



# International expansion and home-country resource acquisition: A signaling perspective of emerging-market firms' internationalization

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**Abstract**

Despite growing attention to the role of home countries in studies of emerging-market multinational enterprises (EMNEs), there is limited focus on how international expansion affects EMNEs' home conditions. Drawing on signaling theory, we propose that EMNEs' international expansions serve as a signaling mechanism that shapes perceptions of stakeholders in their home countries and thus facilitate their resource acquisition from these stakeholders. The signaling effect is strengthened when EMNEs enter more advanced host countries where higher entry barriers incur higher signaling costs that serve as isolating mechanisms; and when they are located in less developed home markets where information asymmetry is more serious due to weaker institutional arrangements. Furthermore, congruent signals, such as patents, strengthen the main effect by cross-confirming the signaled content, while incongruent signals, such as political connections, weaken it due to ambiguity in interpreting the original signal. Using instrumental variables and a difference-in-differences design to account for potential endogeneity of international expansion, our empirical analysis of Chinese-listed privately owned enterprises from 1999 to 2019 supports our propositions.

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## INTRODUCTION

Home country is a fundamental characteristic that distinguishes emerging-market multinational enterprises (EMNEs) from traditional MNEs originating from developed economies (Cuervo-Cazurra, Luo, Ramamurti, & Ang, 2018). Unlike conventional MNEs research that tend to move the role of home country into the background or merely examine the effect of home-host country distance, the EMNEs literature has increasingly emphasized the critical role of home country in their international expansions (Estrin, Meyer, & Pelletier, 2018; Luo & Wang, 2012). Scholars have examined the role of home-country constraints as key triggers of



internationalization (i.e., the escapism perspective) (Shi, Sun, Yan, & Zhu, 2017), the imprinting effect of home-country context on EMNEs' capabilities (or lack thereof) that shape their international strategies (Cuervo-Cazurra & Genc, 2008; Wan & Hoskisson, 2003), and the crucial role of home-country governments (Li, Meyer, Zhang, & Ding, 2018; Li, Zhang, & Shi, 2020). While these past studies have collectively generated important insights, they have paid limited attention to how international expansion affects EMNEs' conditions back home. In other words, our understanding of the home-country outcomes of EMNEs' internationalization remains incomplete.

This constitutes an important knowledge gap that requires research attention as growing evidence suggests that, unlike traditional MNEs that focus primarily on market growth and subsidiary performance in host countries, EMNEs consider improving home-country conditions to be a key concern in their international expansion. For example, Williamson and Raman (2011) observed that the goal of many cross-border acquisitions of Chinese companies is not to gain market share abroad, but to strengthen their positions at home. Similarly, Yamakawa, Khavul, Peng, and Deeds (2013: 193) found that "internationalization is at least as much about what it can do for them [EMNEs] domestically as it is about opening new markets". In their updated springboard perspective, Luo and Tung (2018) continued to emphasize the central role of EMNEs' home base, highlighting it as a prominent feature characterizing their internationalization. EMNEs' home-country orientation is not surprising, given the large market size and growth potential of emerging markets,<sup>1</sup> combined with their endowed home-country familiarity. However, it remains unclear how the linkage between international expansion and improved home base is established – that is, *how* (through what mechanisms) and *when* (under what conditions) international expansion shapes EMNEs' conditions back home.

One potential answer from the literature is the capability-upgrading mechanism (Luo & Tung, 2007). Specifically, via international expansion (especially through acquisitions of targets in developed economies), EMNEs acquire strategic assets (such as advanced technologies, brands, and managerial knowhow) that presumably augment and renew their capabilities, giving them competitive advantages in the home country. However, such capability upgrading may not happen

automatically, given both the path-dependent nature of capability development (Zollo & Winter, 2002) and EMNEs' weak skills in absorbing, transferring, and integrating acquired assets (Wang, Luo, Lu, Sun, & Maksimov, 2014). Although international business (IB) scholars have reached some consensus on the prominent strategic asset-seeking motives of EMNEs (Cui, Meyer, & Hu, 2014), the literature still lacks concrete evidence documenting whether and how EMNEs' capabilities are indeed enhanced (Meyer, 2015).

Complementing the capability-upgrading perspective, in this study, we propose a more immediate but often-neglected home-country outcome: the signaling effect of EMNEs' international expansion in shaping the perceptions of home-country stakeholders and thus their resource acquisition from these stakeholders. Specifically, we focus on financial resource acquisition from banks (via long-term loans) and suppliers (via delayed payments) as two major sources of external financing (Petersen & Rajan, 1997). Financial resource acquisition is critical for firms to survive and grow, yet is an especially challenging task in emerging-market contexts. Institutional weaknesses (e.g., deficient market systems, high government intervention, inefficient legal systems) characterizing many emerging markets tend to bias resource allocation toward certain types of firms (e.g., state-owned enterprises) (Hitt, Li, & Xu, 2016), while discriminating against other firms (e.g., privately owned enterprises, the focus of this study) (Zhao & Lu, 2016). Therefore, it is practically relevant and theoretically meaningful to examine whether EMNEs that do not have privileged resource positions in their home countries can utilize international expansion as a strategic action to improve their resource acquisition back home.

Grounded in signaling theory (Spence, 1973), our main contention is that in the emerging-market context characterized by information problems (Khanna & Palepu, 2010; Meyer, Estrin, Bhaumik, & Peng, 2009), international expansion serves as a strategic signal that enhances EMNEs' perceived quality among home-country stakeholders and thus these stakeholders' willingness to provide resources. Based on core concepts of signaling theory (i.e., signaling costs and information asymmetry), we further argue that the signaling effect of international expansion is strengthened (1) when EMNEs enter more advanced host countries where higher entry barriers incur higher signaling costs that serve as isolating mechanisms for



differentiating high- versus low-quality firms and (2) when EMNEs are located in less developed home markets where information asymmetry is more serious due to weaker institutional arrangements.

In addition, we engage with recent developments in signaling theory that highlight the importance of audience responses to multiple signals (Drover, Wood, & Corbett, 2018; Paruchuri, Han, & Prakash, 2021) to investigate how other signals moderate the signaling effect of international expansion. Drawing on the sensemaking perspective (Weick, 1995), we propose that congruent signals, such as patents granted, strengthen the main effect by corroborating the intended message. In contrast, incongruent signals, such as political connections, weaken the main effect by creating ambiguity in interpreting the original signal and influencing the attribution process of information receivers. For example, home-country stakeholders may attribute an EMNE's international expansion to government support rather than the firm's intrinsic quality when the firm is politically connected. We focus on patents and political connections as fundamental characteristics in the EMNEs context, given that patents have long been viewed as key firm-specific advantages that underlie the existence of MNEs (Buckley & Casson, 1976; Rugman & Verbeke, 1992), while political connections are posited to compensate for the lack of conventional ownership advantages of emerging-market firms (Lu, Liu, Wright, & Filatotchev, 2014). We extend current discussions by examining whether international expansion backed up by political connections versus patents are perceived differently by home-country stakeholders.

We conducted a study on Chinese privately owned enterprises in manufacturing industries from 1999 to 2019 to test our predictions, using the instrumental variables method and difference-in-differences design to control for potential endogeneity of international expansion. Our results largely support our hypotheses. Our study contributes new insights to the literature in three ways. First, we expand the discussion on the interactions between the home country and EMNEs' international expansion in the EMNEs literature, by shifting research attention to home-country outcomes and highlighting a signaling mechanism that enhances stakeholders' perceptions and resource acquisition in the home country. Our study thus strongly complements past studies, which have primarily viewed EMNEs' international expansion as sources of strategic assets and opportunities for

organizational learning (Cui & Xu, 2019; Gubbi, Aulakh, Ray, Sarkar, & Chittoor, 2010; Lyles, Li, & Yan, 2014). Second, we contribute to signaling theory by proposing an attribution mechanism for resolving multiple signals and explaining the magnifying effect of information asymmetry in emerging markets. Finally, we add to the political connections literature by revealing the negative role of political connections in framing stakeholders' interpretation of positive signals.

## THEORETICAL BACKGROUND

### Home Country and EMNEs' International Expansion

Scholars have developed three perspectives regarding the influences of the home country on EMNEs' international expansion: the escapism perspective, the imprinting perspective, and the role of home-country governments (see Online Appendix A, Table 1 for a summary of key papers).

The escapism perspective suggests that EMNEs are driven to internationalize due to institutional weaknesses (Luo & Wang, 2012; Shi et al., 2017) and intense industry competition with both domestic and foreign companies in their home countries (Xia, Ma, Lu, & Yiu, 2014). These unfavorable conditions prompt firms to seek better opportunities abroad. This perspective is supported by studies that show how institutional fragility resulting from pro-market reforms in China has led to an increase in outward foreign direct investment (FDI) decisions by Chinese firms (Shi et al., 2017). This pattern is consistent with the observation in advanced industrialized nations that companies conduct outward FDI as a response to perceived misalignments between their needs and home-country institutional environments (Witt & Lewin, 2007).

While the escapism perspective proposes a relatively direct effect of the home-country context on EMNEs' internationalization, the imprinting perspective provides an indirect explanation for the influence of home country on EMNEs' internationalization by proposing that home-country institutional development and resource endowment shape firms' capabilities and skills, which in turn impact their international strategies (Estrin et al., 2018). Traditional MNE theories suggest that firm-specific advantages are prerequisites for FDI (Dunning, 1988; Rugman & Verbeke, 1992) and are normally developed in munificent home countries



where “abundant institutions enable firms to acquire or develop advanced knowledge,” and “intense rivalry and sophisticated demand sharpen their competitive edge” (Wan & Hoskisson, 2003: 31). EMNEs, however, face institutional weaknesses and resource constraints in the home country that limit their globally redeployable capabilities (e.g., a lack of leading technologies, established brands, and managerial skills), making them more sensitive to entry barriers in host countries (Estrin et al., 2018). This deficiency in capabilities leads to coping strategies, such as delegating autonomy to foreign subsidiaries (Wang et al., 2014) and adopting corporate social responsibility reporting (Marano, Tashman, & Kostova, 2017).

Although the emerging-market context is generally less munificent, research on the role of government involvement in the international expansion of EMNEs has proliferated, as firms with strong government ties (e.g., state-owned or government-related firms) may have difficult-to-replicate advantages (Hitt et al., 2016) compensating for their lack of capabilities (Lu et al., 2014). While these firms may face institutional pressure in host countries due to their political images, lack of transparency, ideological conflicts, and/or national security concerns (Cui & Jiang, 2012; Meyer, Ding, Li, & Zhang, 2014), they benefit substantially from various advantages derived from their home countries, such as soft budgets, political support, and diplomatic relations that enable and promote their international expansion (e.g., Li et al., 2018; Lu et al., 2014).

In summary, the literature has explored how institutional constraints and fierce competition push EMNEs to expand internationally, how home-derived capability deficiencies shape their global strategies, and how home-country governments exert influence in EMNEs’ internationalization. However, there has been limited research on the home-country outcomes of EMNEs’ internationalization. To narrow this gap, this study uses signaling theory to examine how EMNEs’ international expansion shapes the perception of home-country stakeholders and thus their resource acquisition back home.

### **A Signaling Perspective of EMNEs’ International Expansion**

Signaling theory fundamentally concerns investment decisions under information asymmetry. For example, in Spence’s 1973 model of job market signaling, employers must decide whether to hire a

candidate and what wage to offer, despite not having full information about the candidate’s quality. In such cases, observable characteristics serve as signals that help the employer form an assessment of the candidate’s quality. To further reduce the information asymmetry and increase the chances of being hired or obtaining a higher wage, the candidate is motivated to alter their observable characteristics to send additional information. However, for these alterations to be effective signals, there must be signaling costs that are negatively correlated with the unobserved quality of the candidate (i.e., lower-quality candidates will incur higher signaling costs to provide the same information). Signaling costs are thus essential for an observable and alterable characteristic to serve as a reliable signal in the market (Spence, 1973).

In our context, we examine the credit-granting decisions of financial resource providers such as suppliers and banks, who face high levels of information asymmetry due to the uncertainty and ambiguity in assessing the quality of firms (Fisman & Love, 2003; Petersen & Rajan, 1997). This problem is even more acute in emerging markets, where market intermediaries are underdeveloped, reliable information channels are limited, and inefficient rule of law breeds frequent financial fraud, making it difficult to assess a firm’s true value (Khanna & Palepu, 2010; Meyer et al., 2009). In such contexts, signaling by firms can be crucial in reducing information asymmetry. We argue that international expansion is an effective signal for emerging-market firms because it is highly observable (e.g., listed firms in China are required to disclose information about their foreign subsidiaries) and involves significant signaling costs, especially for low-quality firms that lack the capabilities to enter and operate in unfamiliar environments (Eden & Miller, 2004; Zaheer, 1995). Firms that are able to overcome the challenges of international expansion often have higher capabilities and value-creation potential, which are positively perceived by suppliers and banks in their credit-granting decisions.

Once organizations take actions to convey signals about their capabilities and strategic intent, external stakeholders, as information receivers, form perceptions and make inferences based on the signaled information (Basdeo, Smith, Grimm, Rindova, & Derfus, 2006). The interpretation of signals by information receivers is critical in determining the actual impact of a signaling action. However, traditional signaling theory, which originated as an





economic framework (Spence, 1973), tends to assume that the observer (signal receiver) will automatically notice and interpret a signal as intended by the signaler. Recent signaling research (Drover et al., 2018; Paruchri et al., 2021) has begun to move beyond this assumption and has focused on understanding how receivers process signaled information, especially when there are multiple and sometimes inconsistent signals (see Online Appendix A, Table 2 for a summary of key papers). This growing line of research integrates insights from cognitive science and social psychology to provide more realistic views of signal receivers as being both cognitively limited and socially embedded (Drover et al., 2018). In this study, we draw on recent signaling research to highlight the perspective of signal receivers and investigate how the number of patents granted and political connections, which are key characteristics in the context of EMNEs, serve as alternative signals that moderate the signaling effect of international expansion.

## HYPOTHESIS DEVELOPMENT

### International Expansion and Resource Acquisition in the Home Country

Signaling theory posits that a signaler's deliberate signaling action can reduce information asymmetry and shape an outside observer's assessment of the signaler's quality, thereby influencing the observer's investment decision (Connelly, Certo, Ireland, & Reutzel, 2011; Spence, 1973). Based on this logic, our main hypothesis suggests that an EMNE's international expansion can positively influence the credit-granting decisions of suppliers and banks by reducing information asymmetry and shaping these stakeholders' perceptions and evaluations of the firm's quality.

International expansion, by definition, refers to the process of establishing business operations across borders and creating subunits in foreign countries.<sup>2</sup> However, operating in foreign markets can be challenging due to large geographic, cultural, political, and institutional distances across countries (Ghemawat, 2001). IB scholars have long suggested that firms must possess specific capabilities or advantages to counteract the costs of operating in unfamiliar environments, particularly through FDIs (Dunning, 1988; Eden & Miller, 2004; Rugman & Verbeke, 1992; Zaheer, 1995). While EMNEs may not have as competitive capabilities as developed-market MNEs, firms that successfully set

up foreign subsidiaries should possess stronger capabilities than those without such experience. The barriers to foreign market entry serve as an isolating mechanism that differentiates high- versus low-quality firms, especially in emerging markets where institutional weaknesses make it difficult to evaluate a firm's true quality (Khanna & Palepu, 2010; Meyer et al., 2009).

The lending decisions made by home-country banks involve high information asymmetry and rely on both objective and subjective information (Altman, 1980), with loan officers' subjective judgments being influenced by the signaling efforts of the firm (Wilson, 2016). An EMNE's international expansion signals its capability to enter and operate in foreign markets and its strategic intent to grow, conveying positive information to home-country resource providers and increasing their willingness to provide resources. In addition, banks consider the repayment probability of applicant firms (Altman, 1980; Yeung, 2009), and international expansion can signal positive repayment probability by providing new growth opportunities and reducing downside risks through coordinated value-chain activities.

For home-country suppliers, international expansion similarly sends positive signals of EMNEs' quality. As evidenced by finance scholars, trade credit (i.e., finance from suppliers via delayed payments) is an important means of external financing, especially in emerging-market contexts, as "firms in countries with less developed financial markets appear to substitute informal credit provided by their suppliers to finance growth" (Fisman & Love, 2003: 373). In addition to the common criteria that both banks and suppliers consider, suppliers are more willing to provide trade credit to firms with high potential of future businesses that they can benefit from (Petersen & Rajan, 1997). Emerging-market firms with international operations are more likely to expand their businesses and open new markets, thereby sending a positive signal to suppliers as credit providers. Accordingly, we propose:

**Hypothesis 1:** The international expansion of an EMNE (in year  $t-1$ ) has a positive effect on its financial resource acquisition in the home country (in year  $t$ ).

### Signaling Cost: The Moderating Effect of Host-Country Development

We expect the positive impact of an EMNE's international expansion on its home-country



resource acquisition to be amplified when it expands to more advanced host countries. We define advanced host countries as those with more developed economies and higher gross domestic product (GDP) per capita. The combination of strict regulations, high product standards, and more sophisticated customers render advanced economies especially challenging for EMNEs as they are not accustomed to such conditions in their home countries (Estrin et al., 2018). Thus, the successful expansion of an EMNE to an advanced economy sends a stronger signal to home-country resource providers about the firm's competence and high quality. Furthermore, as part of the internationalization process, EMNEs adapt to international standards in areas such as product quality, production processes, and corporate governance. This adaptation process strengthens the signals of the firm's potential for future growth, which is positively perceived by home-country stakeholders. Additionally, EMNEs' association with more prestigious locations (i.e., more developed economies) reinforce the signal of their underlying quality (Higgins & Gulati, 2003). We predict this "halo effect" to be particularly noticeable for emerging-economy home-country stakeholders, who are more likely to exhibit outgroup favoritism and be attracted by foreignness attributes (Balabanis & Diamantopoulos, 2016). Accordingly, we propose:

**Hypothesis 2:** The positive effect of an EMNE's international expansion on its financial resource acquisition in the home country is strengthened when it expands to more advanced economies.

#### **Information Asymmetry: The Moderating Effect of Home-Market Environment**

Although emerging markets generally have weak institutional arrangements that magnify information asymmetry between business partners (Khanna & Palepu, 2010; Meyer et al., 2009), substantial differences exist in the institutional development across subnational regions within emerging markets (Chan, Makino, & Isobe, 2010). Regions with more developed market institutions often have more efficient market intermediaries (e.g., auditors, credit raters, trading companies) that help mitigate information problems by aggregating, analyzing, and disseminating credible and higher-quality information (Chan et al., 2010; Meyer et al., 2009). Resource providers located in such regions have richer information to evaluate firms when making credit-granting decisions. Thus, the

signaling role of international expansion as a quality differentiator becomes diluted in regions with an abundance of high-quality information. In contrast, in regions with less developed market institutions, information asymmetry is more serious as stakeholders lack sufficient information to correctly evaluate firms. Thus, the signaling role of international expansion as a remedy for information asymmetry and in conveying information on quality is amplified (Connelly et al., 2011; Spence, 1973). Accordingly, we propose:

**Hypothesis 3:** The positive effect of an EMNE's international expansion on its financial resource acquisition in the home country is strengthened in regions with less developed market institutions.

#### **The Signal Receiver's Perspective: The Moderating Effects of (in)Congruent Signals**

Signaling theory has traditionally focused more on the signaler side, viewing receivers as passive audiences that notice and react to signals in expected ways. However, the signaling effect requires sensemaking by the receiver, which involves interpreting and ascribing meaning to the signal before taking action (Weick, 1995). Sensemaking is often triggered by ambiguity, uncertainty, confusion, and discrepancy, situations in which signal receivers may encounter when interpreting multiple and inconsistent signals. To make sense of multiple and sometimes inconsistent information, individuals engage in retrospective thinking to construct a plausible account of reality (Weick, 1995). In our research context, we propose that stakeholders confronted with multiple signals form an integrated interpretation through an attribution mechanism. Specifically, we argue that in the context of EMNEs, patents and political connections – as fundamental characteristics – moderate the signaling effect of international expansion by influencing how stakeholders attribute the expansion to the focal firm's intrinsic quality versus external dependence.

We begin by examining the moderating effect of patents granted. Patents are a key factor in the international expansion context because they reflect a firm's innovation capability – a cornerstone of ownership advantages or non-location-bounded firm-specific advantages that bring competitive advantages and justify foreign operations of MNEs (Buckley & Casson, 1976; Dunning, 1988; Rugman & Verbeke, 1992). The legal safeguarding role of patents against expropriation, as well as the



signaling role of patents in revealing patentees' underlying quality, has been emphasized in the innovation literature (Hsu & Ziedonis, 2013). Due to the lengthy application, examination, and grant process, the number of patents officially granted to firms serves as a signal of their underlying innovation capabilities, differentiating high- versus low-quality actors (Huang & Li, 2019). As innovation capabilities often form the foundation of firms' competitive advantages that support international expansion (Cassiman & Golovko, 2011), the sense-making of stakeholders may result in attributing observed international expansion to firms' intrinsic innovation competences. Therefore, a higher number of patents granted to an EMNE serves as a congruent signal that corroborates and validates resource providers' perceptions of its high quality, thereby strengthening the signaling effect of international expansion. Accordingly, we propose:

**Hypothesis 4:** The positive effect of an EMNE's international expansion on its financial resource acquisition in the home country is strengthened when it has a higher number of patents granted.

Next, we examine the moderating effect of political connections, which we define as whether a focal firm's board or top management team (TMT) members have prior working experience as government officials (Zhang, Marquis, & Qiao, 2016). Political connections can provide firms with a range of benefits, including access to information, resources, and political influences (Zhang et al., 2016; Zhao & Lu, 2016), especially in emerging-market contexts where governments hold dominant roles. However, we caution that political connections can act as an incongruent signal, potentially contaminating the positive signaling effect of international expansion. Political connections and international expansion reflect divergent logics that may create inconsistent impressions of a firm. For instance, politically connected firms may be associated with state socialism logics that emphasize stability, central planning, and social welfare, while international expansion is associated more with market capitalism logics that emphasize growth, innovation, and global competitiveness (Marquis & Qiao, 2020).

From the perspective of information receivers, when they receive incongruent signals from the same firm, they engage in deliberate sensemaking to resolve the incompatible information. According to cognitive-based research (Chen & Chaiken, 1999; Drover et al., 2018), information inconsistencies

encourage decision-makers to evaluate available information more extensively, and they tend to reconcile incompatible information by forming an integrated evaluation, which can change signal receivers' interpretation of the original signal (Paruchuri et al., 2021). Specifically, when external stakeholders discover that the internationalized firms also have political connections, they may attribute these firms' international expansion efforts not to their intrinsic capabilities but to the political influences and government support they receive from close affiliations with the government. Such an attribution mechanism weakens the role of international expansion as a signal of firms' underlying ability. Accordingly, we propose:

**Hypothesis 5:** The positive effect of an EMNE's international expansion on its financial resource acquisition in the home country is weakened when it has stronger political connections.

## METHODS

### Data and Sample

We chose China as our research context for several reasons. First, China has the highest amount of outward FDI among emerging markets, making it an important player in the international expansion trend of EMNEs (UNCTAD, 2019). Second, despite pro-market reforms, market institutions in China remain underdeveloped, creating a persistent resource acquisition challenge for many firms, particularly privately owned enterprises (POEs). Compared to state-owned counterparts, POEs in China have historically faced an inferior status, market entry restrictions, and limited access to critical resources, such as financial capital, in the domestic market (Gregory, Tenev, & Wagle, 2000; Zhao & Lu, 2016). Third, China's varied institutional development across regions provides an ideal context to test the signaling mechanism under different conditions of information asymmetry.

We collected our sample by starting with all manufacturing firms listed in the China Stock Market and Accounting Research (CSMAR) Database, which was developed by GTA Information Technology, a major provider of data on Chinese companies (e.g., Zhang et al., 2016). We used GTA's Equity of Nature Research Database to identify the POEs<sup>3</sup> and the Outward FDI Research Database to obtain detailed information on their foreign operations, such as foreign subsidiaries' host-country



locations, entry modes, and year of establishment. We excluded foreign subsidiaries established in tax-haven destinations (i.e., the British Virgin Islands, Cayman Islands, and Bermuda) and those established in Greater China areas (i.e., Hong Kong, Macau, and Taiwan). After merging these datasets and excluding observations with incomplete information, we constructed a panel dataset containing 1734 manufacturing POEs between 1999 and 2019, of which 854 firms conducted outward FDI in 120 host countries. For sector and host-country distribution of internationalized POEs, please refer to Online Appendix B, Tables 1 and 2.

## Measures

### Dependent variables

The dependent variable in our study is the *financial resource acquisition* from banks and suppliers as credit stakeholders in the home country after international expansion. Consistent with previous research, we used the amount of long-term bank loans (Zhao & Lu, 2016) and accounts payable (Petersen & Rajan, 1997) to measure bank credit and trade credit, respectively. To account for industry differences, we subtracted the industry means from each variable (Fisman & Love, 2003). In robustness tests, we also adjusted the measure of trade credit by total assets, total revenue, total debts, and our results remained highly consistent.

### Independent variable

To measure equity-based *international expansion*, we used the yearly count of foreign subsidiaries for each firm (Vermeulen & Barkema, 2002). We chose this measure over alternative ones, such as foreign assets ratios or diversification measures, because the count measure is more explicit and observable as a clear signal to resource providers. This approach is consistent with previous studies (Lu & Beamish, 2004; Vermeulen & Barkema, 2002). In robustness tests, we also employed a difference-in-differences design, which utilizes the first foreign market entry of firms to code a dummy variable of international expansion (equal to 1 for firms engaged in international expansion and 0 otherwise).

### Moderators

To measure *host-country development*, we used GDP per capita as a general indicator of a host country's level of development. We obtained the GDP per capita information from the World Bank. Since each firm may have established more than one

foreign subsidiary per year, we calculated a firm-level ratio to measure this variable. The ratio is the proportion of foreign subsidiaries established in more advanced economies (with higher GDP per capita than China) among all foreign subsidiaries established by the focal firm.

To measure *home-market development*, we used the marketization index developed by the National Economic Research Institute (NERI). We obtained the 1997–2019 dataset from the official platform managed by the NERI research team (<https://cmi.ssap.com.cn>). The yearly marketization index evaluates the development level of market-supporting institutions in China's subnational provinces across five dimensions<sup>4</sup> and has been widely used in previous studies (e.g., Shi et al., 2017; Zhang et al., 2016). We matched this index with our sample firms based on the province in which their headquarters were located.

To measure the number of *patents granted*, we obtained information from the Chinese Innovation Research Database (accessed from the Chinese Research Data Services Platform) and used the number of invention patents granted to each listed POE per year. In China, the State Intellectual Property Office classifies patents into three types: invention, design, and utility. We only used the number of invention patents for our measure because according to the granting process, invention patents more accurately reflect the innovativeness of the focal applicant.

To measure *political connections*, we used GTA's Figure Characteristic Database, and supplemented it with information from firms' annual reports. Specifically, we identified the political work experience<sup>5</sup> of each POE's TMT and board members. Chinese-listed companies are required to disclose biographical information of their TMT and board members, including education, career history, and current position. Consistent with prior studies (Haveman, Jia, Shi, & Wang, 2017), we classified a TMT or board member as having political experience if they had previously worked as a government official. Using this information, we calculated a ratio measure by dividing the number of TMT and board members with political work experience by the total number of TMT and board members in the firm, which we used to capture the level of political connections at the firm level.

### Control variables

We included several control variables to account for potential confounding effects. We controlled for *firm size*, *firm age*, *prior financial performance*, and





*intangible asset ratio* as they may affect both firms' internationalization (Li et al., 2020) and resource providers' evaluations (Petersen & Rajan, 1997). We calculated *firm size* as the natural log of total assets and *firm age* as number of years since the firms' establishment (log-transformed to handle skewness). We used return on assets (*prior ROA*) to measure prior financial performance, which was calculated as operating income divided by total assets. We measured *intangible assets ratio* as the amount of intangible assets divided by total assets. Moreover, we controlled for *debt ratio*, measured as total debts divided by total assets, to reflect firms' financial structures that may affect resource providers' credit-granting decisions. As we propose a signaling mechanism, we considered firms' level of visibility as an important factor. We included *advertising intensity* as a proxy for visibility, which was calculated as the percentage of sales fees out of the operating income. Finally, year fixed effects were included in all models to eliminate any concern over temporal variations (e.g., changes in policies or external environments).

### Estimation Strategy

To address concerns of reverse causality and omitted variable bias, we used the instrumental variables method to analyze the impact of EMNEs' international expansion on home-country resource acquisition.<sup>6</sup> To test Hypothesis 1, we employed the two-stage least squares (2SLS) model with two instrumental variables: *competition pressure from foreign firms* and *managerial communist imprinting*. These two instruments were selected based on the principle of relevance and exogeneity, combined with an extensive review of the literature and careful reflection on our research context. The first instrument, *competition pressure from foreign firms*, captures the extent of competition with foreign companies in the same industry. Specifically, we obtained data from China's National Bureau of Statistics and measured it as the percentage of sales accounted for by foreign companies in the same industry per year (Xia et al., 2014). We considered this variable a valid instrument because high competition pressure from foreign firms may promote emerging-market firms' international expansion (Cui & Xu, 2019; Xia et al., 2014), yet at the same time we did not observe a direct correlation between the industry-level sales ratios of foreign companies and the resource acquisition of a specific firm.

The second instrumental variable, *managerial communist imprinting*, measures the extent to which the top executives of each firm were influenced by communist ideology during their personal growth. We created a dummy variable to identify firms whose CEO or chairman were born between 1950 and 1959, a cohort identified by historians as having stronger communist imprinting due to their exposure to extreme communist movements during their formative years (Chen, 1999; Wang, Du, & Marquis, 2019). We considered managerial communist imprinting to be a valid instrument because research has shown that managers with stronger communist imprinting are more likely to resist foreign investments (Marquis & Qiao, 2020), yet at the same time we did not observe a direct correlation between this variable and the financial resources a specific firm obtained from home-country suppliers and banks.

We performed several diagnostic tests to assess the strength (i.e., relevance) and validity (i.e., exogeneity) of our instrumental variables. First, the Durbin-Wu-Hausman test ( $chi\text{-squared} = 33.618$ ,  $p = 0.000$ ) rejects the null hypothesis that our independent variable is exogenous, confirming the appropriateness of our instrumental variables approach. To assess the relevance of our instruments, we reviewed the first-stage regression results, which indicated that both instruments had significant and expected effects on international expansion (*competition pressure from foreign firms* had a coefficient of 1.631,  $p = 0.000$ ; *managerial communist imprinting* had a coefficient of  $-0.189$ ,  $p = 0.027$ , as shown in Model 1 of Table 2). The under-identification test ( $chi\text{-squared} = 41.300$ , with  $p = 0.000$ ) further supported the relevance of our instruments. We also conducted the weak identification test, which yielded an F-statistic of 20.827 ( $p = 0.000$ ), indicating that our instruments were strongly correlated with the independent variable (Stock & Yogo, 2002). Finally, the over-identification test, using the Hansen J statistic, yielded a  $p$ -value of 0.412, failing to reject the null hypothesis that the instruments were uncorrelated with the error term, thus supporting the validity of our instrumental variables.

To test Hypotheses 2–5, we needed to account for the endogeneity of the interaction terms between international expansion and moderating variables. One way to address this is to generate interaction terms between the chosen instrumental variables and the moderators and include them in the 2SLS model as additional instrumental variables.



However, as Wooldridge (2015) criticizes, in situations with interaction terms (as one example of non-linearity), the 2SLS approach can be inefficient and may provide inconsistent results. Accordingly, Wooldridge (2015) suggests the control function approach as a more parsimonious and efficient approach in such cases. The control function approach first estimates the model of endogenous explanatory variables as a function of instrumental variables, which is similar to the first stage of 2SLS. However, instead of using the fitted values obtained from the first stage, the control function approach uses the residuals from the first-stage regression as controls in the second stage. This approach has gained popularity among economists (e.g., Dreher, Fuchs, Parks, Strange, & Tierney, 2021) and management scholars (e.g., Rao & Greve, 2018) as an appropriate method to handle endogeneity with interaction terms and other nonlinear models in general. Therefore, we adopted this approach in our analyses.

## RESULTS

Descriptive statistics and correlation matrix are presented in Table 1. The mean number of foreign subsidiaries of Chinese POEs is 1.095, with a standard deviation of 3.490, indicating that their international expansion is still in its early stages and the number of foreign subsidiaries is relatively small. Multicollinearity is not a concern in this study, as the variance inflation factor scores range from 1.04 to 6.39 with an average score of 4.33.

Table 2 presents the 2SLS results for H1. Model 1 displays the first-stage results with international expansion as the dependent variable, while Model 2 and Model 3 show the second-stage results for trade credit and bank credit, respectively. Model 1 confirms our prediction for the instrumental variables. Models 2 and 3 reveal that international expansion in year  $t-1$  has a positive effect on both trade credit ( $\beta = 506.360$ ,  $p = 0.000$ ) and bank credit ( $\beta = 451.166$ ,  $p = 0.000$ ) in year  $t$ . The marginal effect suggests that a one-unit increase in international expansion, holding all other explanatory variables constant at their means, leads to an increase of 506.360 (451.166) million RMB in trade credit (bank credit), which is a meaningful impact given the average trade credit (bank credit) of 586.943 (190.318) million RMB. Thus, we found empirical support for H1.

Tables 3 and 4 display results for the moderating effects, using the control function approach for

bank credit and trade credit, respectively. Model 1 shows the main-effect results, which confirm Wooldridge's (2015) argument that the control function approach produces the same results as the 2SLS in linear model conditions, while the control function approach offers an extra residual term that efficiently test the endogeneity assumption of the model. Models 2 to 5 present the results for the four moderating effects, respectively, and the last two models are full models with different samples.<sup>7</sup>

H2 predicts that the positive effect of international expansion is enhanced when firms enter more advanced economies. As shown in Model 2 of Table 3 for bank credit, the interaction term between international expansion and host-country development is positive and significant ( $\beta = 110.367$ ,  $p = 0.015$ ). The calculation of marginal effects reveals that when host-country development is *high* (one standard deviation above the mean), a one-unit increase in international expansion leads to an increase of 469.097 million RMB in bank credit. However, the increase *drops* to 393.466 million RMB if host-country development is *low* (one standard deviation below the mean). However, in Model 2 of Table 4, we did not find similar results for trade credit. Thus, H2 is supported for bank credit but not for trade credit (see Online Appendix C for a detailed discussion on unsupported hypotheses).

H3 predicts that the signaling effect of international expansion is stronger for firms located in home regions with less developed market institutions. As shown in Model 3 of Tables 3 and 4, the interaction term between international expansion and home-market development is negative and significant for bank credit ( $\beta = -23.135$ ,  $p = 0.001$ ) and negative and marginally significant for trade credit ( $\beta = -11.193$ ,  $p = 0.110$ ). The calculation of marginal effects demonstrates that when home-market development is *low* (one standard deviation below the mean), a one-unit increase in international expansion leads to an increase of 454.071 (509.421) million RMB in bank credit (trade credit). However, the increase *drops* to 373.468 (470.423) million RMB if home-market development is *high* (one standard deviation above the mean). Hence, the signaling effect of international expansion is diluted by sufficient information in more developed home markets. Therefore, H3 is supported.

H4 predicts that patents granted have a strengthening effect as a congruent signal. Model 4 in Table 4 shows a positive and significant interaction



Table 1 Descriptive statistics and correlation matrix

	Mean	SD	1	2	3	4	5	6
1 Bank credit (mill. RMB)	190.318	957.478	1.000					
2 Trade credit (mill. RMB)	586.943	1667.705	<b>0.554</b>	1.000				
3 International expansion	1.095	3.490	<b>0.262</b>	<b>0.269</b>	1.000			
4 Firm size	21.505	1.035	<b>0.365</b>	<b>0.519</b>	<b>0.329</b>	1.000		
5 Firm age	2.663	0.435	<b>0.072</b>	<b>0.092</b>	<b>0.095</b>	<b>0.193</b>	1.000	
6 Prior ROA	0.041	0.078	-0.010	0.009	-0.012	<b>0.055</b>	- <b>0.091</b>	1.000
7 Intangible asset ratio	0.046	0.043	0.016	- <b>0.018</b>	<b>0.046</b>	- <b>0.037</b>	<b>0.046</b>	- <b>0.103</b>
8 Debit ratio	0.397	0.494	<b>0.059</b>	<b>0.070</b>	<b>0.043</b>	<b>0.025</b>	<b>0.055</b>	- <b>0.311</b>
9 Advertising intensity	0.084	0.093	<b>0.032</b>	<b>0.030</b>	-0.007	-0.016	<b>0.060</b>	<b>0.038</b>
10 Host-country development	0.803	0.337	-0.021	- <b>0.088</b>	-0.013	- <b>0.037</b>	- <b>0.075</b>	-0.011
11 Home-market development	9.214	1.733	-0.016	<b>0.022</b>	<b>0.099</b>	<b>0.123</b>	<b>0.177</b>	<b>0.070</b>
12 Political connections	0.092	0.090	-0.020	- <b>0.057</b>	- <b>0.056</b>	- <b>0.079</b>	- <b>0.092</b>	- <b>0.027</b>
13 Patents granted	5.111	64.331	<b>0.189</b>	<b>0.469</b>	<b>0.080</b>	<b>0.161</b>	<b>0.018</b>	-0.004
	Mean	SD	7	8	9	10	11	12
1 Bank credit (mill. RMB)	190.318	957.478						
2 Trade credit (mill. RMB)	586.943	1667.705						
3 International expansion	1.095	3.490						
4 Firm size	21.505	1.035						
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8 Debit ratio	0.397	0.494	<b>0.048</b>	1.000				
9 Advertising intensity	0.084	0.093	<b>0.043</b>	- <b>0.079</b>	1.000			
10 Host-country development	0.085	0.984	-0.004	- <b>0.035</b>	<b>0.117</b>	1.000		
11 Home-market development	9.214	1.733	- <b>0.077</b>	- <b>0.051</b>	- <b>0.098</b>	<b>0.087</b>	1.000	
12 Political connections	0.092	0.090	<b>0.037</b>	<b>0.023</b>	-0.001	- <b>0.057</b>	- <b>0.140</b>	1.000
13 Patents granted	5.111	64.331	-0.015	<b>0.022</b>	0.014	- <b>0.078</b>	<b>0.034</b>	- <b>0.026</b>

Bold =  $p < 0.05$ .  $N = 10,048$ .

term ( $\beta = 57.450$ ,  $p = 0.000$ ) between international expansion and patents granted for trade credit. The calculation of marginal effects reveals that for firms with more patents granted (one standard deviation above the mean), a one-unit increase in international expansion leads to an increase of 1412.656 million RMB in trade credit. However, the increase *drops* to 1305.280 million RMB for firms with *fewer* patents granted (one standard deviation below the mean). However, in Model 4 of Table 3, there was no supporting evidence found for bank credit. Therefore, H4 is supported for trade credit but not for bank credit.

H5 predicts that political connections have a weakening effect as an incongruent signal. In Model 5 of Table 4, the interaction term between international expansion and political connections is negative and significant ( $\beta = -384.813$ ,  $p = 0.000$ ). The marginal effects calculation shows that, for firms with *low* political connections (one

standard deviation below the mean), a one-unit increase in international expansion leads to an increase of 495.751 million RMB in trade credit. However, the increase *drops* to 425.985 million RMB for firms with *high* political connections (one standard deviation above the mean). While H5 is supported for trade credit, no supporting evidence was found for bank credit in Model 5 of Table 3.

Figures 1 and 2 visually illustrate significant moderating effects for bank credit and trade credit, respectively. In addition, we plotted the marginal effects of international expansion across the full range of moderators in Figures 3 and 4, following Meyer, van Witteloostuijn and Beugelsdijk (2017). The two outer lines on the graphs represent the 95% confidence intervals (CI) of the interaction lines, which all have consistent directions with our main findings and are above the zero line, indicating statistically significant moderation effects.

**Table 2** 2SLS regression results for trade credit and bank credit

	Model 1 First-stage results	Model 2 Second-stage results	
		Trade credit	Bank credit
Main effects			
H1: International expansion		506.360 [0.000]	451.166 [0.000]
Instrumental variables			
Competition pressure from foreign firms	1.631 [0.000]		
Managerial communist imprinting	- 0.189 [0.027]		
Control variables			
Firm size	1.140 [0.000]	302.670 [0.001]	- 59.041 [0.435]
Firm age	0.094 [0.247]	53.171 [0.284]	96.893 [0.018]
Prior ROA	0.471 [0.208]	560.111 [0.014]	371.750 [0.042]
Intangible asset ratio	4.367 [0.000]	- 2114.766 [0.001]	- 1279.298 [0.012]
Debt ratio	0.220 [0.000]	36.559 [0.233]	- 17.349 [0.404]
Advertising intensity	- 0.271 [0.308]	280.374 [0.055]	311.694 [0.011]
Patents granted	0.001 [0.297]	9.876 [0.000]	1.243 [0.011]
Home-market development	0.108 [0.000]	- 77.463 [0.000]	- 66.809 [0.000]
Constant	- 25.275 [0.000]	- 6689.698 [0.000]	1040.831 [0.502]
Observations	10,048	10,048	10,048

Model 1 shows the first-stage results with international expansion as the dependent variable, while Models 2 and 3 show the second-stage results with trade credit and bank credit as the dependent variable, respectively. All explanatory variables were lagged by 1 year. Year fixed effects were included but not displayed for brevity. *P* values, computed with robust standard errors, are shown in brackets.

To test the robustness of our findings, we conducted several additional analyses, including the difference-in-differences design, different model specifications to test moderating effects, different measures of trade credit, and different explanations of patents granted. Please refer to Online Appendix D for details on these supplementary analyses.

## DISCUSSION AND CONCLUSION

This study proposes and tests the idea that the international expansion of EMNEs has a signaling effect on the perception of home-country stakeholders, which then affects EMNEs' resource acquisitions. We conduct empirical analyses of Chinese POEs in the manufacturing industries from 1999 to

2019, and our results largely support our propositions. This study has important theoretical and managerial implications that we elaborate below.

## Theoretical Implications

The EMNEs literature has a central debate over whether the rationale for emerging-market firms' internationalization differs from that of developed-market firms (Hernandez & Guillén, 2018). While some scholars have proposed unique features and theories of EMNEs' internationalization, others argue that existing theories can explain their behavior with some modifications (Ramamurti, 2012; Verbeke & Kano, 2015). Our study does not aim to resolve this debate, but we do propose and test a unique outcome of internationalization that



**Table 3** The control function results for bank credit

	Model 1	Model 2	Model 3	Model 4	Model 5	Full Model <sup>a</sup>	Full Model <sup>b</sup>
H1: International expansion	451.166 [0.000]	556.884 [0.001]	622.960 [0.000]	539.713 [0.000]	377.870 [0.000]	785.082 [0.000]	744.360 [0.000]
Host-country development		- 229.857 [0.209]				- 374.261 [0.001]	
H2: International expansion × Host-country development		110.367 [0.015]				151.016 [0.000]	
H3: International expansion × Home-market development			- 23.135 [0.001]			- 28.813 [0.017]	- 25.495 [0.014]
H4: International expansion × Patents granted				3.144 [0.674]		3.690 [0.761]	14.717 [0.182]
Political connections					1.803 [0.987]	- 338.484 [0.482]	19.945 [0.861]
H5: International expansion × Political connections					26.197 [0.841]	74.365 [0.688]	- 12.460 [0.926]
<i>Residual from the first stage</i>	- 404.960 [0.000]	- 612.462 [0.000]	- 358.042 [0.000]	- 495.406 [0.000]	- 328.422 [0.000]	- 601.995 [0.000]	- 460.857 [0.000]
Firm size	- 59.041 [0.280]	12.654 [0.953]	- 26.966 [0.617]	- 149.027 [0.058]	- 17.902 [0.768]	- 54.030 [0.770]	- 138.557 [0.098]
Firm age	96.893 [0.000]	- 44.953 [0.699]	20.452 [0.317]	28.416 [0.176]	53.903 [0.018]	- 78.373 [0.287]	44.009 [0.054]
Prior ROA	371.750 [0.001]	908.558 [0.023]	390.659 [0.001]	516.366 [0.000]	554.276 [0.001]	1028.992 [0.053]	609.803 [0.000]
Intangible asset ratio	- 1279.298 [0.000]	- 1962.071 [0.051]	- 1012.042 [0.001]	- 1532.818 [0.000]	- 929.927 [0.010]	- 1906.550 [0.071]	- 1474.897 [0.001]
Debt ratio	- 17.349 [0.285]	51.118 [0.410]	3.318 [0.828]	- 22.468 [0.245]	4.268 [0.796]	119.530 [0.171]	- 21.080 [0.303]
Advertising intensity	311.694 [0.000]	49.459 [0.894]	268.614 [0.001]	239.734 [0.004]	327.286 [0.001]	506.166 [0.043]	336.661 [0.001]
Patents granted	1.243 [0.034]	21.517 [0.749]	1.409 [0.018]	13.600 [0.479]	1.133 [0.033]	5.866 [0.902]	- 9.653 [0.632]
Home-market development	- 66.809 [0.000]	- 125.407 [0.068]	- 52.262 [0.000]	- 80.257 [0.000]	- 64.186 [0.000]	- 28.664 [0.569]	- 60.637 [0.000]
Constant	1040.831 [0.354]	180.144 [0.969]	695.200 [0.546]	3419.571 [0.044]	420.288 [0.747]	1094.747 [0.789]	2913.374 [0.109]
Observations	10,048	2969	10,048	10,048	7416	2220	7416
R-squared	0.165	0.222	0.177	0.166	0.166	0.231	0.170

All explanatory variables were lagged by 1 year. Year fixed effects were included but not displayed for brevity. *P* values, computed with robust standard errors, are shown in brackets.

could be particularly significant for EMNEs. Our findings support the idea that international expansion can serve as a signal to enhance stakeholders' perceptions and EMNEs' resource conditions in the home country. This signaling mechanism complements the capability upgrading mechanism and may be especially relevant in the context of the current surge in economic nationalism, the anti-globalization trend, and decoupling policies. These recent developments make the capability upgrading mechanism less effective as they have challenged EMNEs' ability to access and transfer strategic assets from advanced economies (Luo & Witt, 2022). Our proposed signaling mechanism

offers an alternative perspective on the benefits of international expansion for EMNEs, explaining how internationalization can improve EMNEs' home country conditions.

We believe our study aligns with contemporary internalization theory (Verbeke & Kano, 2015), which argues that successful internationalization requires a firm to combine its firm-specific advantages with location advantages in both home and host countries. The emerging-market context provides both home-country-specific advantages, such as large market size and growth potential, and disadvantages, such as an underdeveloped institutional environment that distorts resource

**Table 4** The control function results for trade credit

	Model 1	Model 2	Model 3	Model 4	Model 5	Full Model <sup>a</sup>	Full Model <sup>b</sup>
H1: International expansion	506.360	2655.093	591.133	1356.010	496.328	2741.649	1619.513
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Host-country development		– 435.338				– 525.286	
		[0.111]				[0.002]	
H2: International expansion × Host-country development		– 31.164				– 48.255	
		[0.578]				[0.331]	
H3: International expansion × Home-market development			– 11.193			– 10.235	– 23.798
			[0.110]			[0.422]	[0.060]
H4: International expansion × Patents granted				57.450		34.405	88.058
				[0.000]		[0.023]	[0.000]
Political connections					– 125.131	– 786.180	– 287.237
					[0.400]	[0.184]	[0.097]
H5: International expansion × Political connections					– 384.813	– 400.897	– 264.595
					[0.000]	[0.003]	[0.071]
<i>Residual from the first stage</i>	– 451.847	– 2617.555	– 430.893	– 1338.933	– 421.060	– 2595.146	– 1392.015
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Firm size	302.670	– 1092.764	308.923	– 535.950	315.912	– 1161.262	– 595.047
	[0.000]	[0.103]	[0.000]	[0.006]	[0.000]	[0.000]	[0.004]
Firm age	53.171	– 250.833	– 28.307	– 2.084	2.077	– 249.835	21.790
	[0.092]	[0.179]	[0.320]	[0.945]	[0.948]	[0.012]	[0.512]
Prior ROA	560.111	2521.522	629.555	1159.160	891.710	2975.926	1390.541
	[0.001]	[0.001]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Intangible asset ratio	– 2114.766	– 13653.741	– 1929.796	– 5406.530	– 1890.576	– 12681.011	– 5717.573
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Debt ratio	36.559	– 197.006	53.200	– 117.155	56.821	12.927	– 127.979
	[0.220]	[0.281]	[0.062]	[0.016]	[0.059]	[0.955]	[0.014]
Advertising intensity	280.374	– 1258.541	215.181	– 31.245	169.214	– 1113.380	– 101.484
	[0.006]	[0.040]	[0.039]	[0.791]	[0.161]	[0.002]	[0.457]
Patents granted	9.876	433.514	9.989	213.062	9.507	362.930	194.119
	[0.000]	[0.001]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Home-market development	– 77.463	– 386.694	– 73.656	– 178.176	– 84.473	– 369.283	– 173.883
	[0.000]	[0.002]	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
Constant	– 6689.698	25043.194	– 6394.588	12129.613	– 6573.734	27116.273	13169.422
	[0.000]	[0.086]	[0.000]	[0.005]	[0.000]	[0.000]	[0.004]
Observations	10,048	2969	10,048	10,048	7416	2220	7416
R-squared	0.344	0.508	0.426	0.364	0.451	0.544	0.392

All explanatory variables were lagged by 1 year. Year fixed effects were included but not displayed for brevity. *P* values, computed with robust standard errors, are shown in brackets.

allocation. Our study suggests that EMNEs can use operations in host countries to alleviate home-country-specific disadvantages and better leverage home-country-specific advantages, with non-location-bound firm-specific advantages like patents playing a crucial role. While prior research has highlighted the role of political connections in compensating for EMNEs' lack of ownership advantages (Lu et al., 2014), our study cautions that internationalization backed up by political connections may not be as sustainable as expected, which could result in negative perceptions from external stakeholders.

In a broader sense, the interaction between home-country conditions and emerging-market firms' internationalization is important not only for EMNE research but for MNE research in general. As Hernandez and Guillén (2018) note, studying EMNEs and their home countries provides an opportunity to observe the “prehistory” of MNEs and avoid left-censoring in traditional MNE research. Our study sheds light on the home-country orientation and the signaling role of international expansion in the early stages of emerging-market firms' internationalization, which has implications for understanding the

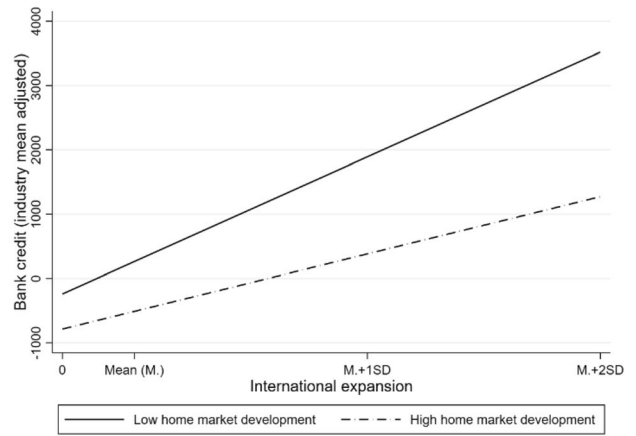
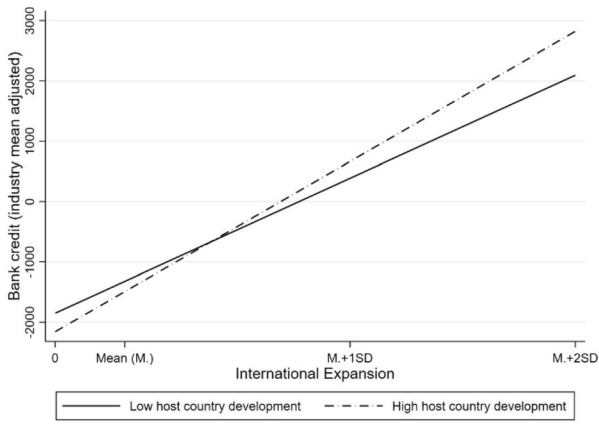


Figure 1 Interaction plots for bank credit.

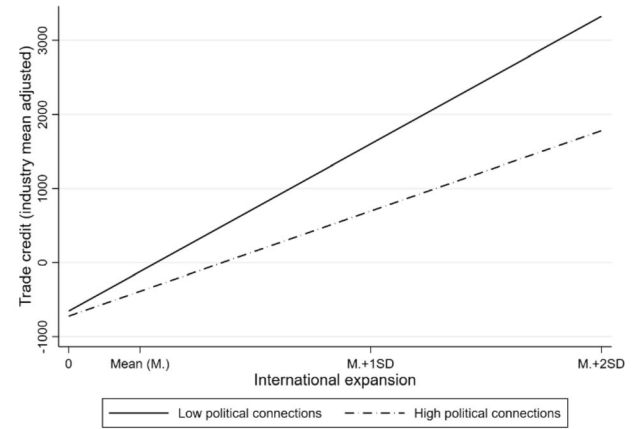
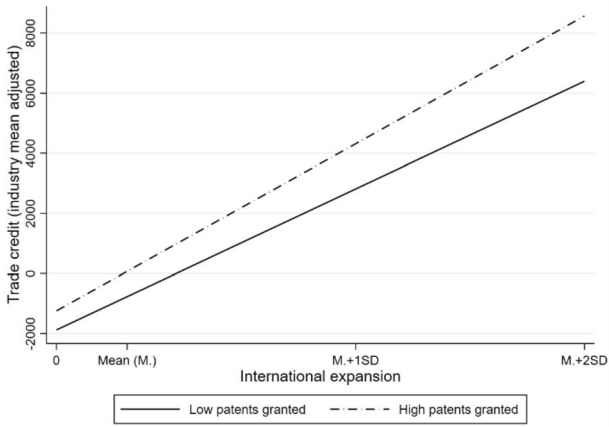


Figure 2 Interaction plots for trade credit.

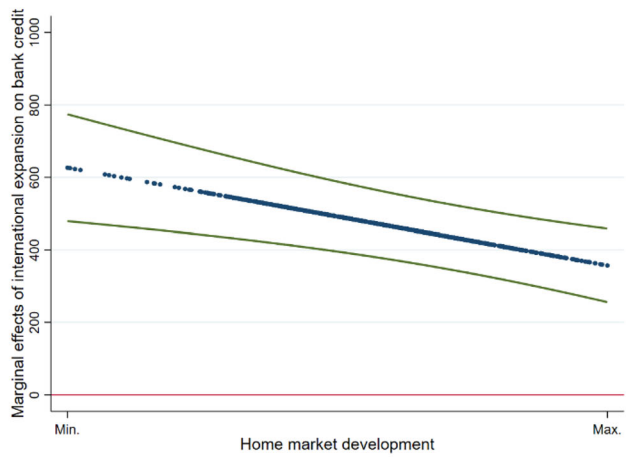
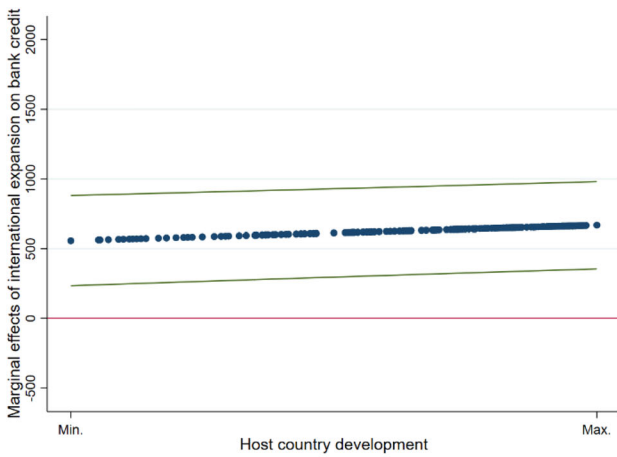
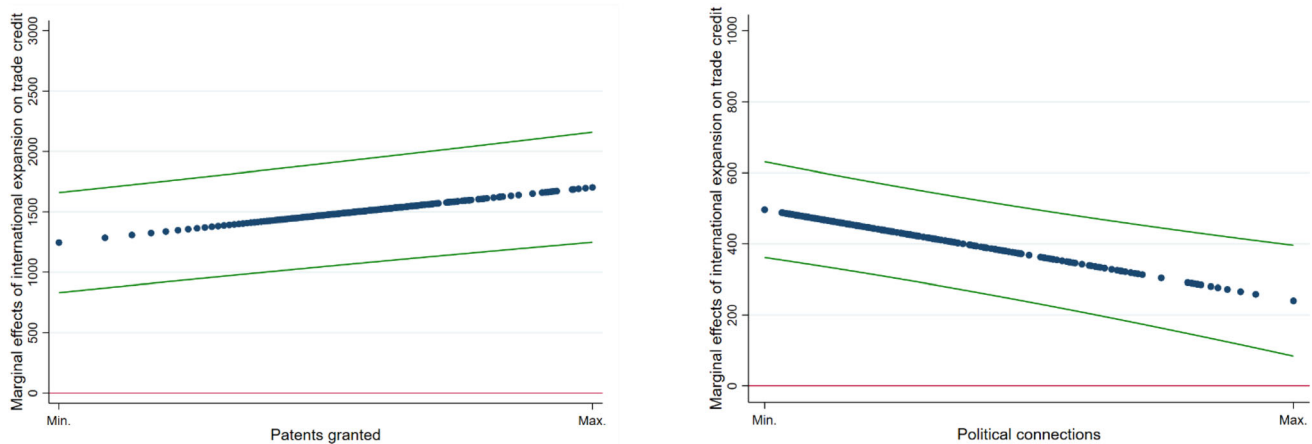


Figure 3 Marginal effects of international expansion on bank credit (across the full range of moderators with 95% CI).



**Figure 4** Marginal effects of international expansion on trade credit (across the full range of moderators with 95% CI).

internationalization strategies of both EMNEs and traditional MNEs.

Additionally, our study also makes contributions to signaling theory and political connections research. While information asymmetry is a prerequisite of signaling theory, it has rarely been examined explicitly in management research (Connelly et al., 2011). In our study, we leverage subnational variations in institutional developments within an emerging economy to explore how information asymmetry affects the values of signals as channels of information. Moreover, we propose an attribution mechanism that explains how signal receivers resolve multiple, and sometimes inconsistent signals, in an integrated way. Regarding political connections research, our study demonstrates a negative framing effect of political connections that shapes how other firm characteristics are interpreted. We caution that stakeholders may undervalue the intrinsic capabilities of politically connected firms by attributing their achievements to governments' special treatment. Future research should extend this line of inquiry and test this attribution effect in different research settings.

### Managerial Implications

Before drawing managerial implications from the findings, it is necessary to note some limitations of this study. First, the empirical results are based on the Chinese context, so generalizations to other emerging markets should be made with caution. While we consider institutional weaknesses and biased resource allocation as common characteristics of emerging markets, the meaning ascribed to signals can be socially constructed (Basdeo et al., 2006) and may thus vary across different national

contexts. Second, while we theorized an attribution mechanism underlying the signal receiver's sensemaking of multiple signals, secondary data prevented direct observation of the underlying process of sensemaking. Future research is encouraged to unpack this process, which can enrich our understanding of the cognitive-based and socially constructed process of interpreting multiple signals. Finally, the study focused on suppliers and banks as key stakeholders, but audiences of firms' signaling actions are not limited to these two (Basdeo et al., 2006). Future research may examine the signaling effect of international expansion on other home-country stakeholders (e.g., customers, employees).

Despite these limitations, our study has significant implications for emerging-market firms, particularly those facing resource constraints in their home countries, such as POEs. Our findings suggest that in emerging markets, where information problems can be severe, firms can use international expansion as a strategic signal to enhance their perceived quality by stakeholders in their home countries. By doing so, they can obtain vital resources, including financial resources, which may otherwise be difficult to access. This signaling effect is particularly useful for firms operating in less developed home markets. To maximize the positive signaling effect of international expansion, firms should carefully choose host-country locations, i.e., developed economies, and manage the disclosure of other congruent information, such as patents granted, which helps corroborate and reinforce their signaled intrinsic quality. However, firms should exercise caution regarding potential incongruent information, such as political



connections, which could alter stakeholders' interpretation of positive signals.

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### NOTES

<sup>1</sup>According to data from World Economics (2022), emerging markets account for 50% of Global GDP and have contributed to 66% of global GDP growth over the past 10 years (2012–2022).

<sup>2</sup>For the purpose of this paper, we define international expansion as internationalization through outward FDI and exclude other nonequity-based approaches such as exporting. We consider outward FDI to be a more substantial form of internationalization that aligns with our arguments on signaling costs and a firm's intrinsic quality.

<sup>3</sup>We applied a strict criterion in our analysis to include only fully privately owned firms, which resulted in the exclusion of hybrid types of firms. For instance, we did not include firms that contain both privately owned equity and state-owned equity or firms that contain both privately owned equity and foreign-owned equity.

<sup>4</sup>The five dimensions are: the relationship between the government and the market, the development of the private sector, the development of the product market, the development of the factor market, and the development of market intermediaries and the legal environment.

<sup>5</sup>Previous studies have measured political connections of Chinese firms by counting the number of TMT members who serve as delegates to the People's Congress or the Chinese People's Political Consultative Conference (i.e., the "two meetings"). In this study, we intentionally excluded the "two meetings" experience and instead used prior work experience to measure political connections. This decision was made because delegation experience can be influenced by a firm's performance or reputation (Zhang et al., 2016).

<sup>6</sup>Reverse causality is a potential concern in our study as it's possible that firms with richer financial resources are more likely to engage in international expansion. To address this, we lagged all explanatory variables by 1 year to reduce this reverse causality concern. However, omitted variable bias remains a concern as managers make strategic decisions based on their predictions of potential positive outcomes, and some observable or unobservable factors may simultaneously influence both the decision to invest abroad and resource acquisition. While we included prior performance, size, age, intangible assets ratio, and other controls to reduce omitted variable bias, there may still be unobservable factors. To mitigate these concerns, we employed the instrumental variables approach as detailed in the main text.

<sup>7</sup>In *Full Model<sup>a</sup>*, the host-country development information is only available for firms with international expansion, and the political connections data from CSMAR is only available for the period 2008 to 2017. Thus, if we directly include all variables in the model, the sample size would be limited to firms with international expansion between 2008 and 2017, reducing the sample size to 2220. In *Full Model<sup>b</sup>*, we excluded the host-country development variable (and its interaction term), allowing us to include both firms with and without international expansion in the full sample, albeit for a shorter observation window (2008 to 2017) due to the restricted information on political connections.

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