Distance and the Completion of Chinese Cross-border Mergers and Acquisitions

Dong, Lijun; Li, Xin; McDonald, Frank; Xie, Jiaguo

Lijun Dong, Xin Li, Frank McDonald, and Jiaguo Xie

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Abstract

Purpose – The purpose of this study is to draw attention to the significant lower completion rate of mergers and acquisitions (M&As) by firms from emerging economies (China in particular) compared with firms from advanced economies, and to identify the country- and industry-level factors that affect the completion of cross-border M&As by Chinese firms.

Design/methodology/approach – This study explores the effects of economic, cultural, and institutional distances and target firms in technology- and knowledge-intensive industries on the completion of cross-border M&As by Chinese firms. It also examines the interplay between distance factors and technology- and knowledge-intensive industries on cross-border M&A completion. This study adopts a quantitative approach and is based on a sample of 768 announced cross-border M&A deals by firms in China between 2000 and 2015.

Findings – The results indicate that economic distance increases the likelihood of the completion of cross-border M&As when the target is in a more developed economy than China, but decreases when the target is in a less developed economy. Cultural and institutional distances have a significant, negative impact on the completion of cross-border M&As. In addition, target technology-intensive industries have a significant direct negative effect on cross-border M&A completion and moderate the relationship between the distance factors and the likelihood of cross-border M&A completion.

Research limitations/Implications – The results reveal factors that affect the completion of cross-border M&As by emerging market firms (EMFs). Further research, however, is needed to discover how distance factors affect how EMFs find, evaluate, and negotiate international bids. To broaden the scope of the research, data for firms from other emerging economies would also be required.

Originality/Value – The study expands the literature that considers the effects of major distances on cross-border M&A completion. In addition, the importance of defining and measuring distances in the context of cross-border M&As is highlighted. Finally, the study expands knowledge on how cross-border M&As affect the internationalization strategies of EMFs by conceptualising and testing how target industries affect cross-border M&A completion.

Keywords

Mergers and acquisitions; completion; economic, cultural, and institutional distance; rules of the game

1. Introduction

Firms in emerging economies (EEs) pursue internationalization using cross-border mergers and acquisitions (M&As) due to a desire to quickly learn how to develop competitive advantages by securing scarce and valuable assets, technologies, and managerial know-how from acquired firms (Shimizu *et al*., 2004; Mathews, 2006). Learning by acquiring firms obtained by accessing these kinds of resources combines with opportunities to exploit competitive advantages available in national locations providing incentives to emerging market firms (EMFs) to use cross-border M&As to advance internationalization strategies (Sun *et al*., 2012). In the last two decades, cross-border M&As by EMFs have grown tremendously and play an important role at the global level. According to the World Investment Report 2017, EMFs conducted 23.37% of world cross-border M&As in 2017, and Chinese firms accounted for 22.87% of cross-border M&As by EMFs – the largest source of outward foreign direct investment (FDI) among emerging economies (UNCTAD, 2017).

However, the completion rate of cross-border M&A by EMFs is significantly lower than the completion rate in most advanced economies (Zhou *et al*., 2016; He and Zhang, 2018). Approximately 33% of the announced cross-border M&A deals involving EMFs failed to successfully conclude, compared to 18% of developed economies (Zhou *et al*., 2016). Even more interestingly, for outbound acquisitions by EMFs from 1992 to 2012, 35.25% of the Chinese deals abandoned are higher than the average 25.31% for some emerging economies, including Brazil (20.33%), Russia (21.40%), India (26.86%), South Africa (19.68%), Mexico (14.46%), Turkey (27.31%) and Indonesia (37.14%) (Popli and Kumar, 2016). High failure rates for cross-border M&A completion are likely to hinder the internationalization objectives of EMFs due to the costs imposed by failure of M&A that undermine the desired development of cross-frontier activities. Hence, the phenomenon calls for a specific analysis on the determinants that contribute to the high failure rate of cross-border M&A completion for EMFs.

Distance in the international business (IB) context relates to the size of differences between home and host locations in areas such as economic, cultural, and institutional conditions (Ambos and Håkanson, 2014). A cross-border acquisition means that the acquiring and the target firm are in different home economies, implying that the environments of two different economies may affect the acquisition process (Lim and Lee, 2017). Hence, numerous studies demonstrate that a variety of distances affect the motivations and post-acquisition performance of cross-border M&A (Malhotra *et al*., 2009; Reus and Lamont, 2009; Gubbi *et al*., 2010; Nicholson and Salaber, 2013; Hutzschenreuter *et al*., 2014; Li *et al*., 2015). Among the various dimensions, the extant studies of cross-border acquisition completion only focus on one dimension of distance such as economic distance (Lim and Lee, 2017), cultural distance (Popli and Kumar, 2016), and institutional distance (Dikova *et al*., 2010; Zhou *et al*., 2016; He and Zhang, 2018). However, each dimension of distance encompasses many different factors to capture the national characteristics disparity between home and host economies. This indicates the evaluation of global investment opportunities requiring systematic examination of the possible impact of distance in all its dimensions (Ghemawat, 2001). Specifically, the unique context-embedded elements may cause EMFs to have different motivations, strategies, competitive advantages, and risk tolerances during internationalization (Kedia *et al*., 2012). There is therefore a lack of knowledge on how the major concepts of distance affect completion of cross-border M&As by EMFs. This omission undermines the understanding of how distance may affect liability of foreignness in cross-border M&A completion and thereby present obstacles to the internationalization process of EMFs. We address this gap by investigating the influence of three major distances on cross-border M&A completion by EMFs – economic, institutional, and cultural.

Considering the costs, complexity and timing of innovation in technology- and knowledge-intensive industries, EMFs prefer to access strategic assets abroad to augment their technological, innovation, and managerial capabilities by cross-border M&As (Elia and Santangelo, 2017). However, this type of acquisition creates information dilemmas for buyers because of the double complexity of the local and industry contexts, when an EMF acquires a target in a technology- and knowledge-intensive industry in an advanced economy. The extant studies only pay attention to the environmental influences of the technology-intensive industries on cross-border M&A completion such as political concerns and complicated administrative procedures (Zhang *et al*., 2011; Reddy *et al*., 2016). Yet, we still have limited knowledge about the effects of the information asymmetries in technology- and knowledge-

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intensive industries on cross-border M&A completion. To fill this gap and advance our understanding of the completion of cross-border M&As by EMFs, our study investigates the effects on completion of target firms not only in technology-intensive industries but also in knowledge-intensive industries.

As latecomers and to address their competitive disadvantage, EMFs tend to be engaged in strategic asset-seeking cross-border M&As (Deng, 2009). The influence of strategic asset-seeking on the process of international expansion is likely to vary between high-tech and non-high-tech sectors (Elia and Santangelo., 2017). In technology- and knowledge-intensive industries, EMFs are eager to acquire foreign strategic assets to rapidly obtain innovation capabilities (Yakob *et al.*, 2018). Considering the motives behind an international acquisition that affect the likelihood of deal completion (Lim and Lee, 2016), this study expands this line of research and argues that targets in technology- and knowledge-intensive industries may affect the possibility of acquisition completion because of strategic asset seeking.

Different industries have different sensitivities to each dimension of distance in the context of international expansion (Ghemawat, 2001). Most of the target firms in technology- and knowledge-intensive industries are located in advanced economies where there are usually large distances of economic, cultural and institutional conditions with the EEs. These differences may increase the information asymmetries in technology- and knowledge-intensive industries because of a higher level of unfamiliarity and uncertainty by outsiders on how such business environments work. Therefore, it is imperative to investigate the interplay between distance factors and technology- and knowledge-intensive industries on acquisition completion. The current literature has not provided research in this regard. By studying the moderating impacts, we make an important conceptual contribution to the existing literature about the relationship between technology- and knowledge-intensive industries and cross-border M&A completion.

The focus in acquisition completion literature is on the public takeover period which starts from the public announcement and ends at the resolution of an acquisition deal (Muehlfeld *et al.*, 2007, 2012; Dikova *et al.*, 2010; Zhang *et al.*, 2011; Caiazza and Pozzolo, 2016; Lim and Lee, 2016, 2017; Ngo and Susnjara, 2016; Zhou *et al.*, 2016; Doan *et al.*, 2018; He and Zhang, 2018). The M&A completion research is confined to bids completed or bids abandoned after a public announcement because decisions regarding completion or abandonment after a public announcement are more likely to be determined by the acquirer

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with more available information (Dikova *et al.*, 2010; Lim and Lee, 2017). During public takeover period, cross-border M&A transactions involve greater complexity, and acquirers can encounter a higher level of unfamiliarity and uncertainties because of foreign government regulations (Zhou *et al.*, 2016) and the possible political intervention from the host economy (Reddy *et al.*, 2016). Abandonment after the public announcement may result in serious losses such as reputation damage and heavy penalties (Lim and Lee, 2016; Doan *et al.*, 2018). In addition, it typically implies a strong negative reaction to the bidder's stock price, which often leads to the removal of the bidder's management, and may in turn transform the bidder into the target of a possible acquisition (Caiazza and Pozzolo, 2016). The probability of deal completion can be used to analyze a firm's ability to manage an acquisition (Muehlfeld *et al.*, 2012) and the influence of external factors on acquisition transaction attempts, especially in the cross-border context. Consequently, this study's research boundary includes cross-border bids after a public announcement which indicate completion is about successfully completing, rejecting, or abandoning announced bids.

Using a sample of 768 cross-border M&As announced by Chinese acquirers from 2000 to 2015, this study attempts to establish an economic, cultural and institutional distance framework based on the cultural, administrative, geographic, and economic (CAGE) distance framework proposed by Ghemawat (2001), combined with the theory of strategic acquisition asset-seeking, to provide a more comprehensive understanding of cross-border M&A completion by EMFs. First, we find that a cross-border acquisition is more likely to be completed when the target is from a more developed economy than the Chinese economy, but less likely to be completed when the target is from a less developed economy. Second, the larger the cultural and institutional distance between the host economy and China, the higher the cross-border M&A completion failure rate. Third, the likelihood of a Chinese firm to succeed in a foreign acquisition is lower if a target is in the technology-intensive industries. Furthermore, inconsistent with our expectations, the coefficients of the interaction effects between technology-intensive industry and the three distance factors are positive and significant, which indicates that the relationship between the distance factors and the cross-border M&A completion likelihood becomes more likely if the target in the technology-intensive industry. This may emphasize the importance of the cross-border acquisition's motivation in the process of internationalization because international strategic-seeking acquisitions are more likely to succeed (Lim and Lee, 2016).

The rest of the article is organized into four sections. We first describe the theoretical framework that links the distance factors with cross-border M&A completion, showing the moderating effect of this link on the targets in high technology- and knowledge-intensive industries, then elucidating this logic through a series of hypotheses. In the following sections, we introduce our empirical setting, data, measures, and methods. We then present our empirical analyses and interpret our results. Finally, we review findings and implications, as well as some of the limitations of our study.

2. Theory and hypotheses

A common definition of distance between countries is the difference in size of their major areas of business (Ghemawat, 2001; Ambos and Håkanson 2014). Ghemawat (2001) offers the CAGE distance framework to evaluate global-investment opportunities, which is used by Malhotra *et al*. (2008) to explain the foreign acquisition behaviour of EMFs. By adding psychic distance stimuli, Hutzschenreuter *et al*. (2014) extends the CAGE distance framework to explore the performance effects of international expansion, and finding that geographical distance tends to strongly correlate with institutional and cultural distances. Furthermore, geographical distance mainly affects the foreign country selection decision before the public announcement of a cross-border M&A deal. Against these factors, we propose using the distance framework – including economic, cultural, and institutional dimensions – to analyze the influence of differences between home and host economies on the cross-border M&A completion, especially for target firms in technology- and knowledge-intensive industries. The theoretical framework combines the theory of distance with the theoretical premise that Chinese cross-border M&As are driven to secure strategic assets.

2.1 Economic distance

Economic distance refers to the different level of economic development of the host country relative to that of the home country. The level of economic development of an economy is associated with size and growth of markets, the extent and qualities of resource pools, physical infrastructures, and information and communications systems. A common assumption is that foreign firms are more likely to succeed in countries that have similar economies, as this allows low-cost transfer of existing business models to exploit competitive advantages in host locations (Ghemawat, 2001). This implies that economic distance is likely to hinder M&A bids. When the economic distance between two economies is large, the acquirer may experience high costs and risks associated with converting bids into completion

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due to significant differences in economic and market conditions (Lim and Lee, 2017). In addition, large economic distance may lead to stereotyping of local stakeholders in the host economy such as investors, regulators, and consumers, which the foreign acquirer will need to address and may increase barriers to completion.

Developed economies may, however, provide large and sophisticated markets (Malhotra *et al.*, 2009). Developed economies are also likely to have resources that are in demand, lower-priced, or higher-quality (Tsang and Yip, 2007; Gubbi *et al.*, 2010; Gaffney *et al.*, 2016). Accessing scarce and valuable resources by acquiring firms in developed economies may help firms from developing economies to obtain competitive advantages that allow them to more easily integrate into the global economy (Shimizu *et al.*, 2004; Mathews, 2006). In these circumstances, firms located in EEs are likely to place higher emphasis and devote more resources to providing evidence and assurances that build trust for announced bids for firms in developed economies. This attractive feature of target firms in developed economies leads the acquirer to exhibit a risk-seeking tendency and thereby putting more resources and effort into converting announced bids into sucessful completion (Lim and Lee, 2017). Another advantage of target firms located in developed economies is that access to information about these firms is more extensive and better quality than in emerging economies. These information advantages of developed economies are normally available to outsiders such as foreign firms (Young *et al.*, 2008) and likely to reduce the transaction costs and risks of converting announced bids into successful acquisitions (Cui *et al.*, 2006).

To summarize, a cross-border M&A can fail because of a large economic discrepancy between the acquirer's and the target's home economy that involves costs and risks and returns and opportunities. The effects of economic distance on cross-border M&A deal completion depend on the the economic development level of the acquirer's economy relative to that of the target (Lim and Lee, 2017). When the target is in a less deveolped economy than the acquirer, a greater economic difference may lead to costs and risks exceeding returns and opportunities, and thus, the deal is less likely to be completed. However, when the target is in a more developed economy than the acquirer, a greater economic difference may lead to returns and opportunities exceeding costs and risks, and thus, the deal is more likely to be completed. On the basis of these arguments, we propose the following.

H1a. When the host economy is less economically developed than the Chinese economy, economic distance is negatively associated with the completion of cross-border

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M&As.

H1b. When the host economy is more economically developed than the Chinese economy, economic distance is positively associated with the completion of cross-border M&As.

2.2 Cultural distance

Cultural distance is a prominent factor in many studies on cross-border M&As (Chakrabarti *et al*., 2009; Reus and Lamont, 2009; Contractor *et al*., 2014). Foreign firms faced with large cultural distance from host countries may struggle to understand how they should approach, in socially acceptable ways, agents involved in economic transactions (Malhorta *et al*., 2009). Problems in this area can lead to an increase in transaction costs and negotiation risks (Eden and Miller, 2004). Cultural distance increases the difficulties of comprehending the roles, hierarchical position and attitudes of key agents involved with foreign bids. This can cause problems in arriving at appropriate and socially acceptable procedures for engaging with key agents and in communicating with such agents. These cultural distance problems are likely to lead to difficulties obtaining and assessing information on the technologies and business models used by target firms, and about the market and institutional environments in which they operate (Malhorta *et al*., 2009). Informational problems of this kind result in difficulties for foreign firms when acquiring and evaluating information to assess the major characteristics of target firms (Cui *et al*., 2006; Reus and Lamont, 2009). This leads to difficulties in understanding and assessing the value of acquired assets and know-how and the compatibility of these purchased benefits with the other activities of the acquiring firm (Anand *et al*., 2005; Deng, 2009). Such outcomes from problematic negotiations can lead to problems of valuation of target firms that increase the prospects of bid failure (Coff, 2002). The problems associated with cultural distance lead to difficulties in understanding how social interactions in economic transactions operate. These difficulties add to the transaction costs and risks of negotiating and communicating effectively with agents in attempts to induce acceptance of announced bids. This reasoning leads to the second hypothesis.

H2. Cultural distance is negatively associated with the completion of cross-border M&As by Chinese firms.

2.3 Institutional distance

Institutional distance tends to increase transaction costs and risks associated with economic transactions (Peng, 2003). Institutional distance often results in increased costs and risks due to a lack of knowledge of local institutions and business practices (Contractor *et al*., 2014). When institutional distance is large, it is more difficult for multinational enterprises to establish legitimacy in the host country and to transfer home base routines and practices to host locations (Kostova, 1999; Kostova and Zaheer, S, 1999). High institutional differences enhance the likelihood of cross-border acquisition abandonment (Dikova *et al*., 2010). The problems emerging from institutional distance appear to increase the transaction costs and risks for bidding firms due to difficulties understanding and complying with the rules of the game that govern M&A bids.

The study by Dikova *et al*. (2010) separates informal institutions from formal institutions and uses cultural factors as a proxy for informal institutions. The effect of informal institutions in this study however does not directly relate to the rules of the game about decisions to proceed or not. The interaction between formal and informal rules determines the rules of the game (North, 1990). Cultural dimensions, however, do not directly relate to informal rules (Helmke and Levitsky, 2004). If institutions governing announced bids are aware of the interaction between written rules and unwritten rules (Helmke and Levitsky, 2004), a better understanding of the rules of the game emerges. Written rules are the formal legal requirements governing M&A bids. Unwritten rules are widely accepted social conventions that determine how agents understand and process information (in the context of the formal legal requirements) to back up announced bids. Institutional distance from this perspective relates to the differences in the rules of the game that arise from the interaction between written and unwritten rules when deciding on M&A bids. In these circumstances, bidders from economies with large institutional distance are likely to be faced with rules of the game that they do not properly understand (Orr and Scott, 2008). This will increase the transaction costs and risks they face when seeking to convert bids into completion. This concept of institutional distance provides the basis for the third hypothesis.

H3. Institutional distance is negatively associated with the completion of cross-border M&As by Chinese firms.

2.4 Technology- and knowledge-intensive industries

Many firms based in emerging economies are eager to acquire strategic resources using internationalization strategies to reduce constraints in emerging domestic markets and to gain

competitive advantages in international markets (Aybar and Aysun, 2009; Malhorta *et al.*, 2009; Sun *et al.*, 2012). Acquiring firms in technology- and knowledge-intensive industries helps transfer technologies and knowledge, which if they can be absorbed effectively helps to develop competencies that enhance the competitive advantages of acquirers (Anand *et al.*, 2005; Luo and Tung, 2007). Informational asymmetries between acquiring and target firms can however make it difficult to value assets and know-how of purchased benefits from M&As (Deng, 2009). Firms in technology- and knowledge- intensive industries often have complex business models that normally embrace large and sophisticated networks involving other firms, public and private sector R&D agencies, and regulatory bodies (Patel and Pavitt, 1997). The linkages between regulatory and institutional networks in these types of industries are normally dense and complex. Outsiders such as foreign bidders are therefore likely to face significant information asymmetries when they seek to convert announced bids into successful deal completion. These information asymmetries hamper the prospects of finding suitable terms for bids to be completed (Coff, 1999). Furthermore, EMFs often lack critical knowledge thresholds (Elia and Santangelo, 2017) that hamper their ability to effectively convert bids into completion when they are engaging in strategic asset-seeking acquisitions in technology-intensive industries. These problems can lead to acquirers abandoning a deal because the costs and risks are too high in the presence of large asymmetric information problems. A deal with a target firm in a technology-intensive or knowledge-intensive industry is also more likely to face obstacles from political forces due to concerns with security issues and fears of loss of control over industries considered to be of strategic importance (Zhang *et al.*, 2011). Targeting firms in technology- or knowledge-intensive industries may therefore lead to have high transaction costs and risks for acquirers that may result in failure of many such bids. This line of reasoning leads to the fourth hypothesis.

H4. Chinese cross-border M&A bids involving firms in technology-intensive and knowledge-intensive industries are less likely to be completed than the bids in other industries.

2.5 Moderating effect of distance

Most technology- and knowledge-intensive firms are in developed economies. Therefore, the level of economic development of host locations provides strong signals about where such firms are likely to be located. Firms in technology- and knowledge-intensive industries tend to have complex path-determined business models (Patel and Pavitt, 1997). These complex

business models lead to significant information asymmetries that make financial evaluation of such firms difficult (Aybar and Ficici, 2009). Access to relatively inexpensive high-quality information reduces the transaction costs and risks associated with asymmetric information. Acquirers of firms with complex business models are therefore likely to benefit from access to high-quality and relatively easy to obtain information about the key factors that determine the financial value of these firms (Boeh, 2011). The quality and availability of information about firms with complex business models is better in developed economies than in emerging economies. Most developed economies have experience gathering, processing, disseminating, and analyzing business. Developed economies therefore tend to have better systems than emerging economies that provide extensive and high-quality information about firms. The information advantages in developed economies may therefore mitigate the transaction costs and risks connected to converting bids into successful acquisitions for technology- and knowledge-intensive firms (see arguments for H4). The information advantages and large range of suitable firms available in developed economies therefore provide a wide range of possible target firms and help to lower the transaction costs and risks for acquirers. These arguments lead to hypothesis five.

H5. When the host economy is more developed than the Chinese economy, this economic distance positively moderates the relationship between technology-intensive industries (knowledge-intensive industries) and the completion of cross-border M&As.

In cases of large cultural distance, it is likely that acquirers will have limited understanding of the role, hierarchal positions, and general attitudes of key agents that they need to engage with to negotiate bids. This will add to the difficulties of obtaining the information needed to negotiate with agents, consequently increasing the costs and risks of converting bids into successful acquisitions. There is evidence of problems in acquiring adequate information about technology issues for international joint-ventures and alliances targets (Cui *et al*., 2006) and these problems are likely to affect whether bids are converted into successful acquisitions. Many acquirers from EEs have limited experience and knowledge about the influences of cultural differences on the roles and hierarchical position of key agents in technology- and knowledge-intensive industries. In these industries, key agents normally deeply embed in market, technological, and institutional networks in their host locations (Cui *et al*., 2006). This leads to broad relationships with a multitude of agents in different settings resulting in a complex interplay between national business cultures in host locations that is

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often difficult for foreign firms to understand (Chakrabarti *et al.*, 2009). This increases the transaction costs and risks of successfully completing a bid. Cultural distance is therefore likely to negatively affect the completion of cross-border M&As for technology- and knowledge-intensive industries. The sixth hypothesis reflects this line of reasoning.

H6. Cultural distance negatively moderates the relationship between technology-intensive industries (knowledge-intensive industries) and the completion of cross-border M&As by Chinese firms.

Institutional differences increase the transaction costs and risk of completing bids due to unfamiliarity about regulatory systems and a lack of understanding about how informal institutions affect the rules of the game in decisions about bids (Dikova *et al.*, 2010; Hutzschenreuter *et al.*, 2014). These problems may increase in cases where the target firms are in technology- or knowledge-intensive industries. Problems understanding the business environments in which these industries operate arise because they often have complex regulatory systems. In these complex business environments, it is also possible that agents operate using different informal institutional rules. Concerns about such things as loss of control over major strategic assets and competencies in technology- and knowledge-intensive industries may also exert influences on informal institutions that affect decision-making processes in M&A bids (Helmke and Levitsky, 2004, 2006). Foreign acquisitions in these industries can also be sensitive to government concerns in host countries about loss of valuable assets and knowledge to foreign companies (Zhang *et al.*, 2011). Institutional distance is therefore likely to increase the transaction costs and risks associated with mounting bids for firms located in technology- and knowledge-intensive industries and thereby increase the likelihood of failure to complete announced bids. This reasoning leads to the final hypothesis.

H7. Institutional distance negatively moderates the relationship between technology-intensive industries (knowledge-intensive industries) and the completion of cross-border M&As by Chinese firms.

3. Methodology

3.1 Sample and data

The data comes from the Zephyr database, which has information on M&A, private equity, and venture capital deals gathered from a variety of reputable sources. The Zephyr database

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is widely used in empirical studies relating to M&As (Dikova, 2009; Dikova and Sahib, 2013; Erel *et al.*, 2015).

From 2000 to 2015, the database records 1334 cross-border M&A bids by Chinese firms involving 88 economies. Of these economies, ten are listed as international tax havens by the EU and nine by the OECD. Acquisitions in tax havens often have little relationship to strategic objectives other than to avoid tax, so are excluded from the sample. Hong Kong (listed as a tax haven by the EU, but not by the OECD) is included because it is a major destination for Chinese outward FDI, and it is unlikely that such investments are primarily for tax avoidance. To check if this omission of important sources of bids from China significantly affects the results, the regressions are run without Hong Kong and the findings are very similar to the results recorded in this paper. After removing observations with missing variables, a sample of 768 remains.

3.2 Measurements

3.2.1 Dependent variable. The study follows the literature (Dikova *et al.*, 2010; Zhang *et al.*, 2011; Lim and Lee, 2016, 2017; Doan *et al.*, 2018; He and Zhang, 2018) by using a dummy variable that takes the value of 1 if the announcements of cross-border M&As are completed and 0 otherwise. To construct this measure, we follows the approach used by Dikova *et al.* (2010) – a cross-border M&A transaction is considered as completed by observing an announcement with a completion date or status as completed (for which no completion date is available) in the Zephyr database. Following the approach of Muehlfeld *et al.* (2012), deals announced in 2016 are excluded in our samples (2000–2015), and deals that were announced in earlier years and completed in 2016 are included.

3.2.2 Independent variables. The economic distance variable follows the most common approach (Tsang and Yip, 2007; Malhotra *et al.*, 2009; Li *et al.*, 2015). This involves using the absolute natural logarithmic difference in the real per capita gross domestic product (GDP) between China and a host economy in the year of the announcement of cross-border M&A. Measuring economic distance this way means there is no control on whether the host economy is "emerging" or "advanced". This method also only captures the "size" of distance and not the direction. In order to solve the problem of direction, the measurement of economic distance follows Tsang and Yip (2007) by using two variables to capture economic distance. One is defined as higher economic distance when the target is from an economy that is more developed economy than the Chinese economy, and the other is defined as lower

economic distance when the target is from a less developed economy than the Chinese economy. Economic distance between China and less developed economies is $\ln(y_c)$ minus $\ln(y)$ and that between China and more developed economies as $\ln(y)$ minus $\ln(y_c)$, where y_c and y represent the real GDPs per capita in U.S. dollars of China and the host economy, respectively in the models (see footnote of Table 2 for details). This allows consideration of host locations that are more or less developed than China. As a robustness test of this measure, tests are run using the absolute difference of the natural logarithm of the real GDP per capita between the home and host location. The results are very similar.

The cultural distance measure follows Contractor *et al.* (2014) and uses a Kogut and Singh (1988) approach using the four most common cultural dimensions – power distance, individualism/collectivism, masculinity/femininity, and uncertainty avoidance. According to Dikova *et al.* (2010), different cultural dimensions have different affects. They maintain that a good theoretical case is necessary to decide which cultural dimensions are most likely to affect deal completion. As a check on the validity of the dimensions used in this study, in addition to the composite measure of four cultural dimensions, the regression models are run for the individual cultural dimensions used by Dikova *et al.* (2010). These regressions using individual cultural dimensions do not result in any substantial changes in the results. As an alternative to cultural distance, a measure of geographic distance is used. This involved using the natural logarithm of the distance in kilometers between the capital cities of the acquiring country and the target country following the approach used by Malhotra *et al.* (2009). Geographic distance is not significant in all models, and other results were very similar. This indicates that cultural distance (which is significant in most models) is a measure of distance that better predicts cross-border acquisition completion.

The formula for the cultural distance measure used in this study follows the approach of Morosini *et al.* (1998).

$$CD_j = \sum_{i=1}^{4} \left[\frac{(I_{ij} - I_{i,China})^2}{V_i} \right] / 4$$

CD = cultural distance

I_{ij} = index value for dimension of national culture i of host economy j

V_i = variance of the index of the dimension i

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The institutional distance measure involves selecting measures considered good proxies for institutions that are strongly involved in making and implementing decisions on cross-border M&As. As argued in the section above, the interaction between formal and informal institutions determines the rules of the game. The measure for institutional distance therefore needs to be a good proxy for distance between home and host economies in the rules of the game relating to M&A bids. The index of economic freedom developed by the Heritage Foundation is used to evaluate institutions in previous studies on cross-border M&As (Gubbi *et al.*, 2010; Zhou *et al.*, 2016). This index measures the ease of individuals and firms to pursue their business activities in a country based on 10 quantitative and qualitative factors, grouped into four broad categories (Zhou *et al.*, 2016). The components selected to calculate institutional distance embrace formal institutions (regulatory systems connected to economic transactions) and informal institutions (proxies for unwritten rules that reflect how agents operate the regulatory systems). From these categories, five components emerge as good proxies for the rules of the game – fiscal freedom[1], property rights, business freedom, investment freedom and financial freedom. The selection of the components emerges as a means to find good proxies for the rules of the game that govern M&A bids. Thus, the selection of the property rights component is from the rule of law category whereas freedom from corruption, the other component in the rule of law category, is not included. This is because the freedom from corruption component in the rule of law category refers to government corruption in general. The property rights component, however, embraces regulatory systems and unwritten rules, including corruption associated with institutions that directly govern economic transactions. This element of the property rights component makes it in theory a good proxy for the rules of the game that govern economic transactions such as M&A bids. Following Zhou *et al.* (2016), we measure the institutional distance between two economies as the absolute difference of the average scores that are calculated by averaging the five selected factors – fiscal freedom, property rights, business freedom, investment freedom and financial freedom – in the prior two years. As a robustness test of this measure, tests are run using the absolute difference of the mean of the six indicators from WGI index between the home and host location, an approach used by He and Zhang (2018). The results are very similar, indicating that the measure is robust.

The OECD classification system provided the basis for identifying the technological and knowledge intensity of the industry of targeted firms (OECD, 2001). The classification of

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[1]Fiscal freedom was renamed tax burden by the 2018 Index of Economic Freedom.

industries is based on NACE codes list, measured at the four-digit level, to identify the technology- and knowledge-intensive industries. A technology-intensive industry is assigned a dummy variable indicating whether an acquisition target is in the aircraft and spacecraft, pharmaceuticals, office, accounting and computing machinery, radio, TV and communications equipment, and medical, precision and optical instruments industries (coded as 1) or not (coded as 0). Knowledge-intensive industry is assigned a dummy variable indicating whether an acquisition target was in the post and telecommunications, finance and insurance, and business activities (not including real estate) industries (coded as 1) or not (coded as 0).

3.2.3 Moderating variables. In line with Hypothesis 5, 6, and 7, we include the three distances (economic, cultural, and institutional) and technology- and knowledge-intensive industry in the models to assess the possible moderating effects of the three distances.

3.2.4 Control variables. To account for firm-level factors that are likely to affect M&A bids, the study uses similar control variables in previous studies of cross-border M&A acquisition completion (Dikova *et al*., 2010; Zhang *et al*., 2012; Lim and Lee, 2016, 2017; Zhou *et al*., 2016). A dummy indicating whether the target and acquirer are in the same industry reflects bids in the same industry. Private acquirers and private targets are coded 1 if the acquirer is unlisted or delisted and 0 otherwise. A coding of 1 indicates a state-owned enterprise if the acquirer is some type of public authority or state agency. Acquired stake is the percentage of ownership of a target sought by an acquirer. A code of 1 indicates the use of an international financial advisor. Method of payment is coded 1 for cash only bids and 0 otherwise. We use two variables to control for the impact of learning experience. To control for direct experience impacts, M&A success is measured by whether an acquirer has been successful in M&A abroad before the focal transaction (Zhang *et al*., 2012; Lim and Lee, 2016, 2017). Based on the springboard perspective, host market-specific experience is critical for EMFs (Luo and Tung, 2007). To control for indirect experience impacts, local experience is measured by whether an acquirer has had any subsidiary in the same host country prior to the focal deal. Data on the value (size) of transactions is available and the literature suggests this is an important factor for completion (Bertrand *et al*., 2016). When data on this factor is included as a control together with acquirer stake, a large number of missing variables undermines the regression results. Running these controls separately provides improved accuracy of fit. Acquirer stake emerges as significant when run alone, whereas value of

transactions is not significant. The results reported in this study therefore use acquirer stake as a control variable.

4. Data analysis

The data analysis approach uses a binary logistic regression model. As most firms in our sample are involved in only one or two cross-border acquisitions (70% and 9%, respectively) over the observation period (16 years), we utilize pooled estimations instead of panel estimations following the mainstream approach of the literature on acquisition completion (Muehlfeld *et al.*, 2007; Zhang *et al.*, 2011; Lim and Lee, 2016, 2017; Doan *et al.*, 2018; He and Zhang, 2018). The results of a likelihood-ratio test also reveal that pooled estimations are more suitable for our analysis than panel estimations. In order to control for the within-firm correlation, we apply clustered standard errors following Doan *et al.* (2018).

Table 1 presents the descriptive statistics and the correlation matrix. We use the same approach in the correlation matrix for economic distance as used by Tsang and Yip (2007) (see footnote of Table 1 for details). The correlation coefficients do not cause serious multicollinearity because their absolute values are below the commonly used cut-off threshold of 0.7. The variance inflation factor (VIF) values range from 1.07 to 1.54, indicating that multicollinearity is not a concern given the standard threshold level of 10 (Belsley *et al.*, 1980).

Table 2 displays the details of logistic regression model results. Model 1 is the benchmark specification, including a constant and control variables. In models 2 to 4, we add each distance dimension step by step. Models 5 to 7 present the results with the interaction terms. For each model, the χ^2 statistic is significant at a 1% level.

For the sake of brevity, we restrict our discussion of the results to the control variables that produce consistently significant estimates for all of the models. We observe that both private targets and private acquirers positively affect deal completion, which indicates privately-owned acquirer and target firms face fewer constraints than listed acquirer and target firms. We also find that the percentage of stake sought decreases the likelihood of completion, which is consistent with extant studies (Lim and Lee, 2016, 2017; Zhou *et al.*, 2016). Cash transactions are less likely to be completed, which is inconsistent with the finding of Dikova *et al.* (2010) but in line with the study of Zhou *et al.* (2016). This can be explained by the fact that the sample of Dikova *et al.* (2010) is based on cross-border M&As

between developed economies but the sample of Zhou *et al.* (2016) is based on cross-border M&As between emerging economies and developed economies. Such transactions will increase the financial stress of Chinese acquirers, which may not affect the decisions of acquirers from advanced economies. The prior operation experience of an acquirer in the same host economy can help increase the probability of completing cross-border M&As, proving that the host market-specific experience is critical for international process of Chinese firms.

The lower economic distance variable has a negative and significant effect on the likelihood of completion in models 4, 7, and 8, which provide some support for H1a. The higher economic distance variable is highly positive and significant in all models, thus providing strong support for H1b. And so, when the target is from a less developed economy than the economy of the Chinese acquirer, the larger economic distance may decrease the likelihood of the cross-border M&A completion after a public announcement. On the contrary, when the target is from a more developed economy than the economy of the Chinese acquirer, the larger economic distance may increase the likelihood of the cross-border M&A completion after a public announcement. In other words, the effects of economic distance on an international acquisition completion differently depends on the relative positions of the acquirer and target, which is consistent with the findings in prior research (Lim and Lee, 2017).

As shown in models 4 to 8, the coefficient for cultural distance is negative and significant, which largely supports H2. These results suggest that culture distance decreases the chance for acquirers to conclude an announced cross-border M&A. Institutional distance also has a significant and negative effect on the likelihood of acquisition completion in all models, which fully supports H3. In other words, the more different the institutional environments of the home and host economy are, the less likely it is that the announced cross-border M&A will be completed. Therefore, we find good support for the use of the distance framework in our analysis when all three distance factors have a statistically significant impact on the likelihood of cross-border M&A completion.

There is partial support for H4, but only for target firms in technology-intensive industries. In order to test H5 to H7, we include the respective interactive terms in models 5 to 8. The coefficients of the interaction effects between technology-intensive industry and the

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three distance factors are positive and significant, which provides partial support for H5 and no support for H6 to H7.

5. Discussion and conclusions

5.1 Conclusions

In this study, we attempt a more comprehensive examination of the role of distance on the likelihood of cross-border M&A completion than what have been done in prior studies. First, we slightly modified the CAGE distance framework into the economic, cultural, and institutional distance framework which has an important and significant impact on completion of cross-border M&As by Chinese firms. Economic distance exerts a different influence on the cross-border acquisition completion than cultural and institutional distances. Thus, we find strong support for the use of a more comprehensive measure of distance to study the international process of firms.

Second, our findings reveal that a cross-border M&A deal by an acquirer from China involving a target in a more developed economy is more likely to be completed, whereas an international bid by an acquirer from China involving a target in a less developed economy is less likely to be completed. Such results are consistent with our hypothesis that for particular Chinese acquirers and EMFs in general, the economic advantages of a host economy over a home economy may facilitate the completion of cross-border M&As: a less advantaged host economy would then be less likely to complete M&As.

Third, cultural and institutional distances have a negative impact on the completion of cross-border M&As. This suggests that similar cultural and institutional environments may increase the possibility for Chinese acquirers to conclude an announced cross-border M&A. The findings on the effects of cultural and institutional distances confirm the results found in other studies on the completion of cross-border M&As (Dikova *et al*., 2010; Zhou *et al*., 2016; He and Zhang, 2018).

Fourth, we find some evidence of a significant negative effect on cross-border acquisition for technology-intensive industries, but not for knowledge-intensive industries. One possible reason for this unexpected result may be that fewer limits face the acquisition of targets in knowledge-intensive industries than technology-intensity industries. Knowledge-intensive industries based on human capital (Coff, 1999) are more difficult to transfer from one economy to another economy by cross-border M&As, which may avoid or mitigate the

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resistance from host economies. For example in 2016, the Committee on Foreign Investment in the United States blocked a $3.8 billion sale of the data storage group Western Digital to the Chinese technology company Unisplendour when Chinese aviation and shipping conglomerate HNA Group successfully completed the acquisition of American electronics distributor Ingram Micro for about $6 billion in the same year.

Fifth, the coefficients of the interaction effects between technology-intensive industries and the three distance factors are significantly positive. The availability of good quality information combined with access to scarce and valuable resources and know-how in developed host economies are also likely to explain the significant moderating effect of higher economic distance on technology-intensive target firms.

The positive and significant impacts of cultural and institutional distances as moderators of cross-border M&A completion for target firms in technology-intensive industries are somewhat surprising. This may caused by the trade-off between the feasibility elements and the acquirer's motivation. Many EMFs pursue internationalization using cross-border M&As due to a desire to quickly learn how to develop competitive advantages by securing scarce and valuable assets, technologies, and managerial know-how from acquired firms (Shimizu *et al*., 2004; Mathews, 2006). These strategic asset-seeking acquisitions may lead to motives to overcome obstacles caused by cultural and institutional distances. Strategically motivated firms are more likely to complete an international acquisition deal because decision makers tend to take risks to achieve the uncertain but expected returns that are in the form of upside potential (Lim and Lee, 2017). The targets in technology-intensive industries are so valuable that acquirers from EEs tend to take more risks and incur higher costs to complete the deal. For example, the average number of days to complete the deal in technology-intensive industry is about 54 days which is more than the mean value of the duration of acquisition completion (about 44 days) in our sample. The interaction terms can explain the moderating effect of technology-intensive industries on the relationship between the distance factors and the completion (rather than the moderating effect of distance factors). This extends Yakob *et al*.'s (2018) discussions on how cross-border acquisition decisions by Chinese acquirers are influenced by the opportunity to create strategic assets in technology-intensive industries. In addition, the effect of cultural and institutional distance factors are probably overshadowed by the economic distance. 95% of the cases involving technology-intensive target firms in the samples are in the developed economies. More sophisticated research design and more comprehensive observations may address these empirical issues in future studies.

5.2 Theoretical contributions

This study extends the literature on internationalization of EMFs (at least those based in China) by considering how distances affect cross-border M&A completion. The existing studies on internationalization of EMFs by cross-border M&As focus on motivations, country and firm selections, or post-M&A integration performance (Zhou *et al.*, 2016; He and Zhang, 2018). Our study contributes to this research by investigating an important issue arising in the middle stage of the cross-border M&A process – failure after the public announcement of a bid. In particular, the results highlight the role of distance as an aid and obstacle to converting bids into successful acquisitions.

This study develops the theory on how distance affects the conversion of announced bids into successful acquisitions. The extant studies on cross-border M&A completion only focus on one dimension of distance. Other cross-border acquisition studies however (e.g. Malhotra *et al.*, 2009; Reus and Lamont, 2009; Gubbi *et al.*, 2010; Nicholson and Salaber, 2013; Hutzschenreuter *et al.*, 2014; Li *et al.*, 2015) show that a variety of distances (principally economic, cultural, and institutional) affect the motivations and post-acquisition performance of cross-border M&As. This study indicates that the consideration of economic, cultural and institutional distance does shed light on factors that aid and hinder the conversion of bids into successful acquisitions. This helps to better understand how distance affects the ability of EMF to successfully use cross-border M&As to allow them to pursue their internationalization strategies.

This study advances the literature on the effects of institutional distance on cross-border M&A completion by clearly separating the influences of institutional distance and cultural distance. The main literature on cross-border M&A completion that focuses on institutions either does not explicitly consider cultural distance (Zhang *et al.*, 2011; Zhou *et al.*, 2016; He and Zhang, 2018) or conflates cultural and institutional factors by using cultural dimensions to represent the role of informal institutions (Dikova, *et al.*, 2010). The use of cultural dimensions as a proxy for informal institutions in entry mode studies has a long history in IB research (Brouthers, 2002) and it is therefore not surprising that this practice is widely used in cross-border M&A studies. There are problems, however, using cultural dimensions to capture the role of informal institutions in economic transactions such as cross-border M&As. The problems arise because cultural dimensions do not capture the rules of the game that govern decisions on whether and under which conditions economic transactions take place.

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The decision to undertake economic transactions is in effect governed by institutional systems that normally involve interaction between written and unwritten rules used to decide if and how transactions take place (Helmke and Levitsky, 2006; Hayo and Voigt, 2007). Cultural concepts focus on the perceptions and assumptions that reflect commonly held beliefs and values that create the social underpinnings that are present when economic transactions are negotiated and that influence how the explicit and implicitly implications of business contracts are fulfilled (Hofstede *et al.*, 2010). On the other hand, the concept of rules of the game (in the context of M&A bids) focuses on the means used to decide if bid is accepted or rejected and that specify the rights and obligations necessary for such transactions to be made (North, 1990). We address this issue by clearly separating institutional distance from cultural distance.

6. Limitations and future research

There are several limitations to our study. The use of a large-scale quantitative study means that it is not possible to study issues such as how bidders in emerging economies value target firms or how they go about negotiations in countries with large economic, cultural and institutional distance. Further research is necessary to discover how distance factors (i.e. higher economic and institutional distance) affect how EMFs go about finding, evaluating, and negotiating bids and how target technology- and knowledge-intensive industries affect how bidding firms prepare for a bid. The firm- and deal-level factors also need further research (e.g. Muehlfeld *et al.*, 2007, 2012; He and Zhang, 2018). The focus on cross-border bids from a single emerging economy means that the findings are only applicable to Chinese firms. To extend the reach of the results, further research on other emerging economies is necessary to see how the three distances affect success or failure of bids. The sample also lacks data on the nature of the experience of managers involved in bids and the large data on the size of bidding and targeted firms. Addressing these issues requires the construction of larger and more comprehensive databases and qualitative and other research on the details of the international experience of managers.

Table 1

Descriptive Statistics and Correlation Matrix

No.	Variables	Obs	Mean	Std. Dev.	Min	Max	1	2	3	4	5
1	Completion	768	0.8490	0.3583	0	1	1.000				
2	Economic distance	768	2.0313	0.7242	0.0187	3.6378	0.172***	1.000			
3	Cultural distance	768	2.0587	1.4565	0.1440	5.0668	0.069*	0.170***	1.000		
4	Institutional distance	768	38.0781	12.0539	0.56	53.88	-0.047	0.327***	-0.344***	1.000	
5	Technology-intensive industry	768	0.1823	0.3863	0	1	0.011	0.075**	0.211***	-0.069*	1.000
6	Knowledge-intensive industry	768	0.3568	0.4794	0	1	-0.027	0.041	-0.215***	0.194***	-0.197***
7	Same industry	768	0.4948	0.5003	0	1	0.061*	-0.032	0.024	-0.069*	0.018
8	Private acquirer	768	0.6901	0.4628	0	1	0.103***	0.105***	-0.007	0.009	-0.092**
9	Private target	768	0.9466	0.2249	0	1	0.062*	-0.041	0.026	-0.044	-0.023
10	SOE acquirer	768	0.1745	0.3798	0	1	0.050	-0.034	-0.020	-0.073**	-0.084**
11	Acquired stake	768	0.8488	0.2456	0.0005	1	-0.058	-0.037	0.215***	-0.098***	0.089**
12	Acquirer advisor	768	0.1445	0.3519	0	1	-0.002	-0.026	0.156***	-0.014	0.046
13	Method of payment	768	0.2839	0.4512	0	1	-0.138***	0.025	-0.179***	0.065*	-0.028
14	M&A success experience	768	0.1680	0.3741	0	1	0.034	-0.053	0.074**	-0.064*	-0.023
15	Local experience	768	0.2370	0.4255	0	1	0.081**	0.028	0.166***	0.036	0.054

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No.	Variables	6	7	8	9	10	11	12	13	14	15
6	Knowledge-intensive industry	1.000									
7	Same industry	0.116***	1.000								
8	Private acquirer	0.011	-0.046	1.000							
9	Private target	-0.041	0.038	-0.059	1.000						
10	SOE acquirer	-0.013	0.128***	-0.144***	-0.074**	1.000					
11	Acquired stake	-0.101***	-0.098***	0.056	0.315***	-0.123***	1.000				
12	Acquirer advisor	-0.020	0.089**	-0.085**	-0.067*	0.279***	0.002	1.000			
13	Method of payment	0.044	-0.057	-0.071**	-0.107***	-0.023	-0.063*	0.094***	1.000		
14	M&A success experience	0.043	-0.013	-0.121***	-0.064*	0.225***	-0.083**	0.241***	-0.051	1.000	
15	Local experience	0.026	0.049	-0.315***	0.078**	0.163***	-0.023	0.180***	-0.025	0.126***	1.000

Note: * $p < 0.1$. ** $p < 0.05$. *** $p < 0.01$. Economic distance is defined as the absolute difference between the natural logarithm of China's real GDP per capita and that of the host economy in the year of the announcement of cross-border M&As, following the approach of Tsang and Yip (2007).

Table 2
Logit Estimates of Completion of Chinese Cross-border Mergers and Acquisitions, 2000–2015.

Model	1	2	3	4	5	6	7	8
Higher economic distance		0.6169*** (0.1278)	0.6100*** (0.1302)	1.1864*** (0.2052)	1.0072*** (0.2151)	1.1643*** (0.2057)	1.1857*** (0.2056)	1.2268*** (0.2111)
Lower economic distance		-0.0361 (0.3911)	-0.0297 (0.3911)	-0.7399* (0.4258)	-0.7187 (0.4380)	-0.6202 (0.4953)	-0.7408* (0.4194)	-0.7580* (0.4297)
Culture distance			0.0217 (0.0888)	-0.2241*** (0.0848)	-0.2394*** (0.0844)	-0.2353*** (0.0844)	-0.2872** (0.1125)	-0.2507*** (0.0882)
Institutional distance				-0.0628*** (0.0131)	-0.0619*** (0.0132)	-0.0635*** (0.0132)	-0.0637*** (0.0132)	-0.0732*** (0.0168)
Higher economic distance × Technology-intensive industry					1.5480** (0.6621)			
Higher economic distance × Knowledge-intensive industry					0.0254 (0.3203)			
Lower economic distance × Technology-intensive industry						0.0000 (0.0000)		
Lower economic distance ×Knowledge-intensive industry						0.3665 (0.9100)		
Cultural distance× Technology-intensive industry							0.3598* (0.1981)	
Cultural distance× Knowledge-intensive industry							0.0330 (0.1521)	
Institutional distance× Technology-intensive industry								0.0727** (0.0334)
Institutional distance×								0.0022

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Knowledge-intensive industry								(0.0186)
Technology-intensive industry		0.0617 (0.2920)	0.0512 (0.2943)	-0.0189 (0.2996)	-2.7980** (1.2671)	0.1230 (0.3202)	-0.8703 (0.5447)	-2.6934** (1.1919)
Knowledge-intensive industry		-0.3136 (0.2345)	-0.3033 (0.2331)	-0.2593 (0.2384)	-0.2978 (0.6220)	-0.2841 (0.2435)	-0.3178 (0.3741)	-0.3475 (0.7793)
Same industry	0.2353 (0.2277)	0.3289 (0.2372)	0.3266 (0.2379)	0.2681 (0.2372)	0.2983 (0.2414)	0.2805 (0.2400)	0.2608 (0.2397)	0.3027 (0.2425)
Private acquirer	0.8758*** (0.2355)	0.7963*** (0.2434)	0.7972*** (0.2439)	0.7649*** (0.2452)	0.7282*** (0.2526)	0.7533*** (0.2495)	0.7517*** (0.2463)	0.7261*** (0.2476)
Private target	0.8995** (0.4285)	0.9950** (0.4322)	1.0097** (0.4365)	0.9449** (0.4299)	1.0453** (0.4366)	0.9743** (0.4273)	0.9840** (0.4321)	0.9447** (0.4277)
SOE acquirer	0.3689 (0.3484)	0.4829 (0.3762)	0.4905 (0.3780)	0.2813 (0.3676)	0.1774 (0.3619)	0.2533 (0.3651)	0.2599 (0.3653)	0.2206 (0.3665)
Acquired stake	-1.0521** (0.5084)	-1.0840** (0.5307)	-1.1076** (0.5493)	-1.0805** (0.5414)	-1.1301** (0.5569)	-1.1202** (0.5473)	-1.1267** (0.5560)	-1.0678** (0.5425)
Acquirer advisor	-0.1136 (0.3185)	-0.1903 (0.3273)	-0.2042 (0.3341)	-0.0935 (0.3420)	-0.0570 (0.3461)	-0.0974 (0.3407)	-0.0620 (0.3481)	-0.1309 (0.3396)
Method of payment	-0.6595*** (0.2201)	-0.6530*** (0.2225)	-0.6407*** (0.2337)	-0.6604*** (0.2401)	-0.6476*** (0.2422)	-0.6421*** (0.2430)	-0.6733*** (0.2397)	-0.6421*** (0.2406)
M&A success experience	0.2443 (0.2951)	0.3674 (0.3193)	0.3630 (0.3173)	0.3146 (0.3192)	0.3524 (0.3304)	0.2960 (0.3184)	0.3249 (0.3178)	0.3271 (0.3233)
Local experience	0.8005*** (0.2944)	0.6825** (0.2980)	0.6731** (0.2992)	0.7783** (0.3087)	0.7726** (0.3119)	0.7649** (0.3084)	0.7631** (0.3103)	0.7739** (0.3076)
Constant	1.1033** (0.5141)	0.0021 (0.5727)	-0.0236 (0.5768)	1.9688*** (0.6803)	2.2252*** (0.7247)	2.0640*** (0.6920)	2.1434*** (0.7074)	2.3712*** (0.7710)
Log likelihood	-305.109	-292.87205	-292.8393	-281.8522	-277.00747	-278.8511	-280.57877	-279.13542
Prob> χ^2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Wald chi-square	37.44	56.29	56.25	67.51	66.72	63.98	69.24	71.55
Observations	768	768	768	768	768	768	768	768

Notes: * p < 0.1. ** p< 0.05. *** p< 0.01. In model 1 2 3 4 6 7 and 8, standard errors in parentheses are adjusted for 630 clusters in firm. In model 5, standard errors in parentheses are adjusted for 627 clusters in firm. The economic distance variable is partitioned into lower economic distance= $\ln(y_c)$ - $\ln(y)$ if $y_c \geq y$ and 0 if $y_c < y$; and higher economic distance = $\ln(y)$ -$\ln(y_c)$ if $y \geq y_c$ and 0 if $y < y_c$. Where (y_c) = real GDP per capita in China and (y) = real GDP per capita in

target country. Higher economic distance implies a host location that is more economically developed than China and lower economic distance indicates a host location that it less economically developed than China.

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