.030	0.087		
Industry	Yes	Yes		
Year	Yes	Yes		

Table 8. Reputational concerns

Table 8 reports the results of reputational concerns for foreign experienced top managers, consisting of 10,373 and 12,287 firm-year observations in Panels A and B, respectively. The dependent variables include *Analysts*, *Ab_Analysts*, *BTD* and *Ab_BT D*, and the test variable is *FE dummy* across Panels A and B. Fixed effects are controlled by industry and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A		
	<i>Analysts</i>	<i>Ab_Analysts</i>
<i>FE dummy</i>	0.115* (1.711)	11.800*** (2.876)
Constant	-11.750*** (-22.782)	-172.358*** (-4.859)
Controls	Yes	Yes
Observations	10,373	10,373
Adjusted R-squared	0.461	0.206
Industry	Yes	Yes
Year	Yes	Yes
Panel B		
	<i>BT D</i>	<i>Ab_BT D</i>
<i>FE dummy</i>	-0.003** (-2.164)	-0.003** (-2.138)
Constant	-0.058*** (-4.013)	-0.040*** (-2.852)
Controls	Yes	Yes
Observations	12,287	12,287
Adjusted R-squared	0.556	0.540
Industry	Yes	Yes
Year	Yes	Yes

Table 9. Channel tests

Table 9 reports the results of channel tests, consisting of 12,287 firm-year observations. Panel A presents the regression results for collecting fitted values and residuals between FE dummy and the three possible channels, foreign ownership (*FO*), dividend payments (*Div*) and overseas investment (*Overseas aff*). Panel B presents the channel test results between the fitted values from Panel A and the earnings quality measures. Fixed effects are controlled by industry and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A			
	<i>FO</i>	<i>Div</i>	<i>Overseas_aff</i>
<i>FE dummy</i>	0.006*** (3.592)	0.175** (2.438)	0.418*** (5.201)
<i>Constant</i>	0.003*** (5.397)	-0.504*** (-2.796)	-1.658*** (-6.546)
Observations	12,287	12,287	12,287
Adjusted /Pseudo R-squared	0.020	0.031	0.062
Industry	Yes	Yes	Yes
Year	Yes	Yes	Yes

Panel B						
	<i>DACC</i>	<i>AQ</i>	<i>DACC</i>	<i>AQ</i>	<i>DACC</i>	<i>AQ</i>
<i>fv FO</i>	-2.262*** (-2.739)	-1.137** (-2.264)				
<i>RSD FO</i>	-0.100 (-0.869)	0.013 (0.163)				
<i>fv Div</i>			-0.171*** (-2.687)	-0.104*** (-2.713)		
<i>RSD Div</i>			0.002 (0.515)	-0.018*** (-7.531)		
<i>fv Overseas_aff</i>					-0.069** (-2.246)	-0.044** (-2.361)
<i>RSD Overseas_aff</i>					-0.001 (-0.302)	0.001 (0.245)
<i>soe</i>	0.000 (0.125)	-0.011*** (-4.229)	0.001 (0.174)	-0.011*** (-4.306)	0.001 (0.303)	-0.011*** (-4.190)
<i>top1</i>	-0.012 (-0.973)	0.044*** (4.422)	-0.012 (-0.989)	0.044*** (4.498)	-0.008 (-0.665)	0.045*** (4.470)
<i>top2-5</i>	0.021 (1.290)	0.061*** (4.688)	0.019 (1.229)	0.060*** (4.694)	0.025 (1.584)	0.063*** (4.828)
<i>bsize</i>	0.003 (0.273)	-0.007 (-1.038)	0.002 (0.247)	-0.005 (-0.802)	0.003 (0.336)	-0.006 (-1.010)
<i>indeperc</i>	0.022 (0.718)	0.052** (2.365)	0.022 (0.719)	0.051** (2.338)	0.024 (0.792)	0.053** (2.418)
<i>duality</i>	0.000	0.001	0.000	0.001	-0.000	0.001

	(0.074)	(0.294)	(0.071)	(0.203)	(-0.055)	(0.295)
<i>big4</i>	-0.012***	0.001	-0.012***	0.000	0.031***	0.004
	(-2.926)	(0.222)	(-2.904)	(0.125)	(7.390)	(1.490)
<i>bmeeting</i>	0.032***	0.005	0.032***	0.004	-0.034***	-0.004
	(7.524)	(1.560)	(7.524)	(1.272)	(-5.477)	(-0.880)
<i>roa</i>	0.204***	0.041**	0.199***	0.079***	0.200***	0.041**
	(7.038)	(2.152)	(6.445)	(4.031)	(6.893)	(2.121)
<i>leverage</i>	-0.025**	0.053***	-0.024**	0.046***	-0.027***	0.053***
	(-2.487)	(5.989)	(-2.420)	(5.186)	(-2.654)	(5.918)
<i>firmsize</i>	0.010***	-0.014***	0.010***	-0.012***	0.012***	-0.014***
	(5.957)	(-9.529)	(5.719)	(-8.060)	(6.535)	(-8.716)
<i>firmage</i>	0.007	0.029***	0.007	0.026***	0.006	0.029***
	(1.064)	(5.956)	(1.073)	(5.463)	(0.904)	(5.937)
<i>Constant</i>	-0.302***	0.240***	-0.204***	0.253***	-0.331***	0.239***
	(-7.282)	(7.935)	(-3.773)	(6.761)	(-7.597)	(7.300)
Observations	12,287	12,287	12,287	12,287	12,287	12,287
Adjusted R-squared	0.028	0.087	0.028	0.097	0.030	0.087
Industry	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes

Table 10. SOEs vs Private firms

Table 10 reports the subsample results between SOEs and private firms, consisting of 7,213 firm-year observations in SOEs and 5,074 firm-year observations in private firms, respectively. Panel A reports the results of subsample analysis between SOEs and private firms. Panel B presents the subsample analysis between politically connected firms and non-politically connected firms based on private firms' subsample. The dependent variables are *DACC* and *AQ*, the measurements of earnings quality, and the test variable is *FE dummy*. Fixed effects are controlled by industry and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A	SOEs		Private firms	
	<i>DACC</i>	<i>AQ</i>	<i>DACC</i>	<i>AQ</i>
<i>FE dummy</i>	-0.007 (-0.933)	-0.002 (-0.556)	-0.016** (-2.470)	-0.010*** (-2.606)
<i>top1</i>	-0.024 (-1.583)	0.040*** (3.320)	0.020 (0.938)	0.045*** (2.729)
<i>top2-5</i>	0.011 (0.594)	0.049*** (3.067)	0.047 (1.595)	0.085*** (4.085)
<i>bsize</i>	0.005 (0.430)	-0.011 (-1.544)	0.010 (0.575)	-0.002 (-0.152)
<i>indeperc</i>	-0.014 (-0.356)	0.025 (0.978)	0.103* (1.846)	0.073* (1.934)
<i>duality</i>	-0.005 (-0.903)	-0.004 (-1.079)	0.003 (0.612)	0.004 (0.880)
<i>big4</i>	-0.020*** (-2.986)	-0.014*** (-3.248)	-0.060*** (-4.683)	0.017 (1.344)
<i>bmeeting</i>	0.023*** (4.629)	0.004 (1.141)	0.040*** (5.445)	0.008 (1.541)
<i>roa</i>	0.160*** (4.420)	0.004 (0.224)	0.223*** (4.928)	0.071** (2.270)
<i>leverage</i>	-0.026** (-2.084)	0.032*** (4.035)	-0.028* (-1.796)	0.068*** (4.344)
<i>firmsize</i>	0.009*** (4.061)	-0.009*** (-5.989)	0.017*** (5.477)	-0.020*** (-6.883)
<i>firmage</i>	0.001 (0.100)	0.026*** (4.044)	0.007 (0.737)	0.030*** (4.226)
<i>Constant</i>	-0.216*** (-4.267)	0.154*** (4.791)	-0.553*** (-6.768)	0.313*** (5.107)
Observations	7,213	7,213	5,074	5,074
Adjusted R-squared	0.022	0.054	0.046	0.109
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Panel B	PC firms		Non-PC firms	
	<i>DACC</i>	<i>AQ</i>	<i>DACC</i>	<i>AQ</i>
<i>FE dummy</i>	-0.010 (-0.902)	-0.015* (-1.956)	-0.018** (-2.174)	-0.009** (-2.066)
<i>top1</i>	0.011 (0.327)	0.070** (2.503)	0.024 (0.864)	0.021 (1.205)
<i>top2-5</i>	0.030 (0.587)	0.077** (2.254)	0.048 (1.354)	0.086*** (3.634)
<i>bsize</i>	-0.015 (-0.536)	-0.026 (-1.500)	0.021 (1.081)	0.008 (0.609)
<i>indeperc</i>	0.116 (1.427)	0.062 (1.151)	0.087 (1.260)	0.066 (1.483)
<i>duality</i>	0.007 (0.763)	-0.009 (-1.395)	0.001 (0.138)	0.011** (2.020)
<i>big4</i>	0.042*** (3.064)	-0.001 (-0.189)	0.040*** (4.498)	0.012** (1.979)
<i>bmeeting</i>	-0.078*** (-5.137)	0.002 (0.106)	-0.052*** (-2.860)	0.025* (1.676)
<i>roa</i>	0.344*** (3.772)	0.108* (1.947)	0.182*** (3.425)	0.059 (1.519)
<i>leverage</i>	-0.023 (-0.732)	0.068*** (2.602)	-0.028* (-1.653)	0.065*** (3.698)
<i>firmsize</i>	0.015*** (2.728)	-0.017*** (-3.580)	0.017*** (4.719)	-0.022*** (-6.602)
<i>firmage</i>	0.024 (1.537)	0.029*** (3.035)	-0.004 (-0.384)	0.028*** (3.233)
<i>Constant</i>	-0.476*** (-3.655)	0.324*** (3.195)	-0.556*** (-6.061)	0.341*** (5.142)
Observations	1,779	1,779	3,295	3,295
Adjusted R-squared	0.053	0.091	0.043	0.130
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Table 11. Monitoring effect

Table 11 reports the relationship between managerial foreign experience and corporate earnings quality for proxies of audit quality and corporate governance. The dependent variables are *DACC* and *AQ*, the measurements of earnings quality, and the test variable is *FE dummy*. In Panels A, B and C, we split our sample into four sub-samples based on the above/below medians value of audit fees, accounting firm ranks and the ratio of independent directors. Fixed effects are controlled by industry and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A Accounting firm ranks				
	<i>DACC</i>	<i>DACC</i>	<i>AQ</i>	<i>AQ</i>
	High	Low	High	Low
<i>FE dummy</i>	-0.009 (-1.629)	-0.016** (-2.022)	-0.005 (-1.101)	-0.012*** (-2.855)
<i>Constant</i>	-0.258*** (-4.440)	-0.384*** (-5.963)	0.203*** (4.204)	0.273*** (6.631)
Controls	Yes	Yes	Yes	Yes
Observations	6,069	5,333	6,069	5,333
Adjusted R-squared	0.030	0.034	0.076	0.095
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Panel B Audit fees				
	<i>DACC</i>	<i>DACC</i>	<i>AQ</i>	<i>AQ</i>
	High	Low	High	Low
<i>FE dummy</i>	-0.009 (-1.453)	-0.017** (-2.501)	-0.004 (-1.133)	-0.012*** (-2.816)
<i>Constant</i>	-0.262*** (-3.907)	-0.511*** (-7.879)	0.171*** (4.367)	0.309*** (5.457)
Controls	Yes	Yes	Yes	Yes
Observations	6,177	6,110	6,177	6,110
Adjusted R-squared	0.033	0.041	0.062	0.108
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Panel C Independent directors				
	<i>DACC</i>	<i>DACC</i>	<i>AQ</i>	<i>AQ</i>
	High	Low	High	Low
<i>FE dummy</i>	-0.009 (-1.333)	-0.014** (-2.141)	-0.007 (-1.437)	-0.009* (-1.693)
<i>Constant</i>	-0.311*** (-4.822)	-0.561*** (-4.539)	0.273*** (6.132)	0.263*** (3.284)
Controls	Yes	Yes	Yes	Yes
Observations	5,682	6,533	5,682	6,533
Adjusted R-squared	0.037	0.033	0.111	0.060
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Table 12. Impact of earnings quality on stock returns and agency costs

Table 12 reports the results on how improved earnings quality by foreign experienced managers impacts stock returns and agency costs, consisting of 12,240 and 12,278 firm-year observations, respectively. Panel A presents the regression for collecting fitted values and residuals between *FE dummy* and earnings quality. Panel B presents the results between the fitted values from Panel A and stock returns and agency costs, respectively. Fixed effects are controlled by industry and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A				
	<i>DACC</i>	<i>AQ</i>	<i>DACC</i>	<i>AQ</i>
<i>FE dummy</i>	-0.009*	-0.009***	-0.008*	-0.008***
	(-1.855)	(-2.724)	(-1.652)	(-2.693)
<i>Constant</i>	0.005	0.060***	0.005	0.060***
	(1.003)	(27.373)	(0.992)	(27.370)
Observations	12,240	12,240	12,278	12,278
Adjusted R-squared	0.001	0.014	0.001	0.014
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Panel B				
	<i>return</i>	<i>return</i>	<i>agency_cost</i>	<i>agency_cost</i>
<i>fv DACC</i>	34.620**		-2.366**	
	(2.076)		(-2.399)	
<i>RSD DACC</i>	0.515		-0.014	
	(1.517)		(-1.038)	
<i>fv AQ</i>		38.080**		-2.328**
		(2.086)		(-2.378)
<i>RSD AQ</i>		-0.364		0.105***
		(-0.538)		(2.762)
<i>soe</i>	-0.225**	-0.229**	-0.024***	-0.023***
	(-2.134)	(-2.159)	(-3.876)	(-3.721)
<i>top1</i>	0.369	0.383	-0.070***	-0.075***
	(1.009)	(1.040)	(-3.542)	(-3.753)
<i>top2-5</i>	0.630	0.667	0.036	0.029
	(1.229)	(1.307)	(1.358)	(1.081)
<i>bsize</i>	0.392	0.391	0.038***	0.038***
	(1.427)	(1.424)	(2.769)	(2.816)
<i>indeperc</i>	0.928	0.959	0.126***	0.120***
	(0.921)	(0.951)	(2.749)	(2.619)
<i>duality</i>	0.041	0.041	0.013*	0.013*
	(0.304)	(0.307)	(1.853)	(1.843)
<i>big4</i>	-0.358*	-0.377*	-0.001	-0.002
	(-1.688)	(-1.779)	(-0.144)	(-0.285)
<i>bmeeting</i>	-0.141	-0.123	0.055***	0.056***

	(-0.981)	(-0.859)	(4.587)	(4.657)
<i>roa</i>	1.829**	1.944**	-0.278***	-0.286***
	(2.217)	(2.354)	(-5.402)	(-5.558)
<i>leverage</i>	0.549**	0.555**	-0.061***	-0.066***
	(2.008)	(2.001)	(-3.090)	(-3.428)
<i>firmsize</i>	-0.157***	-0.156***	-0.040***	-0.038***
	(-3.266)	(-3.186)	(-12.545)	(-12.432)
<i>firmage</i>	-0.082	-0.069	0.009	0.005
	(-0.404)	(-0.334)	(0.832)	(0.527)
<i>Constant</i>	1.845	-0.399	0.950***	1.067***
	(1.468)	(-0.237)	(12.807)	(11.054)
Observations	12,240	12,240	12,278	12,278
Adjusted R-squared	0.035	0.035	0.165	0.167
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Table 13. Robustness test: Earnings persistent

Table 13 reports the results of earnings persistent, consisting of 12,287 firm-year observations. The dependent variable is EP_{t+1} , and the test variable is $EP_t * FE$ dummy. Fixed effects are controlled by industry and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	EP_{t+1}	EP_{t+1}
EP_t	0.018 (0.337)	-0.007 (-0.165)
FE dummy	-0.001 (-0.117)	-0.001 (-0.104)
$EP_t * FE$ dummy	0.541*** (6.617)	0.266*** (3.043)
soe		-0.001 (-0.075)
$top1$		0.099*** (3.740)
$top2-5$		0.095*** (4.156)
$bsize$		0.084 (0.858)
$indeperc$		-0.063 (-0.905)
$duality$		0.022 (1.218)
$big4$		0.006 (0.516)
$bmeeting$		-0.048* (-1.870)
$leverage$		-0.312** (-2.358)
$firmsize$		0.033*** (3.214)
$firmage$		0.036 (1.027)
Constant	0.014*** (2.660)	-0.846* (-1.660)
Observations	12,287	12,287
Adjusted R-squared	0.001	0.011
Industry	Yes	Yes
Year	Yes	Yes

CHAPTER 4

ESSAY THREE

This chapter presents the third essay, investigating the relationship between managerial foreign experience and corporate labour investment. A brief overview of the motivations, key findings and contributions are provided in Section 4.1. Literature review and hypothesis development are then discussed in Section 4.2. Section 4.3 outlines in details about data and methodology used in the essay. The regression analyses, including the baseline analysis, endogeneity checks and subsample tests are presented in Section 4.4. Section 4.5 concludes this chapter. The reference list for this chapter is reproduced in the final section of this thesis.

Does high skilled managers impact employee compensation?

Evidence from labour investment in China

Abstract

We investigate the impact of managerial foreign experience on corporate labour cost. We show that foreign experienced managers pay higher wages to employees. We document that efficiency wage and employee protection can serve as underlying economic channels that increase labour cost by retaining and attracting high skilled employees and improving labour protection. Further analyses indicate that foreign experienced managers mainly focus on employees' wellbeing in SOEs, while improve total factor productivity in private firms. The effect of managerial foreign experience on labour cost is more pronounced in firms without political connection, and in firms with excess cash holdings, or lower operating leverage. The positive relationship between managerial foreign experience and labour cost benefits shareholders by increasing firm value. However, it also generates labour stickiness costs. Overall, our findings have implications for the emerging market regarding the transition from a low-cost labour development model to high-skilled-employees-based model.

JEL Classification Codes: E24, G30, D22

Keywords: Managerial foreign experience, Labour investment

4.1. Introduction

Foreign experience is a type of human assets which is valuable and difficult to imitate by others and such experiences help managers think globally and act locally (Carpenter, Sander and Gregersen, 2000; Coff, 1997). Despite the common discussion of foreign experienced executives on corporate governance and firm performance, there is little research on their influence on labour markets, particularly in China, where the legal system and ownership structure differ from the developed markets (Jiang and Kim, 2015). Typically, labour investment is funded from firms' operating cash flows, in contrast to capital investment which is financed through debt or equity (Taylor, Al-Hadi, Richardson, Alfarhan and Al-Yahyaee, 2019). Hence, under management entrenchment theory, if managers recruit employees for self-interest seeking (e.g. empire building activities) then labour investment may be a sunk cost as it is difficult to reduce or redeploy to other uses. This study investigates the influence of managerial foreign experience on employee compensation in China.

Endogenous growth theory suggests that human capital contributes significantly to economic growth (Aghion et al., 1998). However, a lack of high skilled employees constrains productivity and innovation within firms (Dollar, 2019), and this constraint is particularly problematic in Chinese firms. For example, according to a survey data from Peking University, the second biggest problem constraining Chinese enterprises' innovative activity is the lack of skilled employees (Peking University Open Research Data⁴⁹). As foreign experienced managers are regarded as high skilled talents, they may have more interest in hiring and retaining high skilled employees to innovate and promote firm performance (Glaeser and Berry, 2006). Moreover, previous studies indicate that foreign experienced executives can improve firm performance through their superior skills and knowledge (e.g. Giannetti et al., 2015; Yuan and Wen, 2018). However, the improved organizational behaviours are not only subject to

⁴⁹ For more details, please see <https://opendata.pku.edu.cn/dataverse/esiec>

managerial ability, but also an outcome from other parties' efforts such as employees. Given foreign experienced managers capture significant attention from other parties (e.g. board of directors and public media), they may increase employee compensation to retain and attract high skilled employees to improve firm performance. Thus, foreign experienced managers may increase employee compensation to avoid high skilled labour risk (i.e. the risk of high skilled labour turnover).

In addition to hiring high skilled employees, foreign experienced managers' behaviors could be influenced by those foreign country norms after working or studying abroad for many years (Zhang, Kong and Wu, 2018). Although the Chinese government implemented the labour contract reform to strengthen the labour protection in 2008 (Kong et al., 2020), there are still some problems which are harmful to employees' welfare. For example, in 2021 the Chinese government announced that the popular working norm "996", where employees need to work from 9am to 9pm, 6 days a week is illegal. Thus, managers gaining experience in high employee protection countries may extend similar employee treatment and working norms in their Chinese firms where traditionally labour protection and average wages are comparatively lower than those of more developed markets. As such, managers with foreign experience may be positively associated with employee compensation.

On the other hand, some studies may make the opposite prediction. Paying high employee compensation may reduce firms' profitability, resulting in lowering firms' internal capital availability (Klasa, Maxwell and Ortiz-Molina, 2009; Matsa, 2010; Kong et al., 2020). Given managers with foreign experience are treated as "super stars", with high salaries and additional bonuses, firms may be unlikely to further pay high wages to employees to avoid potential liquidity and bankruptcy risk.

Thus, the effect of managerial foreign experience on employee compensation is an open question that requires further investigation. Unlike the US where firm-level rank-and-file employee data is unavailable, the Chinese Accounting Standard for Business Enterprises-Basic Standard has required firms to report employees' compensation information (e.g. salaries, and allowance) since 2007. Moreover, the China Securities Regulatory Commission (CSRC) requires firms to disclose the descriptive statistics of their employee structures, including employee count, education and position. The data availability in China gives us a unique setting to investigate the relationship between managerial foreign experience and corporate employee compensation.

Using the average wage expenses excluding top executives' compensation, we find that managerial foreign experience increases employee compensation. This result is confirmed after endogeneity checks including instrumental variable (IV) test, difference-in-difference (DID) test and multiple fixed effects tests.

Next, we investigate potential mechanisms through which managerial foreign experience increase employee compensation. We argue that both the efficient wage theory (e.g. firms having more high skilled employees) and employee protection improvement are the potential mechanisms through which foreign experienced managers increase employee compensation. Our empirical evidence indicates that firms with foreign experienced managers are associated with a high percentage of skilled employees and they are more likely to increase employee compensation in firms located in high labour market competition areas. Both results support the efficiency wage channel. Moreover, we find that managers who gain their experience in high labour protection countries have a stronger impact on employee compensation than those with experience in high investor protection countries. Additionally, the positive effect of managerial foreign experience on employee compensation is more pronounced in provinces

with low employee protection, which is also consistent with the high employee protection channel.

We then investigate whether and how government intervention in firms affects the inducement effect of managerial foreign experience. First, we find the relationship between managerial foreign experience and employee compensation is significant in both SOEs and private firms. However, evidence shows that the purposes for foreign experienced managers to increase employee compensation are different in SOEs and private firms. We find that foreign experienced managers fulfil the political and social objectives (e.g. employees' wellbeing and safety) set by government, which may help their future political promotion opportunities in SOEs (Jiang and Kim, 2019). In contrast, foreign experienced managers benefit shareholders through performance-enhancing activities (e.g. increasing total factor productivity) in private firms. Both incentives lead to an increase in labour costs.

Moreover, the inducement effect of managerial foreign experience is more pronounced in private firms without political connections. Thus, foreign experienced managers in politically connected firms are less sensitive to increase labour costs to improve firm performance, as these firms are supported through rent-seeking activities (Chen, Sun, Tang and Wu, 2011; Chen, Li, Luo and Zhang, 2017), such as bank loans. Overall, we indicate the different incentives for foreign experienced managers to increase employee compensation due to government intervention.

Next, we provide evidence on how firm characteristics influence the relationship between managerial foreign experience and employee compensation. We find it is more pronounced in firms with excess cash holdings and lower operating leverage. These results are consistent with He (2018) who presents that firms need a flexible and healthy financial condition to retain and attract high skilled employees.

Further, we find that the increased employee compensation associated with foreign experience managers, positively affects firm value. This provides evidence that the increase in labour costs is more aligned to shareholder wealth maximisation goals, rather than empire building purposes, particularly in private firms.

Although the recruitment of high skilled employees is associated with several benefits, it may also increase the labour adjustment costs, resulting in labour cost stickiness. This is what we find. Foreign experienced managers are associated with labour cost stickiness, indicating a potential structural cost for firms appointing foreign experienced managers.

Our study makes several contributions to the existing literature. First, to our best knowledge, this is the first paper to investigate the relationship between managerial foreign experience and the cost of employees. Previous studies show foreign experienced executives affect firm performance and shareholders' value through their superior skills and knowledge (e.g. Giannetti et al., 2015; Yuan and Wen, 2018; Dai, Kong and Liu, 2018), or how managerial foreign experience benefits managers' compensation (Yuan and Wen, 2018; Conyon, Haß, Vergauwe and Zhang, 2019). In contrast, our study illustrates their impact on employees' compensation and the teams they build which also drives firm performance, as employees are critical corporate stakeholders and their loyalty and teamwork are crucial to corporate success (Hall, Jaffe and Trajtenberg, 2005). We argue that despite the superior skills of knowledge that foreign experienced managers gained from overseas experience, they also implement favourable labour conditions (e.g. human capital building), which is the most valuable firm asset in today's knowledge-based economies (Pfeffer and Villeneuve, 1994; Zingales, 2000) and impact firms' performance significantly.

Second, we contribute to the literature on labour investment. Previous literature mainly focuses on the influence of macro factors on employee compensation, such as labour policy reform,

government connections and the bargaining power from unionization (Cui et al., 2018; Li et al., 2020; Kong et al., 2020; Wei, Hu and Chen, 2020; Klasa et al., 2009). We argue that the micro factors (e.g. managerial foreign experience) also matters in determining employee compensation.

Third, we extend the literature on managerial foreign experience. Previous literature indicates positive effects of foreign experienced executives on firm performance, such as corporate innovation (Yuan and Wen, 2018), investment efficiency (Dai et al., 2018), and corporate social responsibility (Zhang, Kong and Wu, 2018). Given labour investment is distinguished from capital investment, we shed light on another dimension of corporate investment decision-making influenced by foreign experienced managers. In addition to increasing employee compensation to attract and retain high skilled employees, we also find firms with foreign experienced managers increase labour stickiness costs, which is a potential cost of appointing foreign experienced managers.

Fourth, our study builds on the work of Kong et al. (2020) and others who argue that the efficiency wage channel can retain and attract high skilled employees and facilitate their working efficiency. Moreover, given foreign experienced managers are also regarded as high skilled talents (Yuan and Wen, 2020), we show that high skilled managers are more likely to hire high skilled employees to enhance firm performance (Dollar, 2019).

The remainder of the paper is organised as follows. Section 2 provides relevant literature and hypothesis development. Section 3 discusses data and methodology. Section 4 reports empirical results. Section 5 concludes the paper.

4.2. Literature review and hypothesis development

4.2.1 Literature review

Our study incorporates two streams of literature. The first stream of literature which is related to our study is the employee compensation literature. The endogenous economic growth theories argue that increased employee compensation motivates firms to develop innovative production methods which may optimize the labor-saving technologies and provide a substitute for labor (Kong et al., 2020). Moreover, the efficient wage theory indicates that firms may hire and retain skilled employees, particularly in competitive labor markets (Kong et al., 2020). However, the effectiveness of efficiency wage may be mitigated if corruption is regarded as a phenomenon of social interaction (Chang and Lai, 2002). For example, if firms face serious corruption issues, the efficient wage may be less effective against corruption issues and thereby result in substantial profit shrinking in the firms (Chang and Lai, 2002).

In comparison with western countries, China's employee compensation was relatively low before 2003, which was mismatched with the high growth of economy in China. Since 2003, the employee compensation has increased dramatically, with an average growth rate above 12% from 2003 to 2015, particularly in urban areas due to the shortage of migrant workers (Li et al., 2020). In 2008, the Chinese government formally enacted the new Labour Contract Law which strengthens employees' legal rights and increases employees' wages and wellbeing including the social insurance, minimum wage and maximum working hours (Cui et al., 2018). Moreover, human-capital-incentive firms may face high labour costs as human-capital-incentive sectors (e.g. high-tech industries) involve 'talent war', which induces firms to pay high wages to their employees to attract and retain high skilled workers (Cao and Rees, 2020). The increased employee compensation can increase firms' precautionary cash holdings, as well as improving firms' productivity and innovation (Ni and Zhu, 2018; Cui et al., 2018; Kong et al., 2020; Li et al., 2020).

The second stream of literature refers to managerial foreign experience. The upper echelon theory argues that individual's characteristics can influence corporate performance significantly (Hambrick and Mason, 1984). Previous studies define foreign experienced executives as high skilled talents whose superior knowledge and skills to improve corporate performance, investment efficiency, innovation, and corporate social responsibility (Giannetti, et al., 2015; Dai et al., 2018; Yuan et al., 2018; Zhang et al., 2018). Moreover, foreign experienced executives can reduce stock price crash risk and corporate tax avoidance (Cao, Sun and Yuan, 2019; Wen, Cui and Ke, 2020).

4.2.2 Hypothesis development

Foreign experienced managers may increase employee compensation for several reasons. First, efficiency wage theory argues that the excess payment to employees increases firm performance by strengthening employees' loyalty (Stiglitz, 1974; Salop, 1979), attracting high skilled employees (Weiss, 1980; Malcomson, 1981) and retaining talented employees (Albinger and Freeman, 2000). Foreign experienced managers are regarded as talented executives in China who are treated as "super stars", receiving high compensation and allowance to improve firm performance, as well as heightened attention from different parties such as boardroom, social media and employees (Giannetti et al., 2015; Yuan et al., 2018). However, enhancing firm performance and value is a process of team work rather than an individual's effort (Hall, Jaffe and Trajtenberg, 2005). Given skilled managers are more likely to hire high skilled workers for facilitating firm performance (Glaeser and Berry, 2006), foreign experienced managers may be associated with a high proportion of skilled employees for performance enhancement to mitigate the pressure from other parties. Moreover, foreign experienced managers may increase employee compensation to enhance labour protection. Previous studies indicate where executives obtain their foreign experience impacts corporate decision-making. For example, Yuan et al. (2018) find that managers who gained experience

in US have more influence on innovation. Likewise, the employee protection may be strong for firms whose top managers gained their experience from countries with high employee protection. As high employee protection is positively linked to employee compensation (Cui, John, Pang and Wu, 2018), if foreign experienced managers increase employee protection, then employee compensation will increase.

On the other hand, it is also likely that foreign experienced managers are associated with low corporate labour costs. Foreign experienced managers receive high compensations, which may prevent firms from further increasing labour costs as high labour costs may reduce corporate profitability and burden internal capital liquidity (Klasa et al., 2009; Matsa, 2010; Kong et al., 2020).

However, even foreign experienced managers have a possibility to decrease labour costs, we still believe that they are more likely to increase labour costs. Thus, we hypothesise that:

H1. Managerial foreign experience is positively associated with employee compensation.

4.3. Data and methodology

Our sample consists of all firms listed on the Shanghai Stock Exchange (SSE) and the Shenzhen Stock Exchange (SZSE) from 2008 to 2016. The data is from the China Stock Market & Accounting Research Database (CSMAR). We start the sample from 2008 as CSMAR provides executives' profiles and background since 2008. The data of corporate employees' structure is retrieved from Rasset database. We exclude financial firms and observations with missing value.

Unlike western markets, the chairman in Chinese listed firms takes the most powerful managerial position and is concerned with daily operational matters (Kato and Long, 2006).

As such, we define foreign experienced managers as CEO, chairman and vice chairman⁵⁰, who have worked or studied outside the mainland of China. We manually collect information on manager's academic background and countries where they gained their foreign experience, from their resumes, available in the CSMAR database. We cross-check the sample with Baidu (<http://baike.baidu.com>), Sina (<http://finance.sina.com.cn>) and annual reports retrieved from the firms' websites. We then exclude individuals' who gained experiences from foreign branches of Chinese firms (an office of a Chinese firm overseas etc.) or worked for Chinese branches of foreign firms (an office of a foreign firm in China etc.) to rule out non-pure managerial foreign experience (Yuan et al., 2018). Therefore, managerial foreign experience (*FE dummy*) is a dummy variable which equals to one if a firm's chairman, vice chairman or CEO has foreign experience.

4.3.1 Labour costs measures

Following (Li et al., 2020), we define our dependent variable *labour cost* as the natural logarithm of the amount of "paid for and on behalf of employees" reported in cash flow statements plus changes in "wages payable" in the balance sheet in a given year, minus top executives' compensation in the previous year, divided by the total number of employees in a firm. Moreover, we use the industry adjusted labour cost (*Adj_labour*) as the second measure of labour cost. The variable *Adj_labour* is the natural logarithm of one plus the ratio of average labour compensation for a firm to the median compensation of a given industry and year.

4.3.2 Methodology

To test our hypothesis, the Equation 1 is applied for the regression models⁵¹:

$$labour\ cost_t\ or\ Adj\ labor_t = \alpha + \beta_1 FE\ dummy_t + \beta_2 quick\ ratio_{t-1} + \beta_3 leverage_{t-1} + \beta_4 firm\ size_{t-1} + \beta_5 roa_{t-1} + \beta_6 top1_{t-1} + \beta_7 labor\ intensity_{t-1} + \beta_8 indep_{t-1} + \beta_9 bsize_{t-1} +$$

⁵⁰ Vice chairman is also a full-time position which looks after company's daily operation in Chinese firms. Chen et al. (2011) define vice chairman as a powerful position.

⁵¹ All continuous variables are winsorized at the 1% and 99%.

$$\begin{aligned} & \beta_9 \text{insti}_{t-1} + \beta_{10} \text{tangible}_{t-1} + \beta_{11} \text{Std cfo}_{t-1} + \beta_{12} \text{Std nethire}_{t-1} + \beta_{13} \text{otherinvestment}_{t-1} + \\ & \beta_{14} \text{div}_{t-1} + \beta_{15} \text{big4}_{t-1} + \beta_{16} \text{soe}_{t-1} + \beta_{17} \text{duality}_{t-1} + \beta_{18} \text{GDP Growth}_{t-1} + \\ & \beta_{19} \text{inflation}_{t-1} + \beta_{20} \text{Money supply growth}_{t-1} + \varepsilon \end{aligned} \quad (1)$$

where *labour cost* and *Adj labour* are the measures of labour cost and the *FE dummy* is defined as the measure of managerial foreign experience. Following Ben-Nasr and Alshwer (2016), Khedmati, Sualiu and Yawson (2020) and Kong et al. (2020) We also add a set of control variables including quick ratio (*quick ratio*), financial leverage (*leverage*), firm size (*firm size*), return on assets (*roa*), the largest shareholdings (*top1*), labour intensity (*labour intensity*), ratio of independent directors (*indep*), board size (*bsize*), institutional ownership (*insti*), percentage of tangible assets (*tangible*), volatility of operating cash flow (*Std cfo*), volatility of net hiring (*Std nethiring*), other non-labour investment (*otherinvestment*), dividend payout (*div*), audit quality (*big4*), ownership controlling (*soe*), duality (*duality*), growth of GDP (*GDP growth*), inflation rate (*inflation*) and the growth of money supply (*Money supply growth*). We use industry-year fixed effect to examine the relationship between managerial foreign experience and labour cost in China, and the standard errors are clustered by firm level. All the variable definitions are reported in Appendix A.

Table 1 reports the summary statistics. The natural logarithm of labour cost has a mean of 11.319, and standard deviation of 0.637, which are close to Li et al. (2020) and Wei et al. (2020). On average, 10.9% of our observations have foreign experienced managers. In our sample, about half of the firms are state controlled. The largest shareholdings is on average of 35.4%. The average firm has 1.129 quick ratio, 48.1% financial leverage, 36.9% independent directors on board, and 24.9% tangible assets. With regard to the macro-economic variables, GDP growth throughout all provinces is 12.3% on average, the inflation rate is 2.8% and the growth rate of money supply from central bank is 16%.

[Insert Table 1 here]

4.4. Results

Table 2 reports the estimated result of Equation 1, which examines the effect of managerial foreign experience on employee compensation. Both coefficients for *FE dummy* are positively and significantly related to labour cost measures at the 1% level. We also report the result of propensity score matching (PSM) test to check the robustness and address self-selection bias of our baseline result. To execute the PSM analysis, we estimate the propensity scores by considering a set of control variables in Equation 1 and match the sample with the nearest neighbour between the treatment group and control group⁵². According to Table 2, the significance of *FE dummy* remains qualitatively the same.

Taken together, our results suggest that foreign experienced managers are associated with high labour cost and this relationship is not influenced by self-selection bias. However, this relationship may be influenced by potential endogeneity issues such as reverse causality. Further, the mechanisms of foreign experienced managers increase labour costs; the factors which may moderate the relationship between managerial foreign experience and labour costs; and how this relationship affect firm performance or shareholders' value are still underdeveloped. We will discuss these questions in the following sections.

[Insert Table 2 here]

4.4.1 Endogeneity checks

In this section, we apply a set of tests to address potential endogeneity concerns, including instrumental variable (IV) test, difference-in-difference (DID) test, and multiple fixed effects.

4.4.1.1 Instrumental variables test

We first adopt two-stage least square (2SLS) IV test to address the endogeneity concerns. Our first instrument variable is *christian*, defined as the number of colleges for each province that

⁵² In an untabulated result, the differences of control variables between the treatment and control group are insignificant in PSM sample, indicating that our matching sample is well matched.

were built by Christian missionaries up to 1920. Dai et al. (2018) argue that the Christian colleges may import western culture and values which may impact local culture, and such influences may increase the opportunities for local residents to go abroad or increase the possibility for foreign experienced talents to come and work in these areas. In addition, Chinese government enacts a series of policies to attract foreign experienced talents to live and work in China. Therefore, following Giannetti et al. (2015), we employ *policy* which is based on the event of the allowance policies⁵³, as our second instrument variable, *policy* is a dummy variable which equals to one in years of the allowance policy implementation for each province, and zero otherwise. Both of our instrumental variables do not have direct influence on labour costs.

Table 3 report the IV test results. In the first stage result, the coefficients on *Christian* and *policy* are positive and significant at the 5% and 10% level, respectively, indicating that our instrumental variables are highly correlated with appointing foreign experienced managers. The value of F-statistics and the p-value of Hansen J-statistic indicate that our instrumental variables are valid and not weak. In the second stage analysis, both of the coefficients of *FE dummy* are positively and significantly related to labour cost measures at the 1% level, suggesting that our results are not influenced by potential endogeneity concerns such as reverse causality and omitted variables.

[Insert Table 3 here]

4.4.1.2 Difference-in-difference analysis

Second, we employ a DID analysis based on CEO turnover to address the endogeneity issues which may affect the relationship between managerial foreign experience and labour costs⁵⁴.

⁵³ We use the event ‘Thousand Talents Plan’, enacted in 2008. The effective starting date of each province’s implementation of The Thousand Talents Plan varies, which enables us to create the instrumental variable.

⁵⁴ Following Yao, Wang, Sun, Liao and Cheng (2020), we select CEO turnover as benchmark in DID test as the CEO transition is more frequent than that of chairman, which allows us to incorporate more observations in the test.

In detail, we follow Huang and Kisgen (2013) to first identify firms that experience a transition from non-foreign experienced CEO to foreign experienced CEO (treatment group). Next, we identify firms that transition from having a non-foreign experienced CEO to another non-foreign experienced CEO (control group). We then build our DID sample as firm-year observations 2 years before and 2 years after a CEO turnover⁵⁵, excluding the transition year t . Our DID model is as follows⁵⁶:

$$\begin{aligned}
 & \text{labor cost}_{i,t} \text{ or Adj labor}_{i,t} \\
 & = \beta_0 + \beta_1 \text{post}_t * \text{transition}_i + \beta_2 \text{post}_t + \beta_3 \text{transition}_i \\
 & + \sum_k \beta_k \text{Controls}_{k,i,t} + \varepsilon_{i,t}
 \end{aligned}$$

where post_t is a dummy variable equals one if firm-year observations are after the CEO transition and zero otherwise; transition_i is a dummy variable equals one if a firm i 's transition year t is a non-foreign experienced to foreign experienced CEO transition and zero if a firm i 's transition year t does not involve any foreign experienced CEOs.

If H_1 holds, i.e. managerial foreign experience increases labour costs, the coefficient of the interaction term $\text{post}_t * \text{transition}_i$, will be significantly positive. Table 4 presents the results of our DID test. In line with our conjecture, the estimated coefficients on $\text{post}_t * \text{transition}_i$ are positive and significant across the measures of labour costs, indicating that managerial foreign experience can significantly increase labour costs, ruling out the possibility that our results are affected by reverse causality and omitted variables⁵⁷.

⁵⁵ We contain 2 years before and after transition to obtain more firms in our sample selection.

⁵⁶ Similar with Huang et al. (2013), we control for year fixed effects instead of parallel trend check in our DID analysis as the CEO turnovers occur in different dates for different companies.

⁵⁷ In an unreported table, we rerun our DID test by excluding the CEO turnover caused by dismissal, resignation and position transfer, as these turnovers might be endogenous (e.g. firms might change CEOs for specific purposes). The results remain the same after excluding the potential endogenous CEO turnovers, confirming the robustness of our DID test.

[Insert Table 4 here]

4.4.1.3 Other fixed effects

We further apply multiple fixed effects in this section. First, we use firm-year fixed effects to rule out the potential problems generated by time-invariant firm-specific characteristics. According to Panel A of Table 5, both the coefficients on *FE dummy* are significantly positive at the 10% level, indicating that our results are not driven by time-invariant firm-specific characteristics.

Second, to address the endogeneity issues caused by omitted individual's characteristics, we follow Gormley and Matsa (2014, p.644), Hedge and Mishra (2019) and Mishra (2021) in using the 2SLS strategy within the CEO fixed effects framework as managers' foreign experience is practically orthogonal to other individual's characteristics. Specifically, we first retrieve residuals by regressing both of our labour costs measures on all control variables in Equation 1 with CEO, industry and year fixed effects, respectively. We then regress both group-average residuals (*Resid_labour* and *Resid_Adjlabour*) estimated in the first step with *FE dummy* and all control variables in the first step, including industry and year fixed effects, respectively. The results are reported in Table 5. In the second step results, *FE dummy* is positively and significantly associated with *Resid_labour* and *Resid_Adjlabour* at the 1% level, ruling out the potential bias that our results are affected by omitted individuals' characteristics⁵⁸.

[Insert Table 5 here]

4.4.2 Potential mechanisms

In this section, we investigate the potential mechanisms for managers with foreign experience to increase labour costs. According to efficient wages theory, firms pay excess wages to

⁵⁸ In untabulated results, we repeat the same process using chairman fixed effects and the results are qualitatively similar.

employees for employees' loyalty and productivity in return (Kong et al., 2020). Apart from the superior knowledge that foreign experienced managers gained from other countries, they may also stock human capital following efficient wages theory to improve firm performance. Thus, in the context of the efficient wage theory, we expect foreign experienced managers increase labour cost by hiring high proportion of high skilled employees.

4.4.2.1 High skilled employees

Given foreign experienced managers are regarded as talented managers, they may prefer to hire a high proportion of skilled employees, as there is a positive relationship between talented managers and the recruitment of high skilled employees (Glaeser and Berry, 2006). The employee-friendly treatment will increase the attractiveness of recruitment for high skilled employees to overcome the difficulties from technical or innovative activities, as well as reducing labour market friction and adjustment costs (Cao and Rees, 2020). Thus, we expect firms with foreign experienced managers are associated with high proportion of high skilled employees, and this association will increase labour costs.

Following Kong et al. (2020) and Can and Rees (2020), we define high skilled employees based on their educational background (*High_edu*) and their job levels (*High_expert*). The variable *High_edu* is the proportion of employees who hold a bachelor's degree or above, while *High_expert* captures the proportion of employees whose jobs are located at zone 4 or 5⁵⁹ using JobZone data from Occupational Information Network. To design the test, we follow Ferreira and Laux (2007) and Cosset, Somé and Valéry (2016) by running two-stage regressions. In the first step, we separate the *High_edu* and *High_expert* that is explained by managerial foreign experience, and the rest which is irrelevant to managerial foreign experience, respectively. The results in Panel A of Table 6 indicate that managers with foreign experience are positively

⁵⁹ Job zones rank occupations into five zones from low to high level, based on the requirements of educational background, experience and training to perform the occupation.

associated with the proportion of high skilled employee measures. In the second step, we replace *FE dummy* in Equation 1 with both the fitted values and residuals of our high skilled employees' proxies. In Panel B of Table 6, the coefficients of *fv_High_edu* and *fv_High_expert* are all positively and significantly associated with our labour cost measures at the 1%, respectively. The results indicate that managerial foreign experience increases labour costs through improving the recruitment of high skilled employees, which is consistent with efficiency wage channel.

[Insert Table 6]

4.4.2.2 Labour market competition

We further investigate the underlying mechanisms through local labour market competition⁶⁰. The Chinese labour market varies geographically because of the family commitments and the unique hukou system (Meng and Zhang, 2001; Fleisher and Wang, 2004). As a result, competitiveness of labour markets differs across provinces. Firms with foreign experienced managers may have high demand of talented employees in competitive labour markets which results in high excess wages to retain and attract skilled workers. Based on the competitive wages mechanism, we conjecture that the effect of managerial foreign experience on labour costs are stronger in provinces with competitive local labour markets.

Following Kedia and Rajgopal (2009) and Kong et al. (2020), we measure the level of local labour market competition as the ratio of the number of firms in the same industry and province to the total number of firms in the province. We partition the sample into two subsamples based on the median value of labour market competition proxy. The result in Panel C of Table 6 indicates that our findings only hold in provinces with a high level of labour market competition, which is also in line with efficient wage theory.

⁶⁰ Given we are focusing on the provincial characteristics, we add province fixed effects in this section.

Overall, our results are consistent with the efficiency wage channel which argues that foreign experienced managers pay excess wage to retain and attract high skilled employees to stock human capitals for firms.

4.4.2.3 Employee protection

In addition to efficiency wage theory, foreign experienced managers may increase labour cost through improving employee protection. First, countries where the managers gain their foreign experience from may also influence their labour investment decisions as foreign norms may affect executives' decision-making (Zhang et al., 2018). In countries with high employee protection, employee benefits are likely to be more important in terms of firm objectives than in countries with high investor protection (Atanassov and Kim, 2009). Thus, managers who gained experience from countries with high employee protections may have more pronounced effect on labour cost than those from countries with high investor protection. We use the index created by Atanassov and Kim (2009) to capture countries with high employee protection and high investor protection. Specifically, *High employee protection* is a dummy variable which equals to one if the manager gained experience from countries with top5 labour protection index, otherwise zero, while *High investor protection* is a dummy variable which equals to one if the manager gained experience from countries with top5 investor protection index, otherwise zero.

The results are shown in Panel A of Table 7. The coefficients of *High employee protection* are positive and significant on labour costs measures at the 5% level, whereas the coefficients of *High investor protection* is insignificant on labour cost measures, suggesting that managers who gained experience from countries with high labour protection have a more pronounced effect on increasing labour costs than those from countries with high investor protection.

[Insert Table 7]

We then consider the effect of provincial labour protection. Previous literature argues that high labour protection is associated with high labour costs (Cui et al., 2018). If foreign experienced managers have a positive effect on labour protection, the relationship between managerial foreign experience and labour costs should be more pronounced in regions with low labour protection than that with high labour protection, as high labour protection regions are likely to be already associated with high labour costs. Following Luo, Li and Chan (2020), we use the provincial minimum wage as a measure of provincial labour protection. The result is reported in Panel B of Table 7, the coefficients of *FE dummy* is only positive and significant in the subsample of low labour protection regions, suggesting that the level of provincial labour protection moderates the effect of managerial foreign experience on labour costs.

Overall, our results indicate that improving employee protection is another mechanism through which foreign experienced managers increase labour cost.

4.4.3 The effect of government intervention

We further test whether the casual relationship between managerial foreign experience and labour cost will alter due to government intervention. The effect of managerial foreign experience may be less pronounced in SOEs as the government intervention may play a significant role in SOEs. We partition our sample between SOEs and private firms. Panel A of Table 8 indicates that the coefficients of *FE dummy* are positive and significant at the 1% and 5% level between SOEs and private firms subsample, respectively, suggesting that managerial foreign experience has positive and significant influence on labour cost in both SOEs and private firms. Although we do not find a significant different effect of managerial foreign experience on labour cost between SOEs and private firms, the purposes of foreign experienced managers increasing labour cost may be different between SOEs and private firms. Given foreign experienced managers have fewer political ties (Giannetti et al., 2015), they may seek future political promotions through enhancing employees' wages and wellbeing for social

stability as it is one of the political goals for SOEs (Bai, Lu and Tao, 2006; Kong et al., 2020). For private firms, foreign experienced managers are more likely to increase labour cost to enhance productivity as they may be unable to provide the nonpecuniary benefits (e.g. government subsidies or bank loans) as politically connected managers do. To investigate our conjecture, we further run regressions based on employees' responsibility, total factor of productivity and political connection, respectively.

4.4.3.1 Do foreign experienced managers improve employees' wellbeing?

Our findings indicate that foreign experienced managers are more likely to pay high wages to employees, and this effect are pronounced in both SOEs and private firms. However, the motivation to do so may differ between SOEs and private firms as SOEs mainly focus on the economy-based stability of social development, whereas private firms prefer value maximization (Jiang and Kim, 2015). Managers in SOEs have more concerns on completing political goals such as improving employees' wellbeing (Bai, Lu and Tao, 2006; Kong et al., 2020), which makes and strengthens valuable government connections to secure government subsidies and helps to seek nonpecuniary benefits for themselves such as further political promotion. Building these government connections is even more critical for foreign experienced managers who typically have fewer prior political ties compared to non-foreign experienced managers (Giannetti et al., 2015).

To design the test, we obtain the employee responsibility index (*Employee index*) from Hexun CSR scores⁶¹. The index incorporates employees' performance, employees' safety and the care of employees (stock.hexun.com)⁶². The results are reported in Panel B of Table 8, the coefficients on *FE dummy* are positive and significant at the 5% level in full sample and SOEs subsample, whereas it is positive but insignificant in the subsample of private firms. Our results

⁶¹ We lose some observations as Hexun started reporting CSR score since 2010.

⁶² The details of Hexun CSR scores are available at <http://stock.hexun.com/2013-09-10/157898839.html>.

indicate that managers with foreign experience increase labour cost to achieve friendly employee treatment, and this result mainly exists in SOEs as foreign experienced managers may complete political goals to seek potential political promotions through enhancing CSR performance.

[Insert Table 8 here]

4.4.3.2 Does managerial foreign experience increase total factor productivity?

Given managers in private firms are less likely to provide nonpecuniary benefits to firms and employees due to few political connections (Kong et al., 2020), such as bank loans (Li, Meng, Wang, and Zhou, 2008), satisfying workplaces (Bloom, Kretschmer and Van Reenen, 2011), and general employee treatment (Chen, Chen, Hsu, and Podolski, 2016), they are more likely to benefit firms through improving firm performance (e.g. total factor productivity). In addition, private firms have priority to maximum firm value (Jiang and Kim, 2015), whereas the aggregate total factor productivity may be low in SOEs, as firms with heavy government intervention are associated with high resource misallocation in China (Cull, Li, Sun and Xu, 2015; Wei et al., 2020). Thus, we expect the purpose of managerial foreign experience to increase labour cost is to improve firms' total factor productivity, particularly in private firms.

Following Giannetti et al. (2015), we estimate total factor productivity (*TFP*) as the residuals from the regressions of the logarithm of firm sales on the logarithm of the number of employees, the logarithm of total assets, and the logarithm of the expenses for material and other inputs by each industry and year. According to Panel C of Table 8, *FE dummy* is statistically no different than zero in explaining *TFP* in our full sample and SOEs subsample. However, the coefficient of *FE dummy* is positive and significant at the 5% level in explaining *TFP* in the subsample of private firms. The above results suggest that, although the presence of foreign experienced managers has no impact on total factor productivity in our full sample and SOEs subsample, it

is positively associated with total factor productivity in private firms, which is in line with our conjecture.

4.4.3.3 Do political connections matter?

Next, we investigate whether firms' political connections moderate the relationship between managerial foreign experience and labour costs. According to resource dependent theory (Pfeffer, 1972; Boyd, 1990; Hillman, 2005), firms with government connections are associated with easy access to key resources (e.g. bank loan), which may benefit from "soft budget constraints" (Kornai, 1979; Kornai, Maskin and Roland., 2003). Wei et al. (2020) argue that depoliticized firms are associated with higher uncertainty and weaker operating performance than those with political connections due to less government support, and thereby experiencing higher risk of unemployment for employees and increasing precautionary cash holdings. Therefore, managers in politically unconnected firms may pay higher compensation to employees than those in politically connected firms to avoid high employee turnover costs, as well as, attracting or retaining high skilled employees (Wei et al., 2020). Thus, we expect our causal relationship between managerial foreign experience and labour cost is more pronounced in firms without politically connection as foreign experienced managers have less political ties (Giannetti et al. 2015).

Following Li et al. (2020), we only include private firms in our test as SOEs are expected to be politically connected in China. We define a firm as having political connections if either the chairman or CEO are politically connected. The result is reported in Panel A of Table 9, the coefficients on *FE dummy* are only positive and significant at the 5% level in firms without political connections, indicating that firms without political connections are more likely to pay high wages to employees, than those with political connections to avoid high employee turnover costs and retain or attract high skilled employees for better firm performance. In Panel B of Table 9, we also test whether foreign experienced managers have better access to bank

loan between firms with and without political connections. Following Wei et al. (2020), we measure bank loan (*loan*) as the ratio of bank loan to debt. The coefficient of *FE dummy* is only positive and significant at 10% level in subsample of politically connected firms, whereas it is insignificant among politically unconnected firms. The results are consistent with resource independent theory, indicating that foreign experienced managers in politically connected firms have better access to bank loans, in comparison with those in politically unconnected firms. As a result, they may have less incentives to improve firm performance through retaining and attracting high skilled employees, thereby increasing labour costs.

[Insert Table 9 here]

4.4.4 Additional tests

4.4.4.1 Excess cash holding

Previous literature indicates the importance of maintaining employment at a stable level, especially for firms heavily reliant on high skilled employees as the replacement of those employees is associated with high costs of firing, hiring and training for new employees (Oi, 1962; Dolfin, 2006; Blatter, Muehlemann, and Schenker, 2012; Ghaly, Anh Dang and Stathopoulos, 2017). However, maintaining a stable employment level may weaken firms' ability to survive future cash flows shocks (Ghaly et al., 2017), which may be harmful to shareholders' value. Moreover, He (2018) argues that firms hold more cash to strengthen their financial ability for aggressive hiring strategies (e.g. raiding rivals), as well as attracting and retaining talented employees. Likewise, firms with foreign experienced managers may hold excess precautionary cash for increased probability of financial distress, stemmed from high labour costs, and attracting high skilled employees. Therefore, if foreign experienced managers increase in employee compensation is a rational decision, then we would expect the relationship between managerial foreign experience and labour cost to be more pronounced in firms with high excess cash holdings than those with low cash holdings. A firm is defined as

high excess cash holdings⁶³ if their excess cash holdings are above median value of our sample, and low excess cash holding otherwise.

According to Panel A of Table 10, the coefficients of *FE dummy* are only positive and significant at the 1% level in the subsample of firms with high excess cash holding, which is in line with our expectation. This result also supports the motivation of holding precautionary cash suggested by Keynes (1936).

4.4.4.2 Operating leverage

Cui et al. (2018) indicate that the increased labour cost has positive relationship with corporate operating leverage. If firms already have a high level of operating leverage, it may discourage foreign experienced managers to increase labour cost for the avoidance of financial distress and bankruptcy risk. Thus, we expect operating leverage will alleviate the relationship between managerial foreign experience and labour cost. Following Serfling (2014), we calculate operating leverage⁶⁴ as the percentage change in operating income for a percentage change in sales. The result is reported in Panel B of Table 10, the coefficients of *FE dummy* are only positive and significant at the 1% level in the subsample of firms with low level of operating leverage, which is consistent with our conjecture.

[Insert Table 10 here]

4.4.5. Labour cost and shareholder value

So far, we provide suggestive evidence that foreign experienced managers increase employee compensation through hiring more high skilled employees and improving labour protection.

⁶³ Following Xu, Chen, Xu and Chan (2016), we measure excess cash holding as the residuals of a regression between firms' actual cash holding and a set of variables, including firm size, net income, net working capital, the standard deviation of operating cash flow over total assets, the market to book ratio and financial leverage with firm and year fixed effects.

⁶⁴ We use quarterly non-missing data over a three-year window from year t to year $t + 2$. We then run the regression of operating income on sales, for each firm over the three-year window. $Operating\ income_i = \alpha + \beta Sales_i + \varepsilon_i$. The operating leverage is computed as $\beta_i \left(\frac{\overline{Sales_i}}{\overline{Operating\ income_i}} \right)$, where $\overline{Sales_i}$ and $\overline{Operating\ income_i}$ indicates the average values of sales and operating income for firm i over three years, respectively.

We further focus on economic implication of whether increased labour cost through managerial foreign experience increases shareholder value. We use Tobin's Q (*Tobin's Q*) as the measure of market valuation. According to Table 11, the interaction term between *FE dummy* and labour cost measures are positively related to *Tobin's Q* at the 10% and 5% level, respectively, suggesting that the increased labour cost through managerial foreign experience benefits shareholders by increasing corporate market valuation, ruling out the possibility that foreign experienced managers increase labour cost for their own interests such as empire-building activities⁶⁵.

[Insert Table 11]

4.4.6. Managerial foreign experience and labour cost stickiness

Given foreign experienced managers are associated with high proportion of high skilled employees, the employee turnover may be costly as it entails incurring labour adjustment costs such as the costs of firing and hiring staff (Anderson, Banker and Janakiraman, 2003). The labour stickiness costs are generated when the labour costs are more sensitive to an increase rather than a decrease in an event (Anderson et al., 2003). For example, the labour cost increases by 0.6% when the sales increases by 1% and it only decreases by 0.3% when the sales declines by 1%. As foreign experienced managers prefer to hire high skilled employees, it is unlikely for them to decrease wages or retrench high skilled employees when the sale is decreased due to the 'talent war' and high labour adjustment costs. Thus, we expect an increase in labour cost stickiness with foreign experienced managers.

⁶⁵ In an untabulated result, we further test whether the value-enhancing result is different between SOEs and private firms. We find that the interaction term between *FE dummy* and labour cost measures are only positive and significant to *Tobin's Q* in subsample of private firms. This result is consistent with our previous argument that foreign experienced managers have priority to complete political goals which enhance their future political promotions in SOEs.

Following Anderson et al. (2003), Ben-Nasr et al. (2016), and Khedmati et al. (2020), we use the Equation 2 below for our empirical test:

$$\begin{aligned}
& \text{Log} \left(\frac{\text{LabCost}_t}{\text{LabCost}_{t-1}} \right) \\
&= \beta_0 + \beta_1 \text{Log} \left(\frac{\text{Rev}_t}{\text{Rev}_{t-1}} \right) + \beta_2 \text{Decr}_t * \text{Log} \left(\frac{\text{Rev}_t}{\text{Rev}_{t-1}} \right) + \beta_3 * \text{Decr}_t \\
&* \text{Log} \left(\frac{\text{Rev}_t}{\text{Rev}_{t-1}} \right) * \text{FE dummy}_t + \beta_4 \text{Decr}_t * \text{Log} \left(\frac{\text{Rev}_t}{\text{Rev}_{t-1}} \right) * \text{Controls}_t \\
&+ \beta_5 \text{FE dummy} + \beta_6 \text{Controls}_t + \text{Year FE} + \text{IndustryFE} + \text{Province FE} \\
&+ \varepsilon_t \tag{2}
\end{aligned}$$

where *LabCost* is the total labour cost; *Rev* is the total revenue; *Decr* is an indicator equal to one if the total revenue decreased from the previous year, otherwise zero; *FE dummy* is our key explanatory variable for managerial foreign experience; *Controls* include the following variables: asset intensity (*AI*) is defined as the ratio of total assets to total revenue; *Suc_Decr* is a dummy variable equal to one if the firm had a decrease in revenue in both the current and the previous years, otherwise zero; whether the firm reported a loss in the previous year using a dummy variable (*Loss*) equal to one if *ROA* is negative, otherwise zero; institutional ownership (*insti*); local GDP growth⁶⁶ (*GDP Growth*) and a set of fixed effects including industry, province⁶⁷ and year. The standard errors are clustered at the firm level. According to Table 12, β_1 is positive and β_2 is negative, indicating that labour costs are sticky (Ben-Nasr et al., 2016). The coefficient for $\text{Decr}_t * \text{Log} \left(\frac{\text{Rev}_t}{\text{Rev}_{t-1}} \right) * \text{FE dummy}_t$ is negative and significant at the 5% level, suggesting that managerial foreign experience increases labour cost stickiness, which is in line with our expectation.

⁶⁶ Ben-Nasr et al. (2016) and Khedmati et al. (2020) control for labour union rather than GDP growth. Given the effect of labour union is not quite prevalent in Chinese listed firms (Cui et al., 2018), we control for local GDP growth as the local economy has significant influence on labour cost stickiness in China (Xu and Sim, 2017).

⁶⁷ We include province fixed effect as the labour sticky costs vary across regions in China (Xu and Sim, 2017).

Overall, our findings indicate that although foreign experienced managers increase labour costs through hiring high skilled employees, it is also associated with labour cost stickiness due to the ‘talent war’ and high labour adjustment costs.

[Insert Table 12 here]

4.4.7 Robustness test

We report some robustness tests in this section. First, we use alternative measure of labour costs. Following Wei et al. (2020), we use the firm level aggregate employee pay to measure labour cost. The variable *aggr_cost* is measured as the natural logarithm of aggregate labour cost minus executives’ compensation. According to Panel A of Table 13, the coefficient on *FE dummy* is positive and significant at the 5% level. Second, given our measure of managerial foreign experience is an aggregate measure including both chairman and CEO, we separate the *FE dummy* between chairman and CEO to test whether both of the positions have significant effect on labour cost. The variable *FE Chair* is a dummy variable equals one if the chairman of the firm has foreign experience, otherwise zero, while *FE CEO* is a dummy variable equals one if the CEO of the firm has foreign experience, otherwise zero. The results are reported in Panel B of Table 13, both *FE Chair* and *FE CEO* are positively and significantly related to our labour cost measures, indicating that both chairman and CEO have significant influence on corporate labour cost.

Overall, our results indicate that the relationship between managerial foreign experience and labour cost is robust using alternative measures of labour cost and managerial foreign experience.

[Insert Table 13]

4.5. Conclusion

Foreign experienced managers are important to firms' strategic decision-making. Despite the popularity of how foreign experienced executives improve firm performance, research on their impact on labour cost, a cost that is related to an important corporate stakeholder, is unstudied in China. Studying labour investment is important as it can be a sunk cost for investors if managers hire employees to build their own empire. Our study of foreign experienced managers in China helps fill this gap.

We find that in China firms with foreign experienced managers are associated with significantly higher labour cost. We argue that hiring a higher proportion of skilled employees and improving employee protection are potential channels through which foreign experienced managers increase labour cost. Further, the drivers increasing labour costs differ due to the different firm goals and incentives facing foreign experience managers in SOEs and private firms. In order to seek future political promotion, foreign experienced managers in SOEs are more likely to focus on political and social goals such as focusing on employee responsibility. However, without the benefits of political connections, foreign experienced managers association with higher labour cost in private firms should be driven by a desire to improve firm performance. Consistent with this, we find managerial foreign experience is significantly related to total factor productivity in private firms, as they are unlikely bring the benefits of political connection to firms due to fewer political ties. Further, foreign experienced managers increase labour cost most in non-politically connected private firms.

We document that the relationship between managerial foreign experience and labour cost are more pronounced in firms with flexible financial policies (e.g. excess cash holdings and low operating leverage). Moreover, the increased labour cost will increase firm value for shareholders, particularly in private firms. However, the increase of labour cost will generate

labour stickiness cost. Overall, our findings document both the potential benefit and cost of appointing foreign experienced managers.

Appendix

Appendix A Variable definition

Variables	Definition
<i>Labour cost</i>	Natural logarithm of the average wage expenses in a given year after excluding top executives' compensation in year $t-1$. Average wage expenses equal the amount of "paid for and on behalf of employees" reported in the cash flow statement plus changes in "wages payable" in the balance sheet, divided by the number of employees
<i>Adj_labour</i>	The ratio of <i>labour costs</i> over the median <i>labour costs</i> in the related industry during the year
<i>FE dummy</i>	A dummy variable that equals 1 if a firm has chairman, vice chairman or CEO with foreign experience, otherwise 0
<i>christian</i>	The number of colleges for each province that were built by Christian missionaries up to 1920
<i>policy</i>	A dummy variable that equals to 1 in years of the allowance policy implementation for each province, otherwise 0
<i>post</i>	A dummy variable that equals 1 if firm-year observations are after the CEO transition, otherwise 0
<i>transition</i>	A dummy variable equals 1 if a firm i 's transition year t is a non-foreign experienced to foreign experienced CEO transition and 0 if a firm i 's transition year t does not involve any foreign experienced CEOs
<i>High_edu</i>	The proportion of employees who hold a bachelor's degree or above
<i>High_expert</i>	The proportion of employees whose jobs are located at zone 4 or 5 using JobZone data from Occupational Information Network
<i>High employee protection</i>	A dummy variable that equals to 1 if the manager gained experience from countries with top5 labour protection index, otherwise 0
<i>High investor protection</i>	A dummy variable that equals to 1 if the manager gained experience from countries with top5 investor protection index, otherwise 0
<i>quick_ratio_{t-1}</i>	The sum of cash, short-term investment and receivables over current liabilities

<i>leverage_{t-1}</i>	Total liability over total assets
<i>firm_size_{t-1}</i>	The natural logarithm of total assets
<i>roa_{t-1}</i>	The net income over total assets
<i>top1_{t-1}</i>	The largest shareholding over the number of shares outstanding
<i>labour_intensity_{t-1}</i>	The number of employees (times 10 ⁷) over total assets at the end of t-1
<i>indep_{t-1}</i>	The number of independent directors over the total number of directors on the board
<i>bsize_{t-1}</i>	The natural logarithm of total number of directors on the board
<i>insti_{t-1}</i>	The percentage of institutional ownership
<i>tangible_{t-1}</i>	The ratio of net fixed assets over total assets
<i>Std_cfo_{t-1}</i>	Standard deviation of the cash flow from operations in the previous five years (year t-5 to t-1)
<i>Std_nethire_{t-1}</i>	Standard deviation of the change in the number of employees in the previous five years (year t-5 to t-1)
<i>otherinvestment_t</i>	The absolute value of the residuals from the regression model of non-labour investments (i.e., (cash payments for fixed assets, intangible assets, and other long-term assets minus the cash receipts from selling these assets)/total assets) versus sales growth
<i>div_{t-1}</i>	A dummy variable that equals 1 if a firm pays dividend, otherwise 0
<i>big4_{t-1}</i>	A dummy variable that equals 1 if a firm hires the audit service of a top 4 auditor in China, otherwise 0
<i>soe_{t-1}</i>	A dummy variable that equals 1 if the ultimate controller of the firm is the state or state-owned enterprises, otherwise 0
<i>duality_{t-1}</i>	A dummy variable that equals 1 if a firm's chairman and CEO are the same person, otherwise 0
<i>GDP growth_{t-1}</i>	The growth of provincial GDP each year
<i>inflation_{t-1}</i>	The inflation rate in China each year
<i>Money_supply growth_{t-1}</i>	The growth of money supply from central bank each year

Table 1. summary statistics

This table report the summary statistics of our baseline model. All variables are defined in Appendix A.

	Obs	Mean	Std. Dev.	Min	Max
<i>labour cost</i>	16,026	11.319	0.637	9.570	13.434
<i>Adj_labour cost</i>	16,026	1.000	0.091	0.000	1.577
<i>FE dummy</i>	16,026	0.109	0.312	0.000	1.000
<i>quick_ratio_{t-1}</i>	16,026	1.129	1.532	0.046	9.703
<i>leverage_{t-1}</i>	16,026	0.481	0.224	0.059	1.251
<i>firm_size_{t-1}</i>	16,026	21.907	1.278	18.950	25.605
<i>roa_{t-1}</i>	16,026	0.033	0.064	-0.295	0.200
<i>top1_{t-1}</i>	16,026	0.354	0.152	0.088	0.750
<i>labour_intensity_{t-1}</i>	16,026	10.702	10.005	0.220	56.000
<i>indep_{t-1}</i>	16,026	0.369	0.052	0.250	0.571
<i>bsize_{t-1}</i>	16,026	2.168	0.201	1.609	2.708
<i>insti_{t-1}</i>	16,026	0.068	0.081	0.000	0.372
<i>tangible_{t-1}</i>	16,026	0.249	0.178	0.002	0.757
<i>Std_cfo_{t-1}</i>	16,026	0.034	0.068	0.001	0.437
<i>Std_nethire_{t-1}</i>	16,026	0.575	1.828	0.010	14.477
<i>otherinvestment_t</i>	16,026	0.038	0.031	0.001	0.186
<i>div_{t-1}</i>	16,026	0.622	0.485	0.000	1.000
<i>big4_{t-1}</i>	16,026	0.059	0.236	0.000	1.000
<i>soe_{t-1}</i>	16,026	0.500	0.500	0.000	1.000
<i>duality_{t-1}</i>	16,026	0.211	0.408	0.000	1.000
<i>GDP_Growth_{t-1}</i>	16,026	0.123	0.059	-0.007	0.323
<i>inflation_{t-1}</i>	16,026	0.028	1.836	-0.073	0.059
<i>Money_supply growth_{t-1}</i>	16,026	0.160	4.407	0.110	0.276

Table 2. Baseline results

Table 2 reports the results of OLS regression analysis and PSM analysis, consisting of 16,026 and 3,490 firm-year observations, respectively. The dependent variables are *labour cost* and *Adj labour*, the measurements of labour cost, and the test variable is *FE dummy*. Fixed effects are controlled by industry and year and standard errors are clustered by firm across two models. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	Baseline		PSM	
	<i>labour cost</i>	<i>Adj_labour</i>	<i>labour cost</i>	<i>Adj_labour</i>
<i>FE dummy</i>	0.108*** (3.806)	0.010*** (3.896)	0.090*** (3.773)	0.012*** (3.720)
<i>quick_ratio_{t-1}</i>	0.007 (0.998)	0.001 (1.040)	0.012 (1.519)	0.002** (2.080)
<i>leverage_{t-1}</i>	-0.250** (-2.555)	-0.023*** (-2.599)	-0.062 (-0.732)	-0.003 (-0.264)
<i>firm_size_{t-1}</i>	0.063*** (3.205)	0.006*** (3.238)	0.042*** (2.632)	0.004** (2.049)
<i>roa_{t-1}</i>	0.737** (2.476)	0.062** (2.321)	0.645** (2.569)	0.064 (1.337)
<i>top1_{t-1}</i>	0.149* (1.749)	0.013* (1.696)	0.131 (1.566)	0.007 (0.485)
<i>labour_intensity_{t-1}</i>	-0.022*** (-15.848)	-0.002*** (-15.563)	-0.017*** (-12.542)	-0.002*** (-8.302)
<i>indep_{t-1}</i>	-0.203 (-0.824)	-0.023 (-1.014)	0.299 (1.139)	0.029 (0.833)
<i>bsize_{t-1}</i>	-0.056 (-0.761)	-0.006 (-0.900)	0.027 (0.350)	0.001 (0.114)
<i>insti_{t-1}</i>	0.287** (2.234)	0.025** (2.195)	0.278* (1.848)	0.028* (1.735)
<i>tangible_{t-1}</i>	-0.283*** (-3.674)	-0.024*** (-3.515)	-0.328*** (-3.613)	-0.023* (-1.860)
<i>Std_cfo_{t-1}</i>	-0.018 (-0.081)	-0.005 (-0.268)	-0.010 (-0.042)	-0.004 (-0.136)
<i>Std_nethire_{t-1}</i>	0.006 (1.177)	0.000 (1.082)	0.010 (1.309)	0.001** (2.193)
<i>otherinvestment_t</i>	-1.042** (-2.346)	-0.102** (-2.521)	-0.401 (-1.106)	-0.046 (-1.059)
<i>div_{t-1}</i>	0.070*** (2.968)	0.006*** (2.954)	0.034 (1.343)	0.006 (1.487)
<i>big4_{t-1}</i>	0.116* (1.665)	0.011* (1.765)	0.205*** (3.466)	0.013 (1.386)
<i>soe_{t-1}</i>	0.177*** (6.241)	0.016*** (6.308)	0.189*** (5.845)	0.018*** (4.115)
<i>duality_{t-1}</i>	0.011 (0.423)	0.001 (0.514)	0.046* (1.686)	0.002 (0.474)
<i>GDP_Growth_{t-1}</i>	-1.132*** (-3.069)	-0.103*** (-3.113)	-1.227*** (-2.703)	-0.179*** (-3.173)
<i>inflation_{t-1}</i>	-0.069*** (-4.300)	0.005*** (3.177)	-0.043** (-2.172)	0.007* (1.820)

<i>Money_supply growth</i> _{t-1}	-0.028*** (-7.223)	0.001*** (4.153)	-0.024*** (-5.473)	0.002*** (2.826)
<i>Constant</i>	10.970*** (24.177)	0.893*** (21.941)	10.871*** (27.310)	0.882*** (15.220)
Observations	16,026	16,026	3,490	3,490
Adjusted R-squared	0.127	0.083	0.311	0.087
industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Table 3. Instrumental variable test

Table 3 reports the results of 2SLS instrumental variable analysis, consisting of 16,026 firm-year observations. The dependent variables are *labour cost* and *Adj labour*, the measurements of earnings quality, and the test variable is *FE dummy*. Fixed effects are controlled by industry and year and standard errors are clustered by firm across two models. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	First step	<i>labour cost</i>	<i>Adj_labour</i>
<i>FE dummy</i>		4.994*** (2.644)	0.437*** (2.635)
<i>christian</i>	0.013** (2.561)		
<i>policy</i>	0.019* (1.754)		
<i>quick_ratio_{t-1}</i>	0.006 (1.601)	-0.023 (-1.029)	-0.002 (-1.007)
<i>leverage_{t-1}</i>	-0.028 (-1.073)	-0.097 (-0.575)	-0.009 (-0.631)
<i>firm_size_{t-1}</i>	0.006 (0.957)	0.035 (0.911)	0.003 (0.964)
<i>roa_{t-1}</i>	0.035 (0.576)	0.553 (1.317)	0.046 (1.237)
<i>top1_{t-1}</i>	-0.012 (-0.333)	0.182 (0.938)	0.016 (0.926)
<i>labour_intensity_{t-1}</i>	0.000 (0.457)	-0.023*** (-8.172)	-0.002*** (-8.128)
<i>indep_{t-1}</i>	-0.028 (-0.308)	-0.012 (-0.024)	-0.006 (-0.128)
<i>bsize_{t-1}</i>	0.019 (0.703)	-0.139 (-0.881)	-0.013 (-0.953)
<i>insti_{t-1}</i>	0.048 (0.859)	0.084 (0.267)	0.007 (0.266)
<i>tangible_{t-1}</i>	0.067** (2.194)	-0.568*** (-2.833)	-0.049*** (-2.778)
<i>Std_cfo_{t-1}</i>	0.133 (1.147)	-0.714 (-1.082)	-0.066 (-1.141)
<i>Std_nethire_{t-1}</i>	-0.003 (-1.289)	0.019 (1.469)	0.002 (1.421)
<i>otherinvestment_t</i>	-0.033 (-0.315)	-0.838 (-1.249)	-0.084 (-1.405)
<i>div_{t-1}</i>	0.007 (0.845)	0.023 (0.473)	0.002 (0.490)
<i>big4_{t-1}</i>	0.095*** (3.233)	-0.378 (-1.536)	-0.032 (-1.494)
<i>soe_{t-1}</i>	-0.075*** (--5.997)	0.547*** (3.464)	0.048*** (3.487)
<i>duality_{t-1}</i>	-0.022* (-1.844)	0.114 (1.484)	0.010 (1.515)
<i>GDP_Growth_{t-1}</i>	0.011	-0.664	-0.062

	(0.092)	(-0.935)	(-0.991)
<i>inflation</i> _{t-1}	-0.014**	-0.059	0.012***
	(-2.198)	(-1.255)	(2.993)
<i>Money_supply growth</i> _{t-1}	0.000	0.002	0.001
	(0.355)	(0.179)	(0.659)
<i>Constant</i>	-0.037	10.326***	0.881***
	(-0.259)	(12.482)	(12.099)
Observations	16,026	16,026	16,026
Adjusted R-squared	0.039	-	-
industry	Yes	Yes	Yes
Year	Yes	Yes	Yes
F-statistics	17.625***	-	-
Hansen J-statistic	0.307	-	-

Table 4. Difference-in-differences test

Table 4 reports the results of the DID analysis, consisting of 888 firm-year observations. The dependent variables are *labour cost* and *Adj labour*, and the test variable is $post_t * transition_i$. Fixed effects are controlled by industry and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	<i>labour cost</i>	<i>Adj_labour cost</i>
<i>post*transition</i>	0.166* (1.686)	0.016* (1.890)
<i>post</i>	-0.007 (-0.117)	-0.001 (-0.164)
<i>transition</i>	0.100 (0.720)	0.009 (0.743)
<i>quick_ratio_{t-1}</i>	0.007 (0.240)	0.000 (0.013)
<i>leverage_{t-1}</i>	0.037 (0.171)	-0.002 (-0.121)
<i>firm_size_{t-1}</i>	0.037 (0.925)	0.003 (0.791)
<i>roa_{t-1}</i>	1.677*** (2.937)	0.136*** (2.707)
<i>top1_{t-1}</i>	0.195 (0.934)	0.021 (1.139)
<i>labour_intensity_{t-1}</i>	-0.021*** (-6.349)	-0.002*** (-6.354)
<i>indep_{t-1}</i>	0.683 (1.340)	0.062 (1.366)
<i>bsize_{t-1}</i>	0.172 (1.094)	0.019 (1.362)
<i>insti_{t-1}</i>	0.172 (0.648)	0.020 (0.839)
<i>tangible_{t-1}</i>	-0.235 (-1.274)	-0.021 (-1.282)
<i>Std_cfo_{t-1}</i>	-0.611 (-0.694)	-0.060 (-0.772)
<i>Std_nethire_{t-1}</i>	-0.018 (-1.107)	-0.002 (-1.133)
<i>otherinvestment_t</i>	0.197 (0.286)	0.011 (0.187)
<i>div_{t-1}</i>	0.084 (1.611)	0.005 (1.018)
<i>big4_{t-1}</i>	0.506** (2.360)	0.045** (2.360)
<i>soe_{t-1}</i>	0.166** (2.496)	0.015** (2.588)
<i>duality_{t-1}</i>	0.075 (1.245)	0.007 (1.238)
<i>GDP_Growth_{t-1}</i>	-2.268*** (-2.606)	-0.203*** (-2.639)

<i>inflation</i> _{t-1}	0.023 (0.562)	0.013*** (3.436)
<i>Money_supply growth</i> _{t-1}	-0.015 (-1.346)	0.003** (2.549)
<i>Constant</i>	10.262*** (11.590)	0.837*** (10.357)
Observations	888	888
Adjusted R-squared	0.319	0.274
industry	Yes	Yes
Year	Yes	Yes

Table 5. Other fixed effects

Table 5 reports the regression results by firm fixed effect, and CEO fixed effects with 2SLS analysis, consisting of 16,026 firm-year observations. The dependent variables include *labour cost*, *Adj labour*, *Resid_labour*, and *Resid_Adjlabour* and the test variable is *FE dummy*. Fixed effects are selected among firm, CEO, industry and year across Panels A and B. The standard errors are clustered by firm across Panel A and Panel B. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A Firm fixed effect		
	<i>labour cost</i>	<i>Adj labour</i>
<i>FE dummy</i>	0.038* (2.080)	0.003* (1.738)
<i>quick_ratio_{t-1}</i>	-0.011*** (-3.269)	-0.001*** (-3.364)
<i>leverage_{t-1}</i>	-0.107* (-1.917)	-0.006** (-2.113)
<i>firm_size_{t-1}</i>	0.153*** (10.484)	0.007*** (9.439)
<i>roa_{t-1}</i>	0.223* (2.098)	0.022*** (3.846)
<i>top1_{t-1}</i>	0.004 (0.052)	0.016*** (3.307)
<i>labour_intensity_{t-1}</i>	-0.012*** (-14.523)	-0.001*** (-18.082)
<i>indep_{t-1}</i>	0.161 (0.791)	0.000 (0.035)
<i>bsize_{t-1}</i>	0.001 (0.010)	0.003 (1.152)
<i>insti_{t-1}</i>	0.244*** (3.510)	0.020*** (4.213)
<i>tangible_{t-1}</i>	-0.161** (-2.786)	-0.008** (-2.334)
<i>Std_cfo_{t-1}</i>	0.182* (1.985)	-0.005 (-0.478)
<i>Std_nethire_{t-1}</i>	-0.045*** (-5.924)	-0.004*** (-18.001)
<i>otherinvestment_t</i>	-0.019 (-0.172)	-0.006 (-0.579)
<i>div_{t-1}</i>	-0.007 (-0.560)	-0.001 (-1.044)
<i>big4_{t-1}</i>	-0.009 (-0.180)	-0.000 (-0.040)
<i>soe_{t-1}</i>	-0.051* (-2.103)	-0.005** (-2.429)
<i>duality_{t-1}</i>	-0.018 (-1.563)	-0.002* (-1.697)
<i>GDP_Growth_{t-1}</i>	-0.319*** (-3.924)	-0.009 (-0.771)
<i>inflation_{t-1}</i>	-0.037*** (-11.739)	0.003*** (4.617)

<i>Money_supply growth</i> _{t-1}	-0.020*** (-7.768)	0.000 (0.308)
<i>Constant</i>	8.617*** (19.951)	0.850*** (47.622)
Observations	16,026	16,026
Adjusted R-squared	0.265	0.072
Firm	Yes	Yes
Year	Yes	Yes

Panel B CEO fixed effect

	<i>labour cost</i>	<i>Resid1</i>	<i>Adj_labour</i>	<i>Resid2</i>
<i>FE CEO</i>		0.080*** (3.569)		0.010*** (3.896)
<i>quick_ratio</i> _{t-1}	-0.019*** (-3.640)	0.029*** (5.523)	-0.002** (-2.272)	0.003*** (3.998)
<i>leverage</i> _{t-1}	-0.151** (-2.113)	0.094* (1.833)	-0.037** (-2.116)	0.014* (1.650)
<i>firm_size</i> _{t-1}	0.087*** (4.194)	-0.062*** (-5.372)	0.008* (1.697)	-0.002 (-1.193)
<i>roa</i> _{t-1}	0.074 (0.705)	0.622*** (5.077)	-0.014 (-0.409)	0.076*** (2.838)
<i>top1</i> _{t-1}	0.227** (2.437)	0.009 (0.166)	0.051*** (2.722)	-0.038*** (-4.960)
<i>labour_intensity</i> _{t-1}	-0.007*** (-6.771)	-0.015*** (-15.920)	-0.001*** (-3.342)	-0.001*** (-8.891)
<i>indep</i> _{t-1}	0.152 (1.165)	-0.082 (-0.530)	0.001 (0.038)	-0.023 (-1.050)
<i>bsize</i> _{t-1}	0.059 (1.202)	-0.045 (-0.938)	-0.003 (-0.406)	-0.003 (-0.380)
<i>insti</i> _{t-1}	0.182*** (2.679)	0.065 (0.718)	0.026*** (2.795)	-0.001 (-0.073)
<i>tangible</i> _{t-1}	0.045 (0.650)	-0.336*** (-6.195)	0.009 (0.550)	-0.033*** (-4.822)
<i>Std_cfo</i> _{t-1}	-0.109 (-0.809)	0.083 (0.422)	-0.033 (-1.491)	0.028 (1.380)
<i>Std_nethire</i> _{t-1}	-0.049*** (-5.419)	0.053*** (13.263)	-0.006*** (-4.128)	0.006*** (13.704)
<i>otherinvestment</i> _t	0.065 (0.488)	-0.348* (-1.714)	-0.036 (-0.987)	-0.066 (-1.624)
<i>div</i> _{t-1}	-0.006 (-0.573)	0.059*** (3.866)	-0.002 (-0.846)	0.008*** (3.854)
<i>big4</i> _{t-1}	0.043 (0.843)	0.101** (2.332)	-0.002 (-0.186)	0.013** (2.158)
<i>soe</i> _{t-1}	0.010 (0.248)	0.166*** (7.965)	0.010 (1.326)	0.006** (2.372)
<i>duality</i> _{t-1}	-0.010 (-0.621)	0.022 (1.233)	-0.004 (-1.124)	0.005** (2.347)
<i>GDP_Growth</i> _{t-1}	0.244 (1.543)	-1.084*** (-4.470)	0.043 (1.327)	-0.146*** (-4.413)
<i>inflation</i> _{t-1}	-0.105***	0.041***	-0.001	0.005***

	(-12.850)	(4.621)	(-0.310)	(3.561)
<i>Money_supply growth</i> _{t-1}	-0.035***	0.009***	0.000	0.001***
	(-14.026)	(4.013)	(0.562)	(3.377)
<i>Constant</i>	10.489***	1.353***	0.881***	0.055
	(22.714)	(5.050)	(8.820)	(1.345)
Observations	16,026	16,026	16,026	16,026
Adjusted R-squared	0.232	0.137	0.018	0.047
industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
CEO fixed	Yes	No	Yes	No

Table 6. Efficient wage channel

Table 6 reports the results of channel tests. Panel A presents the regression results for collecting fitted values and residuals between *FE dummy* and the potential channel's measure, *High_edu* and *High_expert*. Panel B presents the channel test results between the fitted values from Panel A and the labour cost measures. Panel C reports the results of labour market competition. Fixed effects are controlled by industry and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A High skilled employees				
	<i>High_edu</i>	<i>High_expert</i>		
<i>FE dummy</i>	0.030*** (5.419)	0.013*** (2.627)		
<i>Constant</i>	0.288*** (19.980)	0.282*** (21.549)		
Observations	14,147	15,312		
Adjusted R-squared	0.190	0.161		
Controls	Yes	Yes		
industry	Yes	Yes		
Year	Yes	Yes		
Panel B High skilled employees				
	<i>labour cost</i>	<i>Adj_labour</i>	<i>labour cost</i>	<i>Adj_labour</i>
<i>fv_High edu</i>	3.898*** (4.428)	0.350*** (4.491)		
<i>rsd_High edu</i>	1.099*** (19.719)	0.096*** (19.210)		
<i>fv_High expert</i>			6.791*** (4.019)	0.619*** (4.124)
<i>rsd_High expert</i>			0.970*** (13.669)	0.084*** (13.370)
<i>Constant</i>	10.164*** (22.610)	0.820*** (20.500)	9.036*** (14.643)	0.717*** (13.081)
Observations	14,147	14,147	15,312	15,312
Adjusted R-squared	0.189	0.139	0.174	0.126
Controls	Yes	Yes	Yes	Yes
industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Panel C Labour market competition				
	Above median		Below Median	
	<i>labour cost</i>	<i>Adj_labour cost</i>	<i>labour cost</i>	<i>Adj_labour cost</i>
<i>FE dummy</i>	0.070** (2.209)	0.006** (2.258)	0.043 (0.941)	0.004 (1.033)
<i>Constant</i>	9.948*** (14.782)	0.950*** (15.551)	8.128*** (13.383)	0.789*** (14.545)
Observations	7,814	7,814	8,212	8,212
Adjusted R-squared	0.138	0.070	0.132	0.101
Controls	Yes	Yes	Yes	Yes
industry	Yes	Yes	Yes	Yes
Province	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Table 7. Employee protection

Table 7 reports the results of employee protection analysis. The dependent variables are *labour cost* and *Adj labour*, the measurements of labour cost, and the test variables are *High employee protection*, *High investor protection*, and *FE dummy* across Panel A and B, respectively. Fixed effects are controlled by industry and year and standard errors are clustered by firm across two models. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A Employee protection index (country level)				
	<i>labour cost</i>	<i>Adj_labour cost</i>		
<i>High Employee protection</i>	0.151*** (2.594)	0.016** (2.016)		
<i>High Investor protection</i>	-0.025 (-0.768)	0.002 (0.665)		
<i>Constant</i>	11.320*** (42.643)	0.898*** (21.661)		
Observations	16,026	16,026		
Adjusted R-squared	0.302	0.083		
Controls	Yes	Yes		
industry	Yes	Yes		
Year	Yes	Yes		
Panel B Provincial minimum wage				
	Above median		Below median	
	<i>labour cost</i>	<i>Adj_labour cost</i>	<i>labour cost</i>	<i>Adj_labour cost</i>
<i>FE dummy</i>	0.030 (0.863)	0.003 (1.019)	0.127*** (2.827)	0.012*** (2.820)
<i>Constant</i>	8.653*** (12.626)	0.838*** (13.705)	9.278*** (12.402)	0.887*** (13.047)
Observations	7,912	7,912	7,041	7,041
Adjusted R-squared	0.102	0.114	0.100	0.075
Controls	Yes	Yes	Yes	Yes
industry	Yes	Yes	Yes	Yes
Province	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Table 8. The effect of government intervention

Table 8 reports the results of the effect of ownership structure. Panel A reports the result of the effect of managerial foreign experience on labour cost between SOEs and private firms; Panel B reports the results of managerial foreign experience on employee responsibility; Panel C reports the results of managerial foreign experience on total factor productivity. Fixed effects are controlled by industry and year and standard errors are clustered by firm across two models. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A SOEs versus private firms				
	SOEs		Private firms	
	<i>labour cost</i>	<i>Adj_labour</i>	<i>labour cost</i>	<i>Adj_labour</i>
<i>FE dummy</i>	0.186*** (3.176)	0.014*** (3.771)	0.076** (2.417)	0.005** (2.194)
<i>Constant</i>	12.212*** (17.454)	0.967*** (30.353)	10.119*** (16.931)	0.934*** (27.548)
Observations	7,965	7,965	8,061	8,061
Adjusted R-squared	0.134	0.257	0.124	0.163
Controls	Yes	Yes	Yes	Yes
industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Panel B Employee responsibility				
	Full sample	SOEs	Private firms	
	<i>Employee index</i>	<i>Employee index</i>	<i>Employee index</i>	
<i>FE dummy</i>	0.355** (2.144)	0.757** (2.180)	0.174 (1.037)	
<i>Constant</i>	-13.919*** (-8.606)	-14.218*** (-5.974)	-12.473*** (-5.612)	
Observations	13,540	6,355	7,185	
Adjusted R-squared	0.191	0.199	0.128	
Controls	Yes	Yes	Yes	
industry	Yes	Yes	Yes	
Year	Yes	Yes	Yes	
Panel C Total factor productivity				
	Full sample	SOEs	Private firms	
	<i>TFP</i>	<i>TFP</i>	<i>TFP</i>	
<i>FE dummy</i>	0.015 (1.619)	0.007 (0.554)	0.013** (2.147)	
<i>Constant</i>	-0.332*** (-3.629)	-0.542*** (-4.500)	-0.398** (-2.616)	
Observations	15,988	7,957	8,031	
Adjusted R-squared	0.254	0.310	0.223	
Controls	Yes	Yes	Yes	
industry	Yes	Yes	Yes	
Year	Yes	Yes	Yes	

Table 9 The effect of political connection

Table 9 reports the results of the effect of ownership structure. Panel A reports the result of the effect of managerial foreign experience on labour cost between politically connected firms and politically unconnected firms; Panel B reports the results of managerial foreign experience on bank loans between politically connected firms and politically unconnected firms.

Panel A				
	With		Without	
	<i>labour cost</i>	<i>Adj_labour</i>	<i>labour cost</i>	<i>Adj_labour</i>
<i>FE dummy</i>	0.072 (1.213)	0.006 (1.237)	0.082** (2.086)	0.008** (2.190)
<i>Constant</i>	10.285*** (8.346)	0.833*** (7.760)	9.698*** (14.343)	0.782*** (13.109)
Observations	2,189	2,189	5,872	5,872
Adjusted R-squared	0.138	0.087	0.123	0.066
Controls	Yes	Yes	Yes	Yes
industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Panel B				
	With	Without		
	<i>loan</i>	<i>loan</i>		
<i>FE dummy</i>	0.134* (1.671)	-0.008 (-0.233)		
<i>Constant</i>	1.987** (2.581)	0.896*** (2.614)		
Observations	2,189	5,861		
Adjusted R-squared	0.072	0.030		
Controls	Yes	Yes		
industry	Yes	Yes		
Year	Yes	Yes		

Table 10. Impact of firm characteristics

Table 10 reports the results of impact of firm characteristics. The dependent variables are *labour cost* and *Adj labour*, the measurements of labour cost, and the test variable is *FE dummy*. Panel A reports the results based on the median value of excess cash holdings; Panel B reports the results based on the median level of operating leverage. Fixed effects are controlled by industry and year and standard errors are clustered by firm across two models. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A Cash holdings				
	High		Low	
	<i>labour cost</i>	<i>Adj labour</i>	<i>labour cost</i>	<i>Adj labour</i>
<i>FE dummy</i>	0.075*** (3.002)	0.007*** (3.247)	0.043 (1.283)	0.004 (1.368)
<i>Constant</i>	10.063*** (31.987)	0.950*** (34.128)	9.773*** (28.577)	0.931*** (31.020)
Observations	7,978	7,978	7,978	7,978
Adjusted R-squared	0.276	0.186	0.294	0.212
Controls	Yes	Yes	Yes	Yes
industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Panel B Operating leverage				
	High		Low	
	<i>labour cost</i>	<i>Adj labour</i>	<i>labour cost</i>	<i>Adj labour</i>
<i>FE dummy</i>	0.040 (1.473)	0.004 (1.604)	0.083*** (2.938)	0.008*** (3.162)
<i>Constant</i>	9.869*** (33.372)	0.938*** (35.903)	9.981*** (30.714)	0.945*** (32.951)
Observations	8,013	8,013	8,012	8,012
Adjusted R-squared	0.298	0.201	0.276	0.194
Controls	Yes	Yes	Yes	Yes
industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

Table 11. Labour cost and shareholder value

Table 11 reports the results of the increased labour cost through managerial foreign experience and shareholder value. Fixed effects are controlled by industry, province and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	<i>Tobin's Q</i>	<i>Tobin's Q</i>
<i>FE dummy* labour cost</i>	0.129* (1.832)	
<i>labour cost</i>	0.009 (0.342)	
<i>FE dummy*Adj_labour cost</i>		2.604** (2.149)
<i>Adj_labour cost</i>		0.038 (0.137)
<i>FE dummy</i>	-1.266 (-1.596)	-2.428** (-1.994)
<i>Constant</i>	33.751*** (28.479)	33.827*** (28.564)
Observations	16,025	16,025
Adjusted R-squared	0.411	0.411
Controls	Yes	Yes
industry	Yes	Yes
Year	Yes	Yes

Table 12. Managerial foreign experience and labour costs stickiness

Table 12 reports the results of labour sticky costs, consisting of 15,823 firm-year observations. Fixed effects are controlled by industry, province and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

	Labour cost stickiness
<i>Log(Rev_t/Rev_{t-1})</i>	1.141*** (18.590)
<i>Decr*Log(Rev_t/Rev_{t-1})</i>	-0.677*** (-5.862)
<i>Decr*Log(Rev_t/Rev_{t-1})*FE dummy_t</i>	-0.228** (-2.543)
<i>Decr*Log(Rev_t/Rev_{t-1})*AI_t</i>	-0.006 (-0.063)
<i>Decr*Log(Rev_t/Rev_{t-1})*SucDecr_t</i>	-0.035 (-0.489)
<i>Decr*Log(Rev_t/Rev_{t-1})*Loss_{t-1}</i>	-0.054 (-0.628)
<i>Decr*Log(Rev_t/Rev_{t-1})*insti_t</i>	0.816 (1.374)
<i>Decr*Log(Rev_t/Rev_{t-1})*GDPGrowth_t</i>	-0.901* (-1.809)
<i>FE dummy_t</i>	0.001 (0.222)
<i>AI_t</i>	-0.021*** (-2.734)
<i>SucDecr_t</i>	-0.070*** (-10.997)
<i>Loss_{t-1}</i>	-0.093*** (-8.804)
<i>insti_t</i>	0.186*** (7.612)
<i>GDPGrowth_t</i>	0.171** (2.128)
<i>Constant</i>	0.091*** (4.061)
Observations	15,823
Adjusted R-squared	0.397
industry	Yes
Province	Yes
Year	Yes

Table 13. Robustness checks

Table 13 reports the results of robustness checks. Panel A reports the result using aggregate labour cost, while Panel B reports the results of the effect of both foreign experienced chairman and CEO on corporate labour cost, respectively. Fixed effects are controlled by industry, province and year and standard errors are clustered by firm. The variable descriptions are reported in Appendix A. The superscripts *, ** and *** demonstrate significance at the 90%, 95%, and 99% confidence levels, respectively.

Panel A Aggregated labour cost				
	<i>Aggr_cost</i>			
<i>FE dummy</i>	0.052**			
	(2.093)			
<i>Constant</i>	-0.962***			
	(-2.627)			
Observations	16,026			
Adjusted R-squared	0.786			
Controls	Yes			
industry	Yes			
Year	Yes			
Panel B Splits between foreign experienced chairmen and CEOs				
	<i>labour cost</i>	<i>Adj_labour</i>	<i>labour cost</i>	<i>Adj_labour</i>
<i>FE Chair</i>	0.082***	0.006**		
	(2.658)	(2.427)		
<i>FE CEO</i>			0.100***	0.007**
			(2.816)	(2.543)
<i>Constant</i>	10.541***	0.884***	10.542***	0.884***
	(22.834)	(38.401)	(22.856)	(38.469)
Observations	16,026	16,026	16,026	16,026
Adjusted R-squared	0.122	0.204	0.122	0.204
Controls	Yes	Yes	Yes	Yes
industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes

CHAPTER 5

CONCLUSION

Overall, this thesis sheds light on the effect of managerial foreign experience and corporate behaviours in the Chinese market. The first essay highlights the importance of managerial foreign experience on corporate risk-taking. The broader implication may provide evidence for investors about stock selection based on individual's risk aversion level. The second study adds to the literature with a comprehensive review and examination on the effect of managerial foreign experience on corporate accounting quality, answering the questions of whether, why, how and the consequences of managers with foreign experience improve corporate accounting quality. The third essay provides new evidence showing the influence of managerial foreign experience on corporate labour investment. The essay documents both the benefits and cost of hiring foreign experienced top managers in firms.

Future research can pay more attention to the cost of hiring foreign experienced executives. Most of the previous studies mainly focus on the benefits which foreign experienced executives bring to firm, including superior knowledge and advanced corporate governance practices (e.g. Giannetti et al., 2015; Dai et al., 2018). However, the costs or negative consequences of hiring executives with foreign experience are overlooked. The investigation of the costs of having foreign experienced executives in firms not only balances the existing literature, but also provides a broader view for investors and policy-makers on how managerial foreign experience affect corporate behaviour. Moreover, future research can also investigate managerial foreign experience from investors' perspective. For example, what type of investors (e.g. risk-seeking investors, foreign investors, and institutional investors) acknowledge foreign experienced managers the most?

Overall, the investigation of managerial foreign experience is important for literature, especially in a globalised world where countries are closely connected with each other. Managers with foreign experience bring different cultures and governance standard from overseas, which enriches the diversity of skills and ideas for companies.

References

This section provides all the references referred to in the thesis. Given chapter 2, 3, and 4 are presented as standalone papers, respectively, the references for each chapter are reproduced here, and listed by each chapter.

References for chapter 1

- Anderson, M. C., Banker, R. D., & Janakiraman, S. N. (2003). Are selling, general, and administrative costs “sticky”? *Journal of Accounting Research*, 41(1), 47-63.
- Atanassov, J., & Kim, E. H. (2009). Labour and corporate governance: International evidence from restructuring decisions. *The Journal of Finance*, 64(1), 341-374.
- Chen, X., Cheng, Q., Hao, Y., & Liu, Q. (2020). GDP growth incentives and earnings management: evidence from China. *Review of Accounting Studies*, 25(3), 1002-1039.
- Cui, C., John, K., Pang, J., & Wu, H. (2018). Employment protection and corporate cash holdings: Evidence from China's labour contract law. *Journal of Banking & Finance*, 92, 182-194.
- Dai, Y., Kong, D., & Liu, S. (2018). Returnee talent and corporate investment: Evidence from China. *European Accounting Review*, 27(2), 313-337.
- Deng, L., Li, S., & Liao, M. (2017). Dividends and earnings quality: Evidence from China. *International Review of Economics & Finance*, 48, 255-268.
- Faccio, M., Marchica, M. T., & Mura, R. (2016). CEO gender, corporate risk-taking, and the efficiency of capital allocation. *Journal of Corporate Finance*, 39, 193-209.
- Giannetti, M., Liao, G., & Yu, X. (2015). The brain gain of corporate boards: Evidence from China. *The Journal of Finance*, 70(4), 1629-1682.
- 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.
- Iliev, P., & Roth, L. (2018). Learning from directors' foreign board experiences. *Journal of Corporate Finance*, 51, 1-19.
- Ji, X., Ahmed, K., & Lu, W. (2015). The impact of corporate governance and ownership structure reforms on earnings quality in China. *International Journal of Accounting & Information Management*, 23(2), 169-198.
- Jiang, F. X., & Kim, K. A. (2015). Corporate governance in China: A modern perspective. *Journal of Corporate Finance*, 32,190–216.
- Klasa, S., Maxwell, W. F., & Ortiz-Molina, H. (2009). The strategic use of corporate cash holdings in collective bargaining with labour unions. *Journal of Financial Economics*, 92(3), 421-442.
- Kong, D., Wang, Y., & Zhang, J. (2020). Efficiency wages as gift exchange: Evidence from corporate innovation in China. *Journal of Corporate Finance*, 65, 101725.
- Liao, G., Ma, M. S., & Yu, X. (2017). Transporting transparency: Director foreign experience and corporate information environment. In *28th Annual Conference on Financial Economics and Accounting*
- Liu, Q., & Lu, Z. J. (2007). Corporate governance and earnings management in the Chinese listed companies: A tunneling perspective. *Journal of Corporate Finance*, 13(5), 881-906.
- Pfeffer, J., & Salancik, G. R. (1978). The external control of organizations: A resource dependence perspective. *New York: Harper & Row*.

- Wei, C., Hu, S., & Chen, F. (2020). Do political connection disruptions increase labor costs in a government-dominated market? Evidence from publicly listed companies in China. *Journal of Corporate Finance*, 62, 101554.
- Yuan, R. & Wen, W. (2018). Managerial foreign experience and corporate innovation. *Journal of Corporate Finance*. 48, 752-770.

References for chapter 2

- Aivazian, V. A., Lai, T. K., & Rahaman, M. M. (2013). The market for CEOs: An empirical analysis. *Journal of Economics and Business*, 67, 24-54.
- Athanassiou, N., & Nigh, D. (2005). The impact of US company internationalization on top management team advice networks: A tacit knowledge perspective. *Knowledge Management: Critical Perspectives on Business and Management*, 3, 79-94.
- Benmelech, E., & Frydman, C. (2015). Military CEOs. *Journal of Financial Economics*, 117(1), 43-59.
- Berkman, H., Cole, R. A., & Fu, L. J. (2010). Political connections and minority-shareholder protection: Evidence from securities-market regulation in China. *Journal of Financial and Quantitative Analysis*, 45(6), 1391-1417.
- Bernile, G., Bhagwat, V., & Rau, P. R. (2017). What doesn't kill you will only make you more risk-loving: Early-life disasters and CEO behaviour. *The Journal of Finance*, 72(1), 167-206.
- Bernile, G., Bhagwat, V., & Yonker, S. (2018). Board diversity, firm risk, and corporate policies. *Journal of Financial Economics*, 127(3), 588-612.
- Bhagat, S., & Black, B. (2001). The non-correlation between board independence and long-term firm performance. *Journal of Corporation law*, 27, 231.
- Bloom, N., Genakos, C., Sadun, R., & Van Reenen, J. (2012). Management practices across firms and countries. *Academy of Management Perspectives*, 26(1), 12-33.
- Blomstermo, A., Eriksson, K., Lindstrand, A., & Sharma, D. D. (2004). The perceived usefulness of network experiential knowledge in the internationalizing firm. *Journal of International Management*, 10(3), 355-373.
- Boubakri, N., Cosset, J. C., & Saffar, W. (2013). The role of state and foreign owners in corporate risk-taking: Evidence from privatization. *Journal of Financial Economics*, 108(3), 641-658.
- Boubakri, N., Mansi, S. A., & Saffar, W. (2013). Political institutions, connectedness, and corporate risk-taking. *Journal of International Business Studies*, 44(3), 195-215.
- Cain, M. D., & McKeon, S. B. (2016). CEO personal risk-taking and corporate policies. *Journal of Financial and Quantitative Analysis*, 51(1), 139-164.
- Cao, F., Sun, J., & Yuan, R. (2019). Board directors with foreign experience and stock price crash risk: Evidence from China. *Journal of Business Finance & Accounting*, 46(9-10), 1144-1170.
- Cao, X., Cumming, D., & Zhou, S. (2020). State ownership and corporate innovative efficiency. *Emerging Markets Review*, 44, 100699.
- Carpenter, M. A., Sanders, W., & Gregersen, H. B. (2000). International assignment experience at the top can make a bottom-line difference. *Human Resource Management*, 39(2-3), 277-285.

- Chen, J., Cumming, D., Hou, W., & Lee, E. (2016). Does the external monitoring effect of financial analysts deter corporate fraud in China? *Journal of Business Ethics*, 134(4), 727-742.
- Chen, J., Ezzamel, M., & Cai, Z. (2011). Managerial power theory, tournament theory, and executive pay in China. *Journal of Corporate Finance*, 17(4), 1176-1199.
- Chen, L., Li, Y., Wang, Y., & Zhang, B. (2019). The long-term use of short-term debt around the world. Available at SSRN 3109327.
- Chen, X., Cheng, Q., Hao, Y., & Liu, Q. (2019). GDP Growth Incentives and Earnings Management: Evidence from China. Available at SSRN 3439132.
- Cheng, S. (2008). Board size and the variability of corporate performance. *Journal of Financial Economics*, 87(1), 157-176.
- Choi, S. B., Lee, S. H., & Williams, C. (2011). Ownership and firm innovation in a transition economy: Evidence from China. *Research Policy*, 40(3), 441-452.
- Code of Corporate Governance for Listed Companies in China, China Securities Regulatory Commission (2002).
- Coff, R. W. (1997). Human assets and management dilemmas: Coping with hazards on the road to resource-based theory. *Academy of Management Review*, 22(2), 374-402.
- Conyon, M. J., Haß, L. H., Vergauwe, S., & Zhang, Z. (2019). Foreign experience and CEO compensation. *Journal of Corporate Finance*, 57, 102-121.
- Conyon, M. J., & He, L. (2011). Executive compensation and corporate governance in China. *Journal of Corporate Finance*, 17(4), 1158-1175.
- Cosset, J. C., Somé, H. Y., & Valéry, P. (2016). Credible reforms and stock return volatility: Evidence from privatization. *Journal of Banking & Finance*, 72, 99-120.
- D'souza, J., & Megginson, W. L. (1999). The financial and operating performance of privatized firms during the 1990s. *The Journal of Finance*, 54(4), 1397-1438.
- d'Agostino, R. B. (1998). Propensity score methods for bias reduction in the comparison of a treatment to a non-randomized control group. *Statistics in Medicine*, 17(19), 2265-2281.
- Dai, Y., Kong, D., & Liu, S. (2018). Returnee talent and corporate investment: evidence from China. *European Accounting Review*, 27(2), 313-337.
- Dixon, R., Guariglia, A., & Vijayakumaran, R. (2017). Managerial ownership, corporate governance and firms' exporting decisions: evidence from Chinese listed companies. *The European Journal of Finance*, 23(7-9), 802-840.
- Edamura, K., Haneda, S., Inui, T., Tan, X., & Todo, Y. (2014). Impact of Chinese cross-border outbound M&As on firm performance: Econometric analysis using firm-level data. *China Economic Review*, 30, 169-179.
- Edström, A., & Galbraith, J. R. (1977). Transfer of managers as a coordination and control strategy in multinational organizations. *Administrative Science Quarterly*, 22, 248-263.
- Eisenberg, T., Sundgren, S., & Wells, M. T. (1998). Larger board size and decreasing firm value in small firms¹. *Journal of Financial Economics*, 48(1), 35-54.

- Faccio, M., Marchica, M. T., & Mura, R. (2011). Large shareholder diversification and corporate risk-taking. *The Review of Financial Studies*, 24(11), 3601-3641.
- Faccio, M., Marchica, M. T., & Mura, R. (2016). CEO gender, corporate risk-taking, and the efficiency of capital allocation. *Journal of Corporate Finance*, 39, 193-209.
- Fan, J., Wong, T.J. & Zhang, T. (2007). Politically connected CEOs, corporate governance, and Post-IPO performance of China's newly partially privatized firms. *Journal of Financial Economics*, 84, 330-357.
- Feldman, D., Kang, C. M., Li, J., & Saxena, K. (2021). Politically motivated corporate decisions as tournament participation/inclusion games. *Journal of Corporate Finance*, 67, 101883.
- Feng, X., & Johansson, A. C. (2018). Living through the Great Chinese Famine: Early-life experiences and managerial decisions. *Journal of Corporate Finance*, 48, 638-657.
- Ferreira, M. A., & Laux, P. A. (2007). Corporate governance, idiosyncratic risk, and information flow. *The Journal of Finance*, 62(2), 951-989.
- Filatotchev, I., Liu, X., Buck, T., & Wright, M. (2009). The export orientation and export performance of high-technology SMEs in emerging markets: The effects of knowledge transfer by returnee entrepreneurs. *Journal of International Business Studies*, 40(6), 1005-1021.
- Fogel, K., Morck, R., & Yeung, B. (2008). Big business stability and economic growth: Is what's good for General Motors good for America? *Journal of Financial Economics*, 89(1), 83-108.
- Gatignon, H., & Anderson, E. (1988). The multinational corporation's degree of control over foreign subsidiaries: An empirical test of a transaction cost explanation. *Journal of Law, Economics, and Organization*, 4, 305.
- Giannetti, M., Liao, G., & Yu, X. (2015). The brain-gain of corporate boards: Evidence from China. *The Journal of Finance*, 70(4), 1629-1682.
- Grote, M. H., & Rücker, F. (2007). Acquiring foreign firms far away might be hazardous to your share price: Evidence from Germany (No. 182). Working Paper Series: *Finance & Accounting*.
- 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.
- 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.
- Huang, J., & Kisgen, D. J. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives? *Journal of financial Economics*, 108(3), 822-839.
- Huang, Y. S., & Wang, C. J. (2015). Corporate governance and risk-taking of Chinese firms: The role of board size. *International Review of Economics & Finance*, 37, 96-113.
- Iliev, P., & Roth, L. (2018). Learning from directors' foreign board experiences. *Journal of Corporate Finance*, 51, 1-19.

- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Jiang, F. X., & Kim, K. A. (2015). Corporate governance in China: A modern perspective. *Journal of Corporate Finance*, 32, 190–216.
- John, K., Litov, L., & Yeung, B. (2008). Corporate governance and risk-taking. *The Journal of Finance*, 63(4), 1679-1728.
- Kato, T. & Long, C. (2006). CEO turnover, firm performance, and enterprise reform in China: Evidence from micro data. *Journal of Comparative Economics*, 34, 796–817.
- Khaw, K. L. H., Liao, J., Tripe, D., & Wongchoti, U. (2016). Gender diversity, state control, and corporate risk-taking: Evidence from China. *Pacific-Basin Finance Journal*, 39, 141-158.
- Knüpfer, S., Elias R., and Matti S. (2017). Formative experiences and portfolio choice: Evidence from the Finnish great depression. *The Journal of Finance* 72, 133-166.
- 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.
- Li, J., & Tang, Y. I. (2010). CEO hubris and firm risk taking in China: The moderating role of managerial discretion. *Academy of Management Journal*, 53(1), 45-68.
- Li, M., Olson, J. E., & Frieze, I. H. (2013). Students' Study Abroad Plans: The Influence of Motivational and Personality Factors. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 23, 73-89.
- Li, Y., & Zeng, Y. (2019). The impact of top executive gender on asset prices: Evidence from stock price crash risk. *Journal of Corporate Finance*, 58, 528-550.
- Li, Z., Yamada, T. (2015). Political and economic incentive of government in partial privatization. *Journal of Corporate Finance*, 32, 169–189.
- Lim, M. H., & Lee, J. H. (2016). The effects of industry relatedness and takeover motives on cross-border acquisition completion. *Journal of Business Research*, 69(11), 4787-4792.
- Lin, Y., Fu, X., & Fu, X. (2017). Innovation and ultimate controlling shareholders in China: Should the state shrink itself to residuals? Working paper.
- Liu, Q., & Lu, Z. J. (2007). Corporate governance and earnings management in the Chinese listed companies: A tunnelling perspective. *Journal of Corporate Finance*, 13(5), 881-906.
- Malhotra, S., Lin, X., & Farrell, C. (2016). Cross-national uncertainty and level of control in cross-border acquisitions: A comparison of Latin American and US multinationals. *Journal of Business Research*, 69(6), 1993-2004.
- Malmendier, U., & Tate, G. (2005). CEO overconfidence and corporate investment. *The Journal of Finance*, 60(6), 2661-2700.
- Malmendier, U., & Tate, G. (2008). Who makes acquisitions? CEO overconfidence and the market's reaction. *Journal of Financial Economics*, 89(1), 20-43.
- Miletkov, M., Poulsen, A., & Wintoki, M. B. (2017). Foreign independent directors and the quality of legal institutions. *Journal of International Business Studies*, 48(2), 267-292.

- Murphy, K. J., & Zbojnik, J. (2007). Managerial capital and the market for CEOs. *Available at SSRN 984376*.
- Nelson, R. R. (2009). An evolutionary theory of economic change. *Harvard University Press*.
- Ng, A., Yuce, A., & Chen, E. (2009). Determinants of state equity ownership, and its effect on value/performance: China's privatized firms. *Pacific-Basin Finance Journal* 17, 413–443.
- Payan, J. M., Svensson, G., & Høgevold, N. M. (2012). The effect of attributes of Study Abroad and risk aversion on the Future Likelihood to Study Abroad: A Study of US and Norwegian Undergraduate Marketing Students. *Journal for Advancement of Marketing Education*, 20(3).
- Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113-1155.
- Root, F. R. (1987). Foreign market entry strategies. *New York, NY: AMACOM*.
- Sambharya, R. B. (1996). Foreign experience of top management teams and international diversification strategies of US multinational corporations. *Strategic Management Journal*, 17(9), 739-746.
- Shen, W. & Lin, C. (2009). Firm profitability, state ownership, and top management turnover at the listed firms in China: A behavioral perspective. *Corporate Governance: An International Review*, 17: 443–456.
- Sun, Q.T. and Wilson, H.S. (2003). China share issue privatization: the extent of its success. *Journal of Financial Economics*, 70, 183-222.
- Suutari, V., & Mäkelä, K. (2007). The career capital of managers with global careers. *Journal of Managerial Psychology*, 22(7), 628-648.
- 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.
- Tuggle, C. S., Sirmon, D. G., Reutzell, C. R., & Bierman, L. (2010). Commanding board of director attention: investigating how organizational performance and CEO duality affect board members' attention to monitoring. *Strategic management journal*, 31(9), 946-968.
- Vroom, V. H., & Pahl, B. (1971). Relationship between age and risk taking among managers. *Journal of Applied Psychology*, 55(5), 399.
- Wen, W., Cui, H., & Ke, Y. (2020). Directors with foreign experience and corporate tax avoidance. *Journal of Corporate Finance*, 62, 101624.
- Wong, C. W., Miao, X., Cui, S., & Tang, Y. (2018). Impact of corporate environmental responsibility on operating income: Moderating role of regional disparities in China. *Journal of Business Ethics*, 149(2), 363-382.
- Yang, X. (2015). Chinese college students' risk attitude to moving abroad to study. *Social Behaviour and Personality: an international journal*, 43(5), 795-802.

- Yao, S., Wang, Z., Sun, M., Liao, J., & Cheng, F. (2020). Top executives' early-life experience and financial disclosure quality: impact from the Great Chinese Famine. *Accounting & Finance*, Forthcoming.
- Yuan, R. & Wen, W. (2018). Managerial foreign experience and corporate innovation. *Journal of Corporate Finance*, 48, 752-770.
- Zhang, J., Kong, D., & Wu, J. (2018). Doing good business by hiring directors with foreign experience. *Journal of Business Ethics*, 153(3), 859-876.
- Zhou, B., Li, Y. M., Sun, F. C., & Zhou, Z. G. (2021). Executive compensation incentives, risk level and corporate innovation. *Emerging Markets Review*, 100798.

References for chapter 3

- Aggarwal, R., Erel, I., Ferreira, M., & Matos, P. (2011). Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics*, *100*(1), 154-181.
- Aggarwal, R. K., & Samwick, A. A. (2003). Performance incentives within firms: The effect of managerial responsibility. *The Journal of Finance*, *58*(4), 1613-1650.
- Altman, E. I. (2002). Corporate distress prediction models in a turbulent economic and Basel II environment. Working paper.
- Al-Dhamari, R., & Ismail, K. N. I. K. (2015). Cash holdings, political connections, and earnings quality. *International Journal of Managerial Finance*, *11*(2), 215-231.
- Ang, J. S., Cole, R. A., & Lin, J. W. (2000). Agency costs and ownership structure. *Journal of Finance*, *55*(1), 81-106.
- Bae, K. H., Bailey, W., & Mao, C. X. (2006). Stock market liberalization and the information environment. *Journal of International Money and Finance*, *25*(3), 404-428.
- Belot, F., & Serve, S. (2018). Earnings quality in private SMEs: do CEO demographics matter? *Journal of Small Business Management*, *56*(sup1), 323-344.
- Bena, J., Ferreira, M. A., Matos, P., & Pires, P. (2017). Are foreign investors locusts? The long-term effects of foreign institutional ownership. *Journal of Financial Economics*, *126*(1), 122-146.
- Benmelech, E., & Frydman, C. (2015). Military CEOs. *Journal of Financial Economics*, *117*(1), 43-59.
- Ben-Nasr, H., Boubakri, N., & Cosset, J. C. (2015). Earnings quality in privatized firms: The role of state and foreign owners. *Journal of Accounting and Public Policy*, *34*(4), 392-416.
- Bernile, G., Bhagwat, V., & Rau, P. R. (2017). What doesn't kill you will only make you more risk-loving: Early-life disasters and CEO behavior. *The Journal of Finance*, *72*(1), 167-206.
- Bhagwati, J., & Hamada, K. (1974). The brain drain, international integration of markets for professionals and unemployment: a theoretical analysis. *Journal of Development Economics*, *1*(1), 19-42.
- Bhattacharya, U., Daouk, H., & Welker, M. (2003). The world price of earnings opacity. *The Accounting Review*, *78*(3), 641-678.
- Bisogno, M., & De Luca, R. (2015). Financial distress and earnings manipulation: Evidence from Italian SMEs. *Journal of Accounting and Finance*, *4*(1), 42-51.
- Cai, C. X., Hillier, D., & Wang, J. (2016). The cost of multiple large shareholders. *Financial Management*, *45*(2), 401-430.
- Cao, F., Sun, J., & Yuan, R. (2019). Board directors with foreign experience and stock price crash risk: Evidence from China. *Journal of Business Finance & Accounting*, *46*(9-10), 1144-1170.

- Chang, J. J., & Lai, C. C. (2002). Is the efficiency wage efficient? The social norm and organizational corruption. *Scandinavian Journal of Economics*, *104*(1), 27-47.
- Chan, K., Chan, L. K., Jegadeesh, N., & Lakonishok, J. (2001). Earnings quality and stock returns (No. w8308). *National Bureau of Economic Research*.
- Chaney, P. K., Faccio, M., & Parsley, D. (2011). The quality of accounting information in politically connected firms. *Journal of Accounting and Economics*, *51*(1-2), 58-76.
- Chen, F., Hope, O. K., Li, Q., & Wang, X. (2011). Financial reporting quality and investment efficiency of private firms in emerging markets. *The accounting review*, *86*(4), 1255-1288.
- Chen, J., Cumming, D., Hou, W., & Lee, E. (2016). CEO accountability for corporate fraud: Evidence from the split share structure reform in China. *Journal of Business Ethics*, *138*(4), 787-806.
- Chen, J., Ezzamel, M., & Cai, Z. (2011). Managerial power theory, tournament theory, and executive pay in China. *Journal of corporate finance*, *17*(4), 1176-1199.
- Chen, K. C., & Yuan, H. (2004). Earnings management and capital resource allocation: Evidence from China's accounting-based regulation of rights issues. *The Accounting Review*, *79*(3), 645-665.
- Chen, X., Cheng, Q., Hao, Y., & Liu, Q. (2019). GDP Growth Incentives and Earnings Management: Evidence from China. *Available at SSRN 3439132*.
- Cohen, D. A., Dey, A., & Lys, T. Z. (2008). Real and accrual-based earnings management in the pre-and post-Sarbanes-Oxley periods. *The Accounting Review*, *83*(3), 757-787.
- Cosset, J. C., Somé, H. Y., & Valéry, P. (2016). Credible reforms and stock return volatility: Evidence from privatization. *Journal of Banking & Finance*, *72*, 99-120.
- Conyon, M. J., Haß, L. H., Vergauwe, S., & Zhang, Z. (2019). Foreign experience and CEO compensation. *Journal of Corporate Finance*, *57*, 102-121.
- Cunningham, M. R. (1979). Weather, mood, and helping behavior: Quasi experiments with the sunshine samaritan. *Journal of Personality and Social Psychology*, *37*(11), 1947.
- Dai, Y., Kong, D., & Liu, S. (2018). Returnee talent and corporate investment: Evidence from China. *European Accounting Review*, *27*(2), 313-337.
- DeAngelo, L. E. (1981). Auditor independence, 'low balling', and disclosure regulation. *Journal of accounting and Economics*, *3*(2), 113-127.
- Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review*, *77*(s-1), 35-59.
- Demerjian, P. R., Lev, B., Lewis, M. F., & McVay, S. E. (2013). Managerial ability and earnings quality. *The Accounting Review*, *88*(2), 463-498.
- Deng, L., Li, S., & Liao, M. (2017). Dividends and earnings quality: Evidence from China. *International Review of Economics & Finance*, *48*, 255-268.
- Desai, M. A., & Dharmapala, D. (2006). Corporate tax avoidance and high-powered incentives. *Journal of Financial Economics*, *79*(1), 145-179.

- Desai, M. A., & Dharmapala, D. (2009). Corporate tax avoidance and firm value. *The Review of Economics and Statistics*, 91(3), 537-546.
- Dong, R., Fisman, R., Wang, Y., & Xu, N. (2019). Air pollution, affect, and forecasting bias: Evidence from Chinese financial analysts. *Journal of Financial Economics*. <https://doi.org/10.1016/j.jfineco.2019.12.004>, Forthcoming.
- Du, X., Jian, W., & Lai, S. (2017). Do foreign directors mitigate earnings management? Evidence from China. *The International Journal of Accounting*, 52(2), 142-177.
- Duan, T., Hou, W., & Rees, W. (2020). CEO international experience and foreign IPOs. *Economic Modelling*, 87, 461-470.
- Fan, J. P., & Wong, T. J. (2002). Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting and Economics*, 33(3), 401-425.
- Feng, X., & Johansson, A. C. (2018). Living through the Great Chinese Famine: Early-life experiences and managerial decisions. *Journal of Corporate Finance*, 48, 638-657.
- Ferreira, M. A., & Laux, P. A. (2007). Corporate governance, idiosyncratic risk, and information flow. *The Journal of Finance*, 62(2), 951-989.
- Francis, J., LaFond, R., Olsson, P., & Schipper, K. (2005). The market pricing of accruals quality. *Journal of Accounting and Economics*, 39(2), 295-327.
- Francis, J., Nanda, D., & Olsson, P. (2008). Voluntary disclosure, earnings quality, and cost of capital. *Journal of Accounting Research*, 46(1), 53-99.
- Gallemore, J., Maydew, E. L., & Thornock, J. R. (2014). The reputational costs of tax avoidance. *Contemporary Accounting Research*, 31(4), 1103-1133.
- Giannetti, M., Liao, G., & Yu, X. (2015). The brain gain of corporate boards: Evidence from China. *The Journal of Finance*, 70(4), 1629-1682.
- Goetzmann, W. N., Kim, D., Kumar, A., & Wang, Q. (2015). Weather-induced mood, institutional investors, and stock returns. *The Review of Financial Studies*, 28(1), 73-111.
- Gormley, T. A., & Matsa, D. A. (2014). Common errors: How to (and not to) control for unobserved heterogeneity. *The Review of Financial Studies*, 27(2), 617-661.
- Gu, J., & Semba, H. D. (2016). Can overseas investment improve earnings quality? *The Journal of Developing Areas*, 50(5), 27-40.
- Guadalupe, M., Kuzmina, O., & Thomas, C. (2012). Innovation and foreign ownership. *American Economic Review*, 102(7), 3594-3627.
- Gul, F. A., Jaggi, B. L., & Krishnan, G. V. (2007). Auditor independence: Evidence on the joint effects of auditor tenure and non-audit fees. *Auditing: A Journal of Practice & Theory*, 26(2), 117-142.
- Gul, F. A., Lynn, S. G., & Tsui, J. S. (2002). Audit quality, management ownership, and the informativeness of accounting earnings. *Journal of Accounting, Auditing & Finance*, 17(1), 25-49.

- Hahn, P. D., & Lasfer, M. (2016). Impact of foreign directors on board meeting frequency. *International Review of Financial Analysis*, 46, 295-308.
- 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.
- Haw, I. M., Qi, D., Wu, D., & Wu, W. (2005). Market consequences of earnings management in response to security regulations in China. *Contemporary Accounting Research*, 22(1), 95-140.
- He, W., Ng, L., Zaiats, N., & Zhang, B. (2017). Dividend policy and earnings management across countries. *Journal of Corporate Finance*, 42, 267-286.
- Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, 31(1-3), 405-440.
- Hegde, S. P., & Mishra, D. R. (2019). Married CEOs and corporate social responsibility. *Journal of Corporate Finance*, 58, 226-246.
- Hirshleifer, D., & Shumway, T. (2003). Good day sunshine: Stock returns and the weather. *The Journal of Finance*, 58(3), 1009-1032.
- Hsieh, T. S., Bedard, J. C., & Johnstone, K. M. (2014). CEO overconfidence and earnings management during shifting regulatory regimes. *Journal of Business Finance & Accounting*, 41(9-10), 1243-1268.
- Hu, R., Karim, K., Lin, K. J., & Tan, J. (2020). Do investors want politically connected independent directors? Evidence from their forced resignations in China. *Journal of Corporate Finance*, 61, 101421.
- Huang, J., & Kisgen, D. J. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives? *Journal of Financial Economics*, 108(3), 822-839.
- Huang, J., Xu, N., & Yu, H. (2020). Pollution and Performance: Do Investors Make Worse Trades on Hazy Days? *Management Science*, Forthcoming.
- Huang, T. C., Lin, Y. H., & Hairston, S. (2019). Is there an association between accounting firm ranks and audit quality? An examination of the top 100 accounting firms in China. *International Journal of Auditing*, 23(2), 204-230.
- Iliev, P., & Roth, L. (2018). Learning from directors' foreign board experiences. *Journal of Corporate Finance*, 51, 1-19.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Ji, X., Ahmed, K., & Lu, W. (2015). The impact of corporate governance and ownership structure reforms on earnings quality in China. *International Journal of Accounting & Information Management*, 23(2), 169-198.
- Jiang, F. X., & Kim, K. A. (2015). Corporate governance in China: A modern perspective. *Journal of Corporate Finance*, 32, 190-216.

- Jiang, W., Lee, P., & Anandarajan, A. (2008). The association between corporate governance and earnings quality: Further evidence using the GOV-Score. *Advances in Accounting*, 24(2), 191-201.
- Jones, J. J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research*, 29 (2), 193-228.
- Khanna, T. (2009). Billions of entrepreneurs: How China and India are reshaping their futures and yours. *Strategic Direction*, 25(10).
- Klapper, L.F., Love, I. (2004) Corporate governance, investor protection, and performance in emerging markets. *Journal of Corporate Finance*, 10 (5), 703-728.
- Krishnan, G. V., & Parsons, L. M. (2008). Getting to the bottom line: An exploration of gender and earnings quality. *Journal of Business Ethics*, 78(1-2), 65-76.
- Kuo, J., Ning, L. & Song, X., (2014). The real and accrual-based earnings management behaviours: Evidence from the split share structure reform in China. *The International Journal of Accounting*, 49, 101-136.
- Lennox, C., Wu, X., & Zhang, T. (2016). The effect of audit adjustments on earnings quality: Evidence from China. *Journal of Accounting and Economics*, 61(2-3), 545-562.
- Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: an international comparison. *Journal of Financial Economics*, 69(3), 505-527.
- Lepori, G. M. (2016). Air pollution and stock returns: Evidence from a natural experiment. *Journal of Empirical Finance*, 35, 25-42.
- Levy, T., & Yagil, J. (2011). Air pollution and stock returns in the US. *Journal of Economic Psychology*, 32(3), 374-383.
- Li, J., Shan, Y., Tian, G., & Hao, X. (2020). Labor cost, government intervention, and corporate innovation: Evidence from China. *Journal of Corporate Finance*, 101668.
- Li, Y., & Zeng, Y. (2019). The impact of top executive gender on asset prices: Evidence from stock price crash risk. *Journal of Corporate Finance*, 58, 528-550.
- Liao, G., Ma, M. S., & Yu, X. (2017). Transporting transparency: Director foreign experience and corporate information environment. In *28th Annual Conference on Financial Economics and Accounting*.
- Linck, J. S., Netter, J., & Shu, T. (2013). Can managers use discretionary accruals to ease financial constraints? Evidence from discretionary accruals prior to investment. *The Accounting Review*, 88(6), 2117-2143.
- Liu, Q., & Lu, Z. J. (2007). Corporate governance and earnings management in the Chinese listed companies: A tunneling perspective. *Journal of Corporate Finance*, 13(5), 881-906.
- Luong, H., Moshirian, F., Nguyen, L., Tian, X., & Zhang, B. (2017). How do foreign institutional investors enhance firm innovation? *Journal of Financial and Quantitative Analysis*, 52(4), 1449-1490.
- Masulis, R. W., Wang, C., & Xie, F. (2012). Globalizing the boardroom—The effects of foreign directors on corporate governance and firm performance. *Journal of Accounting and Economics*, 53(3), 527-554.

- Mishra, D. R. (2021). Charitable inclination and the chief executive officer's pay package. *Financial Review*, 56(1), 85-108.
- Saunders, E. M. (1993). Stock prices and Wall Street weather. *The American Economic Review*, 83(5), 1337-1345.
- Schwarz, N., & Clore, G. L. (1983). Mood, misattribution, and judgments of well-being: informative and directive functions of affective states. *Journal of Personality and Social Psychology*, 45(3), 513.
- Siagian, F.T. & Tresnaningsih, E. (2011). The impact of independent directors and independent audit committees on earnings quality reported by Indonesian firms, *Asian Review of Accounting*, 19(3), 192-207
- Skinner, D. J., & Soltes, E. (2011). What do dividends tell us about earnings quality? *Review of Accounting Studies*, 16(1), 1-28.
- Singh, M., & Davidson, W. N, I. I. I. (2003). Agency costs, ownership structure and corporate governance mechanisms. *Journal of Banking & Finance*, 27(5), 793–816.
- Srinidhi, B. I. N., Gul, F. A., & Tsui, J. (2011). Female directors and earnings quality. *Contemporary Accounting Research*, 28(5), 1610-1644.
- Sun, Q., Yung, K., & Rahman, H. (2012). Earnings quality and corporate cash holdings. *Accounting & Finance*, 52(2), 543-571.
- Tong, Y. H., & Miao, B. (2011). Are dividends associated with the quality of earnings? *Accounting Horizons*, 25(1), 183-205.
- Velury, U., & Jenkins, D. S. (2006). Institutional ownership and the quality of earnings. *Journal of Business Research*, 59(9), 1043-1051.
- Vert, C., Sánchez-Benavides, G., Martínez, D., Gotsens, X., Gramunt, N., Cirach, M., et al., (2017). Effect of long-term exposure to air pollution on anxiety and depression in adults: A cross-sectional study. *International Journal of Hygiene and Environmental Health*, 220(6), 1074-1080.
- Whited, T. M., & Wu, G. (2006). Financial constraints risk. *The Review of Financial Studies*, 19(2), 531-559.
- Wen, W., Cui, H., & Ke, Y. (2020). Directors with foreign experience and corporate tax avoidance. *Journal of Corporate Finance*, 62, 101624.
- Wu, Y., & Dong, B. (2021). The value of independent directors: Evidence from China. *Emerging Markets Review*, 49, 100763.
- Xie, B., Davidson III, W. N., & DaDalt, P. J. (2003). Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance*, 9(3), 295-316.
- Xue, S., Zhang, B., & Zhao, X. (2019). Brain Drain: The Impact of Air Pollution on Firm Performance. Available at SSRN 3490344.
- Yang, Z., & Ye, F. (1993). Studies on semi-colonization of Qing dynasty. *Beijing: Higher Education Press*.

- Yao, S., Wang, Z., Sun, M., Liao, J., & Cheng, F. (2020). Top executives' early-life experience and financial disclosure quality: impact from the Great Chinese Famine. *Accounting & Finance*, Forthcoming.
- Ye, K., Zhang, R., & Rezaee, Z. (2010). Does top executive gender diversity affect earnings quality? A large sample analysis of Chinese listed firms. *Advances in Accounting*, 26(1), 47-54.
- Yu, F. F. (2008). Analyst coverage and earnings management. *Journal of Financial Economics*, 88(2), 245-271.
- Yuan, R. & Wen, W., 2018. Managerial foreign experience and corporate innovation. *Journal of Corporate Finance*. 48, 752-770.
- Zalata, A. M., Ntim, C., Aboud, A., & Gyapong, E. (2019). Female CEOs and core earnings quality: new evidence on the ethics versus risk-aversion puzzle. *Journal of Business Ethics*, 160(2), 515-534.
- Zhang, J., Kong, D., & Wu, J. (2018). Doing good business by hiring directors with foreign experience. *Journal of Business Ethics*, 153(3), 859-876.
- Zheng, S., Cao, C. X., & Singh, R. P. (2014). Comparison of ground based indices (API and AQI) with satellite based aerosol products. *Science of The Total Environment*, 488, 398-412.

References for chapter 4

- Aghion, P., Howitt, P., Howitt, P. W., Brant-Collett, M., & García-Peñalosa, C. (1998). *Endogenous Growth Theory*. MIT press.
- Albinger, H. S., & Freeman, S. J. (2000). Corporate social performance and attractiveness as an employer to different job seeking populations. *Journal of Business Ethics*, 28(3), 243-253.
- Anderson, M. C., Banker, R. D., & Janakiraman, S. N. (2003). Are selling, general, and administrative costs “sticky”? *Journal of Accounting Research*, 41(1), 47-63.
- Atanassov, J., & Kim, E. H. (2009). Labour and corporate governance: International evidence from restructuring decisions. *The Journal of Finance*, 64(1), 341-374.
- Bai, C. E., Lu, J., & Tao, Z. (2006). The multitask theory of state enterprise reform: Empirical evidence from China. *American Economic Review*, 96(2), 353-357.
- Ben-Nasr, H., & Alshwer, A. A. (2016). Does stock price informativeness affect labour investment efficiency? *Journal of Corporate Finance*, 38, 249-271.
- Blatter, M., Muehleman, S., & Schenker, S. (2012). The costs of hiring skilled workers. *European Economic Review*, 56(1), 20-35.
- Boyd, B. (1990). Corporate linkages and organizational environment: A test of the resource dependence model. *Strategic Management Journal*, 11(6), 419-430.
- Cao, F., Sun, J., & Yuan, R. (2019). Board directors with foreign experience and stock price crash risk: Evidence from China. *Journal of Business Finance & Accounting*, 46(9-10), 1144-1170.
- Chen, S., Sun, Z., Tang, S., & Wu, D. (2011). Government intervention and investment efficiency: Evidence from China. *Journal of Corporate Finance*, 17(2), 259-271.
- Chen, C. R., Li, Y., Luo, D., & Zhang, T. (2017). Helping hands or grabbing hands? An analysis of political connections and firm value. *Journal of Banking & Finance*, 80, 71-89.
- Conyon, M. J., Haß, L. H., Vergauwe, S., & Zhang, Z. (2019). Foreign experience and CEO compensation. *Journal of Corporate Finance*, 57, 102-121.
- Cosset, J. C., Somé, H. Y., & Valéry, P. (2016). Credible reforms and stock return volatility: Evidence from privatization. *Journal of Banking & Finance*, 72, 99-120.
- Cui, C., John, K., Pang, J., & Wu, H. (2018). Employment protection and corporate cash holdings: Evidence from China's labour contract law. *Journal of Banking & Finance*, 92, 182-194.
- Cull, R., Li, W., Sun, B., & Xu, L. C. (2015). Government connections and financial constraints: Evidence from a large representative sample of Chinese firms. *Journal of Corporate Finance*, 32, 271-294.
- Dai, Y., Kong, D., & Liu, S. (2018). Returnee talent and corporate investment: Evidence from China. *European Accounting Review*, 27(2), 313-337.
- Dolfin, S. 2006. An examination of firms' employment costs. *Applied Economics* 38:861–78.

- Dollar, D. (2019). Technological innovation, supply chain trade, and workers in a globalized world. *Global Value Chain Development Report, 1*.
- Ferreira, M. A., & Laux, P. A. (2007). Corporate governance, idiosyncratic risk, and information flow. *The Journal of Finance, 62*(2), 951-989.
- Fleisher, B.M., Wang, X., 2004. Skill differentials, return to schooling, and market segmentation in a transition economy: the case of mainland China. *Journal of Development Economics 73* (1), 315–328.
- Ghaly, M., Anh Dang, V., & Stathopoulos, K. (2017). Cash holdings and labour heterogeneity: the role of skilled labour. *The Review of Financial Studies, 30*(10), 3636-3668.
- Giannetti, M., Liao, G., & Yu, X. (2015). The brain gain of corporate boards: Evidence from China. *The Journal of Finance, 70*(4), 1629-1682.
- Glaeser, E. L., & Berry, C. R. (2006). Why are smart places getting smarter. *Rappaport Institute/Taubman Center Policy Brief, 2*.
- Gormley, T. A., & Matsa, D. A. (2014). Common errors: How to (and not to) control for unobserved heterogeneity. *The Review of Financial Studies, 27*(2), 617-661.
- Hall, B. H., Jaffe, A., & Trajtenberg, M. (2005). Market value and patent citations. *RAND Journal of Economics, 16*-38.
- 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.
- Hao, Y., & Lu, J. (2018). The impact of government intervention on corporate investment allocations and efficiency: evidence from China. *Financial Management, 47*(2), 383-419.
- Hegde, S. P., & Mishra, D. R. (2019). Married CEOs and corporate social responsibility. *Journal of Corporate Finance, 58*, 226-246.
- Hillman, A. J. (2005). Politicians on the board of directors: Do connections affect the bottom line? *Journal of Management, 31*(3), 464-481.
- Huang, J., & Kisgen, D. J. (2013). Gender and corporate finance: Are male executives overconfident relative to female executives? *Journal of Financial Economics, 108*(3), 822-839.
- Kato, T. & Long, C. (2006). CEO turnover, firm performance, and enterprise reform in China: Evidence from micro data. *Journal of Comparative Economics, 34*, 796–817.
- Kedia, S., Rajgopal, S., 2009. Neighborhood matters: the impact of location on broad based stock option plans. *Journal of Financial Economics 92* (1), 109–127.
- Keynes, J. (1936). *The General Theory of Employment, Interest and Money*. *Harcourt Brace, London*.
- Khedmati, M., Sualihu, M. A., & Yawson, A. (2020). CEO-director ties and labour investment efficiency. *Journal of Corporate Finance, 65*, 101492.
- Klasa, S., Maxwell, W. F., & Ortiz-Molina, H. (2009). The strategic use of corporate cash holdings in collective bargaining with labour unions. *Journal of Financial Economics, 92*(3), 421-442.

- Kong, D., Wang, Y., & Zhang, J. (2020). Efficiency wages as gift exchange: Evidence from corporate innovation in China. *Journal of Corporate Finance*, 65, 101725.
- Kornai, J. (1979). Resource-constrained versus demand-constrained systems. *Econometrica: Journal of the Econometric Society*, 801-819.
- Kornai, J., Maskin, E., & Roland, G. (2003). Understanding the soft budget constraint. *Journal of Economic Literature*, 41(4), 1095-1136.
- Li, H., Meng, L., Wang, Q., & Zhou, L. A. (2008). Political connections, financing and firm performance: Evidence from Chinese private firms. *Journal of Development Economics*, 87(2), 283-299.
- Li, J., Shan, Y., Tian, G., & Hao, X. (2020). Labor cost, government intervention, and corporate innovation: Evidence from China. *Journal of Corporate Finance*, 64, 101668.
- Luo, J., Li, X., & Chan, K. C. (2020). Political uncertainty and labour investment efficiency. *Applied Economics*, 52(43), 4677-4697.
- Malcomson, J. M. (1981). Unemployment and the efficiency wage hypothesis. *The Economic Journal*, 91(364), 848-866.
- Meng, X., Zhang, J., 2001. The two-tier labour market in urban China: occupational segregation and wage differentials between urban residents and rural migrants in Shanghai. *Journal of Comparative Economics* 29 (3), 485–504.
- Mishra, D. R. (2021). Charitable inclination and the chief executive officer's pay package. *Financial Review*, 56(1), 85-108.
- Naughton, B. (1996). *Growing out of the plan: Chinese Economic Reform, 1978-1993*. Cambridge university press.
- Ni, X., & Zhu, W. (2018). The bright side of labour protection in emerging markets: The case of firm transparency. *Pacific-Basin Finance Journal*, 50, 126-143.
- Oi, W. Y. (1962). Labour as a quasi-fixed factor. *Journal of Political Economy*, 70(6), 538-555.
- Pfeffer, J. (1972). Size and composition of corporate boards of directors: The organization and its environment. *Administrative Science Quarterly*, 218-228.
- Pfeffer, J. (1994). *Competitive advantage through people: Unleashing the power of the work force* (No. 04; e-book.).
- Salop, S. C. (1979). A model of the natural rate of unemployment. *The American Economic Review*, 69(1), 117-125.
- Serfling, M. A. (2014). CEO age and the riskiness of corporate policies. *Journal of Corporate Finance*, 25, 251-273.
- Shleifer, A. and Vishny, R.W. (1997), “A survey of corporate governance”, *The Journal of Finance*, Vol. 52 No. 2, pp. 737-775.
- Stiglitz, J. E. (1974). Alternative theories of wage determination and unemployment in LDC's: The labour turnover model. *The Quarterly Journal of Economics*, 88(2), 194-227.

- Taylor, G., Al-Hadi, A., Richardson, G., Alfarhan, U., & Al-Yahyaee, K. (2019). Is there a relation between labour investment inefficiency and corporate tax avoidance? *Economic Modelling*, 82, 185-201.
- Weiss, A. (1980). Job queues and layoffs in labour markets with flexible wages. *Journal of Political Economy*, 88(3), 526-538.
- Wen, W., Cui, H., & Ke, Y. (2020). Directors with foreign experience and corporate tax avoidance. *Journal of Corporate Finance*, 62, 101624.
- Xu, J., & Sim, J. W. (2017). Are costs really sticky and biased? Evidence from manufacturing listed companies in China. *Applied Economics*, 49(55), 5601-5613.
- Xu, N., Chen, Q., Xu, Y., & Chan, K. C. (2016). Political uncertainty and cash holdings: Evidence from China. *Journal of Corporate Finance*, 40, 276-295.
- Yao, S., Wang, Z., Sun, M., Liao, J., & Cheng, F. (2020). Top executives' early-life experience and financial disclosure quality: impact from the Great Chinese Famine. *Accounting & Finance*, 60(5), 4757-4793.
- Yuan, R. & Wen, W. (2018). Managerial foreign experience and corporate innovation. *Journal of Corporate Finance*. 48, 752-770.
- Zhang, J., Kong, D., & Wu, J. (2018). Doing good business by hiring directors with foreign experience. *Journal of Business Ethics*, 153(3), 859-876.
- Zingales, L. (2000). In search of new foundations. *The Journal of Finance*, 55(4), 1623-1653