

## Internationalization of emerging economies: Empirical investigation of cross-border mergers & acquisitions and greenfield investment by Chinese firms



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### ABSTRACT

This study incorporates the eclectic paradigm and institutional theory to examine the key determinants of Chinese firms' cross-border mergers and acquisitions (M&As) and greenfield (GF) investment in advanced economies (AEs) and developing economies (DEs) during the period 2003–2016. It uses a negative binomial regression model. In terms of M&As, our findings are consistent with the growing theoretical literature on emerging market multinational enterprises (EM MNEs). However, Chinese firms' GF investments in AEs and DEs show results that are inconsistent with predictions, which means that research on GF investment requires more scrutiny and in-depth analysis. Although both economic and institutional factors affect Chinese firms' location strategies, institutions tend to play a more dynamic role in shaping the location decisions for Chinese GF investments, implying that institutional context has a greater moderating effect on the link between investment motives and GF activity. In a nutshell, one should be cautious in generalizing Chinese cross-border M&A deals to GF investments or other entry modes.

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### Introduction

Emerging market multinational enterprises' (EM MNEs') internationalization strategies have turned into a key topic in the international business (IB) arena (Alon, Elia & Li, 2020; Buckley, Yu, Liu, Munjal & Tao, 2016; Dikova & Brouthers, 2016). This is due to the fact that traditional internationalization frameworks might not always apply to EM MNEs (Fang & Chimenson, 2017). A number of researchers hold the view that MNEs from countries such as China do actually "deviate from the predictions of existing theories" (Alon, Child, Li & McIntyre, 2011; Cui & Jiang, 2009). As EM MNEs continue stable and growing developments in cross-border mergers and acquisitions (M&As) and greenfield (GF) investments, specifically, knowledge of the deterministic and strategic motivations for their investment requires more inquiry and debate. In the past few years, a growing body of research have looked into the locational drivers of outward

foreign direct investment (OFDI) by EM MNEs (Deng & Yang, 2015; Ramasamy, Yeung & Laforet, 2012). However, there is a gap that requires a comparative analysis of this critical issue.

The existing studies on OFDI, specifically on cross-border M&As and GF investments by EM MNEs, are not only inadequate but also contain some key limitations. Although comparative studies are thought to be effective in testing or generalizing Western theories and establishing new theories from EMs, they have rarely been applied in investigating cross-border M&As and GF investment by EM MNEs under various scenarios (Deng, 2013; Dikova, Panibratov & Veselova, 2019). By differentiating M&A and GF deals initiated by Chinese MNEs in various host economies, this study may advance mainstream models (i.e., the ownership, location, and internalization (OLI) theory) (Child & Rodrigues, 2005; Xu & Meyer, 2013). Moreover, the samples are primarily based on OFDI projects. Consequently, it is debatable whether one type of OFDI, such as Chinese M&As, can be generalized to others, such as GF investments.

However, some critical queries have not been properly addressed in studies on EM MNEs' motivations for OFDI (both M&As and GF investments), more specifically Chinese MNEs. Of course, it remains

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debatable whether all AEs and DEs similarly absorb OFDI. In AEs, the determinants of OFDI from emerging economies (EEs) are understood to differ from those in EEs (Hoskisson, Wright, Filatotchev, & Peng, 2013; Peng, 2017). Moreover, although institutional theory has turned out to be the leading theory in exploring OFDI by EM MNEs (Liu, Wang & Zheng, 2010), very few studies have explicitly examined the chemistry of the influences on M&As and GF investments in target locations (Dikova & Sahib, 2013). While research on Chinese M&As is rapidly expanding, the applicability of GF investment is particularly lacking in the Chinese OFDI literature (Alon et al., 2020). Recognizing these inadequacies, recent studies have called for further research into the linkages between economic elements and institutional factors, particularly in the context of EM MNEs (Nielsen, Asmussen & Weatherall, 2017).

This study contributes to the existing literature on entry mode and EM MNEs by examining their motivations based on the most comprehensive country-level dataset; through an empirical examination, the study seeks to answer research questions about how M&A and GF deals are unique to specific locations. Second, we may obtain fresh insights into the OLI framework by analyzing the moderating impacts of governance indicators in different host country settings. We test our hypothesis based on an M&A and GF investment dataset from 2003 to 2016. Following Yang and Deng (2017) this study draws on the theoretical underpinnings of the OLI paradigm and institutional theory to study both macroeconomic and institutional factors of the M&A and GF activities by Chinese firms in both advanced and developing markets. Compared to earlier studies on Chinese enterprises, this study finds some variations in terms of results. For example, Ramasamy et al. (2012) and Kang (2018) reported a negative trend in the strategic asset-seeking motive for Chinese OFDI, although Buckley et al. (2007) and Kang and Jiang (2012) found no significance. However, a study on cross-border M&A and GF investment based on the same sample with the same variable (i.e., patents), but with updated data, found positive support for this argument. In short, key factors that explain underlying country-level motivations for OFDI by Chinese enterprises are not always applicable to different entry modes.

Our findings on M&As are largely consistent with the expanding theoretical literature on EM MNEs. However, studies on GF investments by Chinese firms produce results that are more inconsistent with predictions, implying that research on GF investment requires more attention and in-depth examination. Although both economic and institutional variables influence Chinese firms' location strategies, institutions typically play a more significant role in determining where Chinese cross-border M&As and GF investments occur. However, the institutional context reflected by each host government's effectiveness seems to have a more dynamic moderating effect on the link between location decisions and Chinese GF investments when compared to cross-border M&As. More importantly, Chinese internationalization via cross-border M&A and GF investments in different sets of target markets provides unique avenues to expand current theoretical frameworks and possibly advance new theories on firm internationalization and the general theory of FDI. The current research suggests that the interaction between motives and institutions largely shapes the OFDI location decision (Kang, 2018), and may produce different results for different target markets than what the mainstream strategy literature suggests.

The paper is organized as follows: First, a brief review that will set the theoretical basis for the current research is presented in Section 2, which is followed by Section 3, which leads to the development of the hypothesis of this study. In Section 4, the research methodology and data are explained and described. The results are shown in Section 5, followed by a sensitivity analysis in Section 6. A brief discussion is presented in Section 7, followed by a conclusion in Section 8.

## Theoretical background

### *The eclectic paradigm*

Dunning (1977) introduced the concept of the eclectic paradigm. In the context of MNE activity, this concept is widely used to analyze and explain the economic logic behind international production. The eclectic paradigm (Dunning, 1977, 1988) asserts that firms have "ownership" or competitive advantage over other rivals, which they use in developing production in places that are suitable because of their "location" advantages. Moreover, firms maintain control over networks of assets (tangible as well as intangible) due to "internalization" advantages.

The country-specific owner advantage (O-advantage) has been used to explain the rise of EM MNEs e.g., (Child & Rodrigues, 2005; Erdener & Shapiro, 2005). O-Advantages include an approach to cheap financial capital and the potential and ability to be involved in beneficial relations (Buckley et al., 2007; Dunning, 2001). Location advantages (L-advantages) are used to determine where MNEs invest, and include transport and communication costs, the spatial distribution of markets and inputs, psychic distance, and government interventions (Dunning, 1979, 1988). The relative advantages of certain locations are internalized within markets. Therefore, location choice may be affected by market imperfection or failure. MNEs seek to benefit from a full return on the ownership of distinctive assets: benefits from their own technologies as well as from coordinating the utilization of complementary and mandatory assets (Dunning, 2001). This explains why MNEs choose to exploit their O-advantages overseas instead of selling them to foreign firms via market transactions (Narula, 2006).

The OLI model identifies four key drivers of OFDI activities: market seeking, natural resource seeking, efficiency seeking, and strategic-asset seeking (Dunning, 1993). Some recent studies have highlighted that these motives can be applied to Chinese OFDI activities (Buckley et al., 2007; Deng & Yang, 2015; Ramasamy et al., 2012). However, these motives may vary for different destinations. For example, previous research has shown that Chinese OFDI in AEs is driven by market- and strategic-asset seeking (Yang & Deng, 2017).

The OLI framework, however, provides only a partial explanation for the choice of OFDI location. The applicability of the OLI paradigm has been criticized, in the context of EM MNEs' internationalization, for disregarding the effect of organizational elements from host economies. The benefits derived from O-advantages cannot explain EM MNEs' internationalization, which is often undertaken by EM enterprises to acquire instead of exploiting new strategic assets (Mathews, 2006). The OLI framework, which is built on the notion of ownership exploration and progressive internationalization, is incompatible with these idiosyncrasies (Yeganeh, 2016). Therefore, there is a need to advance the OLI framework to integrate the institutional perspective into the eclectic model (Dunning & Lundan, 2008; Scott, 2001).

### *Institutional theory (IT)*

North (1990) has observed "the humanly-devised constraints that structure human interaction." IT sets the "rules of the game" to govern firm behavior. It has been well-recognized that institutions play a vital role in helping individuals and firms engage in market transactions and assist in the smooth functioning of market mechanisms (Meyer & Peng, 2005). Institutions from a country determine the environment for conducting business there and allow the transaction cost of doing business to be ascertained.

A firm's entry into a new country could be affected by the host country's weak institutions, such as an ineffective bureaucracy or legal system. Unpredictable and inconsistent legal enforcement in underdeveloped institutions can also make it difficult for firms to

conduct business in these countries (Chan, 2008). EEs will be attracted to a host country with a well-enforced, predictable, transparent institutional environment (Luo & Tung, 2007; Yamakawa, Peng & Deeds, 2008). Pressure and laws from a host country's government can significantly impact a firm's efficacy and capability (Beamish, 1993).

From the perspective of the institutional environment, location choice decisions are meant to determine favorable locations with fewer institutional constraints for firms to easily adjust to the regulatory environment of a recipient economy. The quality of these institutional environments, such as sustainable economic policy, fewer ownership restrictions, safety of possessions, and non-corrupt bureaucracy, attracts MNEs and speeds up the acquisition process (Zhang, Zhou & Ebberts, 2011).

## Hypothesis development

### Market seeking

Market-seeking FDI, also called "horizontal FDI," occurs when investors enter a foreign market with the purpose of expanding their sales and production. With an increase in market size, opportunities to exploit economies of scale and the efficient utilization of resources also increase through FDI (Tolentino, 2010). Several studies (Chakrabarti, 2001) identify that market size and FDI flow are positively related. Some recent studies identify an increase in the market-seeking motivation that drives Chinese firms and propose that a rise in this activity is probably directed at larger markets. Existing theory posits that this market-oriented horizontal FDI will be positively related to a rise in demand.

Recently, some studies have identified the growing significance of market-seeking FDI by Chinese firms into developed economies as a consequence of policy liberalization (Buckley et al., 2016; Yang & Deng, 2017). Furthermore, Chinese market-seeking OFDI comprises both offensive (developing new markets) and defensive (import-substituting and quota-hopping) initiatives (Buckley et al., 2007). The primary motivation for offensive market-seeking OFDI is market size. In an empirical study, Duanmu (2012) found that host countries' GDPs (a fundamental measure of market size) were the most important factor in explaining OFDI (including M&As and GF investment) activities from China. Hence, we anticipate that a host country's market size is positively associated with the number of M&As and GF investments by Chinese firms.

**Hypothesis 1.** A host market's size is positively associated with the number of Chinese cross-border M&As and GF investments in it.

### Natural resource seeking

Natural resource-seeking FDI is undertaken to secure scarce resources that are costlier domestically. One of the primary motivations for FDI activity is the acquisition and security of a continuous supply of natural resources (Dunning, 1993). It is the main reason for backward vertical FDI. Backward integration to secure the supply of certain location-bound resources overseas for local utilization has been the leading driver of Chinese OFDI for the last five decades (Buckley & Casson, 2009). The main purpose of resource seeking is to supply raw materials for investing companies' downstream operations. Internalization theory stresses the significance of equity-based control in the exploitation of valuable and scarce natural resources. FDI by both developing and advanced countries is driven by the urge to get access to other countries' natural resources.

Numerous studies propose that Chinese companies tend to make investments in resource-rich countries to secure continual access to fuel and other natural endowments, which are much more required for the prosperity and sustainability of the home economy (Kang &

Jiang, 2012; Morck, Yeung & Zhao, 2008). Consequently, it is proposed that the number of Chinese M&As and GF investments will increase with an increase in the natural resources of a host country.

**Hypothesis 2.** The natural endowments of host markets are positively associated with the number of Chinese cross-border M&As and GF investments in those host markets.

### Strategic asset seeking

Many empirical studies have found evidence in favor of asset-seeking motives. Deng (2009) studied some popular cases of Chinese MNEs investing in AEs and found that, in an attempt to increase their competitive advantage in the international marketplace, strategic asset-seeking has always been a primary driver of Chinese MNEs' investment. Many companies have turned to aggressive acquisitions to gain access to innovative product technologies, well-known brands, and international distribution networks (Makino, Isobe & Chan, 2004; Nicholson & Salaber, 2013). Some previous studies on Chinese M&As and GF investment have pointed out that Chinese enterprises lag behind their Western counterparts in terms of the improvement of firm-specific advantages, particularly in organizational know-how, innovation, and distribution expertise (Cui, Meyer & Hu, 2014; De Beule & Duanmu, 2012). Consequently, Chinese people cannot develop on their own because of a comparatively weak home-country knowledge base and domestic institutional constraints (Deng, 2009).

Aggressive acquisitions of firms from advanced markets could possibly compensate for their competitive disadvantages through access to novel technologies, famous brand names, and far-reaching networks (Rabbiosi, Elia & Bertoni, 2012). Moreover, a host country's stagnant economic growth is considered a key motivator for drawing Chinese M&As as there are several developed enterprises that have been financially distressed; they sell off their strategic assets to restructure and for revival. Consequently, we propose the following hypothesis:

**Hypothesis 3.** A host market's strategic assets are positively related to the number of Chinese cross-border M&As and GF investments in that host market.

### Host institutions

The OLI paradigm has been found to form the basis for the traditional determinants of Chinese OFDI in natural resources, market seeking, and strategic assets; however, economic factors alone do not adequately explain the reasons behind international acquisitions by Chinese firms. Consequently, we can assert that institutional theory may offer some relevant explanations regarding the question of why Chinese enterprises are progressively involved in OFDI in other countries. From the perspective of regulatory institutions, an MNE's choice of a location entails ascertaining favorable destinations where constraints are less restrictive to FDI activity for the firm to adjust more readily. Previous studies have affirmed that host-country institutions strongly influence inward FDI flow (Kaufmann, Kraay & Mastruzzi, 2010).

A firm may consider it best to uplift its strategic position via alliances or joint ventures (JVs) and be less willing to opt for an M&A. This happens because, in highly-developed institutional conditions, the already-developed business atmosphere reduces possible opportunistic behaviors and ensures legal protection for market behaviors (Cui & Jiang, 2009). In contrast, in the context of underdeveloped institutions, where there is insufficient legal protection and the business environment is fragile, there is the potentially higher threat of expedience by alliance partners that considerably increases the cooperation cost to an EM MNE (Das & Teng, 2001).

For the purpose of the current study, this research stresses host data from this database have mainly projected count data models,

**Table 1**  
Variable List and Description.

Variable	Type	Description	Source
M&As	Dependent	Number of deals	SDC Platinum
GF Investment	Dependent	Number of deals	FDI Markets
GDP	Independent	Log of GDP at constant price 2010 US\$	World Development Indicators
Patent	Independent	Total number of registered patents	World Development Indicators
Resources	Independent	Share of exports of ores and metals in GDP	World Development Indicators
Landlocked	Control	Dummy,1 if country has access to the sea	CEPII
BITs	Control	Bilateral Investment Treaties, dummy (1 yes, 0 no)	UNCTAD
Distance	Control	Log of simple distance (most populated cities, in Km)	CEPII
Cultural Distance	Control	Composite variable of Hofstede's four cultural dimensions	Hofstede's cultural dimension
Inflation	Control	Inflation,% consumer price index	World Development Indicators
Government effectiveness	Moderator	Government effectiveness	World Governance Indicators

government effectiveness as a time-based boundary on OLI applications to provide additional understanding of the OFDI logic that is more prognostic of Chinese MNEs in their M&A and GF investment. While confronting EM MNE-host nation mutual pressures, firms may need to adapt in accordance with the severity of host government ineffectiveness, although acquisition may assist them to mitigate the limitations imposed by powerful actors in various settings. Consequently, we propose the following three moderating hypotheses:

**Hypothesis H4a.** The relationship between a host market's size and the number of M&As and GF investments by Chinese companies is negatively moderated by the host economy's government effectiveness.

**Hypothesis H4b.** : The relationship between a host economy's natural resources and the number of M&As and GF investments by Chinese firms is negatively moderated by the host market's government effectiveness.

**Hypothesis H4c.** : The relationship between a host country's strategic assets and the number of M&As and GF investments by Chinese firms is negatively moderated by the host market's government effectiveness.

## Data, variables, and methods

There are currently several studies that tend to explore Chinese firms' location choices for OFDI using panel data. A few of these, however, break their results down by entry mode (GF or M&A), making it comparatively more difficult to explain the hypothesis of this study. The current study uses several data sources to create the dataset that is used in this research. The dependent variable in this study is based on commercial databases, including SDC Platinum and the Financial Times fDi Markets.

The first source is the SDC Platinum database, developed by Thomson Financial Corporation, which offers data on cumulative M&A transactions. SDC Platinum is a comprehensive database that contains information on M&A, syndicated loans, private equity, and project finance. It also provides information for identifying and monitoring deal activity, and for analyzing project trends, investment banking, comparable projects, and industry-leading league market share.

The second source of data for the dependent variable is the Financial Times fDi Markets. The sample for this study is constituted based on two databases; data on GF FDI are obtained from fDi Markets, a database maintained by fDi Intelligence, which is a specialist division of the Financial Times group that tracks cross-border GF investments and encompasses all countries and industries globally since 2003. Therefore, the current dataset includes the number of cross-border investments made by Chinese firms in every recipient economy and all industries from 2003 to 2016. Researchers who have extracted

with due regard for the validity and reliability of the value of investments. From 2003 to 2016, the current study covers all successful M&As and GF investments initiated by Chinese firms in advanced and developing markets.

The third source is the Worldwide Governance Indicators database, created by Kaufmann et al. (2013), and encompasses the worldwide governance index, which includes government effectiveness. The fourth source is the World Development Indicators Database (World Bank, 2017), which offers other macro-level variables such as GDP, ratio of ore and metal exports to merchandise exports, patents, etc. A few other sources are used to obtain data for the control variables that are listed in Table 1.

## Dependent and independent variables

Data for the dependent variable for the analysis is obtained from commercial databases, including SDC Platinum and the Financial Times fDi Markets. In this study, the dependent variable is the number of M&As and GF investments in each target country (# projects). It is calculated by the total number of completed M&A and GF deals concluded annually by Chinese companies in every recipient country. Recently, many studies have used the number of M&A transactions instead of total volume in examining EM MNEs' internationalization patterns (Deng & Yang, 2015; Dikova et al., 2019; Zhang et al., 2011). This technique shows the overall volume of M&A and GF transactions, enables the use of more accurate statistics, and ultimately boosts the validity of findings.

To capture a host country's market size, the country's GDP at constant price (GDP) is assumed to measure market breadth, which is vital for Chinese companies that carry some particular competitive edges based on competitive advantages in heterogeneous and new markets (Buckley et al., 2007). To some extent, it is evident from the literature that market-seeking motivations drive Chinese OFDI, particularly while investing in OECD or developed markets (A. A. Amighini, Rabellotti & Sanfilippo, 2013; Deng & Yang, 2015; Kolstad & Wiig, 2012), an outcome that is consistent with the mainstream FDI literature. However, a study (A. Amighini, Leone & Rabellotti, 2011) finds that market size is not always an attractive element for Chinese investors, depending on the industry or sector. Their results indicate that market size has a positive effect in the case of manufacturing FDI in developed or OECD countries, but that it tends to negatively impact resource-intensive sectors, which tend to select the poorest countries while investing in low-income economies.

To capture a host country's natural resource endowment, several researchers use the share of raw materials (fuels, ores, and metals) in total merchandise exports as a measure (Cheung & Qian, 2009; De Beule & Duanmu, 2012; Kang & Jiang, 2012), whereas some use the quantity of endowments under the earth as a yardstick that measures the prospective benefits that flow from investing in destinations with untouched natural endowments. The argument by

Kolstad and Wiig (2009) is more convincing, as it states that immediate natural resource rents would be attractive to investors instead of the potential but indefinite yield of unexplored resources. This is the reason that the share of fuel, ores, and metal exports in GDP is a relatively better proxy for a country's natural resource endowment, as demonstrated in empirical analyses, specifically when Chinese enterprises invest in lower-income countries (Amighini et al., 2013).

In terms of the strategic asset-seeking motive, empirical research on China's overall OFDI has produced contradictory results ((Buckley et al., 2007; Kolstad & Wiig, 2012). Strategic assets are typically measured by a host country's registered patents (e.g., Ramasamy et al., 2012). This study uses a host country's total number of registered patents (both resident and nonresident) as a measure to capture the strategic asset-seeking motive.

This study follows the framework developed by Kaufmann et al. (2010) to measure the influence of target economies' institutional environments. Government effectiveness is calculated in terms of the percentile rankings of all the economies on a scale from 0 to 100.

**Other variables**

In addition to the hypotheses previously specified, a few control variables are included. The first is a cultural variable. Cultural distance reflects the extent to which normativity affects FDI undertakings. Current research defines cultural distance as the difference between the national culture of a home economy (China) and those of host countries. It can be calculated in terms of the four cultural dimensions of power distance, uncertainty avoidance, individualism, and masculinity, as presented by Hofstede (1983). Using the scores for individual countries provided by Hofstede, (2009) and adopting the method developed by Kogut and Singh (1988), cultural distance is measured by using a composite variable that comprises the four cultural dimensions. A low score on this scale symbolizes cultural proximity, whereas a high score means a greater cultural distance between China and the host country.

Distance (DIST) from a home country measures trade costs. Firms are more inclined to invest in far-away markets to avoid export costs. By contrast, studies based on the gravity model anticipate that the link between distance and FDI will be negative, as investment costs rise with distance (Kolstad & Wiig, 2012). Consequently, we additionally include a dummy (which is commonly included in gravity models) that indicates if a country has no access to the sea (LANDLOCKED), as an additional control to determine whether a host country's remoteness hinders FDI. Consistent with the above argument, Ramasamy et al. (2012) find that distance has an inverse impact on private Chinese companies, whereas it is not particularly important in the case of state-owned enterprises (SOEs).

Inflation (INFL) is added as a typical indicator of economic growth. As inflation poses a higher risk to companies operating in an

economy, a negative relationship between inflation in a host economy and the location choice for Chinese FDI is anticipated. In the context of China, it has been noted that high inflation does not deter investors, who consider uncertain economic situations as an opportunity to earn high returns on their investments rather than a constraint (Buckley et al., 2007).

Finally, the presence of bilateral investment treaties (BITs) between China and host economies is added as a further control variable. BITs safeguard businesses against investment risk (Dixit, 2012), while in the context of China, they are more attractive to privately owned enterprises (POEs) than to SOEs.

**Research methods**

The dependent variable in this study is a count variable, that spans from zero to some positive number. Thus, since it is a nonnegative number, standard multiple regression is not suitable. Regarding the adoption of a methodology, the econometric literature proposes, in the presence of count data as a measurable statistic with a discrete response function (Greene, 2003), the adoption of a Poisson or of a negative binomial regression model, as such a model is more efficient than linear or discrete models. Negative binomial regression is preferred over Poisson regression because it allows for variation in the rate of the underlying process throughout observations based on a gamma distribution (Agresti, 2003; Dikova et al., 2019; Hilbe, 2011). Count models, meanwhile, have major flaws, such as the presence of heteroscedasticity in them and over-dispersion of data; these flaws can be overcome by modifying the models to consider the exposure of the observations to the grouping structure (Greene, 2003), which is represented, in the current study, by combinations of industries and countries. Last, a one-year lag is used for all the independent variables to avoid any potential endogeneity with the dependent variable. This yields the following model:

$$\begin{aligned} \#M\&A = \beta_0 + \beta_1 \text{Landlocked} + \beta_2 \text{BITs} + \beta_3 \text{Distance} + \beta_4 \text{Cultural} \\ &\text{distance} + \beta_5 \text{Inflation} + \beta_6 \text{Government effectiveness} + \beta_7 \\ &\text{GDP} + \beta_8 \text{Resources} + \beta_9 \text{Patents} + \mu_{it} \\ \#GF = \beta_0 + \beta_1 \text{Landlocked} + \beta_2 \text{BITs} + \beta_3 \text{Distance} + \beta_4 \text{Cultural} \\ &\text{distance} + \beta_5 \text{Inflation} + \beta_6 \text{Government effectiveness} + \beta_7 \\ &\text{GDP} + \beta_8 \text{Resources} + \beta_9 \text{Patents} + \mu_{it} \end{aligned}$$

(MODEL 1)

Regressions are performed separately for AEs and DEs for both M&As and GF investments deals, to enable a comparison of the results.

**Estimation results**

Tables 2 and 3 show the correlation matrices for all the variables used in the M&A and GF investment settings, respectively. Overall,

**Table 2**  
Correlation Matrix for the Number of Cross-border M&As, 2003–2016.

Variable	1	2	3	4	5	6	7	8	9	10
1. Total	1									
2. Landlocked	-0.100*	1								
3. BITs	0.0387	0.0282	1							
4. Distance	-0.0328	0.0645	-0.0915*	1						
5. Cultural distance	-0.0204	0.199**	0.156***	0.327***	1					
6. Inflation	-0.0927*	-0.107*	-0.167***	0.077	-0.345***	1				
7. Government effectiveness	0.167***	0.166**	0.0625	-0.0559	0.539**	-0.666***	1			
8. GDP (log)	0.192***	-0.577***	-0.0428	-0.0438	-0.0940*	-0.028	0.0955*	1		
9. Resources	-0.0377	-0.0759	-0.0125	0.311***	0.0179	-0.026	-0.0005	0.0484	1	
10. Patent	0.367***	-0.0821	0.124**	-0.170***	0.131**	-0.133**	0.205***	0.224***	-0.064	1
VIF	-	1.21	1.09	1.45	1.66	1.95	2.14	1.34	1.14	1.43

**Table 3**  
Correlation Matrix for the Number of Cross-border GF Investments, 2003–2016.

Variables	1	2	3	4	5	6	7	8	9	10
1. Total	1									
2. Landlocked	-0.0989	1								
3. BITs	-0.165**	-0.018	1							
4. Distance	-0.141*	0.0777	0.0397	1						
5. Cultural distance	-0.118*	0.140*	0.221***	0.353***	1					
6. Inflation	-0.155**	-0.121*	-0.114*	0.00732	-0.352***	1				
7. Government effectiveness	0.301***	0.156**	0.0813	-0.0679	0.444***	-0.647***	1			
8. GDP (log)	0.148**	-0.329***	0.0253	-0.0186	0.0676	-0.121*	0.151**	1		
9. Resources	0.142*	-0.0714	-0.0441	0.287***	0.00344	0.095	-0.0254	0.0142	1	
10. Patents	0.278***	-0.105	0.162**	-0.181***	0.135*	-0.130*	0.163**	0.346***	-0.0891	1
VIF	-	1.64	1.1	1.5	1.92	2.12	2.61	1.71	1.14	1.1

the independent variables do not show significant correlation with each other in bivariate relationships. All of these variables are included in the regression models.

Table 4 shows the results of negative binomial regression on cross-border M&As in AE settings. Model 1 is the baseline model, which comprises only control variables and the moderator. Models 2 to 4 examine the key effects of the motivational variables on M&As. Model 5 adds all the independent variables, whereas Model 6 includes a moderator. Models 7 to 9 show the interaction effects of the moderator with different independent variables.

Hypotheses 1 to 3 state, respectively, that the size of the market (GDP), resources (Resources), and strategic assets (Patent) are positively associated with the number of cross-border M&As in each host country. According to Hypothesis 1, the number of M&As in each host market is positively related to market size. As shown in Models 2 and 5, GDP is positive and significant; thus, Hypothesis 1 is supported,

and shows that Chinese firms tend to increase their M&As when the size of the host market grows. Thus, the market-seeking hypothesis is borne out by the Chinese in AEs.

For the natural resource motive, we used Resources as a proxy. In Models 3 and 5, natural resource is found to be positively and significantly related to the number of M&A deals. These findings support Hypothesis 2, which contends that when the host country is rich in natural resource endowments, Chinese firms are expected to increase their M&A activity. Furthermore, in Models 4 and 5, Patents positively and significantly affect the dependent variable. Our findings confirm Hypotheses 2 and 3, which claim that when the host developed country is endowed with natural resources and is strong in R&D, Chinese firms are more likely to engage in acquisition. Our study, using recent data in the context of M&As, shows that the "strategic asset-seeking" motive does lead Chinese firms to pursue M&As in AEs, in contrast to Buckley et al. (2007), who found no significance for Patents.

**Table 4**  
Negative Binomial Regression Analysis of Cross-border M&As in Advance Economies, 2003–2016.

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Landlocked	-0.657**	-0.462*	-0.657**	-0.572**	-0.473*	-0.660**	-0.685***	-0.664**	-0.658**
BITs	0.540**	0.294	0.430*	0.420*	0.0997	0.172	0.136	0.171	0.172
Distance	0.496***	0.636***	0.384**	0.755***	0.668***	0.687***	0.708***	0.689***	0.677***
Cultural distance	-0.186	-0.141	-0.18	-0.142	-0.12	-0.116	-0.117	-0.116	-0.118
Inflation	-0.0721	-0.145***	-0.125**	-0.103**	-0.211***	-0.239***	-0.242***	-0.243***	-0.243***
GDP (log)	-0.0499	-0.0491	-0.0505	-0.0469	-0.0447	-0.0444	-0.0438	-0.0447	-0.0455
Resources		0.373***			0.338***	0.408***	2.005*	0.408***	0.405***
Patents		-0.047	0.0421***		-0.0748	-0.0729	-1.039	-0.0734	-0.0734
Government effectiveness			-0.00585		0.0509***	0.0482***	0.0493***	-0.122	0.0483***
Government effectiveness × GDP (log)					-0.00487	-0.00485	-0.00483	-0.237	-0.00487
Government effectiveness × Resources				2.45e-06***	1.03e-06**	6.55E-07	4.36E-07	6.72E-07	-4.07E-06
Government effectiveness × Patents				-2.86E-07	-4.54E-07	-4.38E-07	-4.63E-07	-4.39E-07	-1.20E-05
Constant	-2.279	-13.60***	-1.275	-4.542***	-12.76***	-17.30***	-62.20**	-16.82***	-17.03***
Observations	192	192	192	192	192	192	192	192	192

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 5**  
Negative Binomial Regression Analysis of M&A in Developing Economies, 2003–2016.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Variables									
Landlocked	0.219	-1.338**	0.708*	0.278	-1.216**	-1.935***	-1.851***	-1.937***	-1.915***
	-0.407	-0.527	-0.422	-0.413	-0.5	-0.441	-0.455	-0.441	-0.443
BITs	-0.609***	-1.539***	-0.638***	-0.641***	-1.525***	-1.356***	-1.396***	-1.345***	-1.308***
	-0.152	-0.175	-0.145	-0.157	-0.174	-0.163	-0.175	-0.166	-0.153
Distance	-0.328***	-0.690***	-0.608***	-0.287***	-1.100***	-0.591***	-0.584***	-0.597***	-0.679***
	-0.0957	-0.0907	-0.12	-0.107	-0.119	-0.132	-0.131	-0.133	-0.127
Cultural distance	-0.299***	-0.0756	-0.479***	-0.348***	0.0932	0.127	0.129	0.128	0.0406
	-0.109	-0.0984	-0.115	-0.125	-0.119	-0.109	-0.11	-0.109	-0.103
Inflation	-0.0208	-0.0542***	-0.0228	-0.0245	-0.0474***	0.019	0.018	0.0206	0.0072
	-0.0184	-0.0173	-0.0181	-0.0192	-0.0166	-0.0183	-0.0183	-0.019	-0.018
GDP (log)		-0.101***			-0.0838***	-0.0721***	-0.216	-0.0721***	-0.0947***
		-0.0236			-0.0237	-0.0239	-0.221	-0.0239	-0.0222
Resources			0.0336***		0.0282***	0.00374	0.00379	0.0136	0.00735
			-0.00775		-0.00638	-0.00707	-0.00704	-0.0317	-0.00722
Patents				1.77E-06	-6.40e-06***	-5.90e-06***	-5.97e-06***	-6.04e-06***	6.41e-05***
				-2.03E-06	-2.03E-06	-2.02E-06	-2.03E-06	-2.07E-06	-1.55E-05
Government effectiveness						0.0310***	-0.0252	0.0321***	0.0378***
						-0.00459	-0.0861	-0.00578	-0.00492
Government effectiveness ×GDP (log)							0.00212		
							-0.00323		
Government effectiveness ×Resources								-0.000122	
								-0.000384	
Government effectiveness ×Patents									-8.49e-07***
Constant	5.123***	11.21***	7.343***	4.826***	13.81***	6.832***	10.64*	-1.87E-07	7.604***
	-0.774	-0.99	-0.943	-0.848	-1.038	-1.403	-5.983	6.786***	-1.352
Observations	150	138	150	150	138	138	138	138	138

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

Hypotheses 4a, 4b, and 4c suggest that the levels of host governments' effectiveness reduce the effects of market size (GDP), natural resources (Resources), and strategic assets (Patents) on the number of cross-border M&As in host markets, which is shown through their interaction effects. Model 6 introduces the moderator (Government effectiveness) into Model 5, while Models 7 to 9 show the interaction effect. Model 7 tests the interaction effect of the market-seeking variable (GDP) and the moderator (Government effectiveness × GDP). Model 8 evaluates the interaction between the natural resource-seeking variable (Resources) and the moderator (Government effectiveness × Resources), whereas Model 9 shows the interaction effect of the strategic-asset seeking variable with the moderator (Government effectiveness × Patents). In terms of interaction effects, none of the interaction variables was significant.

Table 5 presents the results of a negative binomial regression analysis of Chinese enterprises' M&As in DEs. As in Table 4, Model 1 is the baseline model, while Models 2 to 4 show the individual effect of each independent variable; Model 5 incorporates all of the independent variables as baseline values for Model 6, which introduces the moderator. For the main effect of the market-seeking motive, the GDP coefficient is significant but negative in Model 2; thus, Hypothesis 1 is rejected. The Resources coefficient is positive and significant in Model 3, suggesting that natural resource endowment is a key factor in Chinese firms' undertaking of acquisitions in developing target economies. Thus, Hypothesis 2 is supported. Contrary to our predictions, the coefficient of Patents turns out to be significant but negative, which means that the number of cross-border M&As is negatively related to patents in the context of emerging economies (EEs). Based on these findings, we argue that resources are the most appealing factor for Chinese M&As in DEs.

In terms of interaction effects, only the interaction between Gov. Effectiveness and Patents is negatively significant, thus supporting Hypothesis 4c that high government effectiveness in a host market

negatively moderates the relationship between cross-border M&As and strategic assets.

Table 6 presents the results of negative binomial regression of cross-border GF investment in AE settings. As shown in Model 2, GDP is positive and significant, providing support for Hypothesis 1, which proposes that Chinese firms are expected to increase their GF deals in response to the growing size of a target market. Therefore, the market-seeking motive hypothesis is supported in the context of AEs. Furthermore, in Model 4, Patents positively and significantly affects the dependent variable. These findings provide partial support for Hypothesis 3, which argues that Chinese enterprises are expected to increase their GF investment transactions when the host AE is rich in patents.

The interaction between Resources and Government effectiveness is found to be negative and significant, thus supporting Hypothesis 4b, which states that the interaction between natural resources and the number of cross-border GF investment deals is negatively moderated by government effectiveness. These results are consistent with those of Kang (2018) and Kolstad and Wiig (2012), who found a similar relationship.

Table 7 shows the results of the negative binomial regression analysis of Chinese firms' cross-border GF investments in DEs. Concerning the main effects of market-, resource-, and strategic asset-seeking motives, none of the coefficients is significant for Chinese GF investments. These results are consistent with the findings of Deng and Yang (2015), in which none of the key variables were significant in the subsample of developing economies.

The interactions between market size and Government effectiveness and that between strategic assets and Gov. Effectiveness are found to be negative and significant, thus supporting Hypotheses 4a and 4c, implying that government effectiveness negatively moderates the relationship between natural resources and the number of GF investments in DE settings.

**Table 6**  
Negative Binomial Regression Analysis of GF Investment in Advance Economies, 2003–2016.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
<b>Variables</b>									
Landlocked	-0.654*** -0.246	-0.470* -0.246	-0.646*** -0.246	-0.572** -0.252	-0.478* -0.253	-0.734*** -0.257	-0.731*** -0.257	-0.762*** -0.257	-0.736*** -0.257
BITs	0.433** -0.196	0.023 -0.199	0.416** -0.198	0.311 -0.196	0.0189 -0.203	0.115 -0.199	0.123 -0.2	0.0774 -0.199	0.115 -0.199
Distance	0.127 -0.168	0.300** -0.128	0.107 -0.17	0.468*** -0.133	0.324** -0.131	0.348*** -0.125	0.344*** -0.124	0.369*** -0.123	0.354*** -0.128
Cultural distance	-0.145*** -0.0519	-0.149** -0.0681	-0.147*** -0.0523	-0.178*** -0.0567	-0.161** -0.0687	-0.200*** -0.0609	-0.206*** -0.0624	-0.209*** -0.0599	-0.201*** -0.0611
Inflation	-0.0465 -0.0411	-0.0669 -0.0417	-0.051 -0.0417	-0.0538 -0.04	-0.0722* -0.042	-0.0836** -0.0418	-0.0848** -0.0417	-0.0993** -0.0415	-0.0813* -0.0426
GDP (log)		0.425*** -0.0458			0.386*** -0.0716	0.480*** -0.0682	-0.0974 -0.804	0.524*** -0.0668	0.482*** -0.0684
Resources			0.00654 -0.00858		0.00674 -0.00798	-0.000933 -0.00832	-0.00175 -0.00848	0.719*** -0.25	-0.00101 -0.00832
Patents				2.66e-06*** -3.05E-07	4.07E-07 -5.04E-07	-2.05E-07 -4.82E-07	-1.82E-07 -4.81E-07	-4.32E-07 -4.66E-07	3.48E-06 -1.26E-05
Government effectiveness						0.0324*** -0.00786	-0.141 -0.241	0.0581*** -0.0127	0.0332*** -0.00826
Government effectiveness × GDP (log)							0.00623 -0.00866		
Government effectiveness × Resources								-0.00769***	
Government effectiveness × Patents								-0.00268	-4.08E-08
Constant	1.13 -1.472	-11.93*** -1.781	1.306 -1.485	-1.926 -1.179	-11.04*** -2.101	-16.71*** -2.308	-0.607 -22.46	-20.45*** -2.636	-16.89*** -2.385
Observations	234	234	234	233	233	233	233	233	233

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table 7**  
Negative Binomial Regression Analysis of GF Investment in Developing Economies, 2003–2016.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
<b>Variables</b>									
Landlocked	-0.0246 -0.249	0.129 -0.342	0.0246 -0.252	0.0454 -0.256	0.175 -0.348	0.107 -0.351	-0.357 -0.408	0.1 -0.351	-0.458 -0.382
BITs	-0.287*** -0.103	-0.336*** -0.12	-0.283*** -0.103	-0.289*** -0.103	-0.318*** -0.122	-0.271** -0.126	-0.165 -0.119	-0.267** -0.126	-0.401*** -0.107
Distance	-0.257*** -0.0617	-0.282*** -0.0645	-0.290*** -0.0671	-0.200*** -0.0759	-0.274*** -0.0936	-0.227** -0.101	-0.278*** -0.0987	-0.227** -0.101	-0.300*** -0.0875
Cultural distance	-0.120** -0.0608	-0.097 -0.062	-0.127** -0.0612	-0.159** -0.0685	-0.127* -0.0764	-0.153* -0.0789	-0.154** -0.0704	-0.154* -0.0787	-0.197*** -0.059
Inflation	-0.00537 -0.00787	-0.00684 -0.00797	-0.00309 -0.00808	-0.00684 -0.00796	-0.00524 -0.00826	0.00141 -0.00983	-0.00774 -0.00987	0.00284 -0.0102	-0.00126 -0.00965
GDP (log)		0.0143 -0.0165			0.0112 -0.0169	0.0092 -0.017	0.632*** -0.124	0.00922 -0.017	-0.0280* -0.0169
Resources			0.00567 -0.0044		0.0048 -0.00447	0.00356 -0.00457	0.00458 -0.00458	0.00971 -0.0132	0.00392 -0.00468
Patents				1.71E-06 -1.33E-06	8.19E-07 -1.52E-06	8.67E-07 -1.52E-06	7.49E-07 -1.47E-06	7.92E-07 -1.52E-06	8.72e-05*** -7.30E-06
Government effectiveness						0.0039 -0.00323	0.227*** -0.0429	0.00477 -0.00369	0.0116*** -0.00316
Government effectiveness × GDP (log)							-0.00858***		
Government effectiveness × Resources							-0.00164	-9.49E-05	
Government effectiveness × Patents								-0.000193	-1.07e-06***
Constant	4.175*** -0.495	4.040*** -0.737	4.414*** -0.529	3.723*** -0.609	4.025*** -0.87	3.412*** -0.997	-12.47*** -3.223	3.346*** -1.006	4.491*** -0.918
Observations	309	298	309	309	298	298	298	298	298

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .



**Table 8**  
Regression Analytical Results for the Industry Effects on Cross-border M&As & GF Investments.

Variables	M&As			GF Investments		
	Mining & Quarrying	Manufacturing	Business Services	Mining & Quarrying	Manufacturing	Business Services
Landlocked	-1.235	-0.203	-0.599	-12.59	-0.502*	-0.769**
BITs	-1.026	-0.251	-0.432	-662.4	-0.281	-0.377
Distance	-0.0137	-0.323**	-0.593***	0.928	0.121	-0.241
Cultural Distance	-0.335	-0.138	-0.195	-0.592	-0.129	-0.158
Inflation	0.183	0.0478	0.0246	0.175	0.153**	0.0837
GDP (log)	-0.273	-0.0837	-0.131	-0.383	-0.0741	-0.0997
Resources	-0.106	-0.185***	-0.408***	-0.186	-0.162***	-0.273***
Patents	-0.124	-0.051	-0.0766	-0.213	-0.0476	-0.0559
Government effectiveness	0.116**	-0.0414	-0.0522	0.0559*	-0.00163	-0.00617
Constant	-0.0457	-0.0264	-0.0417	-0.0312	-0.0114	-0.0228
Observations	0.252*	0.203***	0.122	0.222	0.0119	-0.0178
	-0.136	-0.0622	-0.102	-0.161	-0.0198	-0.0245
	0.0434***	0.00965*	0.0158*	0.0327***	-0.00953*	-0.00354
	-0.00902	-0.00558	-0.00811	-0.0123	-0.00521	-0.00731
	-2.60E-06	1.77e-06***	2.42e-06***	-3.76E-06	3.09e-06***	3.44e-06***
	-1.62E-06	-5.14E-07	-8.37E-07	-4.04E-06	-3.77E-07	-4.30E-07
	0.0313***	0.0159***	0.0412***	-0.00974	-0.000614	0.0300***
	-0.00975	-0.00414	-0.00653	-0.0107	-0.003	-0.0044
	-11.93***	-5.557***	-5.570**	-10.33*	-0.473	-1.971*
	-4.064	-1.696	-2.813	-5.411	-0.838	-1.094
Observations	330	330	330	531	531	531

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

### Sensitivity analysis

Sensitivity tests are conducted to measure the robustness of my findings, especially regarding the effect of industry differences. To establish how different industries in Chinese cross-border M&As and GF investments affected the findings, we excluded mining and quarrying, manufacturing, and business service cross-border M&As and GF projects from the sample and conducted additional statistical analyses. As shown in Table 8, the market-seeking hypothesis is evidently supported in the manufacturing and mining and quarrying industries in the setting for cross-border M&As. No market-seeking is found to be significant in the setting for GF investment. Regarding the resource-seeking hypothesis, Resources is significant in all three industries in the setting for M&As. The mining and quarrying sectors are positively related to Resources in the context of GF investments, while the manufacturing sector is negatively related to Resources. Regarding the strategic asset hypothesis, the importance of patents is demonstrated in manufacturing and business services rather than in mining and quarrying in the context of both cross-border M&As and GF investments. Furthermore, the three industries are positively affected by their hosts' institutional environments in the setting for M&As, whereas only the business sector showed a positive and significant result in the setting for cross-border GF investments.

Last, different proxies for several key variables in the model are replaced. The variables "Resources" and "Patents" are replaced with "Fuel" and "share of R&D spending in GDP," respectively, in the World Development Indicators Database. The results for these alternative variables are found to be similar to those for the original variables. In the same vein, Government effectiveness is substituted with other indicators, such as "institutional distance" and "economic freedom." These substitute variables produce results that are similar to those for Government effectiveness. Thus, the results of these sensitivity analyses verify the robustness of the empirical findings.

### Discussion

This study aims to advance the knowledge of the key macroeconomics determinants of the OLI paradigm for Chinese cross-border M&A and GF investments in AE and EE foreign markets. The

empirical results for the different economic settings and distinct entry modes varied considerably, demonstrating that OFDI from Chinese enterprises followed diverse location patterns while flowing to different economy groupings. For the AE group in the settings for M&As, all the main variables were significant and bore the predicted signs. For the EE settings, all the main variables were significant. The variable "Resources" was strongly significant and exhibited a positive sign as expected, demonstrating that Chinese M&A flows were drawn to natural resources in these DEs. CNPC's acquisition in Peru, SINOPEC's M&As throughout Asia, the Middle East, and South America, and CNOOC's purchase of Repsol's oil field in Indonesia are examples of targeted natural resource investments (Buckley et al., 2016). The variables "GDP" and "Patents," in contrast, were significant, but opposite to the results from the AE settings: these variables carried a negative sign here. These inconsistencies are not astonishing if we consider the resource possibilities in each particular target market. Regarding the interaction variables, none of them showed significance in the settings for DEs, whereas only the interaction between Patent and Gov. Effectiveness was significant, bearing the expected sign.

The results changed with entry mode, illustrating the dynamic nature of OFDI location choice by Chinese enterprises. Cross-border GF investment by Chinese firms in AEs and DEs, meanwhile, shows results that are more inconsistent with the predictions. In the setting for GF investment in AEs, only one main variable (GDP) was statistically significant and bore the predicted positive sign. The highly significant and positive effects of the variable "market seeking" hold for the AE group. Regarding interaction effects, only the interaction between Patent and Gov. Effectiveness was negative and significant, consistent with the hypothesis. In the settings for DEs, the model estimation yielded quite intriguing results. Concerning cross-border GF investments in EMs, none of the variables was found to be significant, contrary to the prediction. Thus, it appears that no macroeconomic factor is sufficiently important for Chinese firms undertaking GF investment in DEs. Regarding the interaction of the institutional variables with the economic factors, the interactions of GDP and Patents with Government effectiveness were significant, with a negative sign, showing a more dynamic interplay between the institutional element and economic factors in this context.

To conclude, most of the results for M&As in the settings for AEs and DEs are consistent with the proposed hypotheses, whereas the outcomes for cross-border GF investment are inconsistent with the estimates, which means that the research on GF investment requires more scrutiny and in-depth analysis. In terms of interaction effects, however, the institutional context reflected by each host's government effectiveness seems to have a more dynamic moderating effect on the link between location decisions and Chinese GF investments than acquisitions, suggesting the importance of the interaction effects of institutions on strategic motives (Lin, 2015). Despite the fact that some researchers have considered institutions while studying strategic motives (Buckley et al., 2016), studies have not yet explicitly examined the interplay between institutional framework and strategic motives regarding EM MNEs' location choice. This study aims to add to the body of knowledge in this understudied field by investigating the impact of key institutions of government effectiveness on locational decisions (Kang, 2018; Ramasamy et al., 2012).

The empirical outcomes are consistent with earlier research conducted using mainstream Western frameworks for EM MNEs. For example, Hurst (2011) studied Chinese firms' outbound FDI and concluded that the eclectic framework served as a perfect model for studying OFDI in AEs; however, some modification was required in the setting for DEs. Duanmu (2012) finds that the influence of GDP of a recipient economy on Chinese OFDI is positive and significant, which is consistent with our findings. In their study of the strategic asset-seeking motive of Chinese OFDI, Ramasamy et al. (2012) and Kang (2018) discovered a negative trend in this variable, whereas Buckley et al. (2007) and Kang and Jiang (2012) found no significance. However, the sample for this study on cross-border M&A and GF investment found positive support for this hypothesis, using the same variable (patents) but with an updated statistic. In short, major factors that account for country-level motivations for outbound FDI by Chinese enterprises are not always equally applicable to different entry modes. There are some distinctions between the motivations for cross-border M&As and GF investments. One of the primary motivation for this investigation was to establish whether the macroeconomic factors of OFDI were equally applicable to all kinds of entry modes.

## Conclusion

This study explores EM MNEs' internationalization strategies. It is among the first studies to comparatively investigate the determinants of Chinese OFDI using the most comprehensive data. Most previous studies on Chinese OFDI used the total volume of outbound FDI, which explains the fragmented findings. To overcome that issue, the current study uses the number of cross-border M&A and GF deals to study Chinese firms' motives by incorporating the eclectic (OLI) paradigm and institutional theory in different sets of target markets. In the context of M&As, our findings are consistent with the growing theoretical literature on EM MNEs; however, GF investments by Chinese firms show results that are contrary to predictions, which means that research on GF investment requires more scrutiny and in-depth analysis. Moreover, institutional context has a greater moderating effect on the link between investment motives and GF activity. This study contributes to the international business and strategy literature by showing that the recent internationalization of "emerging-economies" is not always consistent with the traditional advanced nation model; therefore, it adds a piece to the jigsaw puzzle of this epistemological academic debate among scholars regarding the validity of the existing frameworks in different settings. Last, this study shows the importance of the interplay between institutional factors and the OLI paradigm in gaining a better understanding of locational determinants.

## Limitations and future research directions

This study has a few limitations that open up new avenues for future research. Overall, the segmentation between target AEs and DEs yields fresh insights into Chinese firms' internationalization patterns. Further research could focus on how different types of ownership structure, i.e., SOE's and POE's, shape the internationalization decisions of different types of Chinese firms. Additionally, future research could source disaggregated industry-, subsidiary-, and firm-level data for an in-depth understanding of firms' embeddedness decisions.

To better understand Chinese firms' internationalization, future research should consider exploring the impact of the interplay between 'push' and 'pull' effects by home and host countries, respectively (Buckley et al., 2016), on cross-border M&As and GF investments. Although China provides an ideal setting to investigate EM MNEs' internationalization patterns, a future research stream could consider firms from multiple EEs as home countries. Therefore, one could test if our theoretical framework and findings were applicable to the internationalization patterns of other EEs. Finally, Chinese OFDI has experienced a significant growth since the launch of the Belt and Road Initiative (BRI) in 2013; future research could examine the strategies of Chinese OFDI in BRI countries.

## Managerial implications

The study has several managerial implications. Our study reveals to managers that a host country's institutional factors are critical in deciding on foreign countries in which to invest, and that the mode of entry should depend on the strength or weakness of government effectiveness. Therefore, managers should consider both the economic and institutional environments in making the OFDI locational decision, rather than cherry-pick a location. Furthermore, worldwide exposure, particularly in-country collective expertise, will allow managers to gain more degrees of freedom in their selection of the setup mode. Moreover, managers should consider that the locational determinants of Chinese OFDI differ based on ownership structure, and therefore the motivations for such investments may also vary.

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