# Outward FDI and Innovation Performance of Chinese Firms: Why Can Home-Grown Political Ties Be A Liability?


## ABSTRACT

We explain how home-grown political ties of Chinese firms negatively influence the effect of outward foreign direct investment (OFDI) on the innovation performance of their parent firms. Our results show that these ties can turn into a liability in the host countries (particularly developed ones) due to their misfit with the local institutional environment, hampering the parent firms' innovation performance from OFDI. We also clarify how absorptive capacity of the parent firm mediates the relationship between OFDI and innovation performance. Our study furthers understanding of the link between internationalization and innovation performance and the 'dark side' of political ties.



**Keywords**: internationalization; political ties; innovation; organizational learning; absorptive capacity; institutional fit.

## 1. Introduction

Although prior research establishes that Chinese firms leverage corporate political ties to support their internationalization strategy (Liu, Yang & Augustine, 2018), little research has examined whether the usefulness of such ties extends beyond China's national borders and affects the innovation performance of Chinese firms from outward foreign direct investment (OFDI). This is surprising because while political ties are identified as important *drivers* of Chinese firms' OFDI (Hong *et al.,* 2015; Wang *et al.,* 2012), by logic they should also influence the performance *outcomes* of OFDI. This study seeks to address this gap and explain whether and how home-grown political ties affect the relationship between OFDI and innovation performance of Chinese internationalized firms.

Political ties are defined as 'boundary-spanning personal and institutional linkages between firms and the constituent parts of public authorities' (Sun *et al,* 2012, p. 68). Political ties may compensate for inefficient institutions and reduce uncertainty (Liu *et al,* 2018; Wang *et al,* 2020), provide firms with otherwise unattainable resources (Li *et al.,* 2018; Wang *et al*., 2012), and therefore create a competitive edge. However, political ties may also prejudice firms to serve social and political objectives to reciprocate for government support (Wang *et al*., 2020), distort firm decisions (Sun *et al.,* 2015), and hence become a liability (Wang & Luo, 2019).

Despite this conflicting theoretical prediction, empirical evidence overwhelmingly supports the positive value of political ties (Krammer & Jiménez, 2020). This theoretical and empirical misalignment is particularly surprising when we consider Chinese internationalized firms. For example, in 2016 the US government blocked the acquisition of the GCS Holdings Inc by Xiamen San'an Integrated Circuit Co., Ltd of China due to concerns with the relationship between the company and the Chinese government and the implications this relationship has for

the US's national security (WIR, 2017). Such evidence suggests that home-grown political ties may create institutional misfit with the industry and business environment of host-countries (Volberda *et al*., 2012), heighten legitimacy barriers (Li *et al.,* 2018; Zhang *et al.,* 2018), amplify the 'liability of foreignness' (Salomon & Wu, 20212) and therefore hinder organizational learning and innovation performance of internationalized Chinese firms. The theoretical significance of understanding this inconsistency between prior empirical evidence and this observation of practice is that it helps reveal *whether* and *how* the effect of political ties may change when firms cross national borders (Fernández-Méndez *et al.,* 2018), which is under-researched in the extant literature.

We draw on insights of organizational learning theory (Argote, 2015; Barkema, & Vermeulen, 1998; Hong *et al*., 2006) and the notion of institutional fit (James and McGuire, 2016; Kondra & Hinings, 1998; Volberda *et al.,* 2012) to explore how a Chinese firm's political ties with Chinese government may become detrimental to its innovation performance, defined as 'the development and market introduction of a new, redesigned or substantially improved product' (Wang *et al*., 2020, p. 3) when it crosses China's borders to conduct OFDI. According to organizational learning theory, internationalization can be viewed as a process of learning whereby firms can enhance innovation performance through accessing, learning, and integrating knowledge and technologies from multiple countries (Kafouros *et al.,* 2018; Piperopoulos *et al.,* 2018). However, according to the notion of institutional fit, broadly defined as the degree of compliance by an organization with the institutional prescriptions of its environment (Kondra & Hinings, 1998), a high degree of institutional misfit between the internationalized firm and its host country environment may create challenges for the firm's organizational learning in the host country by affecting its attainment of local legitimacy (Kostova *et al*., 2020). Legitimacy refers

to the extent of perceived organizational compatibility/congruence with the demands of stakeholders in the host countries (Suddaby, Bitektine & Haack, 2017). Indeed, 'firm strategies, organizational structures, and governance mechanisms successfully pursued and implemented in a particular institutional context many not achieve the same outcomes in another institutional context' (Hoskisson *et al.,* 1999, p. 445). Accordingly, our overarching argument in this study is that the positive effect of Chinese firms' political ties (Liu *et al*., 2018; Wu *et al*., 2016) may turn negative when they conduct OFDI because of their misfit with the institutional environment of the host country; this in turn impairs Chinese firms' organizational learning from OFDI (Liu & Meyer, 2020; Wang *et al.,* 2020) and stifles their innovation performance at home.

Our study makes two contributions. First, we add to research on the link between internationalization and firm innovation performance (Anderson *et al*., 2015; Kafouros *et al,* 2008; Li *et al.*, 2016; Piperopoulos *et al,* 2018). Prior research posits that OFDI enables firms to use their network of subsidiaries to augment organizational learning from foreign locations and improve innovation performance (Anderson *et al.,* 2015; Kafouros *et al.,* 2018). In this study we ask a question that has rarely been examined in prior conceptualizations: when are firms not able to enhance innovation through OFDI? We integrate political ties perspective with the notion of institutional fit to suggest that a 'problem of fit' between home-grown political ties and host country institutional environment prohibits internationalized firms from achieving legitimacy in the host environment and embedding into the local market, blocks their learning and hampers the innovation performance outcomes of their OFDI.

Additionally, previous studies (Li *et al.*, 2016; Wu *et al*., 2016) suggest that absorptive capacity (AC) enhances the effect of internationalization on innovation performance by enabling firms to bridge distant technological contexts (Rosenkopf & Almeida, 2003) and better exploit

the institutions in the host country (Wu *et al*., 2016). Our study extends this literature by suggesting that AC of the parent firm mediates the link between OFDI and innovation performance of the parent.

Second, we enrich research on the value of political ties. Prior theoretical and empirical research supports an overwhelmingly positive effect of political ties on firm outcomes. We depart from this line of research and instead seek to understand when political ties may become a liability for firms. By conceptualizing how home-grown political ties create legitimacy barriers in foreign countries, particularly in those that are developed and institutionally very distant from China, that, in turn, hampers learning outcomes from OFDI, our research demonstrates that the effect of political ties may turn negative when the firm crosses national borders and operates in foreign countries. Our study thus helps explain when political ties may become a liability for firms and furthers understanding of the 'dark side' of such ties (Wang & Luo, 2019; Wang *et al*., 2018).

## 2. THEORETICAL FRAMEWORK

### 2.1 Organizational learning through OFDI and innovation

Organizational learning is the process of creation, retention, transfer and use of knowledge within an organization through learning from its own and from others' experiences (Argote, 2015). Organizational learning is a useful lens to examine how OFDI influences innovation because it can explain how firms learn by embedding into multiple communities of the host country (Hong *et al.,* 2006), and therefore augment their knowledge base (Kafouros *et al.,* 2018). From this lens, internationalization can be viewed as a process of learning, whereby firms use OFDI as a method to gain access to diverse knowledge, increase the set of

technological combinations that they can create and improve their innovation performance (Kafouros *et al.,* 2018; Piperopoulos *et al.,* 2018).

Although firms conduct OFDI for various motives and some OFDI activities (e.g., resource seeking and market seeking projects) may not aim directly at acquiring new technological knowledge, foreign subsidiaries can still learn and gain knowledge (e.g., environmental regulations, new standards, customers' tastes/impulses) by interacting with local suppliers, customers, and institutions in the host country. Such knowledge may not necessarily be direct (technical) inputs into the innovation process but is widely recognized (von Hippel, 1988) for its complementary role to the core research and development (R&D) process, enabling the design and development of innovations.

As Chinese firms, on average, do not possess equally strong R&D capabilities compared with their developed-country counterparts (Piperopoulos *et al*., 2018; Wu *et al.,* 2016), organizational learning through internationalization is vital for these firms to enhance their position in the global technological competition arena (Piperopoulos *et al.,* 2018). Specifically, collaborations with firms and institutions in the host country enable acquisition of advanced knowledge needed to improve innovation performance that would otherwise be unattainable to them. Such collaborations also give access to a large pool of high-quality scientists and engineers who can help Chinese firms learn and assimilate advanced knowledge and technologies (Kafouros *et al*., 2015). In addition, as sophisticated customers are essential for providing new ideas and input for innovation (von Hippel, 1988), collaborations with such customers in foreign markets may lead to superior innovation outcomes. For example, the internationalization and innovation strategy of ZTE, a leading Chinese telecom equipment manufacturer, relied on learning from demanding foreign consumers to enhance innovation (Fan, 2011).

This inter-organizational learning process is then followed by an intra-organizational learning process that involves reverse knowledge transfers (RKT) from overseas subsidiaries to the parent units of the internationalized firms (Liu & Meyer, 2020). This RKT can be direct, when the subsidiary units transfer knowledge directly to the parent without attempting to assimilate it into the organization's culture and R&D capabilities (Nair *et al.,* 2018). In the process of indirect RKT, the subsidiary will embed itself in the local context, un-embed the situated knowledge from the specific location and re-embed it into the entire organization (Nair *et al.,* 2018). A Chinese firm's portfolio of foreign subsidiaries, therefore, will add value to the entire organization by allowing it to access and learn from local markets and by transferring R&D capabilities to the rest of the organization.

However, the extent to which Chinese subsidiary firms can learn, assimilate and transfer knowledge back to their parent units may vary depending on the institutional fit between the Chinese subsidiary firm and the institutional environment of the host country. The rules, regulations, and norms of learning and developing new knowledge and technological capabilities in a foreign country can be different from those in the home country of the Chinese firm. These differences create a degree of institutional misfit between the Chinese firm's organizational systems, structures, strategies and behaviors and the institutional prescriptions of the host country (Kondra & Hinings, 1998). This degree of institutional fit or misfit is important for organizational learning because it determines the attainment of legitimacy of the Chinese firm in the host country. Legitimacy hurdles arising from institutional misfit may restrict Chinese firms' learning by hindering their engagement with local networks, interpretation of the protocols of host-county institutions, and acquisition of institutional support and resources in the host country (Wang *et al.,* 2020).

A higher degree of institutional fit (i.e., higher compatibility between the organization's practices, strategies, and its environmental contingencies) can help reduce the liability of foreignness and enhance legitimacy and local isomorphism as host-country local actors understand better foreign firms' behaviors and practices (Salomon & Wu, 2012). This in turn helps enhance the Chinese firm's learning from the foreign environment and facilitates a smoother transfer of host-country specific advantages and knowledge assimilated by the subsidiary back to the parent firm (Kostova *et al*., 2020), consequently improving the innovation performance at home. By contrast, a lower degree of institutional fit (i.e., lower compatibility between the organization's practices, strategies, and its environmental contingencies) will hamper organizational learning and knowledge transfer from the Chinese subsidiary firm to the parent firm. For example, the US is a prime destination for internationalized firms to set up R&D centers because of its advanced regulatory regimes and innovation systems that encourage innovative activities and protect innovations. However, the degree of institutional misfit between Chinese firms (particularly state-owned firms) and the US institutional frameworks is high, which impedes local acceptance of Chinese firms, hinders their interaction with government authorities, customers, suppliers and other innovation/knowledge agents (Salomon & Wu, 2012), and therefore hampers their organizational learning in the US market.

### 2.2 The benefits and costs of political ties for innovation performance

Political ties may have positive effect on innovation performance. First, political ties assist firms in *creating* innovation by providing privileged access to regulatory resources, such as administrative privileges, licenses, permits, and financial assistance (Li *et al*., 2018; Liu *et al*., 2018) and by enabling firms to tap into government-funded/controlled intermediaries of

knowledge and technology creation (Wu *et al*., 2016), such as publicly funded R&D laboratories, knowledge-intensive business centres, Universities and national research centres. This advantage helps firms compensate for insufficient internal R&D capabilities (Kafouros *et al*., 2015). Political ties also confer legitimacy and reputation in firms (Liu *et al*., 2018), which help them deal with environmental uncertainties, build R&D partnerships and acquire complementary knowledge that are important for the creation of innovations. Second, political ties also help firms *appropriate* value from innovations. Emerging countries in general are characterized with weak protection and enforcement of intellectual property rights, which increases transaction costs and opportunistic behavior (Kafouros *et al.,* 2015). Political ties can compensate for this weakness by protecting firms from external expropriation and threats (Wang *et al*., 2018), increasing the returns from innovation.

However, political ties may also have a negative effect on innovation performance. First, coined the 'resource curse' (Krammer & Jiménez, 2020), excessive reliance on political actors and lobbying may lead managers to habitually overestimate the advantages of political ties and underestimate the importance of developing market-based capabilities required for innovation (Albino-Pimentel, Anand & Dussauge, 2018; Wang *et al*., 2012). Second, strong political ties may lead political forces to have a greater say in the governance and strategic direction of the firm (Okhmatovskiy, 2010), leading it to deviate from innovation related goals (Liu *et al*., 2018), reduce managers' autonomy in decision making, and thus hamper the firm's ability to develop innovation capabilities.

While research has not reached a consensus in regard to the effect of political ties on innovation performance, extant theorizing also implicitly assumes such ties to remain similarly valuable despite environmental changes (i.e., from home country to host country). In this regard,

the contingent view of political ties (Sun, Mellahi & Wright, 2012) suggests that whether the positive effect of such ties dominates the negative effect depends on a wide range of contextual factors that can tip the balance either way (Wang *et al*, 2018). In this context, we suggest that the benefits-costs balance may vary depending on the degree of fit or misfit of the home-grown political ties with the institutional prescriptions of the host country. The notion of institutional fit (Volberda *et al.*, 2012) complements the political-ties perspective (Liu *et al*, 2018; Wang *et al*, 2020) because it helps explain how the usefulness of such ties may change depending on the degree of compatibility between the ties and host country's institutional environment, and therefore enables a more nuanced understanding of how home-grown political ties affect organizational learning from OFDI and consequently innovation performance (Piperopoulos *et al.*, 2018).

### 3.1 OFDI, absorptive capacity and innovation performance

Section 2.1 suggests that Chinese firms use OFDI as a learning tool to augment their knowledge base (Hong *et al*., 2006; Kafouros *et al*., 2018). However, there is little theoretical and empirical work exploring the mechanisms through which OFDI can lead to technological innovations at the home/parent of the firm (e.g., Li *et al*., 2016). Below we draw upon the notion of AC (Cohen & Levinthal, 1990) to propose that OFDI enhances the innovation performance of the Chinese internationalized firm through enhancing the AC of the parent unit of the firm.

A key concept associated with organizational learning is AC, which is coined by Cohen and Levinthal (1990, p. 128) as 'the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends'. AC and learning coevolve and reinforce each other (Barkema & Vermeulen, 1998) and act as key promotors of innovation

(Cohen & Levinthal, 1990). Although AC differs between firms depending on factors such as R&D investments, firms need to have at least a certain level of AC to assimilate external knowledge and develop innovation (Cohen & Levinthal, 1990). Despite that Chinese firms are still on average constrained by weaker R&D capabilities compared with their developed-country counterparts (Piperopoulos *et al.,* 2018), the market oriented economic reform and policies of attracting FDI since 1978 have enabled many of them to achieve a good threshold of AC and get established in their highly competitive home markets before embarking on OFDI. Indeed, innovation systems in China are designed to assimilate foreign technologies enabling Chinese firms to benefit from spillovers of inward FDI, the increased number of new technology suppliers and the breadth of technologies available in the home markets (Liu *et al*., 2011).

We posit that Chinese firms' OFDI further enhance their parent firms' AC through two mechanisms. The first involves effective cross-border knowledge and technology transfer based on the recipient's (i.e., parent firm's) learning intent. When a Chinese internationalized firm identifies certain valuable technological knowledge residing in foreign locations, it builds the prerequisite learning intent (i.e., motivation and desire) to acquire such knowledge and transfer it back to its parent firm. For example, when the foreign subsidiaries of Shanghai Automotive Industry Corporation identified certain valuable knowledge and technologies from foreign companies, their parent firm created the management processes and systems to facilitate the assimilation of the external knowledge (Cuervo-Cazurra & Rui, 2017). This in turn enables efficient integration of the external knowledge to the parent firm (Nair *et al*., 2018), enhancing its AC.

The second mechanism involves the acquisition of foreign firms or collaborations with knowledge and technology sources abroad, such as Universities, research centres, suppliers and

customers. In such cases, subsidiaries of the Chinese internationalized firm act as listening posts within the foreign innovation system, transmitting knowledge and information back to the parent firm (Anderson *et al*., 2015; Nair *et al*., 2018), increasing its AC. For example, Chinese Lenovo acquired the Motorola mobility business from Google. This allowed Lenovo to add human capital (and hence new knowledge) of over 2,800 US based highly trained employees and own over 2,000 patents previously developed by Motorola (Osawa & Luk, 2014). Lenovo's US subsidiary then transferred those 'readily-available' technologies back to the parent firm, enhancing its AC.

Next, we expect the enhanced AC to enable the parent Chinese firm to augment its innovation performance. Higher levels of AC allow the parent firm to comprehend, transform, and internalize a diverse set of technological knowledge and therefore develop new innovative capabilities (Zobel, 2017). Such capabilities, in turn, enable it to increase the set of rare technological combinations (Kafouros *et al.*, 2018) and engage with exploratory and exploitative innovation practices (Grimpe & Sofka, 2009). Moreover, AC facilitates changes in a firm's organizational culture, cognitive schema and knowledge-sharing routines (Cohen & Levinthal, 1990). This assists the firm's assimilation and integration of new knowledge, ensures the right knowledge reaches the right employees (Cepeda & Vera, 2007) and therefore enhances product innovation. Following the above argumentation, we suggest that AC mediates the effect of OFDI on innovation of the parent Chinese firm. Accordingly,

**Hypothesis 1 (baseline):** Chinese firms' OFDI has a positive effect on innovation performance of the parent firms through enhancing their AC.

### 3.2 The moderating role of political ties

We further posit that because of the pervasive role of Chinese government in economic exchanges (Hong *et al.*, 2015; Wang *et al.*, 2012; Wang *et al.*, 2020), particularly in approving and screening OFDI activities (Cui & Jiang, 2012), political ties with their home country government influence how internationalized Chinese firms learn from OFDI and enhance innovation performance. Indeed, many internationalized Chinese firms leverage on political ties to acquire institutional support and resources to compensate for their latecomer disadvantages and lack of experience in operating abroad (Luo & Tung, 2007; Wang *et al*., 2014).

However, a firm's political ties are deeply shaped by the idiosyncrasies of the firm's home country institutional environment. Formal institutions, such as laws and rules, and informal institutions, such as societal beliefs, norms and values, influence the creation and the ways of deploying political ties. As such, a Chinese firm's home-grown political ties may not fit with the institutional idiosyncrasies of the host country. This in turn may decrease its subsidiary's legitimacy abroad and hinder its chances to become isomorphic in the foreign business environment. Chinese firms can reduce this misfit and gain local acceptance by tactically adopting a 'right' entry strategy, such as joint venture (JV) (Cui & Jiang, 2012). However, JVs are notoriously prone to conflicts between the foreign and local partners (Cui & Kumar, 2012), partly because of the misfit between the foreign partner's home ways of doing things and the host country's institutional prescriptions. For instance, whereas a Chinese firm might be accustomed to gift-giving and even briberies as a commonly accepted business norm (Chao & Kumar, 2010), the host-country local partner might face moral challenges with such norms and practices. Such institutional discrepancy implies that although JV strategy may help Chinese firms compensate for the lack of institutional fit as they would be perceived 'less foreign' by local players, substantial learning hindrance remains.

This institutional misfit presents challenges for Chinese firms to obtain a 'social license' and legitimize their operation-related activities (Suddaby *et al.*, 2017), which in turn can hinder learning and the acquisition of knowledge-based assets in foreign locations and consequently limit the enhancement of the parent firms' AC. It may also prevent Chinese firms from unlearning some of the knowledge embedded from their home institutional environment, untangling causalities from prior embedded experiences, practices, and operations at home (Zeng *et al.*, 2013). This in turn can lead to mistrust and miscommunications between the Chinese subsidiary firm and host-country R&D laboratories, Universities and other learning and knowledge agents (Zeng *et al*., 2013). Furthermore, the misfit and the associated legitimacy barriers may prohibit Chinese firms from using home-grown political ties to secure privileged resources from local agents such as government and investors. This in turn, further, constrains the subsidiary's ability to conduct deep searches for valuable new knowledge and invest in R&D capabilities, thus limiting RKT to the parent Chinese firm and restricting the upgrading of its AC.

Despite the contingent view that suggests that the benefits-costs balance of political ties depend on a wide range of contextual factors (Sun *et al*., 2012), we argue that the effect of the institutional misfit of home-grown political ties likely outweighs the resource benefits of these ties in the host country. Our discussion in section 2.2 broadly suggests that political ties assist in developing a firm's AC (and thereby helping create innovation) by providing privileged access to various regulatory resources (Li *et al*., 2018; Wu *et al*., 2016). However, these benefits to the firm's AC may not be achieved because the legitimacy gap created by the misfit of the home-grown political ties in institutionally dissimilar locations hinders the subsidiaries' (learning) role of enhancing the parent firm's AC. Moreover, because foreign subsidiaries often operate as a portfolio of inter-related multiple knowledge units (Kafouros *et al*., 2018), the negative effect of

the misfit created by one or a few subsidiaries may disrupt the knowledge supply chain of the entire company and hamper diffusion of global learning within the firm.

In sum, a high degree of misfit between home-grown political ties and host country's institutional environment may neutralize Chinese subsidiaries' efforts to engage in local networks, collaborate with external players and develop new technological capabilities that can enhance the parent firm's AC. This in turn limits the parent firm's chances to engage with exploratory and exploitative innovation practices and develop new innovative capabilities (Grimpe & Sofka, 2009; Zobel, 2017), hindering the innovation performance outcomes of OFDI back home. Accordingly,

**Hypothesis 2:** Chinese firms' home-grown political ties negatively moderate the positive effects of OFDI on innovation performance.

### 3.3 The moderating role of location choices

While it is widely agreed that Chinese firms learn new knowledge and technologies from OFDI in developed countries (e.g., Piperopoulos *et al.*, 2018; Wu *et al*., 2016), other emerging markets may also serve as valuable learning laboratories for Chinese firms. On the one hand, these markets have pockets/locations of business clusters where there are good quality Universities, research centres, high-talent and low-cost scientists and high-tech foreign and local firms (Karreman, Burger & van Oort, 2017), providing ample learning opportunities for Chinese firms. For instance, Shanghai Fosun Pharmaceutical's Indian arm Gland Pharma operates in the Hyderabad pharma cluster in India (Genome Valley) which hosts R&D centres, Universities, and over 190 international and domestic pharmaceutical firms, providing the Chinese firm with plenty learning opportunities. On the other hand, there are also locations within emerging

countries where Chinese firms can access certain diverse and complementary knowledge that is often unavailable in developed countries but is particularly crucial for developing innovations and new products, such as frugal/low-cost innovations, that cater for customers in developing countries (Prahalad, 2012).

Although Chinese firms can learn from OFDI in both developed and other emerging countries, the negative moderating effects asserted in Hypothesis 2 will be stronger when they invest in developed (institutionally more dissimilar) countries compared to other emerging (institutionally more similar) ones. This premise is based on the argument that the level of (mis)fit between Chinese firms' home-grown political ties and host-country institutional environment varies depending on the location choices of their OFDI. China exhibits institutional idiosyncrasies, such as relationship-based governance and the dominate role of government, that differ fundamentally from those in developed countries. The ways Chinese firms develop and deploy political networking strategies reflect the dominant logic of organizing under those institutional idiosyncrasies of China. As such, the Chinese managers' embedded ways of building and leveraging political ties deviate fundamentally from the institutional, societal norms and accepted practices of political lobbying and networking in developed host countries (Child & Marinova, 2014).

The resulting misfit of political ties' deployment in developed, and thus, institutionally dissimilar locations, hampers Chinese firms' efforts to embed into local networks of the host country and engage in organizational learning and innovation activities. Chinese firms' OFDI in developed countries is largely driven by the search for and acquisition of strategic assets for upgrading technological capabilities (e.g., Luo & Tung, 2007). Yet the high degree of institutional misfit between their home-grown political ties and the institutional environment of

the developed host country acts as a hurdle to achieving this objective because it inhibits these firms' attainment of legitimacy from the local environment. For example, although collaborations with Universities in developed countries may enable Chinese firms to integrate valuable complementary knowledge into their R&D processes (Wu *et al*., 2016) and therefore develop the parent firm's AC and in turn its innovative capabilities, the higher institutional incompatibility with the Chinese ways of building connections and collaborative partnerships may erect high legitimacy barriers, preventing Chinese firms from developing common knowledge-sharing systems (Hsieh *et al.*, 2018) with local Universities and inhibiting their organizational learning and enhancement of absorptive capacity.

Furthermore, the higher level of institutional misfit increases the tension between resourcing external host-country legitimacy and maintaining internal organizational legitimacy and the attainment of economic and technological efficiency (Kostova *et al*., 2020). To earn legitimacy from developed host country stakeholders, Chinese firms need to deploy additional resources to search and process a large amount of information for legitimacy management (Zhang *et al.*, 2018), adjust internal structures and routines, and strike a balance between accommodating the institutionally dissimilar idiosyncrasies of the host country and conforming to the established corporate cultures and practices (Kostova *et al*., 2020). This in turn redirects the firm's finite resources and managerial attention away from organizational learning and transfer of knowledge back to the home country, which hinders the enhancement of the parent firm's AC and stifles the innovation performance of the parent firm from OFDI.

By contrast, the degree of the home-grown political ties' misfit with host-country institutions is lower when Chinese firms conduct FDI in other emerging countries because these are institutionally more similar to China. The modes of political lobbying and networking that

are socio-institutionally accepted in China are relatively more compatible with the ways that these emerging host markets and governments operate. This reduced institutional misfit helps Chinese firms minimize liability of foreignness, reduces legitimacy challenges, and therefore leverage some of their embedded home country experience for organizational learning and knowledge acquisition in the foreign country (Salomon & Wu, 2012). For example, lower levels of institutional misfit and legitimacy barriers may better enable Chinese firms to use their home-grown political ties to engage government networks in the host country to acquire information about industrial policies, regulations and technical standards that are important inputs into the enhancement of AC and innovation of the parent firm, enabling adaptation of home-country-based technologies and new products to meet local needs (Piperopoulos *et al.,* 2018; Prahalad, 2012).

To sum up, although an institutional misfit may reduce the usefulness of home-grown political ties for learning activities in host countries to enhance AC and innovation, this misfit effect is more pronounced for Chinese firms operating in developed host countries than in other emerging countries. Accordingly,

**Hypothesis 3**: The negative effect asserted in H2 will be more pronounced when Chinese firms' OFDI is undertaken in developed countries.

Figure 1 depicts our conceptual model. The model shows that the effects of OFDI on Chinese firms' innovation performance (1) are mediated by the AC of the parent firm being enhanced via subsidiaries' learning from host countries and (2) are contingent on the effect of home-grown political ties in the host country, and this latter effect varies further depending on the location choice of FDI, i.e., developed vs emerging countries.

[Insert Figure 1 about here]

## 4. METHODS

### 4.1 Data

To test our hypotheses, we developed a unique panel dataset for Chinese A-share listed manufacturing firms' OFDI activities and innovation performance for the period 2007-2017. The period is long enough for us to allow for the fact that some OFDI projects take longer time to influence the innovation performance of the parent firm than others do. We chose 2007 as the starting year because it earmarked the introduction of new accounting rules for Chinese listed firms, making certain pre- and post-2007 data less comparable. We chose 2017 as the ending year because more recent years will not allow us to calculate innovation performance accurately. This is because the number of patent citations of an invention often needs 3-5 years to reach its peak (Wagner & Wakeman, 2016).

Data on patents were obtained from the Chinese State of Intellectual Property Office's website (SIPO) (http://www.pss-system.gov.cn). We manually collected data on OFDI from the annual reports of Chinese listed firms. Because we study how OFDI enhances innovation performance through learning in the host country, we excluded OFDI in tax havens such as the Cayman Island, the British Virgin Islands and Bermuda. We obtained information on the political ties of each firm's top-management team members (TMT) from the China Stock Market & Accounting Research (CSMAR) Database. Data on other firm-level variables were obtained from CSMAR and Wind databases.

Using a unique company code, we cross-linked and collated the information extracted from different sources for each company. After removing firms with unusable and/or unreliable

observations, as well as firms that were suspended from public listing temporarily and/or permanently, we were left with an unbalanced panel dataset consisting of 1,163 firms out of a total of 1,849 over 11 years (2007-2017), which created a sample of 8,232 out of a total of 12,793 (1,163 x 11) firm-year observations. Table 1 shows the information about distribution of OFDI of the firms in the sample, while Table 2 displays definition and data source of each variable.

[Insert Tables 1 and 2 about here]

Table 1 shows that among 1,163 Chinese manufacturing firms that conducted OFDI during the period 2007 to 2017, majority of them (862) invested in developed countries, that provide many opportunities for Chinese firms to learn and catch up with global technology leaders. In terms of sectoral distribution, Chinese OFDI was concentrated in high-tech industries related to computers and communications, electronic equipment, special equipment, chemical products and medical equipment. This observation is in line with the view that Chinese firms' OFDI is driven by the search for and acquisition of strategic assets and benefits from spillovers (Luo & Tung, 2007).

### 4.2 Measures

#### *4.2.1 Dependent variable*

We measure innovation performance by the number of forward invention patent citations a (parent) firm has received in a year. Compared with the number of patents, this measure is a more accurate reflection of a firm's level of innovativeness and can better capture the quality of innovation in terms of its technical and market value (Piperopoulos *et al.,* 2018).

*4.2.2 Independent variables*

Our main independent variable is OFDI in foreign countries each year. We build on previous studies that use the amount of OFDI to measure internationalization (OFDI) (Kang & Jiang, 2012; Sethi *et al*., 2003; Wang *et al*., 2012) and define it as the total accumulated amount of OFDI (stock) each year that each firm has. This operationalization is appealing because it is close to the value of foreign assets, and a larger stock of FDI is associated with a greater scope and ability of organizational learning in the host country. It has an advantage over measures that use actual amount of annual OFDI by each firm (Wang *et al*., 2012) in that it reflects the total accumulated OFDI that a firm can use for learning. Using the same operationalization, we devised two more measures: OFDI in develop countries and OFDI in emerging countries. We used the data from World Bank (https://data.worldbank.org/income-level/high-income) to distinguish developed countries from emerging countries. All countries not in the 'high income' group are classified as 'emerging countries'.

We measure political ties using the ratio of politically tied TMT members to the total TMT members in each firm (Lee & Wang, 2017). We reviewed the background of each firm's TMT members and coded whether they are or have been deputies to the National People's Congress (NPC), Chinese People's Political Consultative Conference (CPPCC) at the central, provincial, city and county levels. We then calculated the ratio of politically tied TMT members to the total TMT members in each firm. Compared with studies that use dummies or the number of political ties that a firm has, the use of a ratio allows us to control for the effect of TMTs' size. The seminal work of Cohen and Levinthal (1990) suggests that R&D investment leads not only to innovations but also to increased AC. We followed this conceptualization and previous studies

and used the ratio of R&D expenditure to sales to define AC (Rothaermel & Alexandre, 2009; Tsai, 2001; Wu *et al*., 2016).

*4.2.3 Control variables*

First, because younger and smaller-sized firms tend to be more innovative than their larger siblings, we control for both firm size and age (Stock *et al.*, 2002). We define firm size using the logarithmic transformation of each firm's total number of employees (Piperopoulos *et al.*, 2018). Second, we define firm age by the number of years since the establishment of the firm (Wang *et al.,* 2012). Our third control variable is state ownership, which we operationalize as the ratio of state-owned capital over total capital (Cui & Jiang, 2012). State ownership can make the firm more likely to conform to home-country institutional pressures (Wang *et al.*, 2012) rather than firm objectives such as innovation. Fourth, given that business group affiliation may influence a firm's innovation (Wang *et al.,* 2015), we include business group, which is defined using a dummy variable (equal to 1 if the firm is affiliated with a business group) (Wang *et al*., 2015).

Fifth, because financial leverage can help discipline management and enhance firm performance and innovation, we include leverage which is defined as the ratio of total debt to total assets. Sixth, given that the overseas experience of TMT members is important for organizational learning in international markets and innovation performance (Buckley *et al.,* 2014), we controlled for this effect by including TMT overseas experience, which is operationalized as the ratio of TMT members with overseas experience to the total number of TMT members. Seventh, domestic market competition may force Chinese firms to move overseas and conduct FDI. We therefore construct a measure of domestic market competition for

each industry using the sum of the square of the market shares (sales revenue) of all firms in an industry (Herfindahl index). Eighth, because high profitability has a positive effect on subsequent innovation activities, we include profitability, which we measured as the ratio of profit to total assets (ROA). Finally, we include a number of dummy variables to control for idiosyncrasies associated with additional region-, industry-, and time- specific effects. Table 2 presents the definitions.

### 4.3 Estimation method

Given that the dependent variable is measured by the number of forward patent citations a Chinese internationalised firm received in a year, OLS can lead to biased estimates. Because the number of patent citations often shows large variations between firms, a simple logarithm transformation would not solve the problem. Instead, Poisson regression is often used in models where the dependent variable is defined by count data. The Poisson regression, however, assumes that the mean and variance are the same, which again is not fitting to our dataset as the summary statistics show that the mean (58.45) differs from standard deviation (485.40). Hence, the negative binomial regression model is more appropriate (Piperopoulos *et al.*, 2018). However, because there are some zero citation counts (30.81% of all observations) in our sample, a negative binomial regression model can lead to biased results. We conducted Vuong test (Z-score>0) which suggests that a zero-inflated Negative Binomial (ZINB) model is more appropriate (Pahnke *et al*., 2015). We therefore adopt this method. Furthermore, because models with interaction terms are sensitive to multicollinearity concerns, we mean-centered variables in the interaction terms to increase interpretability of interactions (Aiken & West, 1991). We also lagged all independent variables by one year, given that it takes time for a firm's actions to

influence innovation performance. Because it may take longer time for OFDI to influence AC and subsequently innovation performance, we specifically lagged the OFDI variable for two years when we test Hypothesis 1. Nevertheless, our estimations show that the effect of OFDI on innovation performance does not actually differ qualitatively between one year and two years lags.

## 5. RESULTS

### 5.1 Baseline results

Table 3 shows the descriptive statistics and pairwise correlations of the variables. All correlations are fairly low, and the average value of the variance inflation factors (VIFs) is 1.19, which is substantially below the acceptable level of 10 (Neter *et al.,* 1985), suggesting that multicollinearity is not a concern.

[Insert Table 3 about here]

Table 4 shows the results. The coefficient of OFDI in foreign countries is positive and significant at 0.1% level in all models (e.g., b=0.9419, z=14.30 in model 1), indicating that OFDI improves Chinese firms' innovation performance (e.g., Piperopoulos *et al.,* 2018)[1]. Model 2 (in which AC is the dependent variable) shows that the coefficient of the OFDI variable is positive and significant, suggesting that OFDI enhances AC of the parent firm. Model 3 introduces AC (the mediator) into the model, and the coefficient of the OFDI variable is still positive and significant (b=0.5433, z=8.87), indicating that AC has a partial mediation effect on the focal

[1] Because OFDI beyond a certain level may increase the cost of global governance and coordination and, therefore, reduce innovation performance, we experimented with adding a squared term of the OFDI variable into model 1. We find that it is not significant, indicating that the relationship between OFDI and innovation performance is linear.

relationship. In terms of the magnitude of the mediation effect, our calculations from models 1 and 3 show that about 42.32% of the total effect is mediated through learning[2]. We analyzed the mediation effect with 500 bootstrapping samples (Williams & MacKinnon, 2008). This effect is significant ($p<0.01$) and the 95% confidence interval does not contain 0 (Rodríguez & Nieto, 2016). These results substantiate Hypothesis 1, indicating that AC mediates the relationship between OFDI and innovation performance.

[Insert Table 4 about here]

Model 4 shows that the coefficient of the interaction between OFDI in foreign countries and political ties is negative and significant at 0.1% level (b=-2.1658, z=-4.07). This result provides support for Hypothesis 2, which predicts that home-grown political ties negatively influence the positive effects of OFDI on innovation performance. Models 5 and 6 show that OFDI in developed countries has a positive and significant effect on innovation performance at 0.1% level, whilst OFDI in other emerging countries has an insignificant effect. These results are in line with previous findings (Luo & Tung, 2007; Piperopoulos *et al.*, 2018), suggesting that Chinese firms indeed learn more from OFDI in developed countries than in other emerging countries. Model 6 shows that the interaction term between OFDI in developed countries and political ties is negative and significant at 0.1% level, while the interaction term between OFDI in emerging countries and political ties is not significant at 5% level. These results corroborate H3, which predicts that the negative effect of home-country political ties on innovation performance of internationalized Chinese firms is more pronounced when OFDI is undertaken in

[2] The mediation effect is 0.3986 (=0.9419 in model 1 - 0.5433 in model 3) and thus the 42.32% is derived from 0.3986/0.9419.

developed, rather than other emerging, countries. We also re-tested Hypotheses 2 and 3 by splitting the sample into Chinese OFDI in Belt and Road Initiative (BRI) countries and in non-BRI countries. There were 39 BRI countries (which signed BRI agreements with the Chinese government) and 113 non-BRI countries up until 2017. The results show that Hypothesis 2 is supported in the non-BRI group but not in the BRI group. In other words, H3 remains supported when we replace developed countries with non-BRI countries and emerging countries with BRI countries[3]. To illustrate the moderating effects of political ties, these relationships are presented in Figure 2.

[Insert Figure 2 about here]

**5.2 Further analysis**

*5.2.1 Where does the moderation effect of home-grown political ties occur?*

Section 5.1 shows that home-grown political ties negatively moderate the positive effect of OFDI on innovation performance. As our results also show that this focal relationship is mediated through AC, it is interesting to understand where the moderation effect of political ties occurs in the relationship chain of OFDI→AC→innovation performance[4]. We suggest that it occurs mainly on the first stage, i.e., OFDI→AC; that is, Chinese firms' access to external knowledge sources and organizational learning in the host country is compromised by the institutional misfit between their home-grown political ties and the institutional environment of the host country and the legitimacy barriers this misfit creates. By contrast, we expected these ties to have a limited impact on the second stage, i.e., AC→innovation performance. This is

[3] These results are well expected because most BRI countries up until 2017 are in fact emerging countries.
[4] We appreciate this constructive suggestion from a reviewer.

because the process through which AC influences innovation performance occurs within the firm (intra-firm) and is less likely to be 'interfered' by the institutional misfit discussed above. To examine in which part of OFDI→AC→innovation performance the moderation effect will occur, we conducted a mediated moderation analysis (Muller, Judd & Yzerbyt, 2005). Table 5 confirms our prediction, showing that the interaction between OFDI and political ties is negative and significant (model (1)), whereas the interaction between AC and political ties is negative but insignificant (model (2)).

[Insert Table 5 about here]

*5.2.2 The moderating role of ascribe vs achieved political ties*

Zhang *et al.* (2016) differentiate between two types of managerial political ties, ascribed and achieved. Achieved ties refer to 'prestigious appointments to state organs such as congresses or political councils […] which come as the result of executives' and/or their firms' achievements' (Zhang *et al.*, 2016, p. 1308), whereas ascribed ties refer to those ties executives had before they joined the specific firm. Chinese executives (particularly those in the private sector) may have 'achieved' political ties because of their efforts or achievements (Zhang *et al.*, 2016). Because achieved ties come later in life of the focal firm than ascribed ones, the two types of ties may differ in the degree of their (mis)fit with the host country environment and consequently influence learning and innovation from OFDI differently.

We accordingly tested whether the relationships asserted in H2 and H3 differ between the two types of ties. Building on Zhang *et al.* (2016), we define ascribed ties by the share of TMT members who were former government officials at the central, provincial, city and county levels in the total number of TMT members and achieved ties by the share of TMT members who are

currently deputies to the NPC and CPPCC at the central, provincial, city and county levels. Table 6 shows the results. Model 2 shows that both types of ties negatively moderate the effect of OFDI on innovation performance. Model 4 shows that the coefficients of the interactions between both types of ties and OFDI in developed countries are negative and significant, whereas the corresponding coefficients with respect to other emerging countries are insignificant. These results are qualitative similar to those in Table 4, suggesting that the key hypothesized relationships do not differ between the two types of ties.

[Insert Table 6 about here]

*5.2.3 The moderating role of state ownership ties*

While this study focuses on managerial political ties that typically involve informal relationships between firm executives and politicians, a Chinese firm's relationships with government can also take the form of equity-based political ties, or state ownership ties – i.e., formal relationship between the firm and the government through affiliation (Wang *et al*., 2012; Wang *et al*., 2020). Such type of home-grown ties may also exhibit a degree of misfit with the host country institutional environment because the objective of state-owned enterprises (SOEs) 'is to further the interests of a nation state in the pursuit of national industrial policy or perhaps national security concerns' (Gordon & Milhaupt 2019, p. 198). For instance, MinMetals, a Chinese SOE's attempt to acquire Noranda, the largest Canadian mining company, was blocked by all Canadian political parties because Chinese government was suspected to attempt to gain ownership of Canadian natural resources (Zhang *et al*., 2018).

To examine whether H2 and H3 are still supported when we focus on state ownership ties, we conducted further econometric analysis. We define state ownership ties as the ratio of state-

owned capital over total capital (Cui & Jiang, 2012) and control for the effect of managerial political ties. Table 7 shows that the results are qualitatively similar to those pertaining to managerial political ties and hence H2 and H3 are still supported.

[Insert Table 7 about here]

*5.2.4 The role of entry modes*

Entry modes influence a foreign firm's learning in the host country (Hoskisson *et al*., 2013). Cui & Jiang (2012) suggest that JVs are more likely to be accepted by the host country environment than wholly owned subsidiaries (WOSs). We, therefore, expect the hypothesized negative moderating effect of political ties in H2 and H3 to be less pronounced for JVs than for WOSs. To test this proposition, we operationalize JV as a dummy variable that is equal to 1 if the parent Chinese firm owns less than 95% of the Chinese subsidiary's equity (Gomes-Casseres, 1989; Wu *et al*., 2016). We re-estimated our models and present the results in Table 8. The results show that the negative moderating effect of political ties does not differ qualitatively between JVs and WOSs for both H2 and H3. This result is intriguing given that JVs have lower legitimacy pressures than WOSs in the host country (Cui & Jiang, 2012). One possible explanation is that compared with WOSs in which there is only one layer of institutional misfit - one between the foreign subsidiary firm and the institutional prescriptions of the host country, JVs have an additional layer of institutional misfit - one between the foreign and local partners within the JV. The resulting conflicts between the two partners may offset some of the benefits accrued due to the increased local acceptance of JVs, hindering organizational learning of the Chinese firm and its innovation performance.

[Insert Table 8 about here]

### 5.3 Robustness checks

First, we redefine innovation performance by using the number of granted invention patents to a firm in one year (Jia *et al.*, 2019). Models 4 and 6 in Panel A of Table 9 show that the key results pertaining to H2 and H3 are qualitatively the same as those in Table 4. Second, Chinese SOEs may be less motivated to build political ties with government because they are part of the government system. Non-state-owned firms, on the other hand, are keener to build political ties with government (Li *et al.*, 2011) in order to reduce ownership discrimination and enjoy certain privileges. We removed Chinese SOEs from our sample and created a new sample with 5,724 observations (2,508 observations were dropped). Panel B shows that the key results remain qualitatively unchanged, supporting H2 and H3.

[Insert Table 9 about here]

Third, as innovation performance of Chinese internationalized firms may also influence their OFDI and some factors (such as superior competence) may influence both OFDI and innovation performance, the OFDI variable may be endogenous. The political ties variable can also be endogenous for similar reasons. We use generalized method of moments (GMM) to deal with the endogeneity concern. Some studies on FDI use propensity scoring method (PSM) to remove this concern (e.g., Cui & Xu, 2019). The GMM method is arguably superior to PSM because GMM estimators are known to be consistent, asymptotically normal, and efficient and can control for the three major sources of endogeneity: (a) unobserved heterogeneity, (b) simultaneity, and (c) measurement errors (Wooldridge, 2009). By contrast, the PSM can deal with endogeneity associated with simultaneity and measurement errors, but not with

unobservable (latent) variables (Wintoki *et al.*, 2012). In our study, some unobservable variables (e.g., business confidence, risk preferences) that influence innovation performance can increase the bias of the average treatment effect on the treated group estimated using the PSM (i.e., latent variables may remain after matching). Additionally, compared with the conditional maximum likelihood estimator that is often used to estimate count panel data models, such as negative binomial models, the GMM approach for count-panel-data models can generate consistent estimates even when the explanatory variables are predetermined (Montalvo, 1997).

We use log (invention citations+1) as the dependent variable and use two-year lagged OFDI and political ties variables as instrumental variables (IVs) based on the view that the events and decisions related to these variables occurred in the past and are not correlated with the error term in the present (Wooldridge, 2009)[5]. We followed Wang *et al.* (2012) and tested the exclusion restriction - each IV does not affect the dependent variable through channels other than the suspected endogenous variables. We regressed the residuals of the second stage of GMM on the IVs. The results show that the estimated effects on IVs are statistically insignificant. We also conducted weak identification test. The result shows Cragg-Donald Wald F statistic=3379.56, which is far larger than the 10% maximal IV relative bias (7.03). Both tests thus indicate that the IVs are indeed orthogonal to the error term. Panel C of Table 8 shows that the GMM results pertaining to H2 and H3 remain qualitatively the same as those in Table 4.

Finally, sample selection bias may arise because only Chinese firms that conducted OFDI are included in our sample. We address this potential concern by using Heckman two stage model (Heckman, 1979), following recent advances in using this model (Certo *et al*., 2016;

[5]Because the OFDI and political ties variables are lagged for one year already in the baseline estimations (Table 4), here we use two-year lagged OFDI and political ties variables as IVs.

Marquis & Qiao, 2020; Zhang, 2020). The first stage involves running a probit model that predicts the likelihood of conducting OFDI. This model includes variables for exclusion restrictions which do not appear in the second stage model. The model generates the Inverse Mills Ratio (IMR), which will then be included as a control in the second-stage model to adjust for potential selection bias. We used city with former treaty port policies (these ports became foreign powers' enclaves in China) during treaty port era (1842-1943) (Zhang, 2020) as the exclusion variable (it takes a value of 1 if the city where a Chinese firm is headquartered is a former treaty port). We chose this variable because it may be a predictor of the likelihood of conducting OFDI, but it is unlikely to be closely related to innovation performance of the firm. The estimation of the first stage model is based on a full sample of listed Chinese firms with and without OFDI activities during our sample period, with a total of 16,621 firm-year observations, whilst the second stage model uses a sample of listed Chinese firms with OFDI activities only, with a total of 8,292 firm-year observations. The results in Table 10 show that the key results pertaining to our hypotheses remain qualitatively unchanged when the effect of IMR is controlled for in the second-stage models, indicating that sample selection bias is not a concern (Marquis & Qiao, 2020; Zhang, 2020).

[Insert Table 10 about here]

## 6. DISCUSSION

### 6.1 Contributions to theory

First, our study adds to research on the effects of OFDI on innovation performance of Chinese internationalized firms. While some studies find that OFDI of Chinese firms enhances innovation performance of the parent (Anderson *et al*., 2015; Li *et al*., 2016; Piperopoulos *et al.,*

2018; Wu *et al.,* 2016), others find that although Chinese subsidiaries learn from OFDI this does not extend further to improve their parent firms' innovation (Wang *et al*. 2014). We reconcile these conflicting findings by showing that when the AC of the parent is enhanced through their subsidiaries' learning from the host country, the OFDI can lead to increased innovation performance of the parent. This said, we find that AC only has a partial mediation effect, implying that OFDI may influence innovation of the parent not only through enhancing foreign subsidiaries' learning from the host country and consequently AC of the parent but also, to a degree, through direct knowledge transfers from the foreign subsidiary to the parent firm. In the latter case, the foreign subsidiary acts as a listening post within the foreign innovation system, transmitting knowledge and information back to the parent unit (Anderson *et al*., 2015; Nair *et al*., 2018) without necessarily enhancing learning and AC. Our study also demonstrates that the conflicting findings regarding the effect of Chinese firms' OFDI on their innovation performance in prior literature could be related to the deployment of home-grown political ties in the host country; that is, this effect may be negative when Chinese firms' home-grown political ties do not fit well and may be positive when such ties fit well, with the host country institutional environment.

Second, our study contributes to understanding of *when* and *why* political ties may become a liability (Sun *et al.,* 2016; Wang & Luo, 2019) for innovation performance. Whereas previous studies show an overwhelmingly positive effect of political ties on firm outcomes (Krammer & Jiménez, 2020; Wang *et al.,* 2020), our finding of the negative moderating effect of political ties on innovation performance from OFDI supports the view of the darker side of political ties (Wang & Luo, 2019). Similar results are obtained when we replaced managerial political ties with ownership-based ties. These results are a little surprising. This is because

ownership-based ties are more visible to host country stakeholders (Cui & Jiang, 2012) compared to managerial political ties (which are informal and relationship-based) and, as a result, they should likely exhibit a higher degree of misfit with the host country institutional environment and consequently generate a stronger negative moderating effect on the relationship between OFDI and innovation performance. A tentative explanation of the discrepancy between our reasoning and the empirical findings relates to legitimacy management. Knowing that state ownership ties may cause greater legitimacy challenges in foreign markets (i.e., from past experience of their predecessors and media reports/news), Chinese firms with such ties likely pay more attention to legitimacy management when they operate in the host country (e.g., by hiring offshore experts in greenfield ventures to increase local acceptance (Schaefer, 2020)) that helps reduce the institutional misfit and consequently offset some of the negative effect of home-grown political ties. The findings regarding both types of political ties are in line with Fernández-Méndez *et al.* (2018) who show that domestic political ties do not help firms' foreign expansion as the advantages they confer at home may not be transferable abroad. It appears that depending on the side of the coin (domestic vs international) a researcher examines, different stories can emerge; researchers examining the effect of political ties within home country likely inform us about the 'bright side' of the coin, while researchers examining the effect of home-grown political ties in overseas markets likely reveal the 'darker side' of the coin.

Our study thus also extends research on political ties perspective by integrating the notion of institutional fit (Kondra & Hinings, 1998). Prior theorizing suggests that the usefulness of political ties varies across locations which differ in institutional parameters (Fernández-Méndez *et al.*, 2018; Wang *et al.*, 2020). We extend this work by bringing in the notion of institutional fit (James & McGuire, 2016; Kondra & Hinings, 1998; Volberda *et al.*, 2012) that helps provide a

new explanation of why political ties carry different value in different locations (countries). Specifically, we demonstrate that a degree of fit or misfit between home-grown political ties and host country environment can cause the ties to be more useful in some host countries than in others. Furthermore, our study enriches understanding of the political liabilities of Chinese firms (i.e., SOEs) in the foreign (Western) markets. While both perspectives of institutional (mis)fit and political liabilities are able to explain how the environment in foreign markets may create legitimacy barriers that hinder Chinese firms' access to knowledge and organizational learning, the institutional (mis)fit perspective can elucidate how political liabilities of Chinese SOE firms arise and thus provide a new explanation of the effect of political liabilities on Chinese firms in the foreign (Western) markets from an institutional perspective.

Finally, our findings inform research on the location choices of innovation globalization (Kafouros *et al.,* 2018, Piperopoulos *et al.,* 2018) by showing that the effect of home-grown political ties in the OFDI-innovation performance nexus varies between developed and emerging host countries. Our finding of the stronger negative moderating effect of home-grown political ties in developed countries is in line with prior research that suggests that large institutional dissimilarity inhibits foreign firms from adopting, in the host countries, strategies developed at home (Albino *et al.,* 2018; Kostova *et al*., 2020). The implication of this finding is that future research on the location choices of innovation globalization should not only incorporate the role of home country political ties but also consider their differential effect in different locations.

### 6.2 Implications for practice

First, our results suggest that although political ties offer advantage to firms within their home country, the same ties can become a liability for innovation when these firms conduct

OFDI abroad, due to their misfit with the host country's institutional environment. We thus caution Chinese managers that when their firms' goal is to improve innovation performance, they need to break free largely from home-grown political ties and instead focus on the development of market-based capabilities to maximize the benefits from OFDI. Second, we find that the negative effect of home-grown political ties is particularly pronounced when Chinese firms' OFDI is undertaken in developed countries. This finding implies that Chinese managers should avoid deploying home-grown ties in developed host countries when they aim to use OFDI to enhance learning and innovation performance.

Overall, to enhance innovation performance from OFDI, Chinese firms should limit to the extent possible their reliance and usage of home-grown political ties in foreign markets. This said, they can incorporate into their international strategies some home-developed strengths which can be transferred into foreign markets, while keeping on the background home-developed political ties and managerial and business practices that are incongruent with the institutional conditions and norms of what is acceptable and what not in those markets.

### 6.3 Limitations

First, the unique institutional idiosyncrasies of China mean that home-grown political ties may have a distinctive impact on the internationalization of Chinese firms; however, the results of this study may not be generalizable to other emerging countries with different institutional settings. Therefore, we call other scholars to examine whether our conceptualizations and findings also hold true for internationalized firms from other emerging countries. Second, although we conceptualize that OFDI influences Chinese firms' innovation performance through

organizational learning and the enhancement of the parent firm's AC, data constraints do not allow us to further explore the nature, types, and methods of such learning from foreign locations. Third, while we examined how the relationships asserted in hypotheses 2 and 3 may differ between JVs and WOSs, these relationships may also vary depending on OFDI taking the form of greenfield ventures or acquisitions. In this regard, we believe that the logic that differentiates the effect between JVs and WOSs in section 5.2.4 also applies largely to greenfield ventures and acquisitions. Chinese firms' acquisitions involve integration and collaboration between the Chinese acquirer and the acquired foreign firm and, like JVs, they may experience a higher level of institutional misfit with the host country environment than if they operate greenfield ventures. A case in point is Huawei Technologies of China. This firm uses greenfield ventures in which they hire local experts to overcome liabilities of origin and 'outsidership' in the host countries (Schaefer, 2020). Hence, we expect the hypothesized negative moderating effect of home-grown political ties in H2 and H3 to be more pronounced for acquisitions than for greenfield ventures. However, data constraints inhibit us from testing this proposition.

Finally, Chinese MNEs may route their OFDI both to and via tax havens (Sutherland *et al.*, 2019; Ning & Sutherland, 2012). It might also be true that some Chinese OFDI projects in Hong Kong are not genuine investments but are motivated to achieve Hong Kong identity that helps them 'reinvest' in Mainland China as 'foreign investors' and receive preferential treatments from the Chinese government. However, such data are either not recorded or recorded inaccurately by Chinese government agencies. Therefore, in line with other scholars (Sutherland *et al.*, 2019) we also welcome future research that will look more deeply into the topic of Chinese FDI to and via tax havens to inform the extant international business literature.

**References**


Aiken, L.S., & West, S.G. (1991). *Multiple Regression: Testing and Interpreting Interactions*. Sage: Newbury Park, CA.

Albino-Pimentel, J., Anand, R., & Dussauge, P. (2018). How do firm political connections impact foreign acquisitions? The effects of decision makers' political and firm embeddedness. *Global Strategy Journal*, 8(3): 421-446.

Anderson, J., Sutherland, D. & Severe, S. (2015). An event study of home and host country patent generation in Chinese MNEs undertaking strategic asset acquisitions in developed markets. *International Business Review,* 24(5): 758-771.

Argote, L., (2015). An opportunity for mutual learning between organizational learning and global strategy researchers: transactive memory systems. *Global Strategy Journal*, 5(2): 198–203.

Barkema, H.G., & Vermeulen, F. (1998). International expansion through start-up or acquisition: a learning perspective. *Academy of Management Journal,* 41(1): 7–26.

Buckley, P. J., Elia, S., & Kafouros, M. (2014). Acquisitions by emerging market multinationals: Implications for firm performance. *Journal of World Business*, 49(4): 611–632.

Cepeda, G., & Vera, D. (2007). Dynamic capabilities and operational capabilities: A knowledge management perspective. *Journal of Business Research,* 60(5): 426–37.

Certo, S.T., Busenbark, J.R., Woo, H-S., & Semadeni, M. (2016). Sample Selection Bias and Heckman models in Strategic Management Research. *Strategic Management Journal*, 37(13): 2639-2657.

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

Child, J. & Marinova, S.T. (2014). The role of contextual combinations in the globalization of Chinese firms. *Management and Organization Review*, 10(3): 341-373.

Cohen, W.M., & Levinthal, D.A. (1990). Absorptive capacity: a new perspective on learning and innovation. *Administrative Science Quarterly,* 35(1): 128–152.

Cuervo-Cazurra, A. & Rui, H. (2017). Barriers to absorptive capacity in emerging market firms. *Journal of World Business*. 52(6): 727-742.

Cui, L., & Jiang, F. (2012). State ownership effect on firms' FDI ownership decisions under institutional pressure: a study of Chinese outward-investing firms. *Journal of International Business Studies*, 43(3): 264-284.

Cui, A.S., & Kumar, M.V.S. (2012). Termination of related and unrelated joint ventures: A contingency approach. *Journal of Business Research*, 65(8): 1202-1208.

Cui, L., & Xu, Y. (2019). Outward FDI and profitability of emerging economy firms: Diversifying from home resource dependence in early stage internationalization. *Journal of World Business*, 54(4): 372-386.

Fan, P. (2011). Innovation, globalization, and catch-up of latecomers: cases of Chinese telecom firms. *Environment and Planning A,* 43(4): 830-849.

Fernández-Méndez, L., García-Canal, E., & Guillén, M.F. (2018). Domestic political connections and international expansion: It's not only 'who you know' that matters. *Journal of World Business*, 53(5): 695-711.

Gomes-Casseres, B. (1989). Ownership structures of foreign subsidiaries, *Journal of Economic Behavior and Organization*, 11(1): 1-25.

Gordon, J. N., & Milhaupt, C.J. (2019). China as a 'National Strategic Buyer': Towards a Multilateral Regime for Cross-border M&A. *Columbia Business Law Review*, 2019 (1): 192–251.

Grimpe, C., & Sofka, W. (2009). Search patterns and absorptive capacity: low- and high-technology sectors in European countries. *Research Policy,* 38(3): 495–506.

Heckman, J.J. (1979). Sample selection bias as a specification error. *Econometrica*, 47(1): 153–162.

Hong, J., Easterby-Smith, M. & Snell, R. (2006). Transferring organizational learning systems to Japanese subsidiaries in China. *Journal of Management Studies*, 43(5): 1027-1058

Hong, J., Wang, C., & Kafouros, M. (2015). The Role of the State in Explaining the Internationalization of Emerging Market Enterprises. *British Journal of Management*, 26(1): 45-62.

Hoskisson, R.E., Hitt, M.A., Wan, W.P., & Yiu, D. (1999). Theory and research in strategic management: Swings of a pendulum. *Journal of Management*, 25(3): 417–456.

Hoskisson, R. E., Wright, M., Filatotchev, I. & Peng, M. W. (2013). Emerging Multinationals from Mid-Range Economies: The Influence of Institutions and Factor Markets. *Journal of Management Studies*, 50(7): 1295-1321

Hsieh, W. L., Ganotakis, P., Kafouros, M. and Wang, C. (2018). Foreign and domestic collaboration, product innovation novelty and firm growth. *Journal of Product Innovation Management*, 35(4): 652-672.

James, B.E., & McGuire, J.B. (2016). Transactional-institutional fit: Corporate governance of R&D investment in different institutional contexts. *Journal of Business Research*, 69(9): 3478-3486.

Jia, N., Huang, K. G., & Man Zhang, C. (2019). Public Governance, Corporate Governance, and Firm Innovation: An Examination of State-Owned Enterprises. *Academy of Management Journal*, 62(1): 220-247.

Kafouros, M.I., Buckley, P.J., Sharp, J.A., & Wang, C. (2008). The role of internationalization in explaining innovation performance. *Technovation*, 28(1-2): 63-74.

Kafouros, M.I, Wang, C., Mavroudi, E., Hong, J., & Katsikeas, C.S. (2018). Geographic dispersion and co-location in global R&D portfolios: Consequences for firm performance, *Research Policy*, 47(7): 1243-1255.

Kafouros, M., Wang, C., Piperopoulos, P., & Zhang, M. (2015). Academic collaborations and firm innovation performance in China: The role of region-specific institutions. *Research Policy*, 44(3): 803-817.

Kang, Y., & Jiang, F. (2012). FDI location choice of Chinese multinationals in East and Southeast Asia: Traditional economic factors and institutional perspective. *Journal of World Business*, 47(1): 45–53.

Karreman, B., Burger, M.J., & van Oort, F.G. (2017). Location Choices of Chinese Multinationals in Europe: The Role of Overseas Communities, Economic Geography, 93(2): 131-161.

Kondra, A. Z., & Hinings. C.R. (1998). Organizational diversity and change in institutional theory. *Organization Studies*, 19(5): 743–767.

Kostova, T., Beugelsdijk, S.,Scott, W.R., Kunst, V.E., Chua, C.H., & van Essen, M. (2020). The construct of institutional distance through the lens of different institutional perspectives: Review, analysis, and recommendations. *Journal of International Business Studies*, 51(4): 467-497.

Krammer, S.M.S., & Jiménez, A. (2020). Do political connections matter for firm innovation? Evidence from emerging markets in Central Asia and Eastern Europe. *Technological Forecasting and Social Change*, 151(February): 119669.

Lee, W. & Wang, L. (2017). Do political connections affect sudda price crash risk? Firm-level evidence from China, *Review of Quantitative Finance and Accounting*, 48(3): 643-676.

Li, J., Strange, R., Ning, L. & Sutherland, D. (2016). Outward Foreign Direct Investment and Domestic Innovation Performance: Evidence from China. *International Business Review*, 25(5): 1010-1019.

Li, J., Xia, J., Shapiro, D., & Lin, Z. (2018). Institutional compatibility and the internationalization of Chinese SOEs: The moderating role of home subnational institutions. *Journal of World Business*, 53(5): 641-652.

Li, S.X., Yao, X., Sue-Chan, C. and Xi, Y. (2011). Where do social ties come from? Institutional framework and governmental tie distribution among Chinese managers. *Management and Organization Review*, 7(1): 97-124.

Liu, F., Simon, D.F., Sun, Y., & Cao, C. (2011). China's innovation policies: Evolution, institutional structure, and trajectory. *Research Policy*, 40(7): 917-931.

Liu, H., Yang, J.H., & Augustine, D. (2018). Political ties and firm performance: The effects of proself and prosocial engagement and institutional development, *Global Strategy Journal*, 8(3): 471-502.

Liu, Y. & Meyer, K.E. (2020). Boundary spanners, HRM practices, and reverse knowledge transfer: The case of Chinese cross-border acquisitions. *Journal of World Business*, 55(2):

Luo, Y. & Tung, R. L. (2007). International expansion of emerging market enterprises: A springboard perspective. *Journal of International Business Studies,* 38(4): 481–498.

Marquis, C. & Qiao, K. (2020). Waking from Mao's dream: communist ideological imprinting and the internationalization of entrepreneurial ventures in China. *Administrative Science Quarterly*, 65(3): 795-830.

Montalvo, J.G. (1997). GMM estimation of count-panel-data models with fixed effects and predetermined instruments. *Journal of Business & Economic Statistics*, 15(1): 82-89.

Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. *Journal of Personality and Social Psychology*, 89(6): 852-863.

Nair, S.R., Dermibag, M., Mellahi, K., & Pillai, K.G. (2018). Do parent units benefit from reverse knowledge transfer? *British Journal of Management*, 29(3): 428-444.

Ning, L., & Sutherland, D. (2012). Internationalisation of China's private sector MNEs: an analysis of the motivations for foreign affiliate formation. *Thunderbird International Business Review*, 54(2): 169–182.

Neter, J., Wasserman, W., & Kutner, M. (1985). *Applied Linear Statistical Models*. Richard D. Irwin: Homewood, Illinois.

Okhmatovskiy, I. (2010). Performance implications of ties to the government and SOEs: a political embeddedness perspective. *Journal of Management Studies*, 47(6): 1020–1047.

Osawa, J., & Luk, L. (2014). How Lenovo Built a Chinese Tech Giant: CEO Started Out Delivering PCs on Bicycles, Now 'We Want to Be a Global Player'. *The Wall Street Journal*. [Online]. 30 January. [Accessed 11 February 2021]. Available from: http://online.wsj.com/articles/SB10001424052702303973704579352263128996836.

Piperopoulos, P., Wu, J., & Wang, C. (2018). Outward FDI, location choices and innovation performance of emerging market enterprises. *Research Policy*, 47(1): 232-240.

Prahalad, C.K. (2012). Bottom of the pyramid as a source of breakthrough innovations. *Journal of Product Innovation Management*, 29(1): 6–12.

Rodríguez, A., & Nieto, M. J. (2016). Does R&D offshoring lead to SME growth? Different governance modes and the mediating role of innovation. *Strategic Management Journal*, 37(8): 1734-1753.

Rosenkopf, L., & Almeida, P. (2003). Overcoming local search through alliances and mobility. *Management Science*, 49(6): 751–766.

Rothaermel, F.T., & Alexandre, M.T. (2009). Ambidexterity in technology sourcing: The moderating role of absorptive capacity. *Organization Science*, 20(4): 759–780.

Salomon, R., & Wu, Z. (2012). Institutional distance and local isomorphism strategy. *Journal of International Business Studies*, 43(4): 343-367.

Schaefer, K.J. (2020). Catching up by hiring: The case of Huawei. *Journal of International Business Studies*, 51(7): 1500-1515.

Sethi, D., Guisinger, S.E., Phelan, S.E., & Berg, D.M. (2003). Trends in foreign direct investment flows: a theoretical and empirical analysis. *Journal of International Business Studies*, 34(4): 315-326.

Stock, G.N., Greis, N.P., & Fischer, W.A. (2002). Firm size and dynamic technological innovation. *Technovation*, 22(9): 537-549.

Suddaby, R., Bitektine, A., & Haack, P. (2017). Legitimacy. *Academy of Management Annals*, 11(1): 451–478.

Sun, P., Hu, H.W., & Hillman, A.J. (2016). The dark side of board political capital: enabling blockholder rent appropriation. *Academy of Management Journal*, 59(5): 1801-1822.

Sun, P., Mellahi, K., & Wright, M. (2012). The contingent value of corporate political ties. *The Academy of Management Perspectives*, 26(3): 68–82.

Sun, P., Mellahi, K., Wright, M., & Xu, H. (2015). Political tie heterogeneity and the impact of adverse shocks on firm value. *Journal of Management Studies*, 52(8): 1036–1063.

Sutherland, D., Hennart, J-F., & Anderson, J.R. (2019). How does the routing of FDI to and via tax havens confound our understanding of Chinese MNE identity? A critical review of the empirical literature on Chinese MNEs. *Asian Business & Management*, 18(5): 337-359.

Tsai, W. (2001). Knowledge transfer in intraorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance. *Academy of Management Journal*, 44(5): 996–1004.

Volberda, H.W., an der Weerdt, N., Verwaal, E., Stienstra, M., & Verdu, A.J. (2012). Contingency Fit, Institutional Fit, and Firm Performance: A Metafit Approach to Organization–Environment Relationships. *Organization Science*, 23(4): 1040-1054.

Von Hippel, E., 1988. *Sources of Innovation*. Oxford University Press, Oxford.

Wagner, S., & Wakeman, S. (2016). What do patent-based measures tell us about product commercialization? Evidence from the pharmaceutical industry. *Research Policy*, 45(5): 1091–1102.

Wang, C., Hong, J., Kafouros, M., & Wright, M. (2012). Exploring the role of government involvement in outward FDI from emerging economies. *Journal of International Business Studies*, 43(7): 655-676.

Wang, D. & Luo, W.R. (2019). Retire in Peace: Officials' Political Incentives and Corporate Diversification in China. *Administrative Science Quarterly*, 64(4): 773-809.

Wang, C., Yi, J., Kafouros, M. and Yan, Y. (2015). Under what institutional conditions do business group enhance innovation performance. *Journal of Business Research*, 68(3): 694-702.

Wang, C., Kafouros, M, Yi, J., Hong, J. and Ganotakis, P. (2020). The role of government affiliation in explaining firm innovativeness and profitability in emerging countries: Evidence from China, *Journal of World Business*, 55(3): 101047.

Wang, D., Sutherland, D., Ning, L., Wang, Y. & Pan, X. (2018). Exploring the influence of political connections and managerial overconfidence on R&D intensity in China's large-scale private sector firms. *Technovation*, 69 (January): 40-53.

Wang, S.L., Luo, Y. D., Lu, X. W., & Maksimov, V. (2014). Autonomy delegation to foreign subsidiaries: An enabling mechanism for emerging-market multinationals. *Journal of International Business Studies*, 45(1): 111–130.

Williams, J., & MacKinnon, D. P. (2008). Resampling and distribution of the product methods for testing indirect effects in complex models. *Structural Equation Modeling: A Multidisciplinary Journal*, 15(1): 23–51.

Wintoki, M. B., Linck, J. S. & Netter, J. M. (2012). Endogeneity and the dynamics of internal corporate governance. *Journal of Financial Economics*, 105(3): 581–606.

Wu, J., Wang, C., Hong, J., Piperopoulos, P., & Zhuo, S. (2016). Internationalization and innovation performance of emerging market enterprises: The role of host-country institutional development. *Journal of World Business*, 51(2): 251–263.

Zeng, Y., Shenkar, O., Lee, S.H., & Song, S., 2013. Cultural differences, MNE learning abilities, and the effect of experience on subsidiary mortality in a dissimilar culture: evidence from Korean MNEs. *Journal of International Business Studies*, 44(1): 42–65.

Zhang, C. (2020). Formal and informal institutional legacies and inward foreign direct investment into firms. *Journal of International Business Studies*, forthcoming: https://doi.org/10.1057/s41267-020-00359-1.

Zhang, J., Marquis, C., & Qiao, K. (2016). Do political connections buffer firms from or bind firms to the government? A study of corporate charitable donations of Chinese firms. *Organization Science*, 27(5): 1307-1324.

Zhang, J., Young, M. N., Tan, J., Sun, W. (2018). How Chinese companies deal with legitimacy imbalance when acquiring firms from developed economies. *Journal of World Business,* 53(5): 752-767.

Zobel, A.K. (2017). Benefiting from open innovation: A multidimensional model of absorptive capacity. *Journal of Product Innovation Management*, 34(3): 269–88.