Number 1

The globalization of China
Guest Editors: Kwang-Ho Kim, Christoph Lattemann, Byung Il Park and Wenxian Zhang

1 Editorial advisory and review boards
2 Guest editorial
6 China goes global: provenance, projection, performance and policy
Peter Buckley
24 Reviewing the research on the internationalization of Chinese firms: thematic expansion, new impulses and potential future development
Timon Immanuel Haass and Ingo Liefner
51 Re-orienting the paradigm: path dependence in FDI theory and the emerging multinationals
Jan Knoerich
70 Chinese multinationals’ FDI motivations: suggestion for a new theory
Byung Il Park and Taewoo Roh
91 The roles of emerging multinational companies’ technology-driven FDIs in their learning processes for innovation: a dynamic and contextual perspective
Ju Liu
115 Technological innovation as a source of Chinese multinationals’ firm-specific advantages and internationalization
Shaowei He, Zaheer Khan, Yong Kyu Lew and Grahame Fallon
134 Absorptive capacity and innovation in China
David McHardy Reid
155 Managers’ psychic distance and its impact on Chinese FDI to Germany in the environmental industry
Katrulia Vaccari, Christoph Lattemann, Francesca Spigarelli and Ernesto Tavoletti
171 The transition from relation-based to rule-based governance in East Asia: theories, evidence, and challenges
Shaomin Li, Seung Ho Park and Rosey Shui Bao
187 How does home government influence the internationalization of emerging market firms? The mediating role of strategic intents to internationalize
Fernando Angulo-Ruiz, Alina Pergelova and William X. Wei
207 Returnee entrepreneurs and the institutional environment: case study insights from China
Jan Henrik Grarenagen
231 When institutions matter: a gravity model for Chinese meat imports
Eva Haisiner and Xiaohua Yu
254 A typology of market-seeking investments: Swedish firms in China
Hans Janson and Shin Söderman

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New international business theories for China goes global? The importance of institutions, innovativeness and learning

Introduction
This special issue presents a purposefully selected collection of papers submitted to the 12th and 13th China goes GlobalTM conference held at Kristiansand, Norway and Shanghai, China in 2017 and 2018. At the annual China goes GlobalTM conferences, world-class international business (IB) scholars meet to discuss current theories and approaches in the given of the globalization Chinese MNEs.

Background of this special issue
Following the rapid economic growth of China during the last four decades, Chinese multinational corporations (MNCs) have emerged as a force to be reckoned with and many of them have turned into new global giants (e.g. Huawei, Xiaomi and Lenovo and so on) in the world economic arena (Alon et al., 2011; Gugler and Vanoli, 2015; Yang and Stoltenberg, 2014). Both state-owned and private Chinese MNCs successfully internationalized their business operations, and thus their presence is often considered as a formidable power in developing countries (Xiao and Park, 2018). For instance, the number of Chinese companies in the “Global Fortune 500” has more than doubled to 85 companies in 2013, vs 42 in 2010 (Fortune, 2010, 2013). By this measure, China recently overtook Japan, which has 62 companies on the Fortune list, and trails only the USA, which still holds the top spot with 132 companies.

Despite the rise of Chinese MNCs as the part of emerging market firms, our understanding of these firms still remains in its infancy (Alon et al., 2012; Janssen and Söderman, 2015). While scholars have investigated diverse topics on MNCs, existing studies have developed theories by predominately focusing on MNCs from the developed (western) countries. Thus, conventional theories on IB, such as internalization perspective (Buckley and Casson, 1976, 1999; Rugman and Verbeke, 1995) and the ownership, location and internationalization (OLI) paradigm (Dunning, 1993, 2000), might not be sufficiently applicable to emerging market MNCs, such as Chinese MNCs considering the difference in culture, political and economic systems, foreign direct investment (FDI) motivations and governance structure between emerging markets and the developed countries (the challenges that Chinese MNCs may encounter, their behavioral patterns and the ways that they localize, etc., might be highly dissimilar to those of western MNCs in developed markets) (Lattemann and Alon, 2015).

For example, imbalance theory (Moon and Roehl, 2001) argues that the conventional theories (i.e. internalization perspective and OLI paradigm) are not satisfactory in providing adequate explanations for the rich variety of FDI activities observed from Chinese MNCs based on emerging markets. The imbalance theory suggests that Chinese MNCs often undertake FDI to build new assets, which will strengthen the firm’s own arsenal of resources for future competition. Resource dependence theory (Pfeffer and Salancik, 1978) also points out that no one firm possesses sufficient resources to efficiently compete against other rivals in the global arena and thus the former needs to look for complementary resources that are not available internally from external environments (refer to the acquisition of IBM’s personal computer business by Lenovo and Shanghai General Motors’ takeover for Ssangyong Motor Company operating in South Korea). According to the Uppsala model (Johanson and Vahlne, 1977), the typical strategy of these Chinese firms is to accumulate experience from the domestic market to some extent and then gradually intensify their
activities in foreign markets. Based on these discussions, we believe that this is an appropriate time to try to refine mainstream IB theories considering multinationalization primarily as the outcome of competitive advantage based on the possession of unique assets (Moon and Roehl, 2001). In addition, IB researchers should attempt to explore an evolution of the theoretical domains by synthesizing a variety of FDI motivations, much of which are not well explained by ownership-specific and internalization advantage approaches.

Thus, this special issue aims to improve our understanding on Chinese MNCs as well as to offer a unique opportunity to re-consider diverse extant theories on MNCs by promoting an extension to account for emerging market MNCs. Investigating Chinese MNCs can provide appropriate implications for other MNCs from emerging economies.

Structure and content of this special issue

The 13 papers presented in this special issue make considerable contributions to IB theory and extending our understanding of the impact of FDI on emerging markets in the IB domains. It starts with an introductory and overarching paper written by Peter Buckley on the provenance, projection, performance and policy concerning Chinese outward FDI.

The second section of this special issue includes two papers, both from Haasis and Liefner and Knoerich. Their essays review the existing literature on Chinese and emerging markets OFDI and come to the conclusion that existing theories cannot sufficiently explain Chinese OFDI. According to these authors, particularly institutional and asset-seeing aspects are not adequately reflected in the mainstream internationalization theories (e.g. OLI). Consequently, according to Haasis and Liefner, existing theories needs to be extended. Following Knoerich argumentation, new paradigms must be developed.

The third section of this special issue reflects one of the major issues which can presumably not be explained by mainstream IB theories: strategic asset seeking motives of Chinese MNEs. The five papers in this section focus on the point that Chinese MNEs often undertake OFDI to developed countries to seek strategic assets such as technology and managerial capabilities, and that requires learning capabilities. Hence, Chinese companies are not only exploiting their assets – as describes in mainstream (western) IB theories – but also explore assets in the host country. To include the aspect of asset exploration in the mainstream IB theory, Roh and Park propose to extend the OLI framework toward an OILL framework by integrating the learning elements from Mathews’ linkage-leverage-learning (LLL) framework. Although Roh and Park indicate that Chinese MNEs might went already a long way in acquiring strategic assets, this point is taken up by Liu in that she shows that Chinese companies have acquired new technologies through technology-driven OFDI in the past years and she describes how they did that. Subsequently, He, Khan, Lew and Fallon also prove in their article that Chinese MNEs acquired competitive technology and knowledge over the past years and that Chinese companies are now able to compete on the global market on an equal footing. Consequently, they conclude – in contrast to Roh and Park – that Chinese OFDI can be explained with the OLI framework. New or extended theories are not necessary.

In a viewpoint article about the trajectory of China’s innovativeness from Reid, he supports Liu’s and He et al.’s perspective that China had already built up absorptive capacities. He argues that absorptive capacities are the precursor to innovation. In the last paper of this section, Vaccarini, Lattemann, Spigarelli and Tavoletti indirectly reflect the need for absorptive capacities for learning. A prerequisite for gaining absorptive capacities is to bridge intercultural distances in business. The authors show that the Chinese managers – who have the power to decide about entry modes – under- and overestimate cultural, institutional and other distances between their home country and, in the analyzed case, Germany. This adds to Roh and Park’s, Liu’s and He et al.’s papers in that learning about foreign technologies is a multi-dimensional challenge.
The fourth section deals with the second shortcoming of mainstream IB theory in explaining Chinese OFDI: the institutional environment. This section starts with Li’s discussion on the need of rule-based governance (in contrast to relation-based governance) in East Asian countries for guaranteeing economic growth, as Li sees China just embarking in this trajectory.

Angulo-Ruiz, Pergelova and Wei depict that home government – as part of the countries governance system – influences the internationalization of Chinese firms. They show that government ownership has a direct impact on international local choices, while government promotional measures (e.g. bilateral agreements between countries) have only an indirect effect on location choices. In his paper, Gruenhagen depicts how returnee entrepreneurs interact with the institutional environment while creating and operating ventures and how this influences returnees’ decision making. Hasiner and Yu show the interplay between home and host country institutions in global supply chains by exemplifying effects on meat imports to China.

This special issue ends with a viewpoint article from Söderman and Jansson on the trajectories of foreign companies’ marketing investments (in networks, distribution channels, production facilities, etc.) in China. This paper shows how the elements of existing IB theories and paradigms, i.e. Dunning and Lundan’s market-seeking investment motives and Johansson and Wiedersheim–Paul’s internationalization theory, can be combined to describe new phenomenon in the context of China’s Globalization.

Concluding, this special issue provides an up-to-date overview on the latest IB theories (including internationalization theory, OLI paradigm, LLL, springboard approach, Uppsala model, imbalance theory, resource dependence theory, dynamic capabilities, etc.) and on the discussion of their explanatory power for the globalization of China.

The discussion about IB theories in the articles from Buckley, Hassis and Liefner, Knoerich, and Roh and Park can be used to initiate vivid debates in universities’ classrooms. The discussions on the acquisition of knowledge and technology (Liu, He et al., Reid and Vaccarini et al.) and expansion strategies (Söderman and Jansson) and their presented cases can be used as ostensive examples for practitioners. The discussions on the importance of rule-based institutions for emerging countries for economic growth and institutional arrangements and their effects on business (Li, Angulo-Ruiz et al., Gruenhagen, Hasiner and Yu) are illustrative showcases for decision makers in the political arena.

We wish all readers a great learning experience in reading this well-paced special issue.

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References


China goes global: provenance, projection, performance and policy

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Abstract
Purpose – The purpose of this paper is to examine the provenance, projection, performance and policy concerning Chinese outward foreign direct investment (COFDI) and speculate on the existence of “China’s international strategy”.
Design/methodology/approach – This study includes a comprehensive review of COFDI.
Findings – There is evidence of not only the successful coordination of COFDI, but also context, conflict and independent decision making (in Chinese firms) playing an essential role in the determination of the direction, control and outcomes of the outward FDI, respectively.
Research limitations/implications – There is a great scope for further research on COFDI, as the lack of data prevents definitive conclusions, particularly on the outcomes and performance of the investments.
Originality/value – The paper presents an original synoptic view of key elements in the globalisation of the world economy and in the projection of Chinese economic power.

Keywords China, Globalization, Chinese multinational firms, Foreign direct investment (FDI)

Paper type Viewpoint

Introduction
This paper examines Chinese outward foreign direct investment (COFDI) in terms of its provenance, projection, performance and policy. The provenance of COFDI emerges from the special institutions of China including the government, structure of the Chinese economy and, in particular, market imperfections to which Chinese multinational enterprises (MNEs) are responding. The section on projection examines technological catch-up and the modes of internationalisation that Chinese MNEs have undertaken for their geographical and sectoral spread. Particular attention is paid here to the role of offshore tax havens, push factors from China and capital flight. The performance of COFDI and Chinese MNEs is perhaps the most under-researched element of “China Goes Global” and this issue is examined from a number of viewpoints. Finally, the critical role of policy is analysed, looking not only at the role of the central government, but also provincial and lower tier levels of policy. Host country policy may also be important but its negative aspects are beginning to have an impact on COFDI.

Provenance
The institutional setting for Chinese ODI. Institutional factors are likely to have an important influence on any country’s aggregate ODI flow as at least part of the direction and nature of that ODI will be determined by source nation factors (Buckley and Casson, 1976). However, institutional factors are dynamic and government policy changes over time. This section shows the influence of the Chinese institutional framework on Chinese ODI.

Since the late 1970s, the Chinese Government has determined the legal, regulatory and financial framework of ODI to a considerable degree, either directly, by administrative fiat (via the approval process and foreign exchange controls), or indirectly, using economic policy implementation and other measures (Buckley et al., 2008). Moreover, as the ultimate owner of state-owned enterprises (SOEs) (which dominated Chinese ODI prior to 2003), the government (at various levels) has effectively been the key operational decision-taker in the majority of formally approved investment projects. However, policy has often been ambivalent and inconsistent, with national and sub-national government at various times...
supporting, pushing and constraining Chinese ODI (Buckley et al., 2008). Key stages in the evolution of China’s official FDI approval process and some concomitant changes to the character of Chinese ODI are presented in Table I.

Even before the introduction of China’s “Open Door” policy reforms in 1978, numerous small-scale investments by Chinese SOEs were found in major trading hubs around the world, mostly in service sectors such as international trade, transportation and financial services. After 1979, and in hand with the “Open Door” policies, the Chinese Government

1979–1985 Stage 1: cautious internationalisation
With the “open-door” policy, Chinese state-owned firms start to set up their first international operations. Only state-owned trading corporations under MOFCOM and provincial and municipal “economic and technological cooperation enterprises” under the State Economic and Trade Commission (SETC) are allowed to invest abroad. The State Council was the only authority to examine and approve overseas investments, irrespective of investment size. The government adopted a cautious approach, favouring investment in kind (know-how and physical assets) to avoid excessive capital outflows. Prior to 1984, there were no regulations regarding ODI. Between 1984 and 1985, MOFTEC enacted two directives on the examination and approval of proposals to establish non-trading companies abroad. Only 189 projects were approved, amounting to about US$197m

1986–1991 Stage 2: government encouragement
The government liberalised restrictive policies and allowed more enterprises apply to establish foreign affiliates, provided they had sufficient capital, technical and operational know-how and a suitable joint venture partner. Standardised regulations were drafted to cover the approval process. Approval was granted to 891 projects, totalling some US$1.2bn

Encouraged by domestic liberalisation, initiated by “Paramount Leader” Deng Xiaoping’s journey to the South, sub-national level authorities rushed into international business activities with companies under their supervision, especially in Hong Kong to engage in real estate and stock market speculation. The Asian crisis in 1997 and the subsequent collapse of companies such as GITIC slowed down this development. Later, concerns about loss of control over state assets, capital flight and “leakage” of foreign exchange saw a tightening of approval procedures and in particular a stricter and more rigorous screening and monitoring process. These measures sought to ensure that Chinese capital was invested abroad for genuinely productive purposes. The State Planning Commission and SAFE were required to examine projects valued at US$1m or more, prior to referral to MOFTEC for final approval. Individual ODI project activity declines, despite an increase of total ODI of US$1.2bn

1999–2001 Stage 4: the “go global” policy period
Contradictory policies characterised this period. Further measures to control illicit capital transfers and to regularise ODI towards genuinely productive purposes are introduced. In parallel, ODI in specific industries is actively encouraged with export tax rebates, foreign exchange assistance and direct financial support, notably in trade-related activities that promoted Chinese exports of raw materials, parts and machinery and in light industry sectors like textiles, machinery and electrical equipment. In 2001, this encouragement is formalised within the 10th five-year plan which outlined the “going global” or “zou chu qu” directive. Total approved ODI rises by US$1.8bn, with an average project value of US$2.6m

Since 2001 Stage 5: post-WTO period
in the outline of the latest five-year plan, the 11th, the Chinese Government stressed again the importance of “zou chu qu” for Chinese firms and the Chinese economy. Nevertheless, direct and proactive support of ODI continues to be limited, mainly to preventing illegal capital outflows and loss of control of state assets. Since 2003, privately-owned enterprises are officially allowed to apply for the approval of outbound investment projects. Heightened domestic competitive pressures, due to the opening of once protected industries and markets to foreign and domestic competitors, force some Chinese firms to seek new markets abroad. Latest policy announcements indicate that the Chinese authorities are moving from a pre-investment approval procedure to a post-investment registration system. Provincial differences in implementation prevail

Sources: Derived from Buckley, Chen, Clegg and Voss (2016)

Table I
Key stages in the development of Chinese ODI policy
cautiously sought to encourage ODI as a means to better integrate the country into the global economy and to improve access to domestically scarce raw materials (Zhang, 2003). The government promoted international trade by permitting, and later encouraging, export-oriented FDI by state-owned import and export corporations. However, in the 1980s and 1990s, the tight centralised control of outward FDI was re-imposed amid concerns that it was detrimental to national development. Outward direct investment was seen as a substitute for domestic investment (Sauvant, 2005). It was also feared that the control of state property held overseas might be lost because of both the cost of supervising international projects at a distance and the inexperience of Chinese firms at competing internationally (Zhan, 1995; Ding, 2000). However, a few selected SOEs, like China International Trust and Investment Corporation and Shougang, were granted the freedom to expand abroad as “experimental” MNEs (Zhang, 2003).

In the late 1980s and 1990s, it was generally acknowledged that Chinese firms internationalised mainly in the pursuit of certain national and provincial economic goals and policy objectives, in particular: to support the export function of state-owned manufacturers; to help stabilise the supply of domestically scarce natural resources; and to acquire information and learning about operating abroad for the benefit of other domestic enterprises (Lu, 2002; Ye, 1992; Zhan, 1995; UNCTAD, 2006; Sauvant, 2005). SOEs undertook FDI not only to establish and strengthen diplomatic relations with other developing countries through the building of economic links but also to meet aspects of the government’s political agenda. For these reasons, research has generally stressed the importance of state engagement in the business affairs of Chinese firms, either through direct ownership of productive assets or indirectly, through various kinds of regulatory control and intervention (Sauvant, 2005). From the late 1990s onwards, however, Chinese firms are increasingly portrayed in the literature as internationalising in order to achieve other objectives, in particular: to improve access to foreign proprietary technology, immobile strategic assets and capabilities; to exploit new markets for products and services; and to enhance overall firm competitiveness through the diversification of business activities (e.g. Taylor, 2002; Child and Rodrigues, 2005; Deng, 2003, 2004; Zhang, 2003, 2005; Warner et al., 2004; Sauvant, 2005; Beebe, 2006). Ostensibly, these motivations are attributable as much to market forces, industry dynamics and discretionary, autonomous and managerial decision taking as to government intervention and fiat. As UNCTAD (2006) commented, state ownership does not necessarily invoke state-directed international strategy. At the same time, however, there remains a presumption held by some that the Chinese authorities continue to exert considerable influence over the investment activities of Chinese MNEs (e.g. Deng, 2004; Deutsche Bank Research, 2006). In this somewhat paradoxical milieu, it is interesting to investigate the extent to which the engagement and disengagement of various levels of government have influenced the internationalisation decisions of Chinese firms (Voss, 2007).

There is little doubt that state control over the international activities of Chinese firms has reduced considerably since the late 1990s. Perhaps the most prominent and clearly articulated policy has been the introduction of the “go global”, or zou chu qu, policy in 1999. This was subsequently formalised in China’s 10th five-year plan, 2001–2006, and re-emphasised in the latest 11th five-year plan, 2007–2010. Its objective is to encourage ODI through various means with a view to improving the international competitiveness of domestic companies and thus strengthen the national economy (Sauvant, 2005; UNCTAD, 2006). It is partly in response to the marketization of the Chinese economy and the country’s World Trade Organisation accession commitments (Sauvant, 2005), both of which have combined to heighten domestic competition, amongst other things. Accordingly, since 2001, policies towards ODI have been liberalising (mainly through the easing of investment
restrictions[2] simplification of approval procedures and relaxation of foreign exchange controls) along with indirect, “hands-off” economic policies increasingly substituting for direct, “hands-on” management (see also Table I). To illustrate, government agencies like MOFCOM and the National Development and Reform Commission (NDRC), which were previously instrumental to the formal approval process, now purport to provide mainly advisory, information and support functions to international investors. A further important aspect is the treatment of private Chinese enterprises, which were prevented from investing abroad officially (with a few notable exceptions, like the white goods manufacturer Haier) before this restriction was lifted in 2003.

In future, it seems likely therefore that the individual investment decisions of Chinese firms will be shaped more by commercial considerations and less by political ones. The partial nature of the privatisation of SOEs may also influence ODI. In the early years of privatisation, SOEs were encouraged and given the opportunity to invest overseas, but they were not strictly governed as for-profit enterprises. This led to a serious agency problem. Top managers in SOEs increased their income by positioning themselves overseas as managers of the companies’ foreign operations. This perverse incentive (together with round-tripping to exploit tax incentives) induced excessive ODI and accounted for some of the unique patterns of China’s ODI. As institutional reform proceeds, we would expect these perverse incentives to subside. However, the picture is complex and the challenge for researchers is to disentangle the role of national and sub-national government from other determinants (such as demand conditions and competition) of the level and direction of Chinese ODI flow.

**Government support and involvement.** Presently, the involvement of the Chinese Government in OFDI does not remain on a macro-institutional level, however. The provision of an “acquisition fund” and cheap loans influences the investment decision of Chinese MNEs and constitutes an invaluable source of competitive advantage (Antkiewicz and Whalley, 2006; Child and Rodrigues, 2005). Micromanagement is evident in the annual appraisals by MOFCOM and SAFE to assess the performance of overseas affiliates (MOFCOM, 2004a, b; *People’s Daily*, 2002). Whether future approvals of outbound investment and expatriation of staff are granted or not is based on the outcome of this evaluation. Such type of “parental” involvement by the Chinese authorities in the decision making of state-run and non-state-run enterprises is said to be a common practice (Ring et al., 2005; Child and Tse, 2001).

The “Go Global” policy has also impacted on China’s foreign policy. Numerous high-profile state visits by China’s leaders to developing countries since 2000, especially to the African continent, and the establishment of the Forum for China-Africa Cooperation to smoothen the way for Chinese companies to enter potential host countries are evidence of this development (Liu, 2001; Fernando, 2007). During state visits, China has signed a number of wide-ranging economic cooperation agreements and foreign aid schemes, such as an agreement on exploration rights for China National Offshore Oil Corporation (CNOOC) in Kenya. The Africa link is further politically supported through a newly established investment fund worth up to US$5bn designed to encourage Chinese businesses to invest in Africa (Zafar, 2007; *China Daily*, 2007). Another example is China’s participation in the Technical Cooperation among Developing Countries and Economic Cooperation among Developing Countries programmes of the United Nations Development Programme. One of China’s explicit objectives in this cooperation is to foster the “Go Global” agenda and, in particular, to support and encourage privately-owned Chinese enterprises to invest in Africa (Zhao, 2007). To this end, China has established the China African Business Chamber for private businesses and seeks to conclude double taxation treaties and bilateral investments treaties worth a number of African nations (TCDC Update, 2005, 2006).
Moreover, China’s official development aid is generally allocated to infrastructure projects and this aid is often conditional on the receiving country awarding a Chinese company with a construction contract, as has been evident in the cases of Cambodia, Ethiopia, Laos and Sierra Leone, for example (Zhan, 1995; Frost, 2005; Financial Times, 2005, 2006a, b). China’s official development aid strategy supplies Chinese companies with international contracts, and this helps them to establish an overseas market and set up affiliates with government-backing under low-risk conditions.

The starting year of the “Go Global” policy is ambiguous. Cai (2006) stated that Premier Jiang Zemin announced the policy in 1998, while Child and Rodrigues (2005) referred to the year as being 1999. Sauvant (2005) and Zhang (2005) took 2000 as the starting point. The fourth group of researchers referred to the year 2001 in connection with the FYP (e.g. China Academy of International Trade and Economic Cooperation of the Ministry of Commerce and The Welsh Development Agency, 2005). The most recent date is proposed by Kaartemo (2007), who referred to 2003. The discrepancies probably derive from access to original sources in Chinese and reference to either the first mentioning or the public implementation of the policy.

In emerging markets, financial systems are considered to be quite inefficient and their capital markets, in this neoclassical sense, also imperfect. One might, therefore, expect finance to be highly relevant to the economic geography of emerging markets. The capital markets of the People’s Republic of China, for example, are generally considered not to be driven purely by market forces (and are imperfect, in this neoclassical sense) (Karreman and van der Knaap, 2012; Lai, 2011; Vlcek, 2013). As Martin (1999, p. 8) pointed out, “the institutional geography of the financial system is important because it can influence how money moves between locations and communities”. This is certainly true in China, where SOEs especially “national champion” business groups have privileged access to capital through the state banking sector at favourable rates and preferential access to capital markets owing to their embedded nature within the communist party system (Sutherland, 2009, Karreman and van der Knaap, 2012; Naughton, 2007). Private firms, in comparison, generally face acute challenges in securing bank loans because of state control over lending within Chinese banks and domestic stock markets (Shen et al., 2009; Lai, 2011). Consequently, except for the favoured few, private firms are often crowded out of the domestic capital market (Lu and Yao, 2009). As access to domestic capital is limited by regulation, discrimination by lenders and by the restricted range of outside funders, private firms must search for alternative ways to augment their capital stock, sometimes outside of China.

New outbound policies, such as the One Belt, One Road (OBOR) initiative, have a neomercantilist aim – pursuing a Government-inspired global strategy to strengthen and sustain domestic industry, particularly those state-owned companies suffering from overcapacity by combining the output with privileged access to foreign markets. The social rate of return on such projects for China is unlikely to be high, although they may have some diplomatic pay-offs.

Projection. Recently, the number and scale of cross-border mergers and acquisitions (M&As) by Chinese MNEs have also started to accelerate (Sun et al., 2012) – a phenomenon which has attracted controversy in political circles but little academic scrutiny (see Table II and Figure 1). According to UNCTAD (2014), in 2014 alone, Chinese MNEs spent over US $50bn to undertake cross-border M&As. One of the issues is the rationale underlying cross-border M&As, as an increasing number of acquisitions are targeted at more advanced countries away from the home region (Economist, 2010), and the Chinese Government’s interventions still influence these firms (Luo et al., 2010), which results in incautious investment decisions, in particular in the apparent lack of risk analysis. The Economist (2010)
claimed that, due to its opaque nature, China’s important role as a foreign investor has been interpreted as a threat to countries in the west and sub-Saharan Africa (Bond, 2006; Brautigam, 2009). As a result, some M&A deals proposed by Chinese MNEs have been stalled, e.g. the Rio Tinto-Chinalco deal in 2009 (BBC, 2009). In addition, Chinese MNEs are alleged to have a low international business management ability and a lack of coherent overseas investment strategies (Wang, 2011). Scholars (e.g. Child and Marinova, 2014) suggest that the empirical basis of these remarks on China’s M&As requires a much more careful analysis to

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Source: Buckley Yu, Liu, Munjal and Tao (2016, p. 429)
investigate the motivations of Chinese cross-border M&As, along with home and host country contexts to explain the location choices made by Chinese MNEs.

Scholars have carried out a great deal of research on the motives of China’s OFDI and the applicability of traditional frameworks of analysis (Buckley et al., 2007; Cheng and Ma, 2007; Cheung and Qian, 2009; Deng, 2004; Kolstad and Wiig, 2012; Meyer et al., 2009; Sun et al., 2012). However, traditional investment motives, such as market size, labour costs and resource endowments, originally developed in a western context, provide only a partial explanation of COFDI location strategies.

It is interesting to note that developed countries in the West, e.g. USA, Canada, Germany, UK and France, are among top location choices for Chinese M&As. This is a relatively new phenomenon – an outcome of the “Go Global” policy – which presents an intriguing case for the study of motivation of Chinese MNEs in seeking strategic assets available in these western economies, as compared to the previous strategy of investing in neighbouring countries for natural resource seeking purposes. Nicolas and Thomsen (2008) suggested that Chinese firms are investing in these European countries to seek brands and technology. These authors observed that some Chinese automobile firms have taken over small Italian firms in Turin to gain their technology and design capabilities. This is also likely to benefit the acquirer firms from the spillovers arising from the Moncalieri science and technology park in the vicinity.

The “Go Global” policy has pushed Chinese MNEs to enhance their technological capabilities (Pei and Zheng, 2015). In 2006, Chinese firms accounted for 2.8 per cent of total R&D projects by foreign investors in Europe – rising from virtually zero in 2001 (Nicolas and Thomsen, 2008). The latest “Science, Technology and Industry Outlook” published by the OECD (2014) further suggests that the research intensity of Chinese firms has massively increased. China has edged out the European Union in terms of investment in R&D with its R&D to GDP ratio touching 2 per cent.

The Chinese Government’s policy direction on OFDI seems to have influenced Chinese MNEs’ location choices and motivations of internationalisation (Quer et al., 2012; Richet, 2013; Yang et al., 2009). As discussed above, Chinese FDI follows the government’s catalogue which directs where and how FDI should be made. This directive is often driven by the political and strategic objectives of the Chinese Government, e.g. its need to fuel the manufacturing base at home (Globerman and Shapiro, 2009). Consequently, countries with large endowments of natural resources were preferred location choices of Chinese enterprises (Ramasamy et al., 2012). Investments by the “big three” SOEs, namely, CNPC, CNOOC and Sinopec, into African countries, in the 1990s, illustrate this argument (Cheung et al., 2012; Yao and Wang, 2013).

Since the launch of the “Go Global” policy, in 2002, COFDI policy has liberalised the sectors where FDI can be made by Chinese MNEs. There seems to be thrust on the strengthening of the technological and market competitiveness of Chinese MNEs. In October 2004, the NDRC and the China Export-Import Bank jointly issued a “Policy Notice on the State’s Encouragements of Key Foreign Investment Projects by Credit Support” to supplement the “Go Global” policy. According to the joint notice, special financial assistance is available for supporting investments for: first, setting up overseas research and development centres which may utilise internationally advanced technologies, management experiences and professional talents, and second, cross-border M&As which can improve the international competitiveness of Chinese enterprises and accelerate the exploration of international markets. Moreover, in 2009, the Ministry of Commerce and the Ministry of Science and Technology jointly issued “Opinions on Encouraging Technology Export”, which encourages foreign collaborations and cross-border M&As by Chinese enterprises engaged in the development of technology.
Consequent to these policy changes, in the post-2002 period, the motivation of cross-border M&As undertaken by Chinese MNEs seemed to be changing. Deng (2009) observed that an increasing number of Chinese firms are investing in developed economies by aggressive M&A, and contended that government support is an important determinant. Chinese MNEs use M&As in advanced countries as a springboard for acquiring strategic assets (Luo & Tung, 2007), for instance, machinery in Germany, designs in Italy and automobiles in the UK (Nicolas and Thomsen, 2008). UNCTAD (2005) further pointed out that the Chinese Government actively encourages OFDI in overseas R&D centres as a result of which China has emerged as the largest foreign investor in R&D projects in Europe.

Prior research on the context of Chinese MNEs confirms that Chinese MNEs are less risk averse than their western counterparts (Li and Liang, 2012; Kolstad and Wigg, 2012; Quer et al., 2012). The difference in their attitude towards political risk is attributable to a number of factors. First, Chinese MNEs (especially SOEs) have fewer financial constraints on OFDI and the imperfect domestic capital market creates a specific financial advantage (Voss et al., 2008). In the context of Chinese MNEs, special institutions at home, such as the government’s direction and financial support, may lead to unconventional location choices by Chinese MNEs. Large and rapidly growing domestic markets give them enough cash to invest abroad, and some Chinese SOEs often have access to cheap state finance. For instance, the China Development Bank and the China Export and Import Bank are committed to provide the best possible service to help Chinese firms to invest overseas (Buckley et al., 2007; Dohse et al., 2012; Economist, 2010; Rui and Yip, 2008). Such privileges reduce the commercial or financial risks of OFDI, mitigate institutional distance and subsidise less profitable technology. Second, Chinese investors are attracted towards risky environments when strong bilateral political relations exist between China and the host country as this may reduce potential risk (Amighini et al., 2013). Third, Chinese investors are attracted to the short-term economic rents that arise in risky host countries. Moreover, Chinese MNEs also exhibit indifferent attitude towards the institutional conditions in host countries because of their experience of operating at home and in other developing countries with poor governance structures (Buckley et al., 2007; Quer et al., 2012).

**COFDI in tax havens**

COFDI has been significantly directed to, and through, tax havens. This makes the final destination of this investment difficult to assess. Often, such investment constitutes “round-tripping” where the final investment destination is China – other provinces, other industries, often other ownership vehicles are targeted from its starting point. It may also be intended to raise capital outside China through “capital augmentation”; thus, the drive for offshore incorporation and FDI flows is driven not only by domestic capital market imperfections and the needs of Chinese EMNEs to augment their existing capital structure, but also by access to a more favourable institutional environment (Buckley, Elia and Kafouros; Buckley, Sutherland, Voss and El-Gohari, 2014). The internalisation theory accounts for the impact of imperfect markets and also draws attention to these broader institutional misalignments, including how businesses exploit multi-country presence (Dicken, 2003). These may drive what has been referred to as “institutional arbitrage” (Boisot and Meyer, 2008; Kedia and Mukherjee, 2009), in which MNEs use tax havens to internalise institutional and market differences between countries, with the strategic intent of guaranteeing their long-term economic viability. As such, firm-level financing and institutional arbitrage decisions may become an important determinant of where Chinese MNEs invest.

**Performance**

The area where research on COFDI is the weakest is the area of performance, particularly post-acquisition performance. Partly this is a result of the recency of COFDI which does not
allow for long runs of performance data. It may also be due to the methodological problems in assessing performance and the probability that there may be deliberate obscurcation and lack of transparency caused by Chinese multinationals muddying the waters of performance assessment.

One typical difficulty in assessing performance is assessing the appropriate objectives. If the key motive of a Chinese takeover abroad is to transfer key assets and technology back to China, then the performance in the host country post takeover is necessarily of secondary importance. This contrasts with the aim of building a global company where profitable growth might be an appropriate performance target (Buckley et al., 1988). The assessment of performance is also sensitive to the time frame of assessment.

Research on the performance of target firms post-acquisition by emerging market multinational firms (the BRICs – Brazil, Russia, India and China) suggests that such takeovers often enhance the performance of target firms in developed countries (Buckley, Elia and Kafouros; Buckley, Sutherland, Voss and El-Gohari, 2014). The effects can be explained by differences in the resources of the EMNE and its accumulated experience. EMNEs that are the most effective in enhancing the experience of target firms are those that have investment experience in both acquisitions and developed countries. Learning experience is vital. However, EMNEs do not always acquire firms with high pre-acquisition performance and do not significantly increase the post-acquisition profitability of the acquired firm (Buckley et al., 2011). However, they generally increase the target firm's productivity and sales and slow employment decline. In takeovers, it is always the combination of the synergy achieved between the target firm and acquirer that determines the success (Buckley, Elia and Kafouros; Buckley, Clegg, Cross and Voss, 2010). These results do not separate out Chinese acquirers but are indicative.

Rugman and Li (2007) using an Ownership-Location-Internalisation theoretical framework (Dunning, 2001) argued that China’s MNEs have failed to develop firm-specific advantages (FSAs); in other words, they are knowledge takers rather than knowledge creators. Their view is that Chinese MNEs are building scale economies based on China’s country-specific advantages, cheap labour and natural resources. They went on to say that Chinese MNEs will have difficulty in sustaining their initial forays abroad and will be restricted to regional expansion rather than becoming globally competitive. This ignores the theoretical arguments of Hashai and Buckley (2014) that EMNEs do not need FSAs to be globally competitive. It also ignores the view that the “competitive advantage” of many Chinese MNEs arises from access to cheap capital because of imperfections in the domestic capital market (Buckley et al., 2007). Chinese MNEs could succeed by inputting capital into foreign firms and thus reviving them. This is clearly part of the argument behind strategic asset acquisition in COFDI where key intangible assets are purchased as part of a package deal in acquisition. The fact that Chinese firms often overpay for such assets does not diminish the explanatory power of the argument; however, it clearly diminishes the performance, in terms of profitability, of the acquiring firm.

Lyles et al. (2014) argued that COFDI may be considered a form of experimental learning where Chinese MNEs are prepared to adopt more risky approaches. This chimes well with Buckley et al.’s (2007) argument that risk aversion is reduced by access to plentiful, cheap capital.

A recent study of emerging market multinationals (Casanova and Miroux, 2016) shows that in terms of growth, EMNEs are achieving spectacular results, but in terms of other measures of performance, they still have a long way to go. This reflects that Chinese multinationals have poor profitability performance. This may be because they are more focussed on revenue growth than “margins” (Casanova and Miroux, 2016, p. 54) and this could be a strategic choice. Alternatively, they may not be well managed. There are exceptions to this rule – Chinese banks “have the second largest profit margins in the world and do better than banks from most developed and emerging countries” (Casanova and Miroux, 2016, p. 55). It is difficult to evaluate market capitalisation performance, given the thinness of China’s
domestic capital market. The international diversification of China’s MNEs is low relative to Western MNEs and this is largely due to their relative newness on the global market. Casanova and Miroux (2016) found some limited evidence that Chinese firms M&As deals are conducted at a higher price for the targeted assets than their competitors. They consistently show higher price/earnings and total enterprise value (total market capitalisation, preferred stock value and total debt less cash and cash equivalents)/ Revenue ratios. This price premium appears to be increasing over time. The picture of “China outbound” that Casanova and Miroux (2016) conjured is of rapid growth but uncertain sustainability.

Policy
From the host country’s point of view, outward FDI is not (or should not be) an objective in itself, but a means towards a given policy goal. Establishing the policy goal is an issue in itself – is it development, income growth, equity or some social objective? In rich countries, OFDI policies are often the result of policies directed towards objectives often (loosely) related to OFDI – balance of payments objectives, for instance. In most advanced countries, OFDI has not been a major policy focus (Buckley, Elia and Kafouros; Buckley, Clegg, Cross and Voss, 2010).

As earlier sections of this piece have shown, Chinese policy on OFDI has moved from prevention to control to outright promotion, reflecting changing objectives related both to internal welfare considerations and external goals with increasing external influence, domestic competitive controls, “soft power” and long-term global ambitions in the creation of Chinese global champions. The mix between these objectives is not always clear and they sometimes conflict. (For key stages in policy development, see Table III.)

<table>
<thead>
<tr>
<th>Main regulatory measures</th>
<th>Impact on OFDI</th>
<th>Political direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-1978</td>
<td>Virtually no OFDI</td>
<td>Prohibition</td>
</tr>
<tr>
<td>Phase 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subperiod 1</td>
<td></td>
<td></td>
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<tr>
<td>&quot;Testing the water&quot;</td>
<td></td>
<td></td>
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<tr>
<td>Subperiod 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarification and extension of regulations by MOFCOM and SAFE</td>
<td>Hardly any changes; OFDI by selected companies</td>
<td>Implementation of first national regulations; developmental state; relation-based libelisation steps</td>
</tr>
<tr>
<td>Phase 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subperiod 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;Finding the stepping stones&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subperiod 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shifting of investment approval from the State Council to MOFCOM and NDRC Instigation of the “Go Global” policy</td>
<td>OFDI takes off and subsequently contracts</td>
<td>Decentralisation and tightening of regulation</td>
</tr>
<tr>
<td>Phase 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subperiod 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&quot;A bridge is built&quot;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarifications on investment credits, preferred host countries and local responsibilities; sub-national regulations</td>
<td>Sharp increase in OFDI; OFDI by state-owned and private enterprises</td>
<td>Decentralisation and liberalisation; manifestation of a rules-based administration of OFDI</td>
</tr>
</tbody>
</table>

Source: Derived from Buckley, Chen, Clegg and Voss (2016)
This section examines policies towards COFDI both from within China and in the host (target) countries. The policy impacts of Chinese institutions are vital in generating, targeting, encouraging and regulating COFDI. These impacts are differential across types of foreign investor, geographically (both in origin and destination) and over time as Chinese policy evolves.

Policy towards COFDI is not monolithic, nor does it come from only one source – Chinese investors often complain that they receive mixed policy signals. A number of (potentially rivalrous) Chinese policy institutions make up the environment for actual and potential foreign investors (see Table III).

The backlash against COFDI. The main threat to the continued expansion of COFDI may not be in China but may come from a backlash from potential host countries. As host countries vary enormously, these pressures may differ from advanced (OECD) countries, whose concerns centre on the security and loss of technological capacity and brands, and developing countries, whose concerns centre on the loss of control of raw materials and logistics supporting trade.

The concerns may be grouped as follows: the scale of COFDI; security concerns; loss of the control of sensitive sectors, including culturally significant sectors; and worries about the management and governance of Chinese MNEs.

Scale. In the UK, COFDI over the period 2005–2016 was over $40bn. In itself, this was not remarkable because of concerns such as a lack of transparency of Chinese MNEs, the state control of much of the investment and the fact that much of it was channelled through tax havens.

Regulatory bodies such as Committee on Foreign Investment (CFIUS) in the USA (committee on Foreign Investment in the United States) are concerned with state control and threats to national security as well as competition issues. They utilise a national list of security factors to determine if foreign investment is in the national interest. The extraterritorial reach of the US law and regulatory powers is exemplified in the recent (2016) approval by the USA’s security watchdog of the Chem China (China National Chemical Corporation) takeover of the Swiss pesticide and seed multinational, Syngenta. This approval was vital given the Swiss firm’s presence in the USA. Other regulatory and anti-trust bodies share similar interests in China’s purchases of existing MNEs.

Security and the “National Interest”. Concerns on security inevitably resolve into issues of the state control and state direction of China’s OFDI. The supervisory role of the State Assets Supervision and Administration Commission (SASAC) gives a monolithic view of the nature of state-owned companies in China and the role of the Communist Part in the governance of state assets. Unwisely, SASAC exercises its power to rotate bosses within a supposedly competitive industry – an “obscene game of round robin” according to The Economist (2016, p. 10). Many private companies have strong state elements – for instance, being established by cadres from the Red Army or being recently “privatised” by deals done in tax havens. Many companies are alleged to be vehicles for the private wealth of “children of high cadres” or “princelings” – families of high-ranking Communist party officials. In some cases, this may be better described as capital flight rather than securing Chinese state control over foreign assets, particularly when the investment is in “safe” assets such as real estate, but the lack of transparency allows both (incompatible) explanations at once.

Sensitive sectors. COFDI reflects the structure of the Chinese economy and its strengths and weaknesses. The strengths of the Chinese economy are in large-scale ventures covering energy, infrastructure and power. State ownership of these sectors enables economies of scale and thus allows projection overseas. Areas such as oil (Sinopec and CNOOC), infrastructure (recently augmented by the “One Belt, One Road” strategy), railways, transportation, docks and logistics, nuclear power and energy (AusGrid, the power supplier
China goes global

in Australia is a case in point) are all sensitive sectors, control of which is theoretically able to cripple a host country. Naturally, foreign control is (and always has been) seen as problematic in the areas where China is strong. These sectors have been favoured by the Chinese state in order to build a strong, centrally controlled economy; therefore, the international projection of these key areas is bound to be politically sensitive.

China’s weaknesses are in consumer goods, services and branded goods. In order to compensate for these weaknesses, Chinese companies (partly private) have set out to purchase companies that can make good these deficiencies – often to introduce these branded goods more widely into China. The purchase of iconic brands in the case of the UK includes Weetabix, Pizza Express, The London Taxi Company parent company and House of Frazer. These brands are culturally sensitive and foreign ownership is not well received.

The recent Chinese State has driven (Xi Jinping personally) initiative to upgrade Chinese football (soccer) has resulted in substantive Chinese ownership of clubs in Spain (Athletico Madrid) Italy (AC Milan and Inter Milan) and, particularly, England (West Bromwich Albion, Birmingham City, Wolverhampton Wanderers, Aston Villa, stakes in Manchester City and the attempted purchase of Liverpool FC). While these takeovers bring substantial capital into (sometimes fading) brands, foreign ownership is noted and often resented. Similar sensitivities concern large-scale, concentrated purchases of real estate including cities like London and Vancouver, resulting in political demonstrations and resident reaction against rising house prices and often negative effects on local life when real estate is unoccupied after being purchased as a hedge or capital flight asset.

Soft power. The concerns about COFDI are often potential rather than actual issues and they combine with host country feelings in certain areas about the exercise of Chinese soft power – influence from working with institutions in the host country. This includes a backlash against Confucius Institutes, perhaps the most successful exercise of Chinese soft power internationally.

Chinese multinationals. There is also a growing concern about the impact of the management of foreign assets by Chinese multinationals. The lack of transparency in governance is a key issue here. In addition, the strategy of Chinese MNEs is coming under increased critical scrutiny. Some Chinese conglomerates appear to amass foreign assets and brands without a clear strategic logic. Dalian Wanda, for instance, owns Sunseeker yachts, Athletico Madrid and the American cinema chain AMC amongst its large commercial property portfolio worldwide. Fosun Group owns Club Med (France), Thomas Cook (UK), Canada’s Cirque Du Soleil, American St. John (clothes) and Greek jeweller Folli Follie in addition to its insurance business, including Meadowbrook Insurance Group Inc., USA, pharmaceuticals, mining and iron and steel businesses in China, real estate and Wolverhampton Wanderers FC.

Concern in major host countries about the management of Chinese multinationals includes a lack of transparency and the stripping of key assets. The diversity of M&A deals by companies, such as Dalian Wanda and Fosun, and the wide variety of failed deals are a result of the lack of transparency of much M&A activities from China. Some of the failures are due to regulatory hurdles both in China and the host countries. Increased regulation of foreign takeovers – for example, in the UK by the Financial Conduct Authority and Prudential Regulation Authority concerning the disclosure of ultimate control of bidders and increased vetting in the USA by CFIUS, is believed to have deterred Chinese takeover bids. Asset stripping, in particular, in transferring technology back to China is a concern. In Germany, concern has focussed on the purchase of the robotics company Kuka and the high-tech company Aixtron (the latter with the suggestion of collusion between Chinese state-owned firms). The Aixtron deal has been blocked by German regulatory authorities. As the scale and complexity of COFDI grow, the management of Chinese MNEs must become much more sensitive to host country sensibilities and welfare.
Chinese MNEs have also made unwise promises to the entering host countries in order to allay fears about their operations, promising no redundancies, retention of management and extensive expansion. If these promises are not met, it will not only potentially damage outward Chinese investment but will also risk the reputation of Chinese firms (especially SOEs).

**Summary-backlash.** Are there likely to be restrictions on COFDI by host countries? Across-the-board controls are unlikely in any significant host country, as they require a coalition of interests that oppose COFDI to capture the regulatory process. The benefits of inward FDI in terms of employment creation (or protection) and increased activity remain significant in depressed economic conditions. However, there are likely to be increased selective restrictions on security grounds and the protection of sensitive and culturally relevant assets. There may also be protectionist policies if and when “industrial policies” become salient in OECD countries.

**Conclusion**
Assembling the elements of “China’s international strategy” is to put together influences at the national, provincial, city (even township), company and industry levels. It is not (cannot be) fully coordinated, but the following elements are in play[3]:

1. top-down investment direction;
2. bottom-up investment by companies;
   (1 and 2 are linked by SOE strategies)
3. external acquisition of technology, brand names and other strategic assets;
4. network influences within (phalanx effects) and beyond (diaspora) China; and
5. investments in soft power are both institutional (Confucius Institutes) and macro-policy driven (OBOR).

The extent of successful coordination can be underestimated but it is clear that China’s outward direct investment is a formidable and rapidly growing phenomenon in the global economy. The constraints in marshalling China’s foreign credits (as exemplified by its foreign exchange resources) into commercial success are formidable but there is a sign that its efficacy is improving and that China will pose massive challenges to its national and corporate competitions in coming years.

**Notes**
1. Although the precise mechanisms for the promotion of Chinese ODI activity remain sketchy.
2. For example, the investment value ceiling has been raised to US$30m from US$1m for natural resources-oriented FDI and from US$1m to US$3m for non-resource and non-financial FDI for projects under the control of provincial authorities (Sauvant, 2005).
3. This schema follows Simon Chadwick Industry Economy and Success: China’s great football vision and what the country is doing to win the World Cup. Business Confucius Institute Annual Lecture, University of Leeds, 22 November 2016.

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Reviewing the research on the internationalization of Chinese firms

Thematic expansion, new impulses and potential future development

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Abstract

Purpose – Supplementing a previous review article on the internationalization of Chinese firms (ICF) by Deng (2012) that covers the period 1991–2010, the purpose of this paper is to examine how research on this subject has thematically expanded in recent years, systematically investigating the literature concerning the ICF between 2011 and June 2017 and highlighting the research advancements. Furthermore, it provides impulses for future research and outlines potential avenues for the overall future development of the entire ICF field.

Design/methodology/approach – Based on a systematic literature review, this paper categorizes the surveys reviewed according to the organizational framework of the research on the ICF provided by Deng (2012).

Findings – The results indicate that the research on the ICF has become more widespread and mature during the time period investigated. First, there are more articles examining functional management processes of Chinese firms. Consequently, new knowledge exists regarding the role, control and organization of foreign subsidiaries of Chinese enterprises and their host country institutional integration. Second, the state of knowledge regarding the implications of the ICF has increased. It is argued that the future convergence or divergence of the Chinese economic system determines the overall future development of research on the ICF.

Originality/value – This is the first review paper in the emerging ICF field that consciously continues the work of a previous review article, enabling the tracing of the thematic expansion of research on the ICF.

Keywords China, Internationalization, Mergers and acquisitions, Outward foreign direct investment, Chinese multinational firms, Greenfield investments

Paper type Literature review

1. Introduction

Since the implementation of China’s Go Global policy, Chinese firms have increasingly been seeking their salvation in internationalization, either through greenfield investments or through cross-border mergers and acquisitions (CBMAs) (Buckley et al., 2007; Wei, 2010). Consequently, China’s outward foreign direct investment (OFDI) has increased steadily and rapidly. Meanwhile, China, the country previously primarily associated with massive private capital inflows (Liu et al., 2005), has also become an investor of global significance. In 2016, the annual investment volume reached 183bn US dollars, exceeded only by the USA (UNCTAD, 2017).

In the academic sphere, the tremendous internationalization of Chinese firms (ICF) has been closely observed and energetically discussed (Blomkvist and Drogendijk, 2013). The central subjects of this debate are the antecedents and varieties of the ICF, as well as the implications for China’s economic catch-up process and the global economy (Alon et al., 2012;
Lattemann and Alon, 2015; Lattemann et al., 2012). Often drawing a contrast to the internationalization patterns of developed firms and countries, scholars have analyzed, for example, the prominent role of the Chinese government and Chinese state-owned enterprises (SOEs) in the ICF context (Li et al., 2017; Luo et al., 2010; Yang and Stoltenberg, 2014). Scholarly attention has also been paid to how Chinese firms catch up to western rivals in light of a lack of firm-specific advantages (Peng, 2012; Wei, 2010), or the impact of the ICF on the Chinese firms’ financial performance (Boateng et al., 2008; Clegg et al., 2016). Nevertheless, empirical evidence on the ICF remains in its infancy and in a piecemeal state (Alon et al., 2012; Jansson and Soederman, 2013).

One attempt to overcome the fragmented nature of research on the ICF has been made by Deng (2012). Deng (2012) reviewed the scholarly literature on the research field in the period from 1991 to 2010 and clustered the surveys identified around three main categories (antecedents/drivers, processes/operations and outcomes/consequences of the ICF). Furthermore, he distinguished between sub-aspects of the ICF that scholars have begun to analyze and research issues that remain completely untapped or significantly under-researched, and which thus require future research. As a result, Deng (2012) provided a coherent framework for structuring the academic discourse on the ICF.

However, the scholarly attention on the ICF remains significant. Emphasizing the continuing high relevance of the research subject, several leading international business journals have even published special issues or sections in recent years on the ICF or the internationalization of other emerging market firms (e.g. Thunderbird International Business Review, Vol. 59 Nos 2-4 (March/April 2017, May/June 2017, July/August 2017); Asia Pacific Journal of Management, Vol. 34 No. 1 (March 2017); International Business Review, Vol. 25 No. 1 (February 2016); Journal of International Business Studies, Vol. 45 No. 8 (October 2014); Journal of International Management, Vol. 19 No. 3 (September 2013); Journal of World Business, Vol. 47 No. 1 (January 2012); and Management and Organization Review, Vol. 7 No. 2 (July 2011)).

Given the ongoing research interest in the ICF, it is possible that some of the research gaps identified by Deng (2012) have meanwhile been addressed or that new subject areas have emerged.

In a situation in which it is very likely that a greater number of additional relevant research results are available and that these new findings will substantially increase the state of knowledge regarding a specific research subject, it is beneficial to refresh and complement existing review articles (Bayliss et al., 2016; Garner et al., 2016; Short, 2009).

The objective of this paper, therefore, is to investigate which of the research issues that Deng (2012) classified as unexplored or significantly under-investigated have meanwhile been addressed and which new research streams within the ICF context have recently emerged. Based on the findings, impulses for future research efforts are derived. Furthermore, this paper aims to discuss the potential overall future development of research on the ICF in light of the most recent political developments in China.

For this purpose, this paper systematically examines peer-reviewed English-language journal articles on Chinese greenfield investments and CBMAs published from 2011 to June 2017 using the category scheme provided by Deng (2012) as an analytical framework.

In this way, this paper offers orientation to scholars, business practitioners and politicians by providing a succinct but comprehensive overview of the latest thematic expansions of research on the ICF. In addition, it enables a cross-comparison of the most recent research results. Furthermore, by identifying knowledge gaps and providing detailed suggestions for additional research efforts, it can inspire future research.

It is possible that other literature reviews which have been carried out after Deng’s (2012) report on research findings in areas that Deng (2012) described as unexplored. However, that hardly reduces the contribution of this paper. To the best of our knowledge,
the investigation period of existing review articles that include surveys on Chinese greenfield investments and Chinese CBMAs does not extend beyond 2012 (Berning and Holtbruegge, 2012; Blanchard, 2011; Deng, 2013). In addition, more current review articles exclusively focus on Chinese CBMAs (Liu and Deng, 2014; Zhu and Zhu, 2016). Hence, this paper provides a more contemporary and more comprehensive overview of the thematic expansion in the ICF field.

The remainder of this paper is structured as follows. First, the methodical approach is described. In particular, the search strategy for the publications in the time period considered as well as the analytical framework is explained in detail to ensure a transparent procedure. Subsequently, the advancements and new research results regarding the ICF during the time period investigated are outlined. In addition, recommendations for possible further research are provided. In a subsequent step, this paper discusses potential avenues for the future development of the entire ICF field. The final section outlines the conclusions.

2. Methodical considerations and analytical framework
In order to ensure a systematic analytical procedure and thus increase the reliability of the findings, the review process has been divided into several consecutive steps (Krippendorff, 2013). Due to its clear functional logic, this paper has followed the research approach of Jormanainen and Koveshnikov (2012), as illustrated in Figure 1.

First, the research object of this review paper was defined. In line with Deng (2012), this paper has interpreted the ICF as the venturing abroad of Chinese firms through greenfield investments and CBMAs. Consequently, inward foreign direct investments (FDIs) to China and all other types of foreign operation modes are not the subject of this review paper.

As a next step, the literature databases were selected. In order to achieve consistency, the paper analyzed the same literature databases as Deng (2012) (Business Source Premier (EBSCO), ProQuest and JSTOR). In addition, ScienceDirect and Web of Science were selected to extend the coverage of the scientific literature.

Subsequently, pursuing a relevance sampling strategy (Krippendorff, 2013), the exact search parameters of the literature research were defined. To ensure that the results and conclusions are based on a reliable and valid foundation, this paper has focused exclusively


Figure 1.
Procedure of research approach

Source: Own representation
on peer-reviewed English-language journal articles (except introduction articles and editorials). All others types of publication, such as books, chapters in edited volumes and online resources, were excluded, since they might not have been subject to a strict peer-review process. To guarantee a chronological extension compared to Deng (2012), this paper has investigated publications produced between 2011 and June 2017.

After adjusting the literature databases accordingly, several search operations within the selected search engines were conducted. In order to generate pertinent search results, the search terms were partly adopted from three previous similar review articles (“multinational corporations (MNCs),” “international expansion,” “globalization,” “internationalization,” “cross-border mergers and acquisitions”; Deng, 2012, 2013; Liu and Deng, 2014) and extended using additional keywords (“multinational enterprises (MNEs),” “greenfield investments,” “mergers and acquisitions (M&A),” “outbound investment,” “outward foreign direct investment” (OFDI) and “overseas investments”). To further increase the accuracy of the literature research, these keywords were combined with two further search terms (“Chinese,” “China”) via the Boolean operator AND. Given that alongside Chinese firms, other emerging market enterprises, especially those from other BRICS states, are now also increasingly active cross-border investors (Bertoni et al., 2013; UNCTAD, 2017), further country-related keywords (“Brazilian,” “Brazil,” “Russian,” “Russia,” “Indian,” “India,” “South African” and “emerging”) were added and combined in order to identify cross-national comparative studies (e.g. Deng and Yang, 2015). To create a suitable number of search results, the keywords were searched for in the titles, abstracts and keywords of the articles.

For triangulation, the decision was also consciously made to go manually through each volume of the journals that are included in the review article by Deng (2012) and that published more than one article regarding the ICF within the time period investigated[1]. The same strategy was followed regarding the International Journal of Emerging Markets to take into account the contributions published in this journal.

The selection process of the articles was subdivided into three parts. First, irrelevant articles were removed. An article was considered irrelevant if there was no indication from the abstract of each article that the content of the article was related to the previously defined ICF subject. Consequently, the category scheme proposed by Deng (2012), which is shown in Figure 2, was used as an analytical framework to decide whether an article was eligible for a detailed analysis.

According to the model shown in Figure 2, the surveys published up to 2010 predominantly focus on six research subjects within three main categories (antecedents/drivers, processes/operations and outcomes/consequences). The research issues that have been addressed often are mentioned in the solid matrices, whereas the research issues listed in the dashed matrices have remained completely untapped or significantly under-researched. The bullet points in the dashed matrices represent possible points of reference for future research efforts. Furthermore, the solid arrows indicate causal connections investigated between individual research issues, while the dashed arrows represent possible future research streams (Deng, 2012).

As this paper aims to comment on the thematic expansion within the ICF field, only the dashed matrices are relevant analysis dimensions. To decide whether an article belongs to one of the categories in the solid matrices or in the dashed matrices, the Introduction and Conclusion section of the article was read. In addition, surveys were excluded in which the sample consisted of Chinese firms and firms from other emerging countries when there was no clear separation between the individual sub-segments of the sample. In this case, it is not possible to assess whether the research findings result from the analysis of Chinese firms or from the investigation of firms from other emerging markets. In contrast, it was not a criterion of exclusion if the sample included Chinese firms and enterprises from other emerging
markets with a clear distinction between the sub-segments of the sample (e.g. a survey comparing Chinese and Indian firms). In a third step, the remaining articles were then analyzed in detail using content analysis (Krippendorff, 2013). According to the information derived, each article was finally assigned to a distinct category and sub-category. If an article
addressed a research issue not related to one of the categories used by Deng (2012), the
definition of a new category, sub-category or research issue was considered. Cases involving
doubt were discussed with the co-author.

3. Review results and possible future research

As shown in Table I, the literature research conducted as described in the previous section identifies 57 articles addressing research issues that Deng (2012) classified as unexplored or significantly under-investigated, or that have newly emerged.

As can also be observed from Table I, slightly more articles address the main category “process or operations of the ICF” (31 articles) than the main category “outcomes or consequences of the ICF” (26 articles). Furthermore, Table I reveals that 1 survey has a mixed-method research design, 13 articles employ quantitative research methods, 30 papers apply qualitative approaches, while the remaining 13 surveys are conceptual or descriptive works. Moreover, Table I shows that most of the surveys (34 articles) do not use a specific theory as a theoretical framework; however, if they do so, the institutional theory (8 articles) is the most prominent approach.

Figure 3 summarizes the thematic expansion within the ICF field compared to the state of research described by Deng (2012) and outlines potential future research areas and issues.

The following Sections 3.1 and 3.2 outline the research progress within each category and sub-category and describe possible future research. Due to the fact that in some areas, the research on the ICF developed differently than suggested by Deng (2012), the indication of individual research issues has sometimes been slightly adapted to better reflect the current research status or to inspire future research. Furthermore, in his article, Deng (2012) suggested not only investigating the forward linkages between the antecedents, processes and outcomes of the ICF, but also examining the backward linkages between these categories. However, the literature review of this paper does not reveal any article that has taken up this thought. Therefore, although such efforts might be useful in future research, the issue of reverse connections between outcomes, processes and antecedents of the ICF is not discussed further.

3.1 Research advancements and new impulses regarding the processes or operations of the ICF

While Deng (2012) remarks that “[…] implementation elements, including organizational structure, subsidiary role and control, and host country relationship are largely ignored (Deng, 2012, p. 417),” this situation changed during the time period investigated. This paragraph therefore synthesizes the newly available surveys that analyze the ICF from a process perspective and provides possible future directions.

3.1.1 Expansion and possible future research regarding the research stream “subsidiary role and control”. As the literature review reveals, scholars have started to pay closer attention to the issues of how Chinese firms control their foreign subsidiaries, design their organization in relation to the issue of knowledge transfer and balance the headquarter–subsidiary relationship. This section also outlines possible future research extensions.

Knowledge transfer. It is widely acknowledged that OFDIs can lead to knowledge spillovers (Dunning and Lundan, 2014). In the case of Chinese OFDIs, a distinctive feature appears to be the destination of the investments.

When investing in other emerging markets or less developed countries, Chinese firms act as knowledge disseminators (Auffray and Fu, 2015; Rui et al., 2017). In the context of Chinese OFDIs to Africa, Rui et al. (2016) highlighted that Chinese enterprises purposely reduce the complexity of the knowledge intended to be transferred in order to meet the needs of the recipients and not to overexert their absorptive capacity. Focusing on
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Research subject</th>
<th>Theoretical perspective</th>
<th>Applied research method(s)</th>
<th>Methodical category</th>
<th>Assigned main category</th>
<th>Assigned sub-category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alon <em>et al.</em> (2015)</td>
<td>Implications of the investment behavior of Chinese national oil companies</td>
<td>International relations theory</td>
<td>Descriptive analysis</td>
<td>Conceptual or descriptive</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
</tr>
<tr>
<td>Anderson <em>et al.</em> (2015)</td>
<td>Impact of Chinese CBMA s on innovation performance</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Event study method</td>
<td>Quantitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Goal achievement</td>
</tr>
<tr>
<td>Auffray and Fu (2015)</td>
<td>Managerial knowledge transfer by Chinese OFDI s to Africa</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>In-depth qualitative interviews</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Subsidiary role and control</td>
</tr>
<tr>
<td>Braeutigam and Tang (2014)</td>
<td>Impact of China’s overseas trade and cooperation zone program on Africa</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Conceptual analysis</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
<td></td>
</tr>
<tr>
<td>Chen <em>et al.</em> (2012)</td>
<td>International reverse spillover through OFDI s on Chinese parent companies</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Lagged Tobit estimation model</td>
<td>Quantitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
</tr>
<tr>
<td>Ciabuschi <em>et al.</em> (2017)</td>
<td>Impact factors reverse knowledge transfer</td>
<td>Political embeddedness</td>
<td>Case studies</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Subsidiary role and control</td>
</tr>
<tr>
<td>Cooke <em>et al.</em> (2015)</td>
<td>Human resource management (HRM) of Chinese SOEs in Africa</td>
<td>Institutional theory</td>
<td>Semi-structured interviews</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Organizational design and structure</td>
</tr>
<tr>
<td>Cooke (2012)</td>
<td>International HRM of ZTE and Huawei</td>
<td>Liability of foreignness (LOF)</td>
<td>Case studies</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Organizational design and structure</td>
</tr>
<tr>
<td>Cooke (2014)</td>
<td>HRM practices of Chinese enterprises in the host countries</td>
<td>Political economy framework, institutional theory</td>
<td>Analysis of empirical data from previous studies of the author and secondary data</td>
<td>Conceptual or descriptive</td>
<td>Process or operations of the ICF</td>
<td>Organizational design and structure</td>
</tr>
<tr>
<td>Di Minin <em>et al.</em> (2012)</td>
<td>China’s OFDI s in R&amp;D in Europe</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Case studies</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Subsidiary role and control</td>
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<th>Author(s)</th>
<th>Research subject</th>
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<th>Methodical category</th>
<th>Assigned main category</th>
<th>Assigned sub-category</th>
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<tbody>
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<td>Ding et al.</td>
<td>Impact of Chinese CBMAs on corporate governance practice</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Ordinary least squares (OLS) regression</td>
<td>Quantitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Goal achievement</td>
</tr>
<tr>
<td>Edamura et al.</td>
<td>Impact of Chinese CBMAs on firm performance</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Econometric approach</td>
<td>Quantitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Goal achievement</td>
</tr>
<tr>
<td>Fan et al.</td>
<td>HRM of Chinese firms</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Case studies</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Organizational design and structure</td>
</tr>
<tr>
<td>Fan et al.</td>
<td>Motivation for localized learning by Chinese firms</td>
<td>Dynamic capability framework</td>
<td>Fuzzy-set qualitative comparative analysis</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Subsidiary role and control</td>
</tr>
<tr>
<td>Fan et al.</td>
<td>Media coverage of CBMAs</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Case study</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Host country relationships</td>
</tr>
<tr>
<td>Gao (2014)</td>
<td>Impact of Chinese non-resources investment in Australia</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Descriptive analysis</td>
<td>Conceptual or descriptive</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
</tr>
<tr>
<td>Globerman (2016)</td>
<td>Political assessment of Chinese OFDIs</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Conceptual analysis</td>
<td>Conceptual or descriptive</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
</tr>
<tr>
<td>Gugler and Vanoli</td>
<td>Relationship between Chinese firms’ innovation process and OFDIs</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Descriptive statistical method of patents and patent citations</td>
<td>Conceptual or descriptive</td>
<td>Outcomes or consequences of the ICF</td>
<td>Goal achievement</td>
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<tr>
<td>Hansen et al.</td>
<td>Upgrading strategy of a Chinese enterprise in Denmark</td>
<td>Technological capability perspective</td>
<td>Case study</td>
<td>Qualitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Goal achievement</td>
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<td>Huang and Staples</td>
<td>Impact of internationalization on the corporate governance practice of Chinese firms</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Case studies</td>
<td>Qualitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Goal achievement</td>
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<tr>
<td>Klossek et al.</td>
<td>Mitigation of liability of LOF of Chinese companies</td>
<td>LOF</td>
<td>Semi-structured interviews</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Host country relationships</td>
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Table 1.

Reviewing the research on the ICFs
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Research subject</th>
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<tr>
<td>Kubny and Voss (2014)</td>
<td>Spillover effects of OFDIs by Chinese firms to Vietnam</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Expert interviews</td>
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<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
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<td>Li, Jiang and Shen (2016)</td>
<td>Quality of headquarter–subsidiary relationship</td>
<td>Institutional theory</td>
<td>Moderated hierarchical multiple regression analysis</td>
<td>Quantitative</td>
<td>Process or operations of the ICF</td>
<td>Subsidiary role and control</td>
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<tr>
<td>Li, Strange, Ning and Sutherland (2016)</td>
<td>Impact of Chinese OFDIs on domestic innovation</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Generalized method of moments (GMM)</td>
<td>Quantitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
</tr>
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<td>Li, Li, Lyles and Liu (2016)</td>
<td>Impact of Chinese OFDIs on domestic productivity</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Endogenous threshold model</td>
<td>Quantitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
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<td>Lin and Zhao (2016)</td>
<td>Impact of Chinese culture on the behavior of Chinese expatriates</td>
<td>Social cognitive theory</td>
<td>Semi-structured interviews</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Organizational design and structure</td>
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<td>Liu and Woywode (2013)</td>
<td>Post-merger integration phase of Chinese international M&amp;As</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>In-depth qualitative interviews</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Subsidiary role and control</td>
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<td>Marchand (2017)</td>
<td>Post-merger integration approach of emerging markets firms</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
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<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Subsidiary role and control</td>
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<td>May (2014)</td>
<td>CSR of Chinese agricultural OFDIs</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Conceptual analysis</td>
<td>Conceptual or descriptive</td>
<td>Process or operations of the ICF</td>
<td>Host country relationships</td>
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<td>Miska et al. (2016)</td>
<td>Antecedents of CSR activities of Chinese enterprises</td>
<td>Institutional theory, integration-responsiveness framework</td>
<td>Fuzzy-set qualitative comparative analysis</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Host country relationships</td>
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<td>Muralidharan et al. (2017)</td>
<td>Challenges of Chinese firms in the post-merger phase caused by institutional differences</td>
<td>Institutional theory</td>
<td>Case studies</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Subsidiary role and control</td>
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<td>Author(s)</td>
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<td>Nicolas (2014)</td>
<td>Impact of Chinese OFDIs on European host countries</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Descriptive analysis</td>
<td>Conceptual</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
</tr>
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<td>Peng et al.</td>
<td>Public perception of China’s OFDIs</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Conceptual analysis</td>
<td>Conceptual</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
</tr>
<tr>
<td>Peng et al.</td>
<td>Impact factors on reverse knowledge transfer</td>
<td>Ownership-location-internalization (OLI) model, evolutionary theory</td>
<td>Partial linear modeling, case studies</td>
<td>Mixed-method approach</td>
<td>Process or operations of the ICF</td>
<td>Subsidiary role and control</td>
</tr>
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<td>Implications of Chinese OFDIs for the US economy</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Conceptual analysis</td>
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<td>Outcomes or consequences of the ICF</td>
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<td>Hanemann</td>
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<td>Rui et al.</td>
<td>Knowledge transfer in Chinese OFDIs to Africa</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Multiple case study</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Organizational design and structure</td>
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<td>Rui et al.</td>
<td>Expatriate management of Chinese firms in emerging markets</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Case studies</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Subsidiary role and control</td>
</tr>
<tr>
<td>Schueler-Zhou</td>
<td>Decision-making autonomy of Chinese subsidiaries in Germany</td>
<td>Institutional framework</td>
<td>Multiple regression analysis, factor analysis</td>
<td>Quantitative</td>
<td>Process or operations of the ICF</td>
<td>Subsidiary role and control</td>
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<td>and Schueller</td>
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<td>Seyoum et al.</td>
<td>Relationship between productivity and Chinese OFDIs in Ethiopia</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Econometric approach</td>
<td>Quantitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
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<tr>
<td>Song et al.</td>
<td>Impact of OFDIs of SOEs on China’s domestic structural reforms</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Conceptual analysis</td>
<td>Conceptual</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
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<td>(2011)</td>
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<td>descriptive</td>
<td>Process or operations of the ICF</td>
<td>Host country relationships</td>
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<td>Song (2011)</td>
<td>Role of overseas Chinese networks</td>
<td>Uppsala model</td>
<td>Interviews</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td></td>
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Table I. Reviewing the research on the ICFs
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Research subject</th>
<th>Theoretical perspective</th>
<th>Applied research method(s)</th>
<th>Methodical category</th>
<th>Assigned main category</th>
<th>Assigned sub-category</th>
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<tbody>
<tr>
<td>Spigarelli et al. (2015)</td>
<td>Brand creation after the acquisition of CIFA by Zoomlion</td>
<td>Rugman’s firm-specific advantages (FSA)/country-specific advantages (CSA) framework</td>
<td>Case Study</td>
<td>Qualitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Goal achievement</td>
</tr>
<tr>
<td>Tingley et al. (2015)</td>
<td>Reasons for political opposition against Chinese M&amp;As</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Standard logit models</td>
<td>Quantitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
</tr>
<tr>
<td>Wang et al. (2014)</td>
<td>Impact of Chinese OFDIs on host countries</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Conceptual analysis</td>
<td>Conceptual or descriptive</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
</tr>
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<td>Wang et al. (2017)</td>
<td>Necessary CBMAs of Chinese expatriates</td>
<td>Social learning theory</td>
<td>Case studies</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Organizational design and structure</td>
</tr>
<tr>
<td>Wu et al. (2011)</td>
<td>Huawei’s and Haier’s expansion to the US market</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Case study</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Host country relationships</td>
</tr>
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<td>Wu et al. (2016)</td>
<td>Impact of host country institutional environment on innovation performance</td>
<td>Institutional theory</td>
<td>Negative binominal count regression model</td>
<td>Quantitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Goal achievement</td>
</tr>
<tr>
<td>Xing et al. (2016)</td>
<td>Management of union-firm relationships in Africa</td>
<td>Crossvergence framework</td>
<td>Storytelling approach</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Organizational design and structure</td>
</tr>
<tr>
<td>Yao and Wang (2014)</td>
<td>Displacement effect of China’s OFDIs</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Econometric approach</td>
<td>Quantitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
</tr>
<tr>
<td>Zhang et al. (2014)</td>
<td>Growth effect of Chinese OFDIs on Sub-Saharan Africa</td>
<td>Growth accounting mode</td>
<td>Dynamic GMM, OLS and fixed effect estimations based on the growth accounting model</td>
<td>Quantitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Competitiveness</td>
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<tr>
<td>Zheng et al. (2016)</td>
<td>Characteristics of strategic assets purchased in CBMAs deals</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Case studies</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Subsidiary role and control</td>
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<th>Author(s)</th>
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<th>Theoretical perspective</th>
<th>Applied research method(s)</th>
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<td>Zheng (2013)</td>
<td>HRM practices of enterprises from emerging countries</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Conceptual analysis</td>
<td>Conceptual or descriptive</td>
<td>Process or operations of the ICF</td>
<td>Organizational design and structure</td>
</tr>
<tr>
<td>Zheng (2016)</td>
<td>Post-merger integration approach of Chinese firms</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Case study</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Subsidiary role and control</td>
</tr>
<tr>
<td>Zhu and Jack (2016)</td>
<td>Impact of country-of-origin effect on Chinese firms' approach to employer associations</td>
<td>Country-of-origin effect</td>
<td>Case studies</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Organizational design and structure</td>
</tr>
<tr>
<td>Zhu et al. (2011)</td>
<td>Catch-up process of TCL</td>
<td>Review of relevant literature but no specific theoretical perspective</td>
<td>Case study</td>
<td>Qualitative</td>
<td>Outcomes or consequences of the ICF</td>
<td>Goal achievement</td>
</tr>
<tr>
<td>Zhu et al. (2014)</td>
<td>Impact of country-of-origin effect on HRM of Chinese firms</td>
<td>Country-of-origin effect</td>
<td>Case studies</td>
<td>Qualitative</td>
<td>Process or operations of the ICF</td>
<td>Organizational design and structure</td>
</tr>
<tr>
<td>Zhu (2015)</td>
<td>Management of union-firm relationships of Chinese companies</td>
<td>Rational choice paradigm, institutional theory, organizational learning theory</td>
<td>Case studies</td>
<td>Qualitative</td>
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<td>Organizational design and structure</td>
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**Source:** Own representation

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**Table I.**

Reviewing the research on the ICFs
the managerial knowledge transfer process triggered by Chinese OFDIs to the construction sector in Ghana, Auffray and Fu (2015) found limited local employment, as well as cultural and linguistic barriers, as impediments for this process.

In contrast to that, Chinese enterprises enter developed markets with the intention of receiving knowledge, and in a next step transfer the acquired knowledge back to the Chinese parent company. This process is labeled as reverse knowledge transfer (Ciabuschi et al., 2017; Di Minin et al., 2012; Fan et al., 2016; Peng et al., 2017). When using greenfield investments as an entry mode, Chinese enterprises attempt to gain gradual access to the local innovation network (Ciabuschi et al., 2017; Di Minin et al., 2012; Peng et al., 2017). In the case of CBMAs, the acquired target in particular serves as a knowledge source (Fan et al., 2016; Peng et al., 2017).

As factors influencing the effectiveness of the backward-oriented knowledge transfer, the surveys identified discuss the home country level of political embeddedness, the degree of headquarter control, the size, age and location of the overseas subsidiary, as well as the host country institutional embeddedness (Ciabuschi et al., 2017; Di Minin et al., 2012; Fan et al., 2016; Peng et al., 2017).

Despite these advancements, some important issues remain unaddressed. The strategies pursued by Chinese firms for disseminating knowledge in emerging markets are not necessarily congruent with the measures undertaken by other emerging market firms. Hence, more cross-national comparative studies would be beneficial (Rui et al., 2016). Another observation is that the surveys identified concerning knowledge transfer through Chinese CBMAs focus on majority takeovers. However, it is also conceivable that knowledge transfer happens in the context of minority shareholding by the Chinese firm (Soenmez, 2013), and consequently, surveys that take this aspect into account would be
valuable, in particular if they compare the arrangement of knowledge transfer in majority takeover and minority participation. A suitable possible theoretical perspective could be organizational learning (Liu and Deng, 2014).

Inter-firm and intra-firm networks. In previous international business research, it was assumed that institutional distance between the parent firm and its subsidiaries complicates the creation of efficient networks (Eden and Miller, 2004; Xu and Shenkar, 2002). However, Li, Jiang and Shen (2016) challenged that perception, as they found that larger regulative and cultural distance can prompt a stronger interaction and collaboration and thus positively affect the relationship quality between the Chinese parent company and its overseas subsidiaries.

To further validate that finding, it is necessary to repeat the survey in different emerging markets (Li, Jiang and Shen, 2016). Furthermore, it could be useful to investigate whether and how Chinese firms that venture abroad engage in customer and supplier networks, considering their pronounced strategic asset-seeking motives (Buckley, 2016) and the importance of such clusters for innovation (Calia et al., 2007).

Corporate-subsidiary governance. Meanwhile, there is new empirical evidence concerning the question of how Chinese parent companies control their overseas subsidiaries, in particular in the context of CBMAs in developed markets.

The surveys identified state that in contrast to developed market enterprises, Chinese firms typically prefer to largely preserve the autonomy of their acquired targets and grant a significant amount of freedom in decision making to the management of the foreign subsidiaries (Liu and Woywode, 2013; Marchand, 2017; Schuler-Zhou and Schueller, 2013; Zheng, 2016; Zheng et al., 2016). In the newly added literature, this integration approach is referred to as light-touch integration (Liu and Woywode, 2013) or as a partnering approach (Zheng et al., 2016). More concretely, this post-merger acquisition strategy involves leaving intact the management team of the acquired entity, retaining the target’s company name and brands, providing strategic guidance from the Chinese parent company but giving the management of the purchased DE company a high degree of freedom in decision making, and an involvement of the parent company in the supervisory board of the purchased enterprise (Liu and Woywode, 2013). Furthermore, the research results by Marchand (2017) indicate that the low-level integration strategy pursued holds true for Chinese firms, but does not necessarily apply to all other emerging market acquirers, such as, for example, Russian or South African firms.

As reasons for the rather loose incorporation of the acquired enterprises, this new stream of research discusses cultural influences, a limited amount of absorptive capacity of the Chinese parent company and the knowledge-seeking intention of Chinese firms. In addition, the relevance of the previous acquisition experience, the balance of power between the subsidiary and the Chinese parent company, and the role of institutional differences as influential factors are debated (Liu and Woywode, 2013; Marchand, 2017; Schuler-Zhou and Schueller, 2013; Zheng et al., 2016; Zheng, 2016; Muralidharan et al., 2017).

To push further the current debate on the Chinese firms’ post-merger integration approach, one necessary step is to examine whether Chinese enterprises pursue a similar integration strategy when acquiring other emerging market entities (Marchand, 2017). Moreover, most recent Chinese cross-border acquisitions, such as that of the Swiss chemical company Syngenta (Petroff, 2017), show a tendency toward a stronger emphasis on efficiency and market-seeking motives. Therefore, the question arises as to whether Chinese firms apply a heavier integration in acquisitions in which strategic asset-seeking no longer appears to be the dominant rationale.

3.1.2 Expansion and possible future research regarding the research stream “organizational design and structure”. Meanwhile, there is also a growing body of
literature addressing the issue of how Chinese firms design their organizational structures to manage their international workforce effectively.

International HRM. Concerning the international HRM management of Chinese firms, the articles analyzed predominantly postulate that Chinese enterprises attempt to harmonize their HRM practices with the institutional environment and regulations of the host countries. By actively adapting to the foreign business environment, Chinese firms attempt to overcome disadvantages, such as a negative country-of-origin effect as well as the lack of acceptance of the Chinese working culture in foreign markets, and thus support the success of their international operations (Cooke, 2012; Fan et al., 2013; Zheng, 2013; Zhu and Jack, 2016; Zhu et al., 2014). Such an assimilation strategy is illustrated particularly in connection with the management of the relationship with host country unions (Xing et al., 2016; Zhu, 2015; Zhu and Jack, 2016; Zhu et al., 2014). Nevertheless, the extent to which Chinese firms attempt to comply with the host countries’ HRM standards varies with the industry in which the specific Chinese company operates and with the dependence of the host country on Chinese OFDIs (Cooke, 2014; Cooke et al., 2015).

An omission of the existing surveys on the international HRM of Chinese firms is the strong empirical focus on Chinese OFDIs to Africa or other emerging countries (Cooke, 2014; Cooke et al., 2015; Xing et al., 2016; Zhu, 2015). Consequently, additional research on how Chinese firms adapt their HRM strategies when venturing to developed countries could be useful. Furthermore, it would be beneficial to investigate the measures with which Chinese corporations address the important issue of employee retention after the acquisition of foreign entities (Ranft and Lord, 2000).

Expatriate management. In recent years, scholars have also started to examine the role and performance prerequisites of Chinese expatriates. Rui et al. (2017) argued that Chinese expatriates are a valuable source of competitive advantage for Chinese firms in other emerging markets, due to their relatively low cost, higher productivity and greater hardship tolerance in comparison to host country or developed country counterparts. In addition, the findings by Lin and Zhao (2016) and Wang et al. (2017) reveal that Chinese cultural concepts (e.g. mianzi, guanxi, etc.) and the degree of intercultural competence influence the effectiveness of Chinese expatriates.

Future research could explore the role of Chinese expatriates in developed economies (Rui et al., 2017) and also investigate the Chinese firms’ expatriate selection, training and development, compensation, as well as retention mechanisms (Chen et al., 2002; Graf, 2004; Liu et al., 2014; Mendenhall and Stahl, 2000).

3.1.3 Expansion and possible future research regarding the research stream “host country relationships”. This section outlines the research progress concerning how Chinese firms attempt to achieve organizational legitimacy and good corporate citizenship in the host countries, and provides recommendations for future research.

CSR. As the literature research identified merely two surveys that address the CSR activities by Chinese firms, this issue apparently continues to receive a limited amount of scholarly attention. May (2014) highlighted that in the context of Chinese OFDIs to the agriculture sector, the political guidelines and recommendations by the Chinese authorities are not very concrete, in particular concerning transparency and accountability. In addition, Miska et al. (2016) found that state influence is a driver of the Chinese firms’ global CSR integration, while presence in the west and internationalization via CBMAs promote local CSR responsiveness.

Future research could examine to what extent the western firms and Chinese SOEs and/or privately owned enterprises (POEs) diverge regarding their CSR practices and thereby contribute differently to the host countries’ ethical demands, including the upholding of human rights, respect for labor rights, combating corruption and protecting the environment in developing and developed economies (Deng, 2012; Fang and Chimenson, 2017).
Institutional integration and public perception. Surveys that investigate the integration process of Chinese corporations into the institutional environment of the host country and examine stakeholder reactions represent a new research stream. Drawing on the LOF concept, Klossek et al. (2012) argued that Chinese firms that venture abroad attempt to mitigate the LOF through signaling, a careful due diligence, reputation-building by communication and the hiring of employees who act as a cultural bridge. In addition, Song (2011) highlighted that ties to business networks of local Chinese and overseas Chinese help Chinese companies to overcome institutional obstacles. Furthermore, Wu et al. (2011) found in the context of Haier's and Huawei's expansion to the US market that improving transparency and collaborating with local partners can reduce institutional reservations.

Furthermore, Peng et al. (2011) as well as Fang and Chimenson (2017) found that the ICF in western countries is accompanied by a mainly negative media coverage resulting from a negative image of China in the west and a lack of trust regarding the Chinese government. In view of these findings, research subjects deserving a closer examination could include the interrelation of firm performance and media coverage (Fang and Chimenson, 2017). Furthermore, scholars could investigate in which public relation activities Chinese firms engage to improve their image in the host countries entered.

3.1.4 Expansion and possible future research regarding the research stream “market adaption and cultivation”. When venturing abroad, one of the central issues for firms is to decide whether they should pursue a uniform market cultivation strategy across different foreign markets or adapt to distinct host country characteristics (Kotabe and Helsen, 2009). Despite the relevance of this principle decision, this subject area has received scant attention in the ICF context and is missing in the framework outlined by Deng (2012).

Hence, exploring the balancing of Chinese firms regarding global uniformity vs host market conformity represents a fruitful area for future research. An important research question, for instance, is to what extent Chinese firms modify their marketing strategy and customer relationship management in terms of product, price, place and promotion decisions due to their internationalization. More concretely, do Chinese firms operating in foreign markets, for instance, attempt to sell the same products as in the Chinese domestic market, carry out country-specific product adjustments or even design and develop new products for foreign markets? Similarly, further potential research questions include whether Chinese firms create brands especially designed for international markets, what kind of branding strategy Chinese firms pursue in international markets and how they interact and deal with foreign key accounts.

A possible theoretical framework for carrying out these analyses could be the ethnocentric, polycentric, regiocentric, geocentric profile (EPRG profile), which allows the assessment of the degree of international marketing decisions by Chinese firms (Perlmutter, 1969; Wind et al., 1973).

3.2 Research advancements and new impulses regarding the outcomes or consequences of the ICF
In this section, the research results of surveys primarily addressing research issues related to the consequences of the ICF process are illustrated and summarized. In addition, possible future research is outlined.

3.2.1 Expansion and possible future research regarding the research stream “goal achievement”. In contrast to the research situation on the ICF up to 2010, a considerable number of surveys are now available that investigate whether Chinese firms achieve their defined internationalization aims.
Firm innovation and knowledge absorption. Whether Chinese firms can benefit from their overseas investments in terms of an increased innovativeness and knowledge absorption has become an increasingly addressed research issue during the time period investigated.

Anderson et al. (2015) discovered that the domestic market patents of the Chinese acquiring companies in developed economies increase significantly in the wake of such acquisitions, while those of the acquired target do not significantly change, regardless of the ownership type of the Chinese firm (SOE or POE). They therefore conclude that Chinese firms on average fulfill their knowledge-seeking intentions. The results by Gugler and Vanoli (2015) point in a similar direction, as their findings indicate that Chinese firms possess a low ability to generate indigenous innovations, but rely on the patents that they source by their OFDIs, in particular to developed markets. In addition, Chen et al. (2012) interpreted the finding that Chinese firms increase their R&D spending in China after venturing to foreign markets as evidence for a reverse knowledge transfer. Furthermore, Edamura et al. (2014) found that the intangible assets of Chinese businesses that have acquired companies located in developed countries significantly increase, implying that Chinese companies indeed obtain access to knowledge through acquisitions. However, with respect to R&D, their research results suggest that the R&D intensity, defined as the ratio of R&D expenditures to sales, does not increase through the mergers between Chinese firms and companies from developed markets. They therefore argue that the R&D activities of the acquiring Chinese entities and the acquired companies from a developed country are rather complementary, and that synergies hardly arise. Moreover, Wu et al. (2016) investigated the impact of the host country institutional environment on the innovation performance of Chinese firms. According to their findings, an advanced institutional environment has a positive impact on the innovation performance of Chinese companies, whereas this positive effect is stronger for Chinese firms with a high absorptive capacity and firms that have chosen a broad geographical diversification path. However, when the level of state ownership is high, it appears that the innovation performance of Chinese firms can also prosper in weak institutional surroundings.

A common shortcoming of these surveys is that they merely measure the transfer of explicit knowledge. Nevertheless, another important dimension of knowledge is tacit or implicit knowledge (Polanyi and Sen, 2013; Szulanski, 1996). Hence, attempts to measure the transfer of implicit knowledge in the context of the ICF might be beneficial (Harlow, 2008).

Capability-building. The results of the literature review show that until now, only two surveys have analyzed the effects of the ICF on the capability-building of Chinese firms. Zhu et al. (2011) concluded that the internationalization strategy of TCL has enabled the company’s catching-up and organizational learning process, resulting in a relatively high independence from the Chinese home market, and a global production network which helps the company to exploit country-specific locational advantages. In addition, Hansen et al. (2016) found that the Chinese company investigated has managed to become a leading firm in the global biomass power plant industry mainly through acquisitions of technological frontier firms in Denmark, which have resulted in process, product and functional upgrading. However, the company has failed to sustain its leading firm position because it was not able to establish permanent innovative capabilities.

As both surveys follow a case study approach, the most obvious deficiency of the current research on capability-building through the ICF is the sample size. Consequently, there is the need for comparison studies based on a larger sample size. Moreover, it might be useful to examine capability-building not only on the corporate level, but also on the individual level (Grant, 1996).

Brand creation and recognition. The extent to which the ICF increases the recognition of Chinese brands remains almost completely uninvestigated. Except for a case study by
Spigarelli et al. (2015) about the acquisition of CIFA by Zoomlion, which reveals that the two companies established a joint brand after the closure of the acquisition and now distribute products under this common label in the Chinese market, no articles that address this issue have been identified.

In principle, brand recognition could be measured by the consumer’s ability to recall Chinese brands (Kim et al., 2003; Mikhailitchenko et al., 2009).

Corporate governance. In recent years, the influence of the ICF on the corporate governance practices of Chinese firms has emerged as a new research issue. In this vein, Ding et al. (2017) found that the acquisition of a target firm from a developed country leads to a significant improvement in the acquirer’s accounting standards, measured by the acquirer’s earnings quality, while this result does not hold true when the target is from an emerging market. As another sub-aspect of corporate governance, Huang and Staples (2017) investigated the roles played by the boards of directors in Chinese-controlled subsidiaries in Australia. As they found that the boards of Chinese-controlled companies predominantly focus on their monitoring and controlling function, but hardly serve as advisors to the CEO or help to achieve legitimation in the company’s external environments, they concluded that Chinese firms tend to retain their home country control-oriented corporate governance system in foreign markets as well.

Alongside surveys that focus on single specific aspects of corporate governance, a valuable contribution could also be to measure the impact of the ICF on the corporate governance quality of Chinese firms on an aggregated level by using several indicators and to compose a corporate governance quality index (Black et al., 2017; De Nicolò et al., 2008). The score of Chinese firms could subsequently be compared to a peer-group consisting of other emerging market firms that conduct OFDIs. Promising theoretical angles could be the principal agent theory (Jensen and Meckling, 1976) or the stakeholder theory (Mitroff, 1983).

3.2.2 Expansion and possible future research regarding the research stream “competitiveness”. The scholarly attention on the implications of the ICF on specific industries, the host countries of Chinese OFDIs and China itself has also grown in recent times.

Impact on industries. Regarding the impact of Chinese OFDIs on the Vietnamese manufacturing industry, Kubny and Voss (2014) found that investments by Chinese firms do not trigger significantly different spillover from the investments by developed market firms. The authors therefore contested the assumption that FDI between emerging economies can benefit domestic firms more than investments from developed countries due to a lower technological gap. In addition, Seyoum and Lin (2015) argued, in the context of Chinese OFDIs to the manufacturing industry in Ethiopia, that productivity gains of domestic companies are dependent on the local firms’ absorptive capacity. Furthermore, a conceptual survey by Alon et al. (2015) dealing with consequences of OFDIs by Chinese national oil companies states that the threat for international oil companies caused by the aggressive expansion strategy of Chinese competitors is, even if China’s oil companies receive institutional support, relatively small.

To summarize, the existing surveys on the consequences of the ICF on specific industries apparently still predominantly possess a national or regional focus. Nevertheless, considering today’s close international interlinking of many industries, such a research focus might be too narrow, and there is a need for more surveys with a global focus. To conduct these analyses, the global production network approach might be a valuable theoretical framework (Henderson et al., 2002).

Impact on host and home countries. Surveys addressing the effects of the ICF on the host countries present a differentiated picture.

As beneficial effects of the ICF, either real or potential, scholars particularly discuss positive employment impacts (Braeutigam and Tang, 2014; Gao, 2014; Nicolas, 2014;
Wang et al., 2014) as well as the availability of a new source of capital (Rosen and Hanemann, 2012; Wang et al., 2014; Yao and Wang, 2014), and therefore a positive stimulus for economic growth (Zhang et al., 2014). On the other hand, the potential negative effects include the violation of local labor standards (Wang et al., 2014) and a stronger competition for the sourcing of human talents in the host countries (Rosen and Hanemann, 2012).

Alongside new insights regarding the macroeconomic impacts of the ICF on the host countries, there are also additional articles addressing the political attitude toward the ICF in the receiving countries. Investigating CBMAs in the USA, Tingley et al. (2015) found that the probability of political intervention is higher when the CBMA target a security-sensitive or distressed industry or aim at US sectors that are similarly restricted in China. Moreover, Globerman (2016) argued that Chinese SOEs in recent years operate increasingly in a market-oriented fashion and that concerns about CBMAs by Chinese SOEs, which are based on the assumption that Chinese SOEs pursue non-commercial interests, are thus unfounded.

Nevertheless, these findings have to be interpreted with caution, since most of the results are based on conceptual or descriptive analysis. This situation thus calls for additional surveys that use quantitative methods to measure the impact of Chinese OFDI on the host countries.

Concerning the impact of the ICF on China itself, Song et al. (2011) discussed the relationship between Chinese SOEs and China’s structural reform process. They held the view that OFDI by SOEs can help the enterprises to increase their competitiveness and thereby support the structural reform process. However, OFDI by Chinese SOEs could also result in an increase of their monopoly power, which contradicts the objectives of the Chinese structural reform process. Besides, the results by Li, Strange, Ning and Sutherland (2016) provide evidence that China’s OFDI positively contribute to an increase of its domestic innovation performance. The same positive effect can also be determined regarding the Chinese provinces’ productivity. However, this only holds true as long as the technology gap between a Chinese province and the host countries that receive Chinese OFDI is narrow enough (Li, Li, Lyles and Liu, 2016).

A research idea supplementing the basic thought by Li, Strange, Ning and Sutherland (2016) is to investigate the presumable reciprocal impact of the ICF on reforms of the Chinese national innovation system, in particular the influence on the Chinese educational system.

4. Discussion of the potential overall future development of research on the ICF

The previous sections have described the research progress regarding the ICF on the micro-level. This section now discusses the potential overall future development of the ICF field on the macro-level in light of the most recent political developments in China (Alon et al., 2011).

Based on the explicit and implicit suggestions in the articles examined for this review, and anticipating the consequences of the announcements of China’s party and State Leader Xi Jinping at the 19th National Congress of China’s Communist Party (MERICS, 2017), the following two scenarios are conceivable regarding the potential overall future development of research on the ICF.

The first scenario is based on the assumption that Chinese OFDI will continue to grow as part of a continuing integration of the Chinese economy into the world economy, following the implicit and explicit institutional rules of market economies. In this case, a mutual maturation of the ICF and research on the ICF appears plausible. Assuming that this direction will be taken, the following set of research issues will gain relevance.

Empirical studies will react to the fact that Chinese firms’ overseas activities will cover longer time periods and help these firms to gain more experience abroad.
Future contributions will hence focus more on understanding the characteristics of established Chinese foreign presence. They will examine how a growing experience with working in foreign markets will make the behavior of Chinese firms less unique and more compliant with “standard” behavior. Moreover, they will increasingly review the foreign subsidiaries as parts of their host countries’ economic systems.

Regarding theoretical contributions, the increasing numbers of Chinese firms and the prolonged time periods to be studied will lead to more robust insights concerning causalities and typical patterns of behavior. In particular, it can be expected that Chinese firms will increasingly conform to the behavior of western firms, and theoretical explanations of their behavior will merge with mainstream theories.

The second scenario is fundamentally different. It is based on the notion that China will adhere to and more strongly turn into an economic system that significantly differs from western market economies regarding the level and pervasiveness of government and party control, and regarding the influence of political decisions. At the 19th National Congress of China’s Communist Party, Xi clearly underpinned the communist party’s claim for primacy concerning Chinese society and the economy through his speech and thoughts on a “new era of socialism with Chinese characteristics” (McCahill, 2017). With the revitalizing and reinforcement of a state capitalist one-party system firmly rooted in the Marxist, Leninist and Maoist heritage and opposed to liberal democracy and market-driven capitalism, the world might witness a new round of competition between different economic systems (MERICS, 2017).

Under such circumstances, the ICF field will develop very differently. Empirical contributions will analyze the consequences of differences in the objectives of a company, which in the case of Chinese firms will then be conforming and adhering to political expectations. Among the potential consequences, a completely different set of motives and strategies will be the likely outcome. State support will affect the resource base of Chinese firms and hence materialize in non-standard motives and strategies regarding the ICF. Players in host markets will react with some skepticism and caution, negatively affecting the local embeddedness of Chinese foreign subsidiaries.

On the theoretical level, the standard western theories will not sufficiently explain Chinese firms’ international activities. Instead, a new theory will be needed that acknowledges the most important particularities of Chinese firms that stem from the fact that they will be government-controlled, government-directed and government-supported. As this situation not only describes the situation of individual state-owned companies, but indeed all Chinese firms, it is a fundamental departure from very important assumptions underlying today’s standard theories, such as the assumptions that companies must first and foremost focus on rates of return and profitability. Hence, the theoretical foundation of the ICF field will increasingly become more distinctive, and, assuming a continuing relevance of the Chinese economy despite the establishment of a unique Chinese economic system, will gain importance.

In view of the most recent political developments as described above, at least currently, the second scenario appears more likely.

5. Conclusions
This paper supplements a previous review article on the ICF by Deng (2012) that covers the period 1991–2010. Based on the organizational framework of the research on the ICF provided by Deng (2012), it has reviewed the literature on the ICF between 2011 and June 2017. The research objective was to investigate which of the research issues that Deng (2012) classified as unexplored or significantly under-investigated have meanwhile been addressed and which new research streams within the ICF context have recently emerged or could be addressed in the future.
The results of the literature review reveal that in the course of the ongoing research interest in the ICF, the research field has expanded thematically in recent years and various research gaps identified by Deng (2012) have meanwhile been addressed. There are an increased number of articles analyzing the ICF from a process perspective. In this regard, the latest research efforts have contributed to a better understanding of the role and control of foreign subsidiaries of Chinese firms, group-internal knowledge transfers, the management of international HRM issues, and the integration process of Chinese companies into the institutional environment of the host countries.

Scholars have also made progress in researching the impacts of the ICF process. There are new empirical findings concerning the relationship between the ICF and the capabilities and innovativeness of Chinese firms. In addition, scholars have started to examine the consequences of the ICF for individual industries, China itself and the host countries.

Overall, the results thus imply that in the course of the ongoing scholarly attention, research on the ICF has become more widespread and mature in recent years. However, despite these recent advancements, the state of knowledge regarding these recently addressed issues often remains at an initial stage. To encourage scholars to further increase the understanding of the ICF, this review paper has provided detailed future research recommendations for each of these newly accessed research issues. In addition, the review has identified the foreign market cultivation by Chinese firms as an entirely new possible research field.

To reflect on these research results, the following limitations should be considered. Even though the literature research was conducted thoroughly, it is possible that individual papers have been unintentionally ignored. Due to the selection of keywords and journals, existing articles regarding the ICF may have remained unrecognized.

Another limitation is that the distinction between single categories, sub-categories and research issues in the framework provided by Deng (2012) is rather fuzzy. Therefore, the assignment of the articles reviewed in this present paper is based to a certain extent on the subjective perception of the authors.

Furthermore, this review paper has purposely investigated which of the research issues that Deng (2012) identified as unexplored or significantly under-investigated have meanwhile been addressed and which new research streams and subjects within the ICF context have emerged or could be addressed in the future. Conversely, there is still the need to examine which research advancements have been achieved in research categories that Deng (2012) classified as more frequently analyzed.

In addition, this paper consciously focuses on the thematic expansion of research on the ICF at the expense of a detailed discussion of the theoretical implications of the latest surveys on the ICF. To overcome that limitation, scholars should also analyze the surveys identified from a theoretical advancement perspective. A good starting point could be the more theoretically oriented review article by Deng (2013).

In a wider perspective, this paper argues that the development of the political climate in China will determine whether the ICF, and thus the research on this phenomenon, will conform to “mainstream,” western-dominated internationalization patterns, or whether it will justify a stand-alone positing within the international business literature. The recent announcement by China’s party and state leader Xi Jinping at the 19th National Congress of China’s Communist Party of the “new era of socialism with Chinese characteristics” and the commitment thereby expressed to a state capitalist one-party system firmly rooted in the Marxist, Leninist and Maoist heritage rather suggest the latter.

Note
1. This includes the following journals: Asia Pacific Business Review, Asia Pacific Journal of Management, Asian Business and Management, Asian Survey, Business Horizons, China and World

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Reviewed articles marked with *.


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Re-orienting the paradigm: path dependence in FDI theory and the emerging multinationals

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Abstract
Purpose – The purpose of this paper is to analyze how path dependence in the evolution of major theories of foreign direct investment (FDI) locked in a theoretical perspective of the multinational enterprise that focused on asset-exploitation. This perspective is challenged by recent contradicting observations of multinationals from China and other emerging economies. A decisive re-orientation of FDI theory is proposed as a way forward to resolve this tension.

Design/methodology/approach – Placing FDI theories into the context of FDI patterns prevailing at the time they were developed, Thomas Kuhn’s framework on the evolution of scientific knowledge is employed to track how the mainstream FDI theory emerged, went through a period of normal science and then approached a crisis of science in this field.

Findings – The evolution of FDI theory is strongly path-dependent, which made it difficult for theory to effectively incorporate new conceptual discoveries and empirical findings about the nature of FDI activity.

Originality/value – FDI theory would benefit from a full re-orientation to a demand-oriented perspective which places the pursuit of advantages, assets, resources, etc., at the core of the theory. Such a change is implicit in many recent theoretical advances and would assure theory is generalizable to all types of FDI.

Keywords Emerging market multinationals, Chinese multinational firms, Foreign direct investment (FDI), Path dependency, Theory of the multinational enterprise, OLI

Paper type Research paper

Introduction
The arrival of companies from emerging economies such as China, India and Brazil on the world stage since the beginning of the twenty-first century ushered in a new era in the study of foreign direct investment (FDI) and the multinational enterprise (MNE). These emerging multinational enterprises (EMNEs) exhibited features that were markedly at odds with observations of traditional multinationals known to have expanded globally during the second half of the twentieth century, which prompted many scholars to question and revisit established FDI theories (Alon et al., 2011; Child and Rodrigues, 2005; Buckley et al., 2007; Gammeltoft et al., 2010; Yiu et al., 2007; Ramamurti, 2009; Mathews, 2006; Athreye and Kapur, 2009; Moon and Roehl, 2001; Hennart, 2012). Criticisms of extant theory focused on its baseline idea that companies required strong firm-specific advantages (FSAs), such as know-how or branding capabilities, to successfully internationalize (Buckley et al., 2017, p. 1047; Dunning, 2001a; Hymer, 1976; Vernon, 1966). This requirement contradicted many observations of EMNEs, which were found to be internationally less experienced, less competitive and smaller than their advanced economy peers (Cuervo-Cazurra and Gencl, 2008; Luo and Tung, 2007; Gammeltoft et al., 2010; Contractor, 2013). Other distinct features of EMNEs that raised theoretical questions were their strong network orientation, greater risk-taking behavior, institutional constraints and intense state-government relations in emerging home economies (Mathews, 2006; Buckley et al., 2007; Peng, 2012, 2014; Hoskisson et al., 2013; Yiu et al., 2007; Morck et al., 2008; Luo and Tung, 2007; Quer et al., 2015; Yang and Stoltenberg, 2014).

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The paradox of EMNEs internationalizing despite weak FSAs was further aggravated by their rapid expansion into economies more advanced than their home country (Ramamurti, 2012; Madhok and Keyhani, 2012; Holtbrügge and Kreppel, 2012; Guillén and García-Canal, 2009), as shown in Figure 1. Chinese firms expanded into North American and European markets (Anderson and Sutherland, 2015; Knoerich, 2012; Blomkvist and Drogendijk, 2016), and Indian multinationals increasingly focused their FDI on the USA, UK, Germany and other advanced economies (Pradhan and Sauvant, 2010; Parthasarathy et al., 2017). Companies from other emerging economies such as Brazil, Mexico and Taiwan, and even from less prominent emerging markets such as Jordan, Chile and Costa Rica (Bianchi, 2014; Padilla-Perez and Gomes Nogueira, 2016), have internationalized in the face of highly competitive global incumbents that dominate international markets. Some Chinese firms acquired world leading companies in advanced economies despite their technological and managerial weaknesses, internationally unknown brands and limited international experience (Knoerich, 2010). Such discoveries amplified the tension between extant theory and actual observations of Chinese and other EMNEs. It is increasingly questionable whether traditional FDI theory – and especially the necessity of FSAs that forms the core of it – still accounts for the whole spectrum of global FDI.

This study exposes path dependence in the evolution of FDI theory as the origin of this theoretical dilemma. When FDI was first analyzed after the Second World War, all to be seen were multinationals from leading Western economies investing abroad by exploiting their international leadership and competitive advantages, often in less advanced economies. Continuous theorization on FDI over time locked in these observations – most notably in the form of Dunning’s (2001a) “OLI paradigm,” which emphasized a company’s firm-specific or “ownership advantages” as a foundation of FDI. But over time, mainstream theory was increasingly challenged by the need to incorporate newly emerging conceptual discoveries and empirical observations that did not fit well with its emphasis on ownership advantages. This study is believed to be the first to examine the consequences of path dependence for the evolution of FDI theory and the resulting lack of fit with more recent trends. The conclusion drawn from this analysis is that as FDI theory evolved, it should have placed lesser emphasis on FSAs as a foundation of FDI to avoid questions about the universal applicability and generalizability of the theory.

This study contributes to the further advancement of FDI theory by laying out why a decisive re-orientation of FDI theory is necessary and how it should be undertaken. It explains why FDI theory should do away with its current focus on the exploitation of FSAs as a raison

![Figure 1. FDI between G7 countries and developing and transition economies](source: UNCTADStat)
d’être for FDI activity, and instead adopt a “demand-oriented” perspective. From this perspective, the multinational is not viewed primarily as a supplier of FSAs to other countries, but rather as an entity that uses FDI as a means to satisfy its own demand for specific advantages, assets, resources, etc., by pursuing them abroad. Although recent theoretical advances, which take account of the emerging multinationals, are already implicitly falling in line with such a re-orientation, they avoid broader questions about the general paradigm and analytical thrust underpinning FDI theory. The “demand-oriented” perspective developed in this study addresses this shortcoming by providing an appropriate new fundament and basis for the future advancement of theorizing on FDI.

Path dependence in FDI theory
Path dependence, a familiar concept in the field of economics, refers to a process whose outcome is conditioned by that process’s own history (Martin and Sunley, 2006). According to Peacock (2009) and Sterman and Wittenberg (1999), the concept of path dependence can be applied to examinations of how scientific knowledge is produced. It is implicit in Thomas Kuhn’s famous work on the evolution of scientific knowledge (Peacock, 2009). Avoiding the term “theory” in favor of “paradigm,” Kuhn’s (1970) thinking centered on the idea of a scientific paradigm going through a life cycle from initial emergence of the paradigm, to normal science, followed by crisis and ending in revolution, when science shifts to a new dominant paradigm (Sterman and Wittenberg, 1999). As this research will show, FDI theory has so far gone through the first three stages of this cycle.

For this study, a history of path-dependency in FDI theory was constructed through an in-depth survey of the theoretical literature on FDI from the 1950s to today. It included 70 original articles or books that developed the theories and 40 in-depth discussions of these theories and their evolution by third authors. Several articles included published accounts in which FDI theorists who were active during the relevant periods recalled their experience of the way in which FDI theory evolved. This material was cross-checked with ten comprehensive reviews of FDI theories to ascertain that all the major, enduring and most widely referenced theories of FDI had been incorporated in the analysis. The resulting illustration of the path dependence in FDI theory is depicted in Figure 2.

This study does not differentiate the “FDI theory” and “theory of the multinational enterprise,” as both represent a confined body of theory, aimed at explaining why FDI occurs and multinationals come into existence. This is in line with language used in previous studies (Dunning, 2003; Hennart, 2009).

The emergence of FDI theories
The emergence stage in the evolution of scientific knowledge is characterized by a lack of common beliefs and agreed scientific standards, resulting in competition among different potential paradigms. Then, at some point, one specific paradigm begins to attract most scientists in the relevant field of study (Sterman and Wittenberg, 1999). Dating roughly back to the late 1950s and up until the mid-1970s, several theories – or paradigms – competed to explain FDI and the activities of MNEs. Precisely at that time, when theories of the MNE underwent a rapid process of conceptual development, FDI was largely an activity reserved to internationally leading companies from high-income countries (Buckley, 2016, p. 75). According to Figure 3, in the 1970s, advanced economies accounted for close to 100 percent of all FDI outflows. Unsurprisingly, FDI theory was formulated and conceptualized in accordance with these observations.

Early theories transferred elements of economic and international trade theory to the cross-border movement of capital (Mundell, 1957), employing relatively simplistic two-country, two-commodities and two-factor approaches and assuming perfect market conditions. It was Hymer (1960, 1976), together with Kindleberger (1969), who contested this purely economic
treatment of FDI and the assumption of perfect markets, suggesting that instead, companies invested abroad to overcome imperfections in international markets. This strand of thinking advanced the concept of market power – companies investing abroad by employing oligopolistic or monopolistic advantages which enabled them to overcome disadvantages naturally incurred by the estrangement experienced in a foreign environment. This idea of market power persists in FDI theory up to the present day, awarding Hymer a reputation of father figure in the development of this field of scientific inquiry. Unfortunately, he was not able to further advance his theoretical thinking due to an unexpected early death in 1974.
Vernon’s thesis about the product cycle argued that firms, having developed innovative products in a leading industrialized economy (the USA), expand production abroad once product standardization necessitates a search for more labor-intensive and cost-effective production locations (Vernon, 1966). In resonance with the concept of market power, the companies undertaking investments are leading and dominant international actors from high-income countries investing in less advanced economies to take advantage of lower-end economic activities. Similarly, Kojima’s (1973, 1979) "macroeconomic" approach, informed by observations of Japanese multinationals, identified comparative advantages enjoyed by investors in host economies as a key explanatory factor for the existence of FDI.

The well-known internalization approach, developed during the 1970s, focused on the existence of imperfect markets in the international transactions of firms. Forming part of organization theory, this approach extended transaction cost economics to the context of the MNE. It argues that information asymmetries and the uncertainties of bargaining in the open market incentivize firms to internalize the markets for important economic activities within the confines of the enterprise. If this happens at an international level, MNEs come into being (Buckley and Casson, 1976).

The 1970s was also the time when a group of Scandinavian scholars developed the Uppsala model, also called internationalization approach, which saw the expansion of firms beyond the borders of their home country as a dynamic, sequential process. According to this view, companies internationalize by gradually improving their knowledge about foreign markets and reducing psychic distance with those markets, over time committing increasing amounts of resources to their overseas operations in these locations (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977, 1990). Unfortunately, the rather deterministic nature of the framework and its focus on early stages of internationalization, together with other criticisms (Johanson and Vahlne, 1990), limited its overall potential as a universal theory explaining FDI.

By the mid-1970s, none of these theories had convincingly managed to claim dominance, yet scholars were quite familiar with each other’s efforts as they worked at the same institutions or met at conferences. John Dunning’s main contribution was, thus, to effectively bring together some of the previously developed ideas under one theoretical framework (Buckley and Casson, 1991, p. x). In his view, the international activities of companies were determined by their ownership (O) advantages, reminiscent of the concepts of market power and competitive advantage, by internalization (I) advantages obtained from bringing economic activities within the hierarchy of the firm, and by location-specific (L) advantages, referring to country-specific attributes that attract investments (Dunning, 2000).
This tripod of advantages came to be known as the “OLI paradigm,” or “eclectic paradigm” as it effectively drew on and combined several theories into one analytical framework (Dunning, 2001b, p. 43). A product of previous theories by its very nature, the OLI paradigm is a clear illustration of path-dependence in FDI theorizing.

Dunning’s (2000) conceptualization of the OLI paradigm as an “envelope for economic and business theories,” as unconventional as it might be, was an ingenious move. It gave him an upper hand in the competition for dominance in FDI theory, eventually elevating him to the leading figure in this field. The OLI paradigm has enjoyed popularity especially among British, Commonwealth and European scholars. That Dunning’s dominant role in FDI scholarship remains uncontested is confirmed by his record on Google Scholar – as of 2017, his citation count was above 62k. This is more than double the citation counts of the next highly ranked FDI scholars on this measure. Taking the list of leading international business scholars provided by Lahiri and Kumar’s (2012, pp. 324/331) ranking exercise (and after cleaning their Google Scholar profiles for inaccuracies), S. Tamer Cavusgil came next (32k), followed by Peter Buckley (31k), Mike Peng (29k) and Paul Beamish (29k). This further confirms the OLI paradigm as the dominant FDI theory in the world.

**Normal science in FDI theory**

The emergence of the OLI paradigm in the 1970s launched a period of normal science in FDI theory, with the eclectic paradigm forming the standard theoretical reference point to which a great number of scholars and academics committed themselves. The eclectic paradigm was therefore not easily shaken by changes in global FDI patterns or by new theoretical advancements. This kind of complacence is typical for a period of normal science, in which differences between the theory and actual observations or new discoveries tend to be resolved through a preference for the theory (Sterman and Wittenberg, 1999, p. 324). Normal science does not aim at discovering novelties, but instead is a cumulative activity aimed at “the steady extension of the scope and precision of scientific knowledge” (Kuhn, 1970, p. 52).

Dunning actively supported this process. Since the inception of the eclectic paradigm in the 1970s and up until his death in 2009, he spent more than 30 years continuously defending and enhancing the OLI paradigm in an enormous number of publications. There were criticisms of component parts of the theory, for example, questioning the necessity of ownership advantages or internalization (Kogut and Zander, 1993; Fosfuri and Motta, 1999), and pointing to a lack of distinction between national and cross-border dimensions of internalization (Barney and Hesterly, 1996). The OLI paradigm also had to survive other scholars’ efforts to promote their own or favored theories (Buckley, 1988; Rugman, 1985). As will be shown further below, Dunning went to great lengths at explaining new discoveries and observations in global FDI patterns from within the confines of his eclectic paradigm, making continuous efforts to further “articulate the paradigm theory” (Kuhn, 1970, p. 27). This solidified the process of normal science, enabling scholars to commit to the paradigm and making it difficult to advance any criticisms based on contradictory findings (Peacock, 2009, p. 108).

The first notable change in global FDI patterns occurred with the first observations of multinationals from developing countries during the 1980s, although their FDI was still of insignificant magnitude when compared with the international total (see Figure 3) and mostly involved investments in other developing countries (Wells, 1983). Examinations of these “third world multinationals” aimed primarily at understanding what kinds of ownership advantages enabled them to undertake overseas investments despite their inherent technological weaknesses, lack of innovation and poor managerial and branding capabilities. One strand of theory built on Vernon’s work and considered developing country firms to be recipients of standardized technologies in the mature stage of the product cycle (Beausang, 2003). Ownership advantages were derived from small-scale, low-cost, flexible and labor-intensive activities which had been abandoned by advanced economy firms but not yet mastered by
other firms in the developing economies (Wells, 1983). The theory of localized technological change provided a more optimistic view, in which developing country firms derived their advantages from the localization of technologies to better fit the conditions in developing countries (Lall, 1983). Proponents of the theory of technological accumulation had even greater confidence in the third world multinationals, suggesting that they are able to innovate along idiosyncratic technological paths as their learning trajectory depends both on localized innovation and the adoption of foreign technologies (Pavitt, 1987; Cantwell and Tolentino, 1990; Tolentino, 1993). All these approaches found developing country multinationals to have at least some sort of ownership advantages, even if these were based on economic activities considered inferior to those of the advanced economy multinationals. Thus, none of these approaches challenged the OLI paradigm. As long as developing country firms continued to invest in countries with a level of development equal to or lower than in their home economy, which was largely the case in the 1980s, the concept of ownership advantages could still function well.

From the 1980s, FDI was also “re-injected” into the international trade theory with the increased recognition that scale economies of firms and product differentiation were important in determining trade patterns (Krugman, 1980). The incorporation of FDI into this “New Trade Theory” was informed by both internalization theory and the OLI paradigm (Markusen, 1995), resulting in a wide range of empirical work on trade and FDI (Faeth, 2009; Helpman, 1984; Ethier, 1986). But this approach neither yielded a widely recognized FDI-specific theory, nor did it launch a meaningful challenge to existing theories.

A more significant challenge to the dominant OLI paradigm emerged during the 1990s with the empirical discovery of asset-seeking as an important activity associated with FDI (Almeida, 1996; Dunning, 1996). The asset-seeking perspective focused on the use of FDI as a vehicle for gaining access to valuable assets in host countries, assets which could even be used to overcome firm-specific disadvantages (Wesson, 1993, 1999). From here emerged a duality of asset-exploitation vs asset-seeking in FDI research, where in addition to exploiting ownership advantages, firms could invest in foreign countries to develop FSAs through asset-seeking (Makino et al., 2002). Some scholars emphasized the opportunity to source knowledge overseas through outward FDI activity (Park and Choi, 2014; Inkpen, 1998). This corroborated with the development of a categorization in FDI research distinguishing between market-, efficiency-, resources- and strategic asset-seeking FDI (Dunning, 2000). Conceptually, asset-seeking appeared to be the opposite of asset-exploitation, and had the safety mechanisms of normal science not been there to defend the latter, the discovery of asset-seeking might have mounted a meaningful challenge to the primary notion of multinationals as exploiters of ownership advantages.

However, scholars did not question the validity of the OLI paradigm. Wesson (1999), who made a meaningful contribution to the development of the asset-seeking concept, argued that it was in conformity with internalization theory (p. 3). Dunning (2001a) himself acknowledged asset-seeking as “a new dimension to our thinking about the rationale for FDI” (p. 183), and a perspective considered by many researchers to be “a raison d’être [sic] for MNE activity” (Dunning, 2001b, p. 45). He approached this challenge by advocating a reconfiguration of the OLI components to account for asset-seeking activities, whilst articulating the paradigm theory by producing explanations for why the basic tenets of the eclectic paradigm still held firm (Dunning, 2001a, p. 183). Dunning (2001a) found a viable solution to this dilemma in the concept of “asset-augmentation,” advancing the idea that firms still need some ownership advantages which confer them with the necessary capabilities to seek assets abroad (p. 183). Despite the resolution of this theoretical challenge within the confines of normal science, the discovery of asset-seeking effectively introduced a new perspective from which to examine the activities of MNEs, one that would bring FDI theory closer to crisis mode once the emerging multinationals had begun to invest significant amounts in advanced economies.
FDI theory in crisis

A paradigm enters a crisis at the point when the number of anomalies and inconsistencies accumulate to such a degree that scholars eventually begin to question the dominant theory. They respond by engaging in activities aimed at addressing these anomalies and attempt to propose appropriate solutions (Sterman and Wittenberg, 1999).

By the early 2000s, at least parts of the dominant paradigm in FDI theory had come under attack, as observations appearing to be inconsistent with the OLI paradigm multiplied. Not only did the share of EMNEs in global FDI flows rise continuously, but these firms increasingly undertook greenfield investments and acquisitions in the advanced economies (see Figures 1 and 3). The concept of ownership advantage did not fit well with this trend, given the many technological, managerial, branding and other weaknesses these companies still exhibited. It was not any more possible to rule out the existence of multinationals internationalizing without advantages (Fosfuri and Motta, 1999; Hashai and Buckley, 2014). On the other hand, asset-seeking appeared to be an increasingly suitable concept.

The debate about the implications of FDI from emerging economies for theory focused initially on Chinese outward FDI, which grew rapidly during the first decade of this century and by 2010 had exceeded the magnitude of outward FDI from the other BRICS economies, Taiwan, South Korea and other emerging economies (according to UNCTADStat). Moreover, China’s domestic political economy, with its high number of state-owned enterprises, presented itself as a striking anomaly. It was the established scholars in FDI research who were first to discuss the anomalies of Chinese outward FDI and their implications for theory. Without doubt having an interest in protecting a lifetime of FDI theorization, they exhibited a strong preference for an extension, rather than replacement, of the extant FDI theory (Child and Rodrigues, 2005; Buckley et al., 2007, p. 501). This conforms to Kuhn’s (1970) notion of normal science as a cumulative activity of making scientific knowledge more precise (p. 52).

In recent years, there has been a remarkable intensification of FDI theorization aimed at explaining the behavior of emerging multinationals. It is possible to divide this literature into two strands – exploitation-focused vs demand-oriented theories – as presented graphically in Figure 4 along an indicative timeline. Exploitation-focused theories refer to the multinational exploiting technologies, brands and other ownership advantages to engage in FDI. Demand-oriented theories focus on the multinational having a demand for advantages, assets, resources, etc., which it seeks to satisfy overseas through FDI. Figure 4 shows how some new theoretical advancements can be fit cleanly into one strand, whereas the locale of the others on this spectrum is somewhere in between.

The first strand perpetuates the focus on the exploitation of advantages as the core of FDI activity, in line with the spirit of theoretical extension. Scholars adhering to this view went on a search for new or different ownership advantages enabling emerging multinationals to engage in successful FDI (Jormanainen and Koveshnikov, 2012). Emerging multinationals were seen to benefit from “special ownership advantages” (Buckley et al., 2007), such as privileged access to funds, resilience, frugality, etc. (Ramamurti, 2012; Contractor, 2013). There have been some excesses in this regard, such as the proposal that access to cheap capital might be an ownership advantage of Chinese companies (Buckley et al., 2007; Ramamurti, 2012), which is not much more than reiterating that the possession of funds – from whichever source – is a prerequisite for investment. Rugman (2010), based on his earlier work (2006, originally published in 1981), emphasized country-specific advantages (CSAs), rather than traditional FSAs, as a frequent source of competitive strength for emerging multinationals (Rugman, 2010; Rugman, 2006; Narula, 2012; Chen et al., 2015). Yet, if some multinationals do invest abroad without exploiting any advantages (Fosfuri and Motta, 1999; Hashai and Buckley, 2014), or even when asset-seeking is found to be the only motive for FDI (Meyer, 2015), a theory focused on the exploitation of advantages may not be universally applicable.
Theories in the demand-oriented strand place multinationals’ seeking-behavior at the core of the theory. According to the linkage-leverage-learning (LLL) approach, companies utilize FDI to develop competitive advantages via linkage, leverage and learning (Mathews, 2006). Similarly, the springboard perspective views international expansion as an activity EMNEs undertake to acquire overseas assets that enable them to rapidly overcome their inherent competitive weaknesses (Luo and Tung, 2007, 2018).

Some theories have become embedded in a middle ground, whilst giving the demand-oriented strand greater prominence than it received previously. Moon and Roehl (2001) question the market imperfections approach to FDI and the focus on ownership advantages, and recommend replacing the concept of “advantages” with that of “imbalance.” They conceptualize FDI as an activity to rectify an imbalance between ownership advantages possessed and advantages sought through overseas investments. Similarly, the dynamic capabilities perspective describes the ability of EMNEs to engage in both asset-exploitation and asset-seeking FDI as an “ambidextrous internationalization” (Deng et al., 2018). Furthermore, the resource-based view, which, in its original form, focuses on firm resources as the source of competitive advantage, has been increasingly used to explain how emerging multinationals use FDI to acquire the resources that they lack from abroad (Deng, 2007, 2013). Building on this, the increasingly popular institution-based view demonstrates how, depending on the circumstances, institutions in the home economy can be a source of competitive weakness as well as competitive strength for emerging multinationals, where weaknesses could be overcome by acquiring resources overseas (Hobdari et al., 2017; Peng et al., 2008).

None of these approaches fully contest the OLI paradigm outright. Yet, the literature from strand two and those theories found in the middle ground confirm that asset-seeking has meanwhile become accepted as an important mainstream concept (Meyer, 2015; Cui et al., 2014). Given the way academia is organized, involving significant pressures to publish in leading journals edited and peer-reviewed by established scholars, it would be imprudent for a scholar to advance a new theory whilst rejecting established theories. Engaging in a
balancing act of advancing new theory whilst endorsing previous theories is, thus, the norm, confirmed by the large number of theories found in a middle ground between the two strands. Possibly because of these circumstances, all the recent advances have received some degree of recognition, but have yet to gain widespread acceptance. None of these approaches show serious potential to replace the OLI paradigm as the dominant theory.

A re-orientation of FDI theory

Sterman and Wittenberg’s examination of path dependence in scientific inquiry finds that competition among paradigms and their order of succession is dependent on the scientific environment within which theory is advanced, on the history of prior paradigms and on self-reinforcing processes supporting some paradigms but not others. Once a specific paradigm begins to dominate, switching to another theory becomes extremely costly, allowing the dominant paradigm to maintain its prominence for long periods of time (Sterman and Wittenberg, 1999).

The previous section’s analysis confirmed such patterns of path dependence having greatly influenced the evolution of FDI theory over the past 60 years. New advancements in FDI theory, aimed at addressing the changes observed in global FDI patterns, were built on top of prior theoretical thinking. Strong tendencies of inclusiveness, with earlier theories being incorporated into later theories, have exacerbated the path-dependent nature of FDI theorization. The eclectic paradigm has been so successful because it managed to incorporate other theories into the paradigm rather than having to refute competing theories to gain legitimacy. It is omnipresent and has locked itself in as the dominant paradigm in this field of academic inquiry (Hennart, 2012, p. 182).

The sub-optimal development of FDI theory

Although path dependence might be important in supporting the advancement of scientific knowledge, it can lead to pareto-suboptimal outcomes in the development of appropriate theories. With path-dependent processes selecting and giving preference to some theories over others, there is no guarantee that the dominant theory emerging from this process is the most superior among all viable alternatives. To the contrary, historical accidents, the nature of the scientific environment or other factors can, if supported by path-dependent processes, make an inferior paradigm dominate while potentially better alternatives are rejected (Peacock, 2009). It is important to consider this possibility in the case of FDI theory, for four reasons.

First, traditional theories of FDI emerged under a lack of knowledge of future developments in global FDI patterns. At the time of their conceptualization it was certainly impossible to anticipate the new discoveries that followed. The empirical observations available in the initial years of theory development were of advanced economy multinationals, primarily from Western economies, and of investments from stronger into weaker economies, so theory developed accordingly (Ramamurti, 2009, 2012, p. 43). Similarly, issues such as networks, institutions and state-government relations typical for emerging economies were not considered in great depth. When the emergence of EMNEs combined with the discovery of asset-seeking FDI to pose a significant challenge to established theories, the latter’s survival was assured by processes of path dependence. But because most of FDI theory, as we know it today, was developed at a time when nobody would have been able to anticipate the particularities of current FDI patterns, it is unclear whether the extant FDI theory is the most superior theory among all potential alternatives.

Second, one may question whether current FDI theory is in fact falsifiable. According to Karl Popper (2005), the renowned philosopher of science, falsification is the criterion demarcating science from non- or pseudo-science. In his view, a theory which is irrefutable, because it can be modified to accommodate all possible observations, is by nature unscientific (Thornton, 2016). Scientific extension, accounting for the recent developments in
global FDI trends, could effectively constitute such an attempt at modification. Moreover, the OLI paradigm itself could be questioned for the modifications it has undergone over the years to accommodate new discoveries, such as the incorporation of asset-seeking behavior into the paradigm by re-branding it as “asset-augmentation” (Dunning, 2001a). Continuous scientific extension and modification may well make existing theories non-falsifiable and thus, in Popper’s view, unscientific. It is for this reason that potential alternative theories should be given greater consideration.

Third, FDI theory is potentially facing a lack of generalizability, in view of the Chinese and other emerging multinationals operating in ways not predicted by such theory. As has been shown, not all EMNEs possess the ownership, oligopolistic and competitive advantages based on which they could make investments in line with the predictions of the traditional theory. Moreover, while some may view the identification of new types of ownership advantages as a viable solution to this dilemma, others will view such attempts as no more than a desperate fix. The question is to what extent criteria of generalizability and universal applicability must be fulfilled for a theory to count as legitimate, and how many exceptions may still be tolerable.

Generalizability and universal application is of course not a requirement for a good theory, and emerging multinationals may need a theory of their own. Theories such as the springboard perspective, the LLL approach, the dynamic capabilities perspective or the addition of CSAs are indeed quite EMNE-specific. But advancing a theory specific to the emerging multinational raises conceptual challenges, such as questions about the appropriate cut-off point distinguishing emerging from advanced MNEs, the precise definition of aspects that make emerging multinationals unique, and the necessity to switch theoretical belonging when emerging multinationals mature and transition to become advanced multinationals. Even more problematic would be to stigmatize emerging multinationals as asset-seekers, while more traditional investors from advanced economies have for several decades had the privilege of being described as asset-exploiters. With asset-seeking featuring strongly in the literature on Chinese outward FDI (Deng, 2007; Young et al., 1996; Child and Rodrigues, 2005; Amighini et al., 2013; Gugler and Vanoli, 2015), this tendency is already prevalent. Thus, any theoretical distinction between emerging and advanced economy multinationals would need to be carefully crafted, and it is not surprising that the backing among scholars for such a separation appears to be limited (Narula, 2012; Ramamurti, 2012).

FDI theory evolved primarily in the field of international business, spearheaded by scholars at the University of Reading, some of whom in later years dispersed to other locations in the UK and beyond. The thinking and theoretical arguments published by business scholars are however bound by the need to present companies and businesspeople in a favorable light. Academics working in international business are dependent on good relations with companies, on whom they rely to obtain data and funding. The asset-exploitation narrative focusing on the technological, managerial and branding strength of multinationals promotes such a favorable view, as it creates a positive notion of a strong company bringing capabilities and other assets which may spill over into host countries. An asset-seeking perspective may, on the contrary, shine less of a bright light on the activities of MNEs. This is because, even though target firms or host economies can potentially benefit from asset-seeking FDI together with the investing firm (Knoerich, 2010), it may also raise concerns over issues such as technology theft, reverse knowledge transfer and economic dependency, attitudes increasingly visible toward Chinese multinationals (Giuliani et al., 2014, p. 681). That activities akin to asset-seeking had been observed as early as the 1950s (Cantwell et al., 2004, p. 18), yet no corresponding concepts entered theory, is an indicator of such considerations possibly having been present, either consciously or sub-consciously. For similar reasons, traditional theories may still be preferred among business scholars today.
A change in dominant perspective

It is useful, for a moment, to imagine a hypothetical world in which theorization on FDI started only today, with no previous theories available and scholars having full knowledge of the current characteristics of MNEs from both advanced and lower-income countries. This scenario may well have seen FDI theory develop in a markedly different way to what happened over the past 60 years because the phenomenon that firms go abroad to seek assets, resources, advantages, etc. would have been familiar from the outset, rather than treated as a new observation that needed to be woven into already existing theoretical frameworks.

It is likely that asset-seeking – or an associated similar demand-oriented perspective – would have been given prominence in the development of FDI theory. This is not only because asset-seeking is a characteristic of all time periods and done by multinationals from advanced and developing economies – the former having engaged in asset-seeking activities since the 1950s (Cantwell et al., 2004, p. 18; Sutherland et al., 2017; Almeida, 1996; Dunning, 1996). It is also because recent theoretical advances, especially those referring to emerging multinationals, have shown some preference for a demand-oriented narrative, while placing less emphasis on asset-exploitation. Most new theoretical advances – apart from those simply advocating the addition of ownership advantages – tend to lean toward the right-hand side of Figure 4. Asset-seeking, or an associated concept, therefore deserves to be at the core of FDI theory, rather than an add-on to existing theoretical frameworks.

Moreover, it cannot be proven – neither conceptually nor empirically – that the exploitation of ownership advantages must occur in each case of a foreign investment. As discussed above, examples exist where the clear identification of ownership advantages is a challenge. If a company has the necessary funds, it can make an investment or acquire a firm, for which it may not need any form of advantage. Of course, the same can be argued about asset-seeking narrowly defined, as not all companies invest abroad to seek technologies, know-how and brands. But theorists in the hypothetical scenario are unlikely to have started off with such a narrow definition of asset-seeking. They would have begun developing theory by viewing FDI from a broader demand-oriented perspective, in which the multinational uses FDI to seek, link to or obtain from a foreign location whatever is in its interest. In other words, not only would they have included the acquisition of assets in the theory, but also the pursuit of other advantages, resources and further objects of interest in a foreign country.

Such a pursuit of advantages, assets, resources, etc., can be conceived as the essence of any investment, a necessary and sufficient condition for FDI to occur. It is sufficient because FSAs are not a requirement for such a pursuit to occur. It is necessary because without it, the foreign investment would be without purpose and thus would not occur. No matter what ownership advantages a company possesses, it would not invest abroad if it were not for the existence of some market, technology, factory, linkage, network, workforce or other advantage, asset or resource it considered worthwhile to obtain in the overseas location through a merger, acquisition, greenfield or brownfield investment. A pursuit in a foreign country is thus a universal requirement for an investment to go forward, a reason for internationalization and the birth of the multinational, indeed the raison d’être of the MNE.

On the contrary, the possession of ownership advantages is neither a necessary (Hashai and Buckley, 2014), nor a sufficient condition for FDI to occur. A multinational without ownership advantages may nevertheless make an investment to obtain assets, advantages, resources, etc., abroad, and a company may possess ownership advantages, but it may not invest abroad as it finds nothing worth pursuing in another country. Ownership advantages are rather a tool or means, to be employed in addition to investment capital, which companies may or may not use to invest abroad successfully.

Put differently, rather than focusing on ownership advantages as a means for FDI (that is not essentially required), it is better to focus on a pursuit of advantages, assets, resources, etc., as the ends for FDI (required for it to occur). The strength of such a perspective is its universal
applicability and generalizability to all advanced and emerging economy MNEs – both invest abroad in pursuit of some sort of advantages, assets, resources or other objects of interest, even if there may be differences in what they pursue specifically. A demand-oriented perspective, therefore, promotes a holistic view that incorporates all kinds of FDI by all kinds of firms. It further allows for Popper’s requirement of falsifiability – the discovery of any FDI not driven by such a demand and not constituting a pursuit, as unlikely as it may be, would result in falsification. Finally, it encourages parsimony, as the number of different concepts needed to explain FDI is likely minimized.

Conclusions
Employing Thomas Kuhn’s framework on the evolution of scientific knowledge, this study uncovered the constraints on the advancement of FDI theory imposed by deep processes of path dependence in the evolution of the theory over the past 60 years. The eclectic paradigm with its focus on FSAs and asset-exploitation was found to have locked itself in as the dominant theory explaining FDI. Even when challenged by contradicting observations of multinationals from China and the emerging economies, this perspective on FDI continues to dominate, making a “scientific revolution” in FDI theory unlikely. A “paradigm shift” – to use Kuhn’s terminology – would require a widely-accepted re-conceptualization in FDI theory going beyond simple theoretical extension (Sterman and Wittenberg, 1999).

The main theoretical advancement of this study is its proposition of a full re-orientation of FDI theory to overcome the shortcomings of the asset-exploitation perspective uncovered by it. Instead of focusing on FSAs, a preferred perspective should be “demand-oriented,” viewing the multinational primarily as an entity seeking to satisfy its demand for advantages, assets, resources etc. abroad through foreign investment. This demand-oriented perspective ventures beyond the focus on asset-seeking that dominates the existing literature, as it conceptually incorporates all kinds of assets, resources, advantages, etc., sought through overseas investment. It, therefore, provides a much broader analytical fundament, still to be filled with detail by future theoretical reasoning. Recent advances in theory – including the LLL approach, the springboard perspective, parts of the imbalance theory and dynamic capabilities perspective, and aspects of the resource- and institution-based views – have already initiated this shift toward a demand-oriented conceptualization of FDI theory but have fallen short of advocating a full re-orientation.

This is where this study goes decisively beyond previous theoretical advancements, as it advocates for a fundamental re-orientation of the broad perspective applied to FDI and the multinational. Rather than focusing on the strengths and advantages of the multinational to explain its investments, the demand-oriented perspective re-orients the focus toward the demands, needs and objectives of the multinational. Given that all FDI is motivated by a pursuit of some advantages, assets, resources, etc., abroad, fully adopting this perspective has the added benefit of promoting universally applicable, generalizable, parsimonious and falsifiable FDI theories, and of overcoming the need for a particularistic theory specific to the EMNE. The full and decisive re-orientation to the demand-oriented perspective is preferable to previous practices endorsing a duality of asset-exploitation and asset-seeking, which represents a compromise that comes at the cost of parsimony and theoretical focus. The demand-oriented perspective provides an important new conceptual foundation, the purpose of which is to entice greater confidence in the advancement of theories decisively opposed to the asset-exploitation narrative.

Theories adopting the demand-oriented perspective potentially offer new and improved ways of understanding and analyzing FDI, given this perspective’s greater power in the examination of specific aspects of foreign investment. Such theories would likely provide more profound insights on aspects that are influenced by the way in which multinationals pursue advantages, assets, resources, etc., through FDI, such as the home country impact of
FDI and effectiveness of reverse spillovers (Knoerich, 2017; Zámborsky and Jacobs, 2016). They might better examine factors that lead to success or failure of investments, which depends on the effective pursuit of the aspired advantages, assets, resources, etc. Theories adopting a demand-oriented narrative will likely provide suitable theoretical backing to examinations of various forms of environmental and social impact of FDI, an issue of concern especially when MNEs pursue lower environmental and labor standards in host countries. They would be effective for examining the attitude of governments toward FDI, for example by explaining rationales for investment protectionism and the increased use of investment screening mechanisms to vet Chinese acquisitions motivated by the pursuit of assets and resources. Theories adopting a demand-oriented perspective may therefore offer important insights for policy and practice and provide theoretical views that may be valued beyond the realm of international business.

Switching to a demand-oriented conceptualization in FDI theory does not necessarily constitute a full “scientific revolution” out of which an entirely new theory develops. As theories adopting a demand-oriented perspective are further developed, many familiar concepts might continue to be endorsed, resulting in a significant shift that nevertheless perpetuates the path-dependent trajectory in the development of FDI theory. A general theory fitting with a demand-oriented narrative could be superior to alternatives, yet still incorporate some of the remarkable contributions made to the conceptualization of FDI over the past decades. Alternatively, a decisive theoretical advancement that adopts a demand-oriented perspective could yield an entirely new theory. It all depends on the trajectory taken by theorists in the future.

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Chinese multinationals’ FDI motivations: suggestion for a new theory

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Abstract

Purpose – The purpose of this paper is to complement the conventional international business (IB) theory, the OLI perspective, which is good at explaining the foreign direct investments (FDIs) undertaken by developed market multinational corporations (DMNCs). This study also suggests a new theoretical framework, namely, the OILL paradigm, that is able to encompass FDIs from emerging market multinational corporations (EMNCs) toward developed economies.

Design/methodology/approach – The data comprising 206 Chinese MNCs, which completed international mergers and acquisitions (IMAs), were obtained from Zephyr. By using these data, logical regressions are conducted to statistically confirm that we should not omit the learning motivation if we want to adequately understand the FDI phenomenon by encompassing investment flow from developing (or emerging) to developed countries.

Findings – The results based on this data set indicate that EMNCs often try to enter developed economies with the motivation to seek sophisticated foreign host knowledge that is not available internally. In particular, they tend to use IMA strategies when they want to learn from heterogeneity (i.e. inter-industry mergers and acquisitions) and absorb advanced technologies from DMNCs.

Research limitations/implications – By shedding light on the recent new trend in FDI (i.e. FDI from emerging countries to developed economies), the study provides useful theoretical implications, as well as suggesting scholarly contributions. However, we should acknowledge that there are some limitations to this study. First, the study explores only Chinese MNCs. Second, learning motivations need to be minutely and precisely measured by other studies. Third, this study argues that FDI from EMNCs to DMNCs is triggered by the former’s motivation concerning knowledge acquisition. However, the type of knowledge should be considered, and this is perhaps another avenue for future research.

Practical implications – Conventional IB theories, such as the OLI paradigm and internalization theory, have long sought to answer the question of why DMNCs go for foreign markets, in spite of the presence of the liabilities of foreignness, and focused on their main investment motivations (i.e. market-seeking, efficiency-seeking and resource-seeking motivations). For this reason, these theories do not adequately capture the primary FDI motivations of EMNCs, and consequently, they are unable to see the big picture when it comes to the FDI phenomenon. Based on this idea, the authors complement the well-known triad motivations (i.e. market-seeking, efficiency-seeking and resource-seeking motivations) by adding the knowledge-seeking motive and contribute to the evolution of IB theories by suggesting a new theory, which is the OILL paradigm.

Originality/value – The study contributes to the extant literature in the field of IB in two key ways. First, it examines EMNCs’ central motivations in conducting FDI where empirical research is sparse. By doing this, this paper attempts to solve the query indicated above (i.e. why MNCs choose FDI in spite of the presence of the liabilities of foreignness), and it offers a new theory (i.e. the OILL paradigm).

Keywords Emerging market multinationals, OLI paradigm, FDI motivation, OILL paradigm

Paper type Research paper

1. Introduction

We often observe an increasing phenomenon that emerging market firms actively invest in foreign countries. In particular, as of 2015, the international mergers and acquisitions (IMAs) undertaken by Chinese multinational corporations (MNCs) accounted for about...
593 transactions, and the transaction value is estimated at $40.1bn. According to PricewaterhouseCoopers’ recent report on IMAs by China, compared to the year 2014, the number of IMA activities in 2015 increased by 40 percent and their value also increased by 21 percent from $55.7bn to $67.4bn (Brown and Chan, 2015). In addition, Chinese MNCs’ foreign investment is taking place in a variety of ways and its transaction numbers are increasing simultaneously in many industries. However, this trend somewhat differs from the explanations of traditional foreign direct investment (FDI) theories (e.g. OLI paradigm and internalization theory), which are generally appropriate to illustrate investments by “developed economies” to “developing and emerging countries,” and Chinese investment is commonly referred to as FDI occurring from the latter to the former.

Despite this growth, we argue that mainstream international business (IB) theories experience difficulty in drawing an overall picture of FDI patterns, in that they do not properly encompass outward FDI from emerging market multinational corporations (EMNCs) toward developed economies, but represent the investment motivations of developed market multinational corporations (DMNCs), which is part of the real world. For example, in the early years of China’s FDI, greenfield investments were prevalent, but their recent investments have mainly been IMAs with the motivations that they want to speedily absorb foreign technology and managerial know-how. In other words, although the OLI paradigm and other mainstream IB theories have successfully been used to shed light on the investment motivations of DMNCs possessing ownership-specific advantages and seeking to exploit internal organizational assets in foreign markets, EMNCs (e.g. Chinese MNCs) may have different reasons to go abroad (i.e. an exploration motivation rather than an exploitation one), though it is not always the case. In the meantime, the Chinese stock value of FDI transactions, which were mainly conducted by state-owned enterprises, have dramatically grown due to the evolution in the type of investment toward megadeals, including the IPO deals associated with Alibaba and JD.com led by private companies. According to the World Investment Report 2015 released by UNCTAD (2017), the total Chinese FDI amounted to $1.03 trillion in 2013 and ranked 2nd in the worldwide activities in 2015.

Among the various theories presented in previous IB research, we acknowledge that some of these theoretical lenses indirectly provide some implications and answers to the question, “why do EMNCs try to invest in developed economies, despite the presence of the liabilities of foreignness and their lack of internal resource reservoir,” but these answers are not still concrete. For instance, the process-based internationalization (Johanson and Vahlne, 2006), asset augmentation argument (Kedia et al., 2012) and resource-based view (Anand and Delios, 2002) have a learning element in their theoretical frameworks. However, a critical common problem that they face is that although they acknowledge the importance of learning, these perspectives fail to successfully encompass all of the different crucial components of FDI, and there is no single theory which is able to simultaneously explain the FDIs undertaken by both DMNCs and EMNCs. Consequently, the aim of this study is to fill this research gap and complement and contribute to extant IB theories by looking at Chinese MNCs and their IMA patterns. As illustrated above, Chinese MNCs often enter into foreign markets through IMAs, and we believe that the motivation for such behavior is to acquire and learn new advanced knowledge that has not been available internally. In this vein, we propose an OILL paradigm by combining a learning (emphasis added) motivation with the existing OLI perspective (in fact, we will gain insight into the monopolistic advantage and internalization theories, as they function as a foundation for the “O” and “I” advantages of the OLI paradigm in the next section), and in order to contribute to the evolution of current IB theories, we develop a new theoretical framework.

This study is organized as follows. Section 1 examines the theory of the traditional OLI paradigm. In the second part, the learning motivation is explained and hypotheses are suggested (for reference, the learning motivation refers to the FDI motivation to learn). Third, we describe the sample of China’s MNCs to be used in the empirical research and
present the measurement method of each variable. The data used in this study are mainly obtained from the Zephyr database and the total sample comprises 498 firms satisfying the following conditions: the acquirer is a Chinese MNC; the deal has been completed; the time period comes after China joined the World Trade Organization (WTO) in 2002; and the mergers and acquisitions (M&As) are transacted between countries. Among these 498 firms, 206 were used for our statistical analyses. In Section 4, the results of the empirical examinations are described. Finally, in-depth discussions are provided and our conclusions appear in the last section.

2. Theoretical background and hypotheses development

The development of the extant FDI theories can be traced back to the late 1960s and 1970s in most cases, when US companies were rapidly expanding their overseas production. Scholars have sought to derive a general and meaningful assumption from the experience of US organizations’ FDI and their investments in the UK, Germany, Canada, Japan and many other advanced countries and vice versa. In this case, the explanatory power of each theory was determined by how well it could explain the flow of foreign investments among these countries.

Among these theories, no one can deny that one of the most developed conventional theoretical perspectives is the OLI paradigm. The OLI approach to the theory of FDI was suggested by Dunning (1980). It has provided an extremely useful way of thinking about MNCs and has encouraged a great deal of applied work in economics and IB. “OLI” denotes Ownership, Location and Internalization, which are three potential ingredients of the foreseen advantages that may trigger a firm’s decision to become a multinational. Ownership advantages answer the question of why some firms but not others enter foreign markets and propose that a successful MNC is equipped with firm-specific advantages which allow it to overcome the difficulties of functioning in a foreign country. Location advantages focus on the question of where an MNC selects to locate to. Finally, internalization advantages affect how an MNC chooses to operate in a foreign nation, trading off the reduction in the cost of transactions and the holding-up costs of its wholly owned subsidiary. Although the OLI perspective was considered as a standard in the mainstream IB theory until quite recently, the emergence of EMNCs, which aggressively penetrate into developed countries, has cast doubt on the possibility of different kinds of motivation for FDI.

Unlike the conventional IB theories, such as the OLI perspective, which contends that a firm’s commitment to international markets occurs in stages (e.g. from export to sales subsidiaries and finally manufacturing), recent studies discovered that EMNCs, as latecomers to global competition, “need to accelerate their pace of internationalization, so as to catch up with that of the incumbents” (Luo and Tung, 2007, p. 490). When entering into developed countries, it is commonly claimed that EMNCs “overwhelmingly look to rapidly catch up via aggressive acquisitions” (Luo and Tung, 2007, p. 485). It has been stressed that “the EMNC specific perspective suggests that EMNCs differ from traditional MNCs in one key respect: the accelerated pace of EMNC internationalization” (Kedia et al., 2012).

In addition, a commonly held view is, in fact, that EMNCs involve themselves in FDI for asset augmentation reasons as latecomers, in order to enhance their capabilities and become more competitive in domestic and foreign markets (Li, 2010; Luo and Tung, 2007). However, the knowledge-seeking motivation has not been adequately and theoretically captured by IB scholars, and the influence of the search for knowledge as a prime mover stimulating EMNCs’ FDI has not been sufficiently examined as yet. The notion that a firm might absorb knowledge through its international operations is a common understanding, but it has often been viewed as a positive side effect (i.e. spillover) rather than as a pivotal motivation of FDI. Recently, it has been argued that MNCs may complement their extant learning capabilities by escalating their abilities internationally and that such expansions would allow and lead them to high-end technology, skills and know-how (Alcácer and Chung, 2007). This is very true for EMNCs that
lag behind in their prospective industries and face a knowledge gap; thus, they may be more active in acquiring foreign firms in order to remain globally competitive.

In this way, although FDI theories, including the OLI paradigm, have been presented in various ways by different scholars, there has not been any single theory that is able to fully explain the phenomenon of FDI including investments from South (i.e. developing and emerging countries) to North (i.e. developed economies). Under these circumstances, we first review the OLI paradigm (by explaining its foundation), which is at the center of IB discussions, concentrate on the meteoric rise of EMNCs (particularly Chinese MNCs), and endeavor to answer the question: What is the main motivation of EMNCs entering developed economies?

2.1 Monopolistic advantage theory: ownership-specific advantage

In order for a firm to survive without being forced out of the market, this theory indicates that it must have a competitive advantage over its rivals. Whether competing domestically or internationally, securing a competitive advantage is essential to the survival and growth of firms. Meanwhile, the competitive advantage required to compete successfully in overseas markets is called the monopolistic advantage (Hymer, 1976, p. 42). A firm is able to survive and grow by securing a superior competitive advantage in the overseas market only when its monopolistic competitiveness is stronger than that of its local rivals. This is because MNCs are destined to compete against local organizations under a strong disadvantage stemming from the liabilities of foreignness at the outset.

Erramilli et al. (1997) argued that the monopolistic advantage that an MNC should possess when it enters an overseas market can vary depending on which country is selected as the entry country. In other words, there is a difference between the level of monopolistic advantage required to enter advanced markets and that needed to go into developing markets. This is because the competition against firms in developed countries requires a much higher level of monopolistic advantage than the competition with ones in developing countries.

Hymer (1976) emphasized the ownership of a monopolistic competitive advantage as a prerequisite for an MNC to enter a foreign country and successfully run international operations. In other words, a firm is able to survive in the competitive race against overseas organizations only in the case where it possesses a superior/monopolistic advantage compared to its rivals. The reason for this is that when an MNC is in competition with local firms, the fact that the MNC is recognized as a foreign firm is not always an asset (or advantage), but always a debt (or disadvantage). This implies that MNCs are fatedly in a disadvantageous situation in local markets and logically experience the liabilities of foreignness. In a similar vein, Zaheer (1995) documented the presence of the liabilities of foreignness in alien environments and pointed out that MNCs do not have as good an understanding of local markets as their local competitors and are often discriminated against by various local actors in the competitive market. Meanwhile, the extent to which MNCs suffer from such discrimination depends on the characteristics of local consumers. If the price or quality of a foreign firm's product is not that much superior to that of a local competitor, consumers are likely to preferentially purchase goods and services produced and provided by local firms, in that they commonly have a degree of economic patriotism. In addition, the level of discrimination encountered by MNCs is also subject to local governments that establish and enforce policies to nurture their own national firms and do not want their economies to be dominated by MNCs. Moreover, the obstacles formulated by local governments in particular play a pivotal role in deteriorating the MNCs' organizational performance in developing and emerging countries. The primary reason for this is that most developing and emerging countries experienced colonial occupation by the great powers and are concerned about the extreme situation in which MNCs dominate their economies by crowding their local firms out of the competition.
For this reason, although there may be more or less differences between countries, no one can deny that MNCs’ destined course of life is to overcome the liabilities of foreignness. In order to reflect this in IB discussions, Hymer (1976) proposed the monopolistic competitive advantage as a vehicle to surmount the disadvantage in foreign markets. As an example of follow-up studies, Siripaisalpipat and Hoshino (2000) analyzed the effects of firm-specific advantages on Japanese FDI performance in Thailand for three years from 1994 to 1996 and found that there is a positive relationship between the parent firm-specific advantages (e.g. trademarks, production techniques, entrepreneurial skills and returns to scale) and investment performance of the parent firms[1].

2.2 Internalization theory: internalization advantage
Internalization theory explains the inevitability of establishing a local subsidiary through FDI and advises that a firm can maximize its profits in the long run by internalizing the monopolistic advantage (Buckley and Casson, 1976; Dunning and Rugman, 1985; Hennart, 1986). Internalization theory states that under imperfect business environments in intermediate product markets, it is better for firms to confine their transactions to within their own business networks by sharing assets only between headquarters and subsidiaries across borders rather than opening transactions in markets. With respect to knowledge, it has particularly public good characteristics, and thus the theory points out that internalization is essential for MNCs to protect their own knowledge reservoirs and prevent proprietary knowledge from being transferred to other firms (Ghauri and Park, 2017). The internalization theory is, thus, in line with Williamson’s (1975) transaction cost theory, which sheds light on the importance of the minimization of transaction costs by means of the integration of economic activities and the efficient alignment of internal resources. This theory has been widely used to illustrate the determinants of entry mode selection (i.e. what governance structure is adequate in certain environments) or to elucidate the performance of foreign investment after entry.

Another approach to the incorporation of the internalization decision is proposed by Antras and Helpman (2004). Following Grossman–Hart–Moore’s theory of the property rights perspective on the difficulty of bargaining between the owner and potential suppliers (or employees), they argue that the ex post efficiency is larger when the residual ownership rights are distributed to the member which contributes the most to the ultimate outcomes. Based on the embeddedness in the model of product differentiation, it infers that more efficient MNCs whose headquarter operations are more important should conduct internalization: the owner of the firm contracts with suppliers who becomes its workers. Meanwhile, less efficient MNCs tend to exhibit arm’s length trade: the suppliers remain an independent legal entity. Chen and Hu (2002) discussed MNC performance by using FDI data in China from 1979 to 1992. According to their findings, single investment with a high level of internalization, such as the establishment of wholly owned subsidiaries or IMA investment, functions better as a conduit leading to superior performance than, for instance, arm’s length contracts, such as licensing.

2.3 Eclectic paradigm: location-specific advantage
The location-specific advantage is associated with MNCs’ endeavors to uncover the optimal production location on a global scale that can supply a high market potential, abundant labor force and/or efficient raw material procurement (Vernon, 1974). Dunning (1993, 2000) blended motivations pushing MNCs to go abroad (i.e. ownership-specific advantages) and internalization advantage with factors pulling MNCs to invest (i.e. location-specific advantages) to describe the increase in FDI and the prevalence of MNCs. This OLI paradigm suggests that if firms want to exploit competitive advantages by owning strong firm-specific assets and discover optimum locations to conduct value adding activities
without an internalization advantage, they are likely to prefer arm’s length contracts (e.g. licensing) to FDI. His explanations also highlight that sufficient conditions for FDI are met only in the case where foreign markets’ attractions pulling MNCs are large so that these magnetisms can offset the investment risks deriving from the liabilities of foreignness, thus shedding light on the importance of the location-specific advantage (Ghauri and Park, 2017).

2.4 New introduction to OILL theory: learning motivation

Extant empirics have been devoting their effort to confirming the theoretical adequacy of the monopolistic advantage, internalization and location advantage (to reiterate, they are integrated into the OLI paradigm) and documenting that they are the central motivations for MNCs to choose an FDI strategy in spite of the presence of the liabilities of foreignness. In most of the empirical examinations using an MNC sample based on developed economies (e.g. the conventional Triad, namely, the USA, Japan and Europe), they seem to successfully confirm the effects of these motivations on the FDI decision. However, the current scholarly endeavors illustrated above overlook the important reality that no one firm possesses enough resources and competitiveness to effectively compete with other firms. According to the resource-dependence perspective (e.g. Pfeffer and Salancik, 1978), firms often seek complementary assets (e.g. knowledge) from external environments and even from competitors in other cross-border markets and try to obtain strategic knowledge that has not been available internally from foreign organizations. For instance, firms attempt to offset their organizational shortcomings through coopetition with partner firms within an international joint venture structure and/or try to remedy their lack of knowledge through IMAs (Ghauri and Park, 2017). In addition, another notable phenomenon which has recently emerged in the IB arena is that FDI is no longer the exclusive strategy by developed economies and that many EMNCs, often experiencing a lack of firm-specific advantages, are becoming the source of outward FDI in the world economy. These conversations clearly inform us that conventional IB theories focusing on FDI from DMNCs, such as the OLI paradigm and contemporary literature, do not well explain the motivation of EMNCs, and thus, we know only half of the FDI picture. In this vein, this study seeks to answer the question as to why EMNCs internalize their activities through an IMA strategy in foreign markets and suggests a new IB theory, namely, the OILL paradigm.

Meanwhile, the proposed OILL paradigm can perhaps be best understood by studying the explanations given by the LLL-framework. According to their arguments, EMNCs tend to try to develop the capacity to innovate and constantly build up sustainable competitive advantages that lessen their resilience on location-specific endowments (Rugman and Collinson, 2012, pp. 655-656). The LLL-framework suggests that EMNCs often aim for global markets in order to seek to acquire complementary resources and assets, which are not available in their home countries, through linkage, leverage and learning strategies. Thus, internationalization is used to establish international networks in which resources are linked up. Establishing networks for resource exchange can leverage the linkages between resources that have been internationally identified. In this vein, leverage refers to the EMNCs’ ability to use all of the available resources efficiently within their international networks (Mathews, 2006). In this context, it is important to devise suitable strategies and form appropriate structures that enable firms to effectively manage and utilize the resources and capabilities across their entire network. EMNCs apply repeated linkage and leverage processes that lead to organizational learning and help to share new knowledge within the networks, so that they are able to enhance their organizational competitiveness. In this case, foreign markets clearly act as sources of learning for those EMNCs to promote the development of their capabilities (Checchinato et al., 2017).

In other words, our OILL paradigm supports the rise of EMNCs’ internationalization. Ramamurti (2012) summarized the series of accounts given in the previous paragraph and
stressed that the motivation of most EMNCs that enter into the global marketplace is to acquire new advanced knowledge and technologies which they can then exploit in their home and other markets. In parallel with this, Cuervo-Cazurra (2012) argued that EMNCs have a propensity to enter into overseas markets in order to reduce the disadvantages of OLI in their home country. For example, EMNCs purchase firms in developed economies through IMA strategies to enter into advanced input markets, such as technology or skills, to avoid knowledge disadvantages at home. Ramamurti (2009) pointed out that although EMNCs tend to focus on operations in standardized industries, such as cement, steel, paper and PCs, it is worthwhile examining whether they engage in intra-, inter- and high-tech industry M&As with the motivation of organizational learning from foreign markets and how these industry characteristics influence EMNCs’ internationalization.

2.4.1 Intra-industry mergers and acquisitions (M&A). As the chance of generating new knowledge is commonly enhanced through the sharing of previous experiences within organizations, it is difficult for firms to cultivate new information in the case where they do not possess prior know-how, which indicates that what firms already know is the key to their learning new things, and thus firms without previous experience are motivated to swiftly remedy it through intra-industry M&A strategies (i.e. the acquisition of organizations owning previous and current experiences and operating businesses in the same industry). Meanwhile, learning refers to the absorption of a different experience or information that does not reside in the knowledge acquiring firm’s memory and triggers the application of new skills and practice to existing and non-existing organizational assets. Therefore, learning functions as a prime mover for firms to adapt to constant market changes creates opportunities to conversely change a crisis to a chance in the marketplace, and enables the organizations to innovate by themselves (e.g. new product development, regeneration of innovation process, etc.). In this regard, MNCs often have a propensity to try to apply external knowledge gained through acquisitions of “intra-industry foreign firms” to other markets by diffusing it within their networks (Vermeulen and Barkema, 2001).

Recent research suggests that firms are more likely to complete M&A transactions successfully in certain situations with structural similarities (Muehfeld et al., 2012). These structural similarities include analogous cognitive structures between firms and comparable industrial structures within the same sector. Such studies imply that the more similar the attributes of the products/services or the characteristics of the industrial sector in which they are produced, the higher the likelihood of IMA transactions. Previous studies exploring organizational learning have long recognized the importance of “knowledge relatedness” as an essential concept (Inkpen, 2000). In the same vein, learning performance is improved when both knowledge transferring and absorbing firms share a similar cognitive structure. Thus, if the business background, products/services and fundamental operation skills of the knowledge transferors are unrelated to those of the knowledge absorbers, the latter will find it difficult to learn valuable know-how (Lane et al., 2001). In line with this, Park and Ghauri (2011) indicated that among the various elements that may influence knowledge absorption by MNCs, business relatedness representing information transactions within the same industry (i.e. intra-industry M&A) is a vehicle to facilitate knowledge flow through FDI. Park (2010) further argued that when a learning organization (i.e. MNCs in this paper) shares a similar industrial background with a knowledge transferor in regard to prior knowledge (i.e. knowledge acquisition through intra-industry M&A), the MNCs’ learning capabilities are likely to be much enhanced, even though it is tacit information. In conclusion, since, in the case of intra-industry M&As, the knowledge base of the acquiring and acquired firms is similar and their congruent experience often facilitates learning, the overlapping cognitive structure generally plays a positive role in promoting the occurrence of IMAs. Likewise, Sears and Hoetker (2014) proposed that the pursuit of corporate learning is more feasible
when firms own similar technologies to those of companies operating in completely heterogeneous industries.

Hence, this study presents the following hypothesis:

**H1.** EMNCs often engage in intra-industry M&A with the motivation that they seek new foreign knowledge possessed by firms in developed economies.

### 2.4.2 Inter-industry M&A

In contrast with firms growing through internal growth by acquiring targets with a similar knowledge structure, MNCs choose M&A strategies to intentionally adopt dissimilar knowledge for creating a new learning routine. IMAs, thus, are often selected precisely to deviate from the existing bounds of organizational learning and technological expertise in order to access different organizational know-how (Belderbos, 2003). Under this premise, Tanriverdi and Venkatraman (2005) shed light on the concept of “complementarity” to illuminate the additive value creation acquired through the combination of heterogeneous knowledge. With respect to learning from heterogeneity, although the presence of prior knowledge is somewhat essential for learning to occur, the successful transmission of external knowledge from one firm (i.e. target firms) to another (i.e. acquirers) commonly depends on the extent to which the target firms can boost the acquirers’ intent to learn and stimulate the latter’s curiosity toward exploratory learning.

Cloodt et al. (2006) found that IMAs between heterogeneous industries provide new incentives for corporate learning in accordance with new environmental and technological changes. A follow-up study written by Enkel and Gassmann (2010) supported such statements (i.e. learning from heterogeneity) by saying that the blend of existing knowledge with new information obtained through inter-industry M&A functions as a new source for the extension of a firm’s internal knowledge trajectory. Stieglitz (2003) similarly argued that it is a general phenomenon that inter-industry IMAs have a large effect of learning spillover, which helps to store new information in the organizational knowledge reservoir and subsequently strengthens the existing knowledge system. Liu and Zou (2008), in fact, examined the effect of FDI spillover on inter-industry productivity for Chinese technology firms and confirmed the close association between inter-industry IMAs and the enlargement of their learning capabilities.

Based on the above illustrations, this study presents the following hypothesis:

**H2.** EMNCs often engage in inter-industry M&A with the motivation that they seek new foreign knowledge possessed by firms in developed economies.

### 2.4.3 High-tech industry M&A

IMA activities are considered to have the potential to allow learning across country boundaries, especially in high-tech industries (Harzing, 2002). It is common sense that high-technology firms have a higher level of knowledge accumulation than other firms with low- or medium-level technologies, mainly due to their long history of obligatory investments in technology. This implies that high-tech firms are eager to innovate rapidly, so as not to lag behind their competitors in international markets, as they are exposed to intense competition in the race for survival. Thus, firms possessing high value-added technology are logically very attractive for MNCs (including EMNCs), as they allow them to absorb state-of-art knowledge without investing in uncertain R&D expenditures (Bertrand and Zuniga, 2006).

Meanwhile, when firms feel that they need to speedily catch up with their competitors’ or other firms’ in-house technology, the demand for the use of IMA strategies is increased, in that these strategies allow firms that are in danger of falling behind their competitors to acquire new technological assets and adopt sophisticated skills and practices in novel areas (Liu and Zou, 2008). The inflow of new technology through IMAs that particularly occurs in high-tech industries tends to drive the acquiring firms’ employees out of their
organizational inertia, promote their willingness to learn new external information and augment their ability to adapt to new business environments. Due to these characteristics, the IMAs that an MNC undertakes in high-tech industries often inevitably ignite another subsequent engagement in M&As primarily for fast access to an oasis, which is full of fresh technology (Alon et al., 2014; He et al., 2017). In other words, with the intensification of globalization, national boundaries no longer act as significant obstacles to cross-border business activities and firms are apt to face “the survival of the fittest” challenges in the case where they fail to adequately evolve in such environments, which forces firms to adopt IMA strategies so as not to fall behind their competitors in high-tech industries (Kedia et al., 2012).

Thus, this study presents the following hypothesis:

\[ H3. \] EMNCs often engage in high-tech industry M&A with the motivation that they seek new foreign knowledge possessed by firms in developed economies.

3. Data and measures
3.1 Empirical context and sample
We test the hypotheses by using Chinese MNCs’ FDI (particularly, M&A deals) in developed economies, which has attracted relatively scant scholarly attention. At the IB level, such FDIs from South (i.e. China) to North (i.e. developed economies) are generally fueled by motivations in which EMNCs seek to learn valuable knowledge and technology from external environments. With the intensification of globalization, a marked change has come about in that FDIs by EMNCs to developed economies have come increasingly into the limelight, and we should note that the active IMAs by Chinese MNCs represent such a trend.

During the sample period of 2002–2016, Chinese MNCs have made considerable effort to enter overseas markets and have chosen the IMA as their main entry strategy. No one can deny that the global competition by Chinese MNCs against DMNCs began in earnest in 2002, since China joined the WTO in 2001. Alon et al. (2014) pointed out that not too many people recognize that China is one of top 3 investment economies in the world, together with the USA and Japan. The Chinese Government has implemented its tenth five-year plan since 2001, when the authorities embarked on the provision of favorable environments for firms wishing to invest abroad. Such changes in policy include the shortening of the evaluation process for the establishment of overseas subsidiaries, the reduction in the number of outward foreign direct investment (OFDI)-restricted industries from ten to five, and the revision of the regulations on foreign investment remittance by the Chinese Government to encourage the active circulation of overseas funds. As of 2016, due to these policy alterations, Chinese investment around the world has been liberalized, and as a result, OFDI by Chinese MNCs reached $1,281bn (UNCTAD, 2017).

We focus on all of the Chinese MNCs listed on the Shanghai Stock Exchange, because their financial and deal structure data are publicized by Zephyr. Among the various data provided by this data set (i.e. Zephyr), we especially included information associated with their intra- and inter-M&As and IMAs targeting high-tech firms based in developed economies. Based on the illustrations given above, the onset point of the data used in this study is the year 2002. Fortunately, Zephyr provided suitable information on 69,536 of the IMAs by Chinese global acquirers in 2002 (of these, the number of completed M&A deals was 7,783 and the remainder are incomplete cases due to transactions ending in a stalemate or coming to a halt). Among them, Chinese MNCs completed 498 IMA deals with 100 percent ownership. Then, by excluding all of the missing information, we finally included a total of 206 samples in the statistical analyses.
3.2 Dependent variable
To reiterate, no one can deny that compared to DMNCs having a long history of FDIs, EMNCs suffer from a relatively short experience of internationalization and logically also from a lack of knowledge accumulation. Therefore, EMNCs tend to try to complement their shortage of internal knowledge and resource reservoir by acquiring firms in developed economies (OECD countries), which allows them to arm themselves with sophisticated knowledge and technology. In this vein, our analysis focuses on the Chinese decision as to whether they should plant their feet in developed economies and enter these markets by acquiring firms in OECD countries. Bertrand and Zuniga (2006) supported our opinion by stating that IMAs toward firms in OECD countries often resulted in EMNCs’ successful R&D development and pointing out that one of the central motivations of IMAs is the enhancement of technological capabilities, and thus, such entry strategies are very important for new learning and innovation (see also Larimo, 1993).

Based on these discussions, our dependent variable, OECD, is coded as a dichotomous variable (“1” if the Chinese MNCs’ target firm is located in OECD countries before the commencement of their IMA negotiations, and “0” otherwise) (Salomon and Jin, 2010). We coded this variable based on the data from Zephyr and OECD.org where the list of member countries and their year of membership are found.

3.3 Explanatory variables
We divided IMA deals into three groups: intra-industry M&A, inter-industry M&A and high-tech industry M&A. Intra-industry M&A was coded “1” if both the acquirer and target have the same SIC code, which implies that the focal deal occurred within the same industry, and “0” otherwise (Reuer and Ragozzino, 2008). Inter-industry M&A was coded “1” if the first digits of the SIC code for the acquirer and target are different, and “0” otherwise (Reuer and Ragozzino, 2008; Shen and Reuer, 2005). High-tech industry M&A was coded as “1” in the case where the first three-digit SIC code of the target firm is categorized as a high-technology industry, and “0” otherwise. Based on the suggestions given by Kile and Phillips (2009), an industrial sector is defined as a high-tech industry when the first three digits of the SIC code are 283, 357, 366, 367, 382, 384, 481, 482, 489, 737 or 873.

3.4 Control variables
We also included some factors that potentially affect the dependent variable (i.e. Chinese MNCs’ takeover of firms in OECD countries) as control variables. For instance, as IMAs may occur at different frequencies each year and there can be a variety of events that can influence the takeover bids every year, we may need to control one particular variable, the year (in fact, IMA transactions were much more vivid in 2005, 2006, 2009, 2010, 2011 and 2012) (Harzing, 2002; Hayward and Shimizu, 2006).

Next, we might need to consider the characteristics of the IMA deals. First, we should determine whether the transaction for IMAs is paid in cash or in stock. Paying by cash does not necessarily mean a strong commitment to the target acquisition, but it does imply the acquiring company’s willingness and intent to participate in active managerial involvement (Gu and Reed, 2016). Second, the value of IMA deals can be another consideration. The larger the size of the deal, the more likely the acquiring company will be reluctant to engage in IMAs due to the investment risk. Third, the effect of whole ownership cannot be neglected.

Finally, the acquiring company’s characteristics (size, age and private vs state-owned) are also included in the framework. Size was measured by the total assets and number of employees, whereas age was assessed by the number of years since the creation of the IMA. In contrast, state-owned enterprises were coded as a dummy variable (1 for state-owned enterprises, 0 otherwise) (Gu and Reed, 2016).
3.5 Model specification

We estimate the following logistic regression to examine the effect of Chinese MNCs on the propensity to enter OECD countries to learn about innovative knowledge:

\[
\text{Pr}(y_{it} = 1) = \beta_1 \text{Intra M&A}_{it} + \beta_2 \text{Inter M&A}_{it} + \beta_3 \text{High-tech M&A}_{it} + \beta_4 X_{it} + \delta T_t + \epsilon_i,
\]

where \(i\) indexes the firms, \(t\) indexes the year and \(y_{it}\) is the dependent variable OECD. The explanatory variable that measures the acquisition of target firms by Chinese MNCs in intra-industry is Intra-industry M&A, in inter-industry is Inter-industry M&A and in high-tech industry is High-tech industry M&A. The vector of control variables, \(X_{it}\), includes the deal characteristics (Payment in cash, Deal value and 100 percent acquisition) and firm characteristics (Total assets, Number of employees, Firms age and State-owned enterprise).

4. Results

The descriptive statistics and correlations are displayed in Table I. Of the 206 Chinese MNCs that completed IMAs during 2002–2016, the number of these firms which entered OECD countries is 44 (21 percent). The remaining 79 percent are IMAs associated with Chinese MNCs’ entry into non-OECD countries. The low level of correlation observed between the variables shows the minimum presence of multicollinearity. In addition, we tested for multicollinearity with “Collin” in Stata 13.0 and found that VIF ranges from 1.15 to a maximum of 2.20, which confirms that we do not need to be concerned about this problem in this study (Hair et al., 1998).

The results of our logistic regression models are displayed from Model 1 to Model 5, which presents the odds ratio. We clustered the standard errors generated by EMNCs to explain the assumption of heteroscedasticity caused by the fact that the firms might have done multiple M&As in the same year. The estimated coefficients in each model represent the magnitude of the odds ratio and marginal effects are calculated at the mean of all other variables by using the Delta method.

Model 1 in Table II shows the results of the logistic regression we conducted to see whether the control variables influence the likelihood of the Chinese MNCs’ entering into OECD with a learning motivation. The effects of payment in cash and firm age are significant and the coefficients of each variable are less than 1. This indicates that Chinese MNCs often pay by stock rather than cash when acquiring DMNCs and that, generally speaking, the takeover of DMNCs by younger EMNCs is more frequent than that by older organizations.

In Model 2 in Table II, the probability of Chinese MNCs with intra-industry M&A entering into developed countries has an odds ratio of 1.296, while the \(p\)-value is larger than 0.5, which does not support \(H1\). Although this is somewhat different from our expectations, this finding is similar to that of Liu and Zou (2008). They reported that intra-industry M&A is generally undertaken by EMNCs, which have a strong desire to expand their markets internationally or elevate their market positions in overseas countries, etc., more than by emerging multinationals, which use the strategy as part of their endeavors to learn. However, we should note that this does not mean that intra-industry M&A is irrelevant to EMNCs’ learning and does not play a pivotal role in obtaining strategic assets (e.g. typically advanced sophisticated knowledge) possessed by other firms. For instance, we should pay attention to the fact that Shanghai Auto bought SsangYong Motor to acquire the latter’s technology and the takeover of IBM’s Personal Computing Division by Lenovo occurred for the same reason in 2004. Meanwhile, to better understand the reason for this unexpected result, we conducted a supplementary analysis, as described below, with the idea that the age of the EMNCs may have an effect on their IMAs (McAllister and Sauvant, 2013).
### Panel A: summary statistics

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 OECD countries</td>
<td>0.21</td>
<td>0.41</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>2 Payment with cash</td>
<td>0.64</td>
<td>0.48</td>
<td>0</td>
<td>1</td>
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<tr>
<td>3 Deal value</td>
<td>2.47</td>
<td>1.99</td>
<td>0</td>
<td>8.4</td>
</tr>
<tr>
<td>4 100% acquisition</td>
<td>0.81</td>
<td>0.40</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>5 Total asset</td>
<td>15.41</td>
<td>1.84</td>
<td>8.9</td>
<td>20.18</td>
</tr>
<tr>
<td>6 Number of employee</td>
<td>7.93</td>
<td>2.23</td>
<td>0</td>
<td>13.16</td>
</tr>
<tr>
<td>7 Firm age</td>
<td>2.61</td>
<td>0.71</td>
<td>0</td>
<td>5.33</td>
</tr>
<tr>
<td>9 State-owned enterprises</td>
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<td>0.26</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>10 Inter-industry M&amp;A</td>
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<td>0.50</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>11 Intra-industry M&amp;A</td>
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<td>0.43</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>12 High-tech industry M&amp;A</td>
<td>0.09</td>
<td>0.28</td>
<td>0</td>
<td>1</td>
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</tbody>
</table>

### Panel B: correlations

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
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<tbody>
<tr>
<td>1 OECD countries</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Payment with cash</td>
<td>-0.19*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Deal value</td>
<td>-0.12</td>
<td>0.03</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 100% acquisition</td>
<td>-0.08</td>
<td>0.22*</td>
<td>-0.02</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Total asset</td>
<td>-0.04</td>
<td>-0.03</td>
<td>0.28*</td>
<td>-0.01</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Number of employee</td>
<td>-0.07</td>
<td>-0.04</td>
<td>0.27*</td>
<td>-0.01</td>
<td>0.36*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Firm age</td>
<td>-0.09</td>
<td>0.06</td>
<td>-0.10</td>
<td>--0.00</td>
<td>0.02</td>
<td>0.00</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 State-owned enterprises</td>
<td>-0.11</td>
<td>-0.05</td>
<td>0.32*</td>
<td>-0.04</td>
<td>0.13</td>
<td>0.31*</td>
<td>-0.25*</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Inter-industry M&amp;A</td>
<td>0.14*</td>
<td>0.02</td>
<td>0.02</td>
<td>-0.10</td>
<td>0.08</td>
<td>-0.00</td>
<td>0.20*</td>
<td>-0.11</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Intra-industry M&amp;A</td>
<td>0.03</td>
<td>-0.07</td>
<td>0.07</td>
<td>-0.04</td>
<td>-0.00</td>
<td>0.03</td>
<td>0.13</td>
<td>-0.03</td>
<td>0.52*</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>12 High-tech industry M&amp;A</td>
<td>0.18*</td>
<td>-0.02</td>
<td>-0.13</td>
<td>-0.09</td>
<td>0.04</td>
<td>-0.13</td>
<td>-0.04</td>
<td>-0.09</td>
<td>0.06</td>
<td>0.16*</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Notes:** *Natural logarithm. *p < 0.05

Table I. Descriptive statistics
In Model 3 in Table II, the probability of Chinese MNCs with inter-industry M&A entering into developed countries has an odds ratio of 3.609 and the p-value is less than 0.01, which supports H2. This corresponds to a marginal effect of 13.71 percent based on the mean value of all of the variables. Fixing this variable to “1” and all other variables to their means, we computed that Chinese MNCs acquiring DMNCs via inter-industry M&A had a predicted probability of 20.83 percent.

In Model 4 in Table II, the probability of Chinese MNCs with high-tech industry M&A entering into developed countries has an odds ratio of 3.375 and the p-value is less than 0.05, which also lends support to H3. The marginal effect of relationship is 15.12 percent, while the value of all of the variables is fixed at their mean. In the same way, with Model 3, we set high-tech industry M&A to “1” and all other variables to their means and calculated that Chinese MNCs acquiring DMNCs via high-tech M&A had a predicted probability of 35.64 percent.

Model 5 in Table II shows the results of the logistic regression we conducted as a full model. With respect to the control variables, the effects of payment in cash and firm age are still significant and each coefficient is less than 1. Among the explanatory variables, the effects of inter-industry M&A and high-tech industry M&A are still significant and each value is larger than 1 (p < 0.01 and p < 0.05, respectively).

As suggested by Reid and Toffel (2009), we ran the OLS examination to compare the magnitude of the effect of Chinese MNCs acquiring DMNCs in Model 6 in Table II. The OLS regression acted as a robustness check of our logistic specification. The OLS model produced coefficients on the hypothesized variables with magnitudes and significance levels that are comparatively close to those generated by the logistic regression models.
4.1 A supplementary analysis: young EMNCs vs old EMNCs

The previous estimations used all Chinese MNCs (regardless of their number of years in operation up to the time of our examination) to assess the probability of their acquiring DMNCs. We assumed that EMNCs use an intra-industry M&A as a means to learn the foreign knowledge owned by DMNCs, but the result contradicted this assumption. As a consequence of the statistical outcome, we changed our way of thinking. That is, we now presume that various reasons might affect the results, and one of them is perhaps associated with the fact that we did not consider the subsidiary age. Therefore, based on McAllister and Sauvant’s (2013) explanations, we tried to experiment a supplementary test. McAllister and Sauvant (2013) suggested that firm age can influence a subsidiary’s learning behavior, and thus, we classify Chinese MNCs into two groups: young and old firms (see also Anderson and Sutherland, 2015). We posit that as a part of the strategy of the EMNCs, fast followers tend to attempt to develop their capability to rapidly catch up with next generation knowledge as soon as they come on stream. The most of EMNCs may come to the global arena without technological superiority (Awate et al., 2012). Such a knowledge gap induces the EMNCs to internationalize with the aim of acquiring advanced knowledge to duplicate and imitate the skills developed by other firms. In particular, in this process, young EMNCs are expected to be able to rapidly catch up in terms of firm-specific assets by acquiring explorative knowledge residing at the advanced frontier, which subsequently indicates that young EMNCs are likely to try to learn new knowledge to strengthen their own organizational competitiveness, and that the use of intra-industry M&As functions as a conduit to reach the objective. In contrast, old EMNCs may have a different purpose for acquiring DMNCs. Unlike young EMNCs, although old EMNCs are born in developing or emerging countries, they have established a sufficient knowledge base and may be armed with firm-specific competitive advantages. In this vein, the main aim of IMAs by old EMNCs is perhaps to diversify their business unit through acquisitions (and learn new knowledge from the diversification), which points out that they are less likely to focus on acquiring similar knowledge-assets and obtain complementary resources via intra-industry IMAs. In this sense, this supplementary analysis attempts to confirm our expectation described above.

As shown in Table III, there are two separations of our sample: Model 1 for old EMNCs and Model 2 for young EMNCs. To reiterate, we expected that old EMNCs owning

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1 (old EMNCs)</th>
<th>Model 2 (young EMNCs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2009</td>
<td>2.779 (0.961)</td>
<td>0.943 (−0.055)</td>
</tr>
<tr>
<td>Year 2010</td>
<td>1.005 (0.004)</td>
<td>2.512 (0.826)</td>
</tr>
<tr>
<td>Year 2011</td>
<td>0.560 (−0.629)</td>
<td>5.041* (1.848)</td>
</tr>
<tr>
<td>Year 2012</td>
<td>1.367 (0.353)</td>
<td>1.090 (0.074)</td>
</tr>
<tr>
<td>Payment with cash</td>
<td>0.209** (−2.175)</td>
<td>0.272** (−2.065)</td>
</tr>
<tr>
<td>Deal value a</td>
<td>0.870 (−0.725)</td>
<td>0.739* (−1.692)</td>
</tr>
<tr>
<td>100% acquisition</td>
<td>1.056 (0.060)</td>
<td>0.660 (−0.425)</td>
</tr>
<tr>
<td>Total asset a</td>
<td>0.965 (−0.216)</td>
<td>1.067 (0.344)</td>
</tr>
<tr>
<td>Number of employees a</td>
<td>0.742** (−2.138)</td>
<td>1.182 (0.652)</td>
</tr>
<tr>
<td>Intra-industry M&amp;A</td>
<td>1.413 (0.461)</td>
<td>0.212** (−1.994)</td>
</tr>
<tr>
<td>Observations</td>
<td>113</td>
<td>93</td>
</tr>
<tr>
<td>Pseudo $R^2$</td>
<td>0.170</td>
<td>0.151</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>−39.859</td>
<td>−41.287</td>
</tr>
<tr>
<td>$\chi^2$ (df)</td>
<td>19.327</td>
<td>14.857</td>
</tr>
</tbody>
</table>

Notes: Exponentiated coefficients; $t$-statistics in parentheses. aNatural logarithm. *$p < 0.01$; **$p < 0.05$
competitive advantages have a propensity to try to diversify their business abroad, and thus, they do not concentrate on learning through intra-industry M&As. In line with our expectations, the results from Model 1 show that the reason why old EMNCs are involved in takeovers of DMNCs is not so much to do with learning, which probably means that their central motivations go beyond knowledge acquisition in the same sector. On the other hand, with respect to young EMNC’s takeovers, the p-value is less than 0.05, which clearly supports our explanations. In other words, our results reveal that old EMNCs, given the greater period of time that they have been operating, generally tend to have a better knowledge base and therefore superior capability relative to young EMNCs. For this reason, the former is likely to employ an inter-industry M&A strategy to diversify their business (and obtain new skills), whereas the use of the IMA tactic helps the latter to absorb new information from other firms operating in the same sector to some extent. Drawing from the arguments on the learning motivations of newness enjoyed by young firms, Yuan and Pangarkar (2015) also documented that young EMNCs tend to seek learning opportunities potentially through intra-industry M&A strategies and thus are in a strong position to exploit available chances. These statistical outcomes and extant empirical suggestions provide clear evidence for the importance of the effect of EMNC’s age on their intention to horizontally acquire DMNCs for the sake of learning.

5. Conclusions
This study examines the issues involved in EMNC’s acquisition of firms in developed countries as a function of their three different types of M&A (intra-industry, inter-industry and high-tech industry M&As) for the purpose of learning from DMNCs in the context of Chinese MNCs as a representative emerging market. We address three key findings. First, the exploitative learning motivation of Chinese MNCs may not lead to their acquisition of DMNCs. For the acquirer, we expected that intra-industry M&As would often play an important role in absorbing information from familiar operations, seizing the technological resources that are available in the target firms (Shen and Reuer, 2005) and grasping the assets needed for efficient innovation (Liu and Zou, 2008). However, our analysis results do not robustly document a significant relationship between Chinese MNCs’ intra-industry M&A and their learning motivations (we concluded that when intra-industry M&As are mainly conducted by old EMNCs they often own firm-specific advantages to create powerful brand names, offer balanced product lines and/or enhance R&D capabilities. In contrast, young EMNCs’ IMA in the same sector is based on an explorative learning motivation. For this particular sentence, refer to the explanations in the supplementary analysis below). Second, in terms of IMAs, we also anticipated that Chinese MNCs would acquire fresh and next generation knowledge from DMNCs through inter-industry M&A strategies, and our findings confirmed that IMAs especially occurred in inter-sectors by EMNCs wishing to reach their potential for learning and innovation across country boundaries (Harzing, 2002). Third, we predicted that by directly acquiring firms with high-tech knowledge, Chinese MNCs are able to rapidly learn and catch up with the capabilities of DMNCs in a relatively short period of time. In line with this, our statistical outcomes confirmed that Chinese MNCs, which experienced a lack of internal knowledge reservoirs, are more likely to try to absorb the cutting-edge technologies from DMNCs through M&As in high-tech sectors (Liu and Zou, 2008). In addition, our supplementary analysis examined whether juvenile EMNCs tend to have greater learning motivations than old firms when they enter alien environments through intra-industry M&A strategies. We found that young Chinese MNCs seem to acquire DMNCs particularly when they are eager to obtain new knowledge (Anderson and Sutherland, 2015).
As a theoretical perspective, this study contributes to IB theories by discovering evidence of Chinese MNCs’ learning motivations for their FDI, as well as suggesting three types of learning mechanisms. Although the volume of FDI by MNCs is growing swiftly, the emphasis in the existing IB literature has been on FDI by DMNCs, and for this reason, the current theories may ignore the reality that EMNCs are one of the main agents undertaking active FDI (we would like to point out that one of their key motivations is associated with knowledge-seeking motives, but conventional theories tend to shed light on market-seeking, efficiency-seeking and resource-seeking intentions). In a similar vein, Moon and Roehl (2001) argued that such unconventional FDI from EMNCs to developed countries is dramatically increasing, reflecting their rising dominance in the world market. In particular, Peng (2012) stated that Chinese MNCs (as an example of EMNCs) typically do not possess superior technology to their global competitors and their management capabilities are usually not world class. In other words, a big chunk of the “O” part seems to be missing. In order to overcome their weaknesses, they usually seek to identify new information, bridge their knowledge gaps (i.e. linkage) and take advantage of their unique capabilities, which may not be at the cutting edge, but may nevertheless give them a comparative advantage over their global competitors (i.e. leverage) and they go abroad to learn (i.e. learning) (see LLL-framework and Peng, 2012). Thus, by extending the OLI perspective through the LLL-framework, we suggest a new theoretical lens, namely, the OILL paradigm. In addition, we believe that the IMAs by EMNCs are characterized by three modes, and thus, this study also contributes to the current literature by providing a particularized depiction of EMNCs’ learning mechanisms in developed countries.

The practical implications of this study are as follows. Our finding on EMNCs’ learning through inter-industry M&A implies that they are much more eager to acquire explorative knowledge than exploitative knowledge. That is, latecomers to the market (i.e. EMNCs) tend to focus on gaining resources and knowledge, which can be acquired externally, rather than exploit their own advantages and capabilities in international markets. The heterogeneous knowledge base owned by target firms based in developed countries has a propensity to attract the managerial attention of EMNCs, which seek locations to invest. This means that new knowledge residing in developed countries and technology that are not available in the EMNCs’ home countries can be a crucial location-specific factor for emerging country multinationals seeking to acquire resources and complementary assets, which can be accessed in the global market. Such learning motivations possessed by EMNCs and their IMA strategies may benefit both the acquirer and target firms. Through their internationalization, acquirer firms will be able to reduce their knowledge gap, find a short-cut to catching-up with DMNCs and function as a source of innovation, despite the numerous innate drawbacks. In addition, although the IMA strategy is riskier than the more conservative inward focus, as it involves the risks of overpayment and organizational integration problems, EMNCs need to overcome the constraints and limitations of their domestic markets and speedily obtain the new knowledge that they long for. From the perspective of EMNCs, an explorative IMA strategy seems to be a conduit to find a solution for this problem. In fact, through the explorative IMA strategy, Chinese MNCs have continuously been catching-up with DMNCs both in domestic and global markets, and some of them even began generating new knowledge and competencies of value to their global strategies and operations (Bhaumik et al., 2010; He et al., 2017). While Chinese MNCs had a propensity to immerse in mimicking and assimilating advanced foreign technology in the past, they have recently been assuming the role of a leader in technological sector by acquiring DMNCs as well as by undertaking knowledge-seeking R&D abroad. EMNCs that were highly dependent on national resource endowments such as the Chinese Government’s
financial support have grown to become the global front-runners, and they are changing the rules of game dominated mainly by DMNCs. In order to outpace DMNC rivals, Chinese MNCs (e.g. Lenovo, Huawei and Haier) that previously used to implement a “learning by acquiring” strategy now hold leadership positions, for instance, in global value chains and production areas (He et al., 2017). In contrast, acquired firms can have the opportunity to exploit an internal knowledge reservoir that has been imperfectly utilized, which infers, from the DMNCs’ standpoint, that high-tech firms are expected to be the primary target of EMNCs whose main motivation is learning through IMAs, and at the same time, EMNCs’ internationalization provides an opportunity for DMNCs to divest existing yet partially utilized business units to the acquirers.

Despite the contributions to the evolution of the OLI model made in this study and the new suggestion concerning the OILL paradigm, we should acknowledge there are some research limitations. First, as we covered only Chinese MNCs, our contributions need to be verified by other research to confirm whether they are accurately valid in all other contexts. For instance, empirical research that attempts to identify the factors affecting EMNC’s acquisition of DMNCs in diverse geographical areas would be helpful for us to enhance our comprehension. Second, the learning motivation in our study was measured by the dichotomous variable of whether or not the target MNC is located in developed countries (i.e. OECD member countries). Although some previous studies suggested that the OECD can be considered as a focal context where highly advanced MNCs are doing business and competitive for manufacturing high-end products (Bertrand and Zuniga, 2006; Salomon and Jin, 2010), there may be a better appropriate proxy to assess learning motivations. That is to say, not all OECD member countries are highly advanced in terms of knowledge or sufficiently attractive for EMNCs to acquire MNCs in these countries to meet their learning expectations. Moreover, we should note that some non-OECD countries are already as qualified as OECD members in terms of their economic volume and social improvement, but are just waiting for the best moment to enter into the entrance or observing how the market hegemony is changing. Third, complete control over corporate governance does not necessarily ensure knowledge transfer from target companies. Thus, in the IMA context between EMNCs and DMNCs, additional endeavors are needed to figure out what kind of knowledge is learned, and in the progress of acquisition, how they manage the knowledge transfer. Fourth, we confess that our sample size is somewhat small for a valid statistical analysis, and thus, conducting empirical examinations with enriched samples is another critical path for future research avenue.

Note
1. Bhaumik et al. (2010) pointed out that although understanding on the rising power of EMNCs possessing ownership-specific advantages was perhaps unimportant within traditional IB theory, which has evolved specifically to analyze and explain FDI from the traditional set of source countries in the developed world, with the growing visibility of FDI from emerging markets we would like to suggest that it is time to extend the gamut of analysis to the EMNCs. In the same vein, He et al. (2017) argued that increasing number of Chinese firms are becoming global innovation players in their own right, enabling them to challenge DMNCs for efficient coordination of global R&D and production functions. These explanations clearly inform us that the monopolistic advantage theory, which is the root of conventional IB perspectives, has been outdated.

References


Appendix

As indicated in the Conclusion section, this study has some research limitations. Consequently, we attempted to find a remedy to this problem and decided to conduct an additional analysis, though it is beyond the scope of our study. That is, we examined Chinese MNCs’ payment method when they take over DMNCs, and we believe that this analysis will be useful for future researchers. For example, Gu and Reed (2016) found that there is no relationship between industry-specific relatedness and payment in cash, and this is particularly the case when the deal involves overseas M&As. Among the various types of IMAs, the industrial concern can be divided into


intra- and inter-relatedness, and the payment can also be separated into cash and stock. Our additional test shows that the odds ratio of Chinese MNCs’ M&As occurring in the inter-industrial sector is 7.473 and the p-value is less than 0.01 in the case where their payment method is cash (see Table AI). This finding informs us that EMNCs that acquire target firms by paying cash have a considerable propensity to possess a higher learning motivation than the others. Model 2 is an experiment on EMNCs’ stock financing for their IMA deal and their learning behaviors, and no significant results were found. However, researchers need to be careful when interpreting these results, in that the number of samples is small in Model 2 and that an insufficient sample size may yield unexpected statistical errors (Vittinghoff and McCulloch, 2007). Conversely, in the case where the problem is resolved by future research, a more meaningful interpretation of stock and cash financing in IMAs will become possible. In addition, it is also necessary for future researchers to primarily consider whether the context of the acquisition is overseas or domestic.

### Table AI.
The effect of paying method for Chinese IMAs

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1 (paying with cash)</th>
<th>Model 2 (paying with stock)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2005</td>
<td>3.481 (0.805)</td>
<td>3.184 (0.614)</td>
</tr>
<tr>
<td>Year 2009</td>
<td>1.825 (0.749)</td>
<td>3.594 (0.837)</td>
</tr>
<tr>
<td>Year 2011</td>
<td>2.383 (1.293)</td>
<td>0.873 (−0.105)</td>
</tr>
<tr>
<td>Year 2012</td>
<td>2.420 (1.195)</td>
<td>0.398 (−0.676)</td>
</tr>
<tr>
<td>Deal valuea</td>
<td>0.864 (−0.937)</td>
<td>0.841 (−0.968)</td>
</tr>
<tr>
<td>Acquisition with 100%</td>
<td>0.699 (−0.438)</td>
<td>1.995 (0.654)</td>
</tr>
<tr>
<td>Total asseta</td>
<td>1.033 (0.241)</td>
<td>0.869 (−0.507)</td>
</tr>
<tr>
<td>Number of employeea</td>
<td>0.902 (−0.791)</td>
<td>0.938 (−0.238)</td>
</tr>
<tr>
<td>Firm agea</td>
<td>0.397* (−1.922)</td>
<td>5.477 (1.004)</td>
</tr>
<tr>
<td>Intra-industry M&amp;A</td>
<td>0.374 (−1.614)</td>
<td>5.347 (1.326)</td>
</tr>
<tr>
<td>Inter-industry M&amp;A</td>
<td>7.473*** (2.945)</td>
<td>0.370 (−0.719)</td>
</tr>
<tr>
<td>Observations</td>
<td>167</td>
<td>39</td>
</tr>
<tr>
<td>Pseudo $R^2$</td>
<td>0.138</td>
<td>0.127</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>−59.274</td>
<td>−21.661</td>
</tr>
<tr>
<td>$\chi^2$ (df)</td>
<td>18.942</td>
<td>6.327</td>
</tr>
</tbody>
</table>

Notes: Exponentiated coefficients; t-statistics in parentheses. *Natural logarithm. *p < 0.1; ***p < 0.01

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The roles of emerging multinational companies’ technology-driven FDIs in their learning processes for innovation
A dynamic and contextual perspective

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Abstract
Purpose – The purpose of this paper is to contextually theorise the different patterns of emerging multinational companies’ (EMNCs’) learning processes for innovation and the different influences of their technology-driven FDIs (TFDIs) on the processes.
Design/methodology/approach – A comparative case study method and process tracing technique are employed to investigate how and why firms’ learning processes for innovation took place, how and why the TFDIs emerged and influenced the firms’ learning processes in different ways.
Findings – The paper identifies two different patterns of learning process for innovation (Glider model vs Helicopter model) and two different roles of the case firms’ TFDIs (accelerator vs starter) in the different contexts of their learning processes. It is found that the capability building of the domestic wind energy industry has an important influence on the case of EMNCs’ learning processes and thus on the roles of their TFDIs.
Research limitations/implications – The limitation of the paper lies in its small number of cases in a specific industry of a specific country. The two contextually identified learning models and roles of TFDIs may not be applied to other industries or other countries. Future research should investigate more cases in broader sectoral and geographic scope to test the models and also to identify new models.
Practical implications – For EMNCs, who wants to use the Helicopter model to rapidly gain production and innovation capability, cross-cultural management and integration management are crucial to practitioners. For emerging countries with ambitions to explore the global knowledge and technology pool, besides of the EMNC’s capability building, the capability building in the domestic industries should not be overlooked by policy makers.
Originality/value – The paper develops a dynamic and contextual analytical framework which helps to answer the important questions about how and under what context a TFDI emerges and influences firm’s learning process for innovation. It theorises the EMNCs’ learning process and TFDIs in the context of the development of the domestic industry. It strengthens the explanatory power of the learning-based view and adds new knowledge to the current FSA/CSA discourse in the international business literature.

Keywords China, Europe, Emerging market multinationals, Foreign direct investment (FDI), Technological innovation, Wind energy

Paper type Research paper

1. Introduction
The most noticeable trend of the new wave of internationalisation is the increase in outward technology-driven foreign direct investments (TFDIs) undertaken by emerging multinational companies (EMNCs) to the advanced countries. These EMNCs are targeting what are probably the most important assets in the developed world – knowledge and technology (Awate et al., 2012; Lebedev et al., 2015; Chaminade and Rabellotti, 2015; Elia and Santangelo, 2017) with the aim of enhancing their innovation capability via learning (Li, 2010; Liu et al., 2016). How and
under what kind of contexts did the TFDIs emerge? How did the TFDIs help the different EMNCs in their learning processes for innovation in different ways? These are interesting questions to be answered.

The change from receiving inward FDI to undertaking outward TFDI in the emerging economies create a new rationale for revisiting the international business (IB) literature (Amsden and Chu, 2003; Mathews, 2006; Rugman, 2008; Goldstein, 2009; Gammeltoft et al., 2012; Si et al., 2013; Cuervo-Cazurra and Ramamurti, 2014). Over the last decade, the fast-growing EMNCs’ outward FDIs breed a new strand of EMNC research marked by accelerated internationalisation (Mathews, 2006), springboard perspective (Luo and Tung, 2007), institution-based view (Peng et al., 2008), learning-based view (Li, 2010) and integrated view (Li, 2007), which is a balanced integration of the ownership-based OLI model and the learning-based LLL model. This strand of literature takes EMNC outward FDI as a strategy to build up their capabilities by leveraging knowledge complementarity, reducing their institutional and market constrains at home, and gaining institutional advantage and legitimacy in the host country. These researches have greatly explained how EMNCs can conduct outward FDI without possessing the same technological ownership advantage as the advanced country MNCs (AMNCs) have. Nevertheless, they are less clear about how the TFDIs emerge over time, under what contexts, and with what advantages ex ante the EMNCs conduct TFDIs (Ramamurti, 2012; Bhaumik et al., 2016). Furthermore, they are not clear about how and why in the same country and the same industry, different EMNCs’ TFDIs can play different roles.

To address these challenges for better understanding the roles of different EMNCs’ TFDIs in their learning processes for innovation we need to extend the existing theoretical framework. First, a dynamic perspective is needed. EMNCs’ TFDIs do not constitute a one-stroke transaction of technology ownership but a continuously ongoing learning process for innovation with the phases of preparation, implementation, and maintenance. To understand the role of a TFDI in the learning process for innovation, both the pre- and post-TFDI learning processes should be considered. Second, contextualised theorising is needed. The tension between scientific explanation and context has been an important common concern for IB research (Welch et al., 2011). Research on China, one of the fastest-growing emerging economies, has presented a lively debate on the need for contextualised theories (Tsui, 2006; Child, 2009; Jia et al., 2012). Third, understanding why and how a specific role of a TFDI was brought about in the EMNC’s learning process for innovation entails qualitative comparative analysis and process tracing (Welch et al., 2011). This method combines the analysis of the different learning processes and the analysis of the different contexts in which the TFDIs emerge and influence.

The aim of this paper is to take a dynamic perspective to contextually theorise the different roles of different EMNCs’ TFDIs by comparing and tracing their learning processes for innovation in order to generate theoretical contribution to the current discourse about EMNCs’ outward TFDI. It develops a dynamic and contextual analytical framework from a learning-based view to analyse the pre- and post-TFDI learning process, which is framed in terms of both learning dynamics and learning context. The learning dynamics refer to changes in the three key elements of learning: knowledge (what to learn), linkage (from whom to learn) and activity (how to learn). The learning context refers to the production and innovation capability building of the domestic industry, which influences the learning processes of the firms in question.

The paper selected two leading firms in the Chinese wind energy industry that both conducted TFDIs in Europe. One firm is a pioneer in the industry who gradually internationalised its R&D activities and the other firm is a latecomer who internationalised its R&D right after its establishment. Selecting a pioneer EMNC and a latecomer EMNC as the cases is to observe the different process of learning and the different roles of TFDIs in
different contexts. The author traced and compared the learning dynamics and learning context in the case firms’ pre- and post-TFDI phases so as to contextually theorise the roles of the case firms’ TFDIs in their learning processes for innovation. Data collection was conducted in the firms’ headquarters and suppliers in China as well as in their R&D subsidiaries in Europe.

The key research questions addressed in this paper are as follows:

RQ1. What are the learning dynamics and learning context of the pioneer and latecomer EMNCs’ pre- and post-TFDI learning processes?

RQ2. What are the roles of the TFDIs in the pioneer and latecomers’ learning processes for innovation and how did they work?

The paper identifies two different patterns of learning process for innovations, namely, the Glider model and the Helicopter model of the two case firms, respectively. The pioneer EMNC’s 20-year-long learning process for innovation is like the slow take-off of a glider with the aid of imitating foreign technology (the wind) but with no in-house R&D capacity (the engine). The latecomer EMNC’s learning process is like a quick take-off of a helicopter with in-house R&D capacity (the engine) gained in a short period of time.

It is found that the two case firms’ TFDIs play different roles, namely, the accelerator and the starter. To the pioneer EMNC, which has accumulated production capacity and technology in the firm since the early stage of the domestic industry, TFDI is an accelerator to boost the firm’s innovation by seeking the design technology abroad and exploiting the production capacity and technology already developed by the company. To the latecomer EMNC, which was established when the domestic industry became mature, TFDI is the starter for the firm to quickly acquire design technology internationally and to exploit the production capacity and technology not developed within the firm but acquired domestically.

The mechanism of the two companies’ internationalisation from a firm-specific advantage (FSA)/country-specific advantage (CSA) perspective and its relation between the two models of learning patterns are also critically discussed.

The contribution of this paper is threefold. First, it develops a dynamic and contextual analytical framework for understanding the different roles of the EMNC’s outward TFDIs as diverse phenomena rather than identical practices as the opposite of the FDIs from advanced countries’ MNCs. This framework helps to answer the important questions about how and under what context a TFDI emerges and how it influences firm’s learning process for innovation. The framework strengthens the explanatory power of the learning-based view in IB research. Second, it contextually theorises the learning process for innovation in the pioneer and latecomer EMNCs and the roles of TFDIs in the learning process based on process tracing and comparative contextual analysis. It explains why and how in the same industry of the same country, different EMNCs presents different patterns of learning for innovation and the TFDIs play different roles. Third, it adds new knowledge to the current FSA/CSA discourse by identifying the different source of FSA that the EMNCs possessed and the different type of CSA that the EMNCs leveraged when going global.

This paper is structured as follows. Section 2 presents the theoretical background and analytical framework of the paper. Section 3 introduces the method of comparative case study and process tracing technique in detail. Section 4 presents the main findings about the learning process for innovation in the two case firms’ and the TFDI’s roles. Section 5 contextually theorises the patterns of learning for innovation in the two case EMNCs’ learning processes for innovation and the roles of the TFDIs. Section 6 discusses the theoretical contribution to the learning-based view and theoretical implication from the CSA/FSA perspective. Section 7 concludes the paper.
2. Theoretical background and analytical framework

2.1 The EMNCs’ TFDI and the learning-based view

TFDIs refer to foreign direct investments aimed at accessing, obtaining or creating technology assets to enhance innovation capabilities in view of the long-term competitiveness in the investing company. Technology assets are typical strategic assets (Dunning, 1993; Dunning and Narula, 1995), which are critical to firms’ long-term competitiveness. The concept of TFDI falls into the same category of strategic asset-seeking FDI as other similar concepts, such as knowledge-seeking FDI (Chung and Alcácer, 2002), asset-seeking FDI (Makino et al., 2002, Ivarsson and Jonsson, 2003) and springboard FDI (Luo and Tung, 2007). The strategic asset-seeking FDI has been widely studied in IB literature, from FDIs among advanced countries (i.e. Kogut and Chang, 1991; Almeida, 1996; Shan and Song, 1997) to FDIs from emerging economies (Chen and Chen, 1998; Kumar, 1998; Hoesel, 1999; Makino et al., 2002; Mathews, 2006), particularly, in recent years, from China (Rui and Yip, 2008; Deng, 2009; Li et al., 2012; Cui et al., 2014; Anderson et al., 2015). One distinctive characteristic of this type of FDI, compared with other forms of FDI (market-seeking, efficiency-seeking, natural resource-seeking) as distinguished in the FDI literature (Dunning, 1998; Makino et al., 2002; Buckley et al., 2007), is its explorative motive (Meyer, 2015); the explorative motive implies the great importance of learning (Makino and Inkpen, 2003).

The concept of learning has long been embedded in IB theories. The learning-based view sees MNCs’ internationalisation as a cross-border learning process (Li, 2010). An important contribution of the IB model with a learning-based view is the linkage–leverage–learning model (Mathews, 2006), which is developed upon the observation of the accelerated internationalisation of EMNCs. Linkage refers to connections with incumbents in advanced countries who are the external knowledge suppliers with the knowledge that the EMNCs seek. Leverage implies the integration of acquired external knowledge with prior related internal knowledge for innovation. Learning emphasises the repeated application of linkage and leverage based on previous success or failure.

The LLL model offers a dynamic and external perspective in accounting for the success of EMNCs’ accelerated internationalisation in contrast with the conventional static and inward-looking IB models (Li, 2007). It explains how an EMNC, whose resources and capabilities are initially deficient and weak, overcomes its disadvantage and accelerates its capability building by learning from abroad. It conceptualises the EMNC’s internationalisation process as a continual process of linking and leveraging that leads to learning.

Nevertheless, the LLL model focusses on what to learn from advanced country incumbents but ignores what can be offered to these incumbents in order to motivate them to transfer knowledge. It assumes that, once the linkage is set up, the resources owned by the incumbents will be certainly obtained by the EMNCs if the resources themselves are imitable, transferable or substitutable. It does not discuss the incumbents’ willingness to transfer knowledge, which is directly related to the benefit that the incumbents will get in return (Foss and Pedersen, 2004). Thus, the LLL model cannot explain why the EMNCs’ acceleration of internationalisation happened at a specific time or place and did not happen earlier or elsewhere. The LLL model has a strong explanatory power in the accumulative and accelerated internationalisation of the EMNCs, but it cannot give a clear account of the extreme case of accelerated internationalisation, which is the rapid emergence of the latecomer EMNCs or the born-globals (Knight and Cavusgil, 2004).

2.2 Towards a dynamic and contextual analytical framework

Keeping the dynamic perspective and external focus of the LLL model, the paper extends the model by adding an internal focus and extending the external focus. First, it looks into not only what can be learnt from advanced country incumbents, but also what has been
possessed internally that can be offered to these incumbents to motivate knowledge transfer. Understanding the knowledge and technology that the EMNCs have accumulated internally is crucial for answering the question of when and why the incumbents in advanced countries are willing to share or trade their knowledge and technology for what they want in return. Second, the framework includes not only external incumbents in advanced countries but also external actors in domestic markets, such as domestic suppliers, customers, universities and research institutions. The domestic linkages are non-separable important relations of the EMNCs’ learning networks. The capability building of the domestic actors forms an important context in which the EMNC learns. Understanding the learning context helps to answer the question of what can be learnt or leveraged domestically besides of internationally.

Hence, the paper suggests a dynamic and contextual learning-based framework (see Figure 1) for understanding the roles of EMNCs’ TFDIs in the learning processes for innovation. The framework focusses on the learning dynamics and the learning context.

2.2.1 The learning dynamics. The learning dynamics include the change of the three key elements of learning – knowledge, linkage and activity.

In terms of knowledge, the paper analyses the internal knowledge that the EMNCs have within the firm and the external knowledge that the EMNCs intend to acquire from outside as a strategic asset. Internal knowledge is related to absorptive capability (Cohen and Levinthal, 1990; Lane et al., 2001; Chen, 2004), which is essential for learning. It is also related to what the EMNCs can offer to their international partners to motivate knowledge exchange. External knowledge is related to complementarity to the EMNCs’ internal knowledge. Once external knowledge is integrated into the firms’ internal system, it becomes internal knowledge. By such integration, the firms increased their absorptive capacity and are able to seek more sophisticated external knowledge. The success of knowledge transfer highly depends on the absorptive capacity of the learning firm which is largely a function of the firm’s level of prior internal knowledge (Cohen and Levinthal, 1990), the transferability of the external knowledge and the external sending firm’s willingness to transfer knowledge (Hamel, 1991).

In terms of linkage, the paper investigates the direct linkage for learning. Linkages refer to the firm’s connections with both domestic and international players, such as suppliers, universities and research institutions. The seeking, building and maintaining of the linkages are based on the reciprocity of the relationships. Unlike the conventional IB literature on FDI, which pays more attention to international linkages, this research investigates both domestic linkages and international connections. It is important to understand the

![Figure 1. The dynamic and contextual analytical framework](image-url)
differences and interplay between external knowledge that is domestically acquired and internationally acquired. Such difference and interplay may illuminate important implications in understanding the roles of TFDIs in firms’ learning processes for innovation in the context of domestic industrial capability building.

In terms of activity, the paper studies three kinds of activities of learning, as defined by the *OECD Oslo Manual* (OECD, 2005), including: accessing openly available information at a low cost, such as visiting industrial fairs, attending conferences and participating in training; acquiring knowledge and technology without active cooperation with the source, such as purchasing equipment, purchasing consultant services, outsourcing contract research or hiring talent; and actively collaborating in innovation projects. The activities imply different modes of knowledge dynamics, such as knowledge sharing with no formal relationship, knowledge acquisition through market relationships, and knowledge creation by interactive collaboration. The different modes of knowledge dynamics reflect different intensities of learning.

The author is aware of the bidirectional learning between the EMNCs and their domestic and international collaborators but this paper focusses only on the knowledge flow from the external collaborators to the EMNCs.

2.2.2 The learning context. The learning context refers to the domestic industry’s production and innovation capability building, which may have influence on the focal firm’s learning process. Industrial capability building has long been in the core of analysis in the catch-up literature (Godinho and Fagerberg, 2005; Fagerberg and Srholec, 2008; Awate et al., 2012; Bell and Figueiredo, 2012; Lee, 2013). It has been used as an analytical device to interpret the success of catch-up in newly industrialised economies, such as Korea and Taiwan (Kim, 1993; Park and Lee, 2006; Hu, 2012; Lee, 2013). There are two kinds of capability that are commonly identified as the important catch-up determinants: production capability and innovation capability (Bell and Pavitt, 1995; Bell and Figueiredo, 2012).

Production capability contains two aspects of capabilities. One is the production capacity of increasing productivity and scaling up the product quantity. The other is the technology capability of incorporating advanced technical and design specifications, as well as the performance features of the product. Innovation capability refers to technologies, knowledge and skills which are used to develop new products and designs. Production capability is interrelated with innovation capability. Even though it is found that the catch-up of production capability is easier than that of innovation capability (Awate et al., 2012), it is also found that emerging countries’ production capability building through engaging in the global production network has greatly benefited their transition from imitation to innovation (Kim, 1993; Lee, 2013). This is evident in the capability building of the Chinese wind energy industry (Ru et al., 2012; Qiu and Anadon, 2012; Silva and Klagge, 2013; Nahm and Steinfeld, 2014).

The author is aware of the bidirectional influence between the learning in the EMNCs’ networks and the capability building in the domestic industry. But this paper mainly focusses on the influence of the capability building in the industry on the EMNCs’ learning.

Under this analytical framework (see Figure 1), the paper investigates, in the pre- and post-TFDI period, what kind of prior internal knowledge the case EMNCs have possessed, what kind of external knowledge the case firms have looked for, what kind of domestic and international linkages the case firms have had for accessing the target external knowledge, and what kind of learning activities they have conducted to internalise the externally acquired knowledge. Combining the analysis of the influence of the domestic industry’s capability building on the pioneer and latecomer EMNCs’ learning processes, the paper expects to have a holistic understanding of the roles of TFDIs in the two case firms’ learning processes.
3. Methods

The paper adopts an in-depth comparative case study method and process tracing technique to investigate one pioneer and one latecomer Chinese wind energy MNCs’ pre- and post-TFDI learning processes in the fast-growing Chinese wind energy industry. An in-depth comparative case study method offers great opportunities for understanding the mechanism of the formation of a certain pattern in reality (Eisenhardt, 1989; Yin, 2003). Process tracing is a qualitative technique of working backwards to identify the intervening cause process between two variables (George and Bennett, 2005). The paper traces back to the pre- and post-TFDI period to see and compare how and under what kind of learning contexts the TFDIs emerged and influenced the learning dynamics in two different case firms.

Both case firms are lead companies in the Chinese wind energy industry. Both case firms have high innovation performance in terms of patent application and new product development compared with other Chinese wind energy companies. Both case firms have TFDI in European countries, with the clear intention of acquiring technological innovation capability. Both case firms’ TFDIs became the milestone marking the start of the Chinese wind energy companies’ internationalisation for technology and innovation. Nevertheless, these two companies present very different learning processes. One is the pioneer, starting from scratch in the very early stages of Chinese wind energy industry, while the other is a latecomer joining in when the wind energy industry was becoming mature. The paper intends to see whether the TFDIs play different roles in the pioneer and latecomer’s learning processes for innovation. If they are different, how and why?

The pioneer EMNC is Xinjiang Goldwind Science and Technology Co., Ltd. Goldwind is a leading and pioneering wind energy company, established in 1998 as a spin-off from a public research institution which had started a wind energy project in 1988. It has been a pioneer in the Chinese wind energy industry and is now the biggest wind turbine company in China. The company has operations in six countries, including a manufacturing factory in Germany. It has two headquarters in China and one each in the USA, Germany and Australia. Goldwind has one R&D centre in China and one in Germany, which was acquired in 2008 through TFDI.

The latecomer EMNC is Envision Energy Co., Ltd. It was established in 2007 as a latecomer. It built up a global innovation centre in Denmark in 2008, right after its establishment. Four years later, Envision’s number of patent applications has reached the highest in China. It is now a key player in the Chinese wind energy industry, characterised by its smart energy solution, which integrates information technologies and energy technologies. The company now has one R&D centre in Denmark, two in the USA, one in Japan, two in China and one manufacturing plant and one sales office in China. The Danish R&D centre is Envision’s only international centre for wind turbine R&D.

This paper used multiple data sources to search for more accurate information and improve the robustness of the results (Jick, 1979). Data sources used by this paper include semi-structured interviews, annual reports, internal documents, industrial reports, policy documents, press news and academic publications on the case firms. The interviews with CEOs and top managers were conducted in both the headquarters in Beijing and Shanghai, China, as well as in the R&D centres in Germany and Denmark in 2013. All interviews, except one in Germany, were recorded and transcript was made under a confidentiality agreement. The subsequent interviews with the two companies’ suppliers and industrial experts were conducted in China in 2014 and 2015. These interviews were not recorded, because of the interviewees’ reluctance to be recorded.

4. Identifying the roles of TFDIs

In this section, the paper first summarises the learning processes in the two cases and trace the learning dynamics in the pre- and post-TFDI period. Then the paper investigates how the TFDIs influenced the learning dynamics and identify the roles of the TFDIs in the learning processes of the two case firms.
4.1 The pioneer EMNC – Goldwind

4.1.1 The learning dynamics of the pioneer EMNC’s accumulative learning process (1988–present). Goldwind is the pioneer in the Chinese wind energy industry. It started from running a small wind farm donated by an international donor in the late 1980s. In the 1990s, Goldwind imported a 600 kW wind turbine from a German company Jacobs and started to build up production capacity based on imitation. Until 2002, Goldwind had accumulated a production capacity of 200 units of 600 kW–750 kW wind turbines per year. In 2003, Goldwind made a strategic decision to focus only on permanent magnet direct drive (PMDD) technology and started to look for foreign design technology suppliers. Through their previous partner in Jacobs, Goldwind linked up with another German company Vensys. Vensys was then a small wind turbine design studio with around 20 personnel specialised in PMDD wind turbine design and licensing worldwide. In the same year, Goldwind was granted Vensys’ licence of the 1.2 MW model and started to co-develop and test production in the second year. Just a year later, Goldwind started commercial production of the 1.2 MW wind turbine.

Goldwind’s successful commercialisation of Vensys’ design encouraged both sides towards further long-term collaboration. To Goldwind, the licenced Vensys technology helped Goldwind to exploit and further enhance its production capacity and technology. To Vensys, licensing posed risks of IPR infringements and provided only limited financial benefit. At the same time, selling the PMDD technology, which needs rare earth resources for construction, to the Chinese firm is strategically sensible, as China is one of the few countries to have access to rare earth resources, whereas other countries – such as Germany – struggle to access rare earth resources. It was much more beneficial for Vensys to have a long-term collaborator who could commercialise its design on a big scale. In collaboration with Goldwind, Vensys gets access to the Chinese production capacity, market and contacts. Based on the consensus on the long-term mutual benefit, in 2006 Goldwind built a factory alongside Vensys to further enhance their collaboration on the 1.5 MW model. The licensing and collaboration for production greatly improved Goldwind’s technological capability. In 2008, Goldwind bought a 70 per cent share in Vensys and in 2009, Goldwind developed the 2.5 MW model and the 3.0 MW model together with Vensys. In 2013, Goldwind accomplished the R&D and test production of the 6.0 MW model. It can be clearly seen after the 2006 FDI and the 2008 TFDI that Goldwind’s patent applications and new product launches were accelerated. By 2013 Goldwind had become the third largest wind energy company in China and had twice been selected as one of “the 50 most innovative companies in the world” by MIT (Figure 2).

![Figure 2. Number of patent applications and new product launches by Goldwind (1988–2013)](image)

Source: Goldwind website, annual reports and European Patent Office
To understand the learning dynamics, the author investigates the knowledge, linkages and activities of Goldwind’s learning process for innovation during the different stages between 1988 and 2013 (see Table I).

Analysing the change of the knowledge, linkages, and activities, one can clearly see the learning dynamics of Goldwind’s learning process in the pre- and post-TFDI period.

First, Goldwind's internal knowledge has been incrementally upgraded. The externally sought knowledge of previous stage became the internal knowledge of the next stage. Once the external knowledge was integrated into Goldwind’s internal system, the company started to seek more complex and sophisticated knowledge. Thus, knowledge has kept being upgraded and translated into innovation in the form of patents and new products.

Second, the linkage with international design technology suppliers is a long-term continual relationship with the same senior managers. It seems to be different relationships with different

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<td><strong>Internal knowledge</strong></td>
<td>Knowledge mainly about local wind resources</td>
<td>Knowledge about managing wind farms in different domestic locations Knowledge about wind turbine assembly Knowledge about large-scale manufacturing of low-volume turbines</td>
<td>Knowledge about managing wind farms in different international locations Knowledge about large-scale manufacturing of high-volume turbines Certain knowledge about wind turbine design</td>
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<td><strong>External knowledge to be sought</strong></td>
<td>Knowledge about operating wind turbines Knowledge about managing wind farms</td>
<td>Knowledge about large-scale manufacturing of high-volume turbine Knowledge about wind turbine design</td>
<td>Knowledge about advanced manufacturing Knowledge about advanced wind turbine design</td>
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<td><strong>Linkages</strong></td>
<td>Local research institution (Xinjiang Institute of Technology, Xinjiang Institute for Energy) International equipment donor (Bonus, Jacobs, RePower)</td>
<td>International technology supplier (Vensys) International component suppliers (Siemens)</td>
<td>International component suppliers (GH, Aerodyn, Siemens) International research institutions and universities (Fachnachschule Saarbrucken)</td>
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<td>Domestic research institutions and universities (Xinjiang Institute for Wind Energy, CAS, Tsinghua University) Domestic component supplier (Huiteng, Chongqing, Nanjing, Dalian, Nanyang, Zhuzhou, Lanzhou, Yongji, Xiangtang)</td>
<td>Domestic research institutions and universities (Zhejiang University, Tsinghua University, China Research Institute for Power Electric) Domestic component suppliers (Huiteng, Zhongfù, LM, Nanjing, Chongqing, Yongji, Zhuzhou)</td>
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<tr>
<td><strong>Activities (main ones)</strong></td>
<td>Installing international donor’s product Human mobility from local research institution Visiting international wind farm and international equipment manufacturer Participating in international industry fairs Visiting and training in domestic research institution</td>
<td>Importing advanced countries’ products and designs Human mobility from domestic research institutions and competitors Visiting and training in international technology suppliers’ location</td>
<td>Collaboration with international technology and component suppliers and knowledge infrastructures for co-development of new product Collaborating with domestic research institutions and universities Human mobility from domestic and international competitors and collaborators Training organised by domestic industrial association and firm’s international R&amp;D centre</td>
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companies (Jacob, RePower, then Vensys) but, actually, Goldwind has kept collaborating with the same senior managers when they successively joined these companies. This linkage has become increasingly strong, from a relationship for licensing in the early stages, to collaboration for co-developing and producing, and then to shared ownership. Noticeably, the linkages that Goldwind has had over time include many other domestic and international component suppliers and knowledge suppliers. A bigger number of domestic and international knowledge and technology suppliers joined in during the later stages than in the early stages.

Third, the activities for learning become more intense and broader over time. The mode of knowledge transfer changed from one directional knowledge transfer without formal relationship (e.g. visiting international manufacturers and participating in industry fairs) in the early stages, to knowledge transfer with formal relationship (e.g. importing products, training at international collaborators’ locations), then to the most interactive learning with formal relationship at the later stages. The sources of learning extended from one domestic research institution to more and more technology and knowledge sources, such as domestic and international knowledge infrastructures, technology suppliers, component suppliers and competitors.

These characteristics of the learning dynamics reflect the accumulative nature of the learning process in Goldwind.

4.1.2 TFDI as an accelerator in the accumulative learning process for innovation. The paper argues that the TFDI of Goldwind in Vensys plays a role as an accelerator in their accumulative process of learning for innovation. Before conducting TFDI, Goldwind had spent 20 years transiting from “learning to produce” to “learning to produce efficiently” through imitating and revising engineering since the late 1980s. Goldwind had already accumulated production technology and large-scale production capacity for the 600 kW and 700 kW wind turbine model in 2002. But then the company started to move toward “learning to improve a product” and, further, to “learning to develop new products”. The 2003 Vensys’ licensing of the 1.2 MW model provided Goldwind with the opportunity of learning to develop new products. After co-developing and producing the 1.2 MW model in 2005 and the 1.5 MW model in 2006, Goldwind decided to further enhance their collaboration with Vensys. It built a factory near Vensys in 2006 and acquired the company in 2008. The 2006 FDI enhanced the collaboration by a commitment to the partnership. The 2008 TFDI enhanced the collaboration by shared ownership. Without the TFDI in Vensys, Goldwind might still have been able to develop their technological capability via licensing. But with TFDI, the learning process was speeded up.

The accelerator role of the TFDI in its learning process is verified by the interviews at both the Goldwind’s headquarters in Beijing and the subsidiary in Germany. In terms of Goldwind’s innovation strategy and internationalisation practice, the VP of Goldwind International commented:

Goldwind deployed a three-step innovation strategy: importing technology by licencing, co-developing product via collaboration, and integrating the two companies (Goldwind and Vensys) through merge and acquisition. The strategy was very successful. Goldwind’s first PMDD wind turbine are designed by Vensys [...] actually even nowadays, all the mainstream models are based on Vensys technology. Without investing in Vensys technology, we would not have been able to launch the PMDD product series so quickly. Without acquiring Vensys, it may take us longer time, let’s say 3 to 5 more years, to build up the same technological capability as we have today.

The Vensys senior manager, who had collaborated with Goldwind for over 15 years, commented:

Vensys has had collaboration with Goldwind for a long time. Operational, scientific, and design knowledge has been constantly flowing between the two firms [...] the quality in China side has been increased tremendously. Yet it cannot be said that this is due to the acquisition. Maybe it would have happened anyway because of the good cooperation we already had before [...] But if you ask about the difference before and after the acquisition, one example is that after the
acquisition Goldwind shortly mastered the gearless station technology. Another example is that Vensys started training and qualification of Chinese suppliers for Goldwind. It would not have happened without the M&A.

Evidently, the TFDI enhanced the collaboration between Goldwind and Vensys. It speeded up the learning process for innovation.

4.2 The latecomer EMNC – envision

4.2.1 The learning dynamics of the latecomer EMNC’s rapid learning process (2006–present).

Envision is a fast-growing newcomer in the Chinese wind energy industry. It was established in 2007. Right after its establishment, in 2008 the company built up an R&D centre in the greater Aarhus area in Denmark with the objective of developing “good and cheap” larger turbines for the global market. The major goal for Envision’s R&D centre in Denmark was to design “the future wind turbine”. In 2009, Envision successfully developed the world’s first 1.5 MW turbine with 87 m rotor blades. According to the informants at the Danish R&D centre, the companies’ technological level had reached between advanced and world-leading level in 2010, less than three years from its establishment. In 2012, the company launched the “game changer”, a 3.6 MW two-bladed rotor with partial pitch combined with direct drive technology, which saves costs on towers, foundations, nacelle, rotor, blades and transportation. It gives a reduction of approximately 8–10 per cent in the cost of energy. The two-bladed turbine has significant advantages in typhoon conditions in conjunction with revolutionary technologies in variable-pitch blades and carbon fibre shafts. Envision’s Danish R&D centre has installed most of the electrical components in a “box” outside or beside the turbine near the base. This enables Envision to reduce the cost of replacing a component by approximately 75 per cent. In the same year, Envision launched the world’s first 1.5 MW low-speed turbine with 93 m rotor blades, and in 2013 the world’s first 2.1 MW turbine with 110 m rotor blades and its own smart dual-mode electric drive chain technology. Envision is now the biggest offshore wind turbine manufacturer in China and the largest smart energy management company in the world (Figure 3).

To understand the learning dynamics, the author investigates the knowledge, linkages and activities of Envision’s learning process for innovation between 2007 and 2013 (see Table II).

Analysing the change of the knowledge, linkages, and activities, one can clearly see the learning dynamics of Envision’s learning process in the pre- and post-TFDI period.

![Figure 3](image-url)
First, Envision quickly built up an internal knowledge base by internationally sourced top managers and engineers with world-class knowledge and capabilities. At the beginning of its establishment, Envision had almost no accumulated internal knowledge about wind turbine manufacturing. Instead, what Envision had was the knowledge about the business opportunities in the wind energy industry and about where and how to find talent. The founder and CEO of Envision was an energy analyst and energy derivatives manager working in London before he started Envision. He has a great deal of knowledge about global energy markets and the development trends of the energy industry. He and his founding team, which consists of ten returnees, have a broad international network from which they know where and how to attract the top managers and engineers in the industry.

Second, Envision has had close linkage with the world’s leading wind energy clusters since the beginning of its establishment. Envision’s first group of employees was hired in Denmark, where the world’s leading wind energy cluster is located. The hiring of a former director of Gamesa’s office in Denmark was considered to be “a significant input to the decision of investing in Denmark”. Most of the personnel in Envision’s Danish R&D centre were recruited from the old network of key managers. Most of the personnel had previously worked for wind energy multinationals such as Vestas, Siemens, Gamesa and Suzlon. Starting with the excellent network in the world’s wind energy industry, Envision continued to develop its global network by collaborating with international, as well as domestic, component suppliers and knowledge suppliers. The great ambition of competing using technology, rather than low-cost labour, and the talent-orientated strategy have made Envision an attractive employer to domestic and international talent. It has also increased the legitimacy of Envision as a global player in the world’s wind energy industry.

Third, the learning activity started from and heavily depends on knowledge acquisition via human mobility from international and domestic wind energy clusters. The experienced key managers are the key resources for learning. They have not only knowledge about...
technology and industry but also a broad social network in the industry. As the Envision R&D director said, they are able to quickly build up R&D capability through their personal networks. After acquiring international talent, Envision encouraged international R&D centres to collaborate with domestic headquarters so as to transfer knowledge from international centres of excellence back home.

These characteristics of the learning dynamics reflect the rapid learning process in Envision.

4.2.2 TFDI as a starter in the rapid learning process for innovation. The paper argues that the role of TFDI in the learning process for innovation in Envision is like a starter which quickly built up its innovation capability from scratch. Envision rapidly built up its innovation capability via an aggressive internationalisation strategy. Shortly after the establishment of Envision, the company conducted TFDI in Denmark. Two years later, Envision launched its new product, the world’s first 1.5 MW turbine with 87 m rotor blades. Envision only spent less than three years building up capabilities for the whole process of wind turbine manufacturing, from design and protocol testing to large-scale production. All of this achievement depends highly on its talent development strategy of hiring internationally. Over 20 per cent of the company’s employees are foreigners and 60 per cent of employees have master’s or PhD degrees, which is not common among their competitors in China.

The Harvard Business Review (2014) commented on Envision’s talent development strategy:

The CEO and VP of Envision were convinced that many successful executives were searching for a greater sense of meaning in their work—a big and exciting idea to lead the industry forward—and that’s what they offered. They wanted employees who could work across cultures and who had an ‘open innovation’ mind-set, so they confined their recruiting to people with multinational experience. They took their search to global pockets of excellence: to Denmark for engineers with alternative-energy-innovation skills, to the United States for software architects, and to Japan for managers skilled in lean manufacturing techniques. They attracted an exceptionally diverse range of top performers.

The director of Envision’s Danish R&D centre said:

Our CEO started in Jiangyin with the first turbine. He had the vision about a global company from the very beginning and one of the means to make a global company from scratch was to be global […] he wanted to own technology by himself rather than buying licences from others […][He hired] experienced people, not the cheapest in the market, and the team was capable of designing turbines […] we jumped directly into something in between the advanced and world-leading situation (right after the establishment of the company).

The personal linkages of the international employees, particularly the key managers, have played big roles in the success of Envision’s TFDI as a powerful starter for its learning processes.

The informant of the Danish R&D centre commented:

I was a colleague of our current director and he hired me when he joined Envision […] a lot of us [the managers and engineers in the Envision Danish R&D centre] are employed through the old network […] that is, people knowing people and knowing somebody who would like to try something else. And that created a team [later] […] [Having a long experience of working in the world’s lead wind energy companies] our (Danish) director was able to build a team quickly.

Evidently, the TFDI started the learning process for innovation in Envision.

5. Contextual theorising the learning processes and the roles of the TFDIs
In this section, the paper first analyses the learning context of the two case firms, which is the production and innovation capability building process of the Chinese wind energy industry. Then the paper contextually theorises the patterns of learning process for innovation in the two case firms and the roles of the TFDIs.
5.1 The learning context: the production an innovation capability-building process of Chinese wind energy industry

The Chinese wind energy industry experienced three capability-building stages. The first was the self-closed indigenous development stage from the late 1980s to 1997. This started from running small-scale experimental projects supported by public investment and international aid. Chinese wind energy companies accumulated a basic knowledge of managing wind farms but did not successfully attain manufacturing and design knowledge because of their weak absorptive capacity, which disabled advanced knowledge accumulation from international donors (Wu, 1997). The second is the imitating and collaborating stage from 1997 to 2007, which started with reverse engineering based on imported wind turbines and then involved joint ventures and collaboration with MNCs investing in China. In the late 1990s and early 2000s, firms began to initiate their own manufacturing of turbines, partly because turbines grew in size, making them inefficient to transport by sea, and partly because of a 70 per cent local content requirement stipulated in sectoral public procurement legislation from 2004 (Lema et al., 2011). The take-off of the domestic Chinese wind energy industry occurred in this period, a phase of the Chinese industrial capability-building and strategy which was concerned with the “breakthrough” from production to innovation (Altenburg et al., 2008). It coincided with the strategy of “indigenous innovation” (zizhu chuangxin) formulated by the Communist Party of China in 2005 (Gu and Lundvall, 2006) and incorporated into the then five-year plan (Lazonick and Li, 2013). It was further fuelled by the National Mid-and-long-term Science and Technology Development Plan (2006–2020), in which the research and development of large-scale wind energy facilities were given high priority (Gu et al., 2009). There was a range of policy changes on both the demand side and supply side in the mid-2000s, which created a big push for growth and technological learning. Rapid growth created space for the build-up of R&D departments within the leading manufacturers. Over time, some of the leading firms gained capabilities for engaging creatively with licensed designs in order to tweak them for cost reductions and small improvements. Ultimately, these firms gained capabilities to produce turbines without licences for architectural designs, based on blueprints developed in house. In this stage, the Chinese wind energy industry built up its production capability and gained a certain level of innovation capability. The third stage is the internationalisation of R&D stage, from 2008 to the present. This is an extension of the second stage that has ultimately led firms to further develop technological linkages to leading firms and institutions outside China, by means ranging from contracts for R&D services to technology-seeking acquisitions and Greenfield establishment of R&D units in Europe and the USA. In this stage, the companies aggressively conducted TFDI for acquiring core technologies to improve their innovation capability based on their manufacturing knowledge and capacity (Curran et al., 2017). The Chinese wind energy industry has fundamentally increased its competitiveness, as demonstrated by a number of technological parameters including turbine size, design, reliability and the cost and development of specialised models for different conditions, wind-speeds, altitudes, temperatures and points of installation (e.g. onshore or offshore). By 2013, China had attained the world’s highest-installed wind energy capacity and became the third-biggest investor in wind energy R&D.

5.2 Understanding the case firms’ patterns of learning process in their learning context

The two cases present two different patterns of learning process for innovation. The paper uses two metaphors to name the two patterns, they are the Glider model of the pioneer EMNC and the Helicopter model of the latecomer EMNC.

A glider horizontally takes off with the aid of wind. It does not depend on an engine. The take-off trajectory is long. Like a glider, Goldwind, as a pioneer, started its learning
process for innovation with no in-house R&D capacity (the engine) but with the aid of
imitating and revise engineering foreign products (the wind). It took the company almost
twenty years before the first new-to-the-world innovation happened. It is like a glider slowly
and gradually takes off to reach a certain height. The Glider model of Goldwind’s learning
process for innovation reflects the learning context of China in the 1980s and 1990s when
self-closed low level development and imitation of foreign technology were the mainstream
in the wind energy industry.

A helicopter vertically takes off with an engine. The take-off process is short. Like a
helicopter, Envision, as a latecomer, started its learning process for innovation with an
in-house R&D capacity (the engine) right after its establishment. It just took the company
one year before launching its first new-to-the-world innovation. It is like a helicopter takes a
short time to rise to a certain height. The Helicopter model of Envision reflects the much
stronger capability of the Chinese wind energy industry in 2007 to 2008 that enables
Envision to quickly acquire production capacity in the domestic market and give confidence
and incentives to international R&D personnel to join in.

5.3 Understanding the roles of case firm’s TFDIs in their learning context
Putting the two case EMNCs’ learning processes against the contextual background of the
Chinese wind energy industry capability building (see Figure 4), one can clearly see the
difference: Goldwind is a pioneer and incrementally builds up its innovation capability all
the way along the capability building of the industry, while Envision is a latecomer in the
industry but catches up very fast.

The comparison of the learning context in relation to the firms’ establishment and TFDI
time are summarised in Table III.

Based on the comparison of the learning context of the two case firms’ learning
processes, the paper comes up with the arguments as follows.

First, to the pioneer EMNC, who has accumulated production capacity and technology
since the early stage of the domestic industry, TFDI is an accelerator to boost the firm’s
innovation by seeking the design technology abroad and exploiting its already-possessed
production capacity and technology in the company.

Goldwind has taken 20 years to gradually accumulate production capacity and
technology. The 20-year-long process is a process of both domestically and internationally
building linkages based on reciprocity, integrating new knowledge based on absorptive

Source: China Wind Power Outlook 2014, company annual report, industrial report and the
European Patent Office
capacity and seeking new knowledge based on complementarity. Goldwind’s accumulative capability building is not an isolated process of its own but an inseparable part of the capability building in the Chinese wind energy industry. The increased quantity and quality of the domestic wind energy design companies, component suppliers, universities and research institutes provided a better learning context in which knowledge seeking became easier and quicker. The enhanced domestic industrial capability also gave confidence to advanced country incumbents to collaborate with the EMNC. The accelerator role of Goldwind’s TFDI should be understood under the condition of the internal availability of production capacity and technology which were accumulated with the support of the capability building in the domestic wind energy industry.

Second, to the latecomer EMNC, who was just established when the domestic industry has built up certain levels of production and innovation capability, TFDI is the starter for the firm to quickly acquire design technology internationally and exploiting the production capacity and technology that are not developed within the firm but acquired domestically. The domestic markets fast growth is also an important factor that attracts international managers to join in the game.

Unlike Goldwind, Envision established its production and innovation capability within just a few years. Envision did TFDI to set up an R&D centre in 2008 which is one year after its establishment in 2007. It quickly built up innovation capability via hiring experienced top managers and engineers who have had long experiences of working in top international players such as Gamesa, Siemens, Vestas, etc. A frequently mentioned reason why the top managers are willing to join Envision is “being part of the big thing” which refers to the great opportunity in the Chinese wind energy industry. Such opportunity had never been so evident when China’s new installed wind energy capacity grew 147 per cent in 2007 and 108 per cent in 2008 (China Wind Power Outlook 2013). At the same time, Envision acquired production capacity and technology from the domestic market. Most of Envision’s components were outsourced to the co-located domestic companies. Envision shortly established its production and innovation capability by leveraging the local production capacity and technology on the one hand and international
innovation capability on the other. The TFDI started its innovation activities. The starter role of Envision’s TFDI should be understood in the context of the external availability of the production capacity and technology as well as the great opportunity in the Chinese wind energy market.

6. Discussion

6.1 Contribution to the learning-based view

The learning-based view represented by the LLL model in IB research provides an effective framework for understanding the EMNCs’ accelerated internationalisation. Nevertheless, it is relatively weak for understanding why TFDI emerges at a certain time and place. The dynamic and contextual framework of this paper which encompasses learning dynamics and learning context, however, strengthens the learning-based view in two ways.

First, the absorptive capacity, technology complementarity and relational reciprocity in the learning dynamics should not be ignored in the learning-based view when answering the question when TFDI tends to happen. The reasons why Goldwind did not do TFDI earlier in the 1990s are twofold. One the one hand, Goldwind did not have the absorptive capacity to digest any sophisticated design technology thanks to the big technology gap. On the other hand, foreign companies in advanced countries were reluctant to share design technology and collaborate on joint R&D when they saw no comparable return. Only after almost 20 years when Goldwind had accumulated noticeable absorptive capacity, its production capacity and technology are complementary to the foreign counterpart, and its offer is reciprocal, were they able to use TFDI to acquire Vensys’ design technology and the latter were willing to trade. The inclusion of the absorptive capacity, technology complementarity and relational reciprocity in the learning dynamics of our analytical framework increases the explanatory power of the learning-based view about when TFDIs may happen.

Second, the learning context, that is the production and innovation capability building in the domestic industry, is critical for answering the question why outward TFDI happens at a certain place instead of elsewhere. It is also critical for understanding the extreme case of accelerated internationalisation – the emergence of the born-global EMNCs – which the LLL model has difficulty to explain. The emergence of the TFDI of Envision is right after the establishment of the company in Yangzi Delta. The rapid establishment of both the firm and its in-house R&D capacity is embedded in the context of the considerable domestic production capacity, mature renewable energy cluster in Yangzi Delta and the fast-growing Chinese wind energy market. It is difficult to imagine Envision and its TFDI would emerge in a country with weak industrial base. The inclusion of the learning context in our analytical framework increases the explanatory power of the learning-based view about where FDIs may happen.

6.2 Implication to the FSA/CSA discourse

In terms of the mechanism of firm’s internationalisation, it has been widely discussed about the FSAs and CSAs for EMNCs. Recent FSA/CSA discourse has two main arguments. One argument is that EMNCs do not possess FSAs when going global. Instead they leverage their home country CSAs such as low labour cost, natural resources, domestic market, etc. The other argument is that EMNCs do possess FSAs that are different from the conventional AMNCs’ FSAs. They are not cutting-edge technologies but the capabilities to develop good enough products with reasonable price which suit to the special needs of customers in their local markets (Ramamurti and Singh, 2009; Govindarajan and Ramamurti, 2011; Ramamurti, 2012). The paper’s findings actually support both arguments but with distinctive differences.

The pioneer EMNC did possess FSA ex ante that is the production capacity and technology which are accumulated in the firm over years by imitating and revise engineering foreign
product for domestic market. Noticeably, the pioneer EMNC has never been part of the global production networks nor global value chains that are dominated by AMNCs. This is different from the existing literatures which argue that the EMNCs’ FSAs are gradually accumulated through participating global production network and global value chain through OEM, ODM, OBM, joint venture and in-licensing (Simonin, 2004; Child and Rodrigues, 2005; Bonaglia et al., 2007; Luo and Tung, 2007). Nevertheless, even the case firm did not directly benefit from global production network when it conducted TFDI, it did indirectly benefit from their supplier’s involvement in the global production network.

The latecomer EMNC did not possess FSA ex ante when conducting outward TFDI. Instead, they leverage the home country CSA that is the production capacity and technology which are accumulated in the domestic industries. Most of the latecomer firm’s components were outsourced to the co-located domestic suppliers. The reason why this firm is located in Jiangyin is because the Yangzi Delta has a renewable energy cluster where the suppliers aggregate together. This is different from conventional developing country CSA such as cheap labour and natural resources. At the time of the firm’s establishment, cheap labour was still the main comparative advantage of China compared with that of nowadays. But it was not only the cheap labour factor that convinced the world-class top managers and engineers in advanced countries to transfer knowledge and technology for innovation, it was also the capacity and technology of rapid scaling-up production that the country accumulated by being the world’s factory.

In terms of the patterns of learning process for innovation, the Glider model takes place when the company does not possess FSA ex ante nor the home country possess CSA in production capacity and technology. The company needs to accumulate FSA from scratch with the aid of internationally imitated and then acquired knowledge and technology. The Helicopter model takes place when the home country possesses CSA in production capacity and technology. The company can quickly acquire both domestic production capacity and technology together with international design knowledge and technology to generate innovation.

7. Conclusions
This paper investigates and explains how and why in the same industry of the same country, different EMNCs presents different patterns of learning for innovation and their TFDIs play different roles. It develops a dynamic and contextual analytical framework with a learning-based view for understanding how and why TFDI emerged and influences EMNCs’ learning process for innovation. The framework includes the learning dynamics (the change in knowledge, linkage and activities of the EMNCs) and learning context (the domestic industry’s production and innovation capability building). Based on this framework, two different patterns of learning process for innovation and two different roles of TFDI are identified in the case study.

The pioneer EMNC’s learning process is summarised as a Glider model (see Figure 5). In the early stage, the firm’s learning process goes slowly and gradually. The firm does not have in-house R&D capacity but depends on imitating foreign technologies and revise engineering foreign products. In much later stage, when the firm has already accumulated FSA – production capacity and technology – it undertakes TFDI. Different from the existing literatures, the FSA that the pioneer possessed was accumulated in the firm without participating the AMNC-dominated global production network. The success of the TFDI relies on the absorptive capacity of the EMNC, the complementarity between the firm’s production capacity and technology and its foreign counterparts’ design technology as well as the reciprocity of the relationship. The firm uses TFDI as an accelerator to boost its innovation by seeking the design technology abroad and by exploiting its already-possessed production capacity and technology in the company.
The latecomer EMNC’s learning process is identified as a Helicopter model (see Figure 6). The firm’s learning process goes quickly through acquiring production capacity in the domestic market and international R&D capacity abroad almost at the same time. In this case, the firm quickly accomplished its domestic capability building by taking use of the home country CSA. Noticeably, this home country CSA is not the conventional cheap labour nor natural resources but the production capacity and technology that are accumulated in the domestic industry over years. At the same time the firm conducts TFDI which becomes a starter in the firm’s learning process for innovation. The success of the helicopter-type learning process and the success of the fast TFDI can be partially attributed to its timing when Chinese domestic wind energy market boomed and production capacity built. In this circumstance, the internationally acquired R&D capacity becomes the strong engine that drives the soar of innovation.

Although the Glider model is much slower than the Helicopter model, it is more organic. The knowledge and technology, which are first imitated and later acquired, are gradually integrated into the internal system of the company overtime by trial and error. The Helicopter model is more mechanical than the Glider model. Since production capacity/technology and design technology are both externally acquired (from domestic market and international market, respectively), it is expected to be more difficult to integrate together into the internal system of the company at the same time. The Helicopter model faces the challenge of internal embeddedness to succeed (Narula, 2016). For EMNCs who wants to use the Helicopter model to rapidly gain production and innovation capability, cross-cultural management and integration management are crucial to practitioners.
The propensity of reaching global knowledge pool via TFDI depends on the capabilities of the EMNCs to identify and to attract the foreign collaborators, as well as the capabilities to maintain and enhance the international collaboration. These capabilities are related to firms’ technological resources, human resources, network resources, international experiences, and so on so forth. Such capabilities can either be gradually accumulated within the firm or be quickly acquired from the domestic industry. No matter which way to be taken, the domestic industrial capability building is a prerequisite. Thus, the paper argues that for emerging countries with ambitions to explore the global knowledge and technology pool, domestic industries’ capability building should not be overlooked by policy makers.

The two learning process models and the two roles of TFDIs are drawn upon the limited number of case studies in a specific industry. The wind energy industry is a highly modularised industry. Technology is rather mature and the change is relatively slow. Designs and blueprints can be purchased and consultants can help to set up the production line. The specific characteristics of the industry enable fast catch-up. It might not happen in other industries. In addition, the rapid development of the Chinese wind energy industry has been driven by the big domestic market as well as strong governments’ industrial policies. One should be very careful when applying these conclusions to other industries where market is small and state involvement is limited. Future research should investigate more cases in broader sectoral and geographic scope to test the validity of the models and also to identify new learning process models in different contexts.

The paper’s dynamic and conceptual framework has the potential to be applied to other manufacturing industries of which production and innovation have been typically distributed in emerging countries and advanced countries, respectively.

References


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Technological innovation as a source of Chinese multinationals’ firm-specific advantages and internationalization

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Abstract

Purpose – The purpose of this paper is to examine how innovation-related firm-specific ownership advantage (FSA) plays a role in developing the competitive advantage of Chinese multinationals when they internationalize.

Design/methodology/approach – Based on a review of the existing literature concerning foreign direct investment by emerging economy multinational enterprises (EMNEs), the authors identify that numerous studies explain this phenomenon on the basis of their location-bound country-specific advantages. However, such views do not fully explain the key underlying factors behind the rapid rise and success of many EMNEs as these firms rapidly internationalize and develop global competitiveness in developed markets. The current research explores three leading innovative Chinese EMNEs from the engineering sector: BYD, Sany Heavy Industry and CSR China.

Findings – The authors find that EMNEs’ knowledge, and particularly their innovation-creating technological knowledge, has contributed greatly to their successful internationalization. The illustrative cases show that the three firms have now moved beyond the infant to the mature stage of EMNE development through developing their technological knowledge in order to realize FSA through internationalization. This study helps in contributing fresh reflections to the continuing debate concerning the causes of internationalization and global competitive development by EMNEs and the role of their FSAs in these processes.

Originality/value – This is one of the few studies which have demonstrated that some of the EMNEs do possess firms’ specific advantage which helps explain their innovative capabilities, competitive advantages and subsequent internationalization patterns.

Keywords Emerging market multinationals, Technological innovation, Outward foreign direct investment (OFDI), Internationalization, Firm-specific advantages, Country-specific advantages, China

Paper type Research paper

1. Introduction

During the last decade, international business (IB) and strategy scholars have paid increasing attention to understanding the emergence and rapid growth of emerging market multinational enterprises (EMNEs) and their outward foreign direct investment (OFDI) (Buckley et al., 2007; Buckley, 2018; Deng et al., 2017; Guillen and Garcia-Canal, 2013; Meyer and Thaijongrak, 2013; Huang et al., 2017; Li, Cui, and Lu, 2017; Li, Guo, and Xu, 2017; Luo and Tung, 2018). Most existing research has focused on understanding the reasons underlying the rapid rise, internationalization and competitive successes of EMNEs, including Chinese EMNEs (Buckley, 2018; Deng, 2012, 2013; Deng et al., 2017; Meyer and...
Some scholars argue that the ownership, location and internalization advantages (OLI) paradigm provides a theoretical basis for EMNEs’ emergence and their internationalization behavior (Dunning, 2006; Narula, 2006, 2012). This stream of research links EMNEs’ international expansion to the type of firm-specific advantage (FSA) that is predominantly associated with most developed economy multinational enterprises (DMNEs), such as reputational resources and innovative technologies.

However, others argue that the conventional OLI paradigm does not fully account for EMNEs’ OFDI behavior (e.g. Meyer and Thajjongrak, 2013; Moon and Roehl, 2001; Ramamurti, 2012; Luo and Zhang, 2016). More specifically, such scholars argue that EMNEs’ motivations and internationalization processes differ from those of traditional DMNEs; and therefore, that there is a need to revise conventional IB theoretical frameworks. Contributions to this view include the creation of the linkage-leverage-learning (LLL) (Mathews, 2006, 2017; Si et al., 2013), springboard (Luo and Tung, 2007, 2018) and bundling (Hennart, 2009, 2012) frameworks. Mathews (2006), for example, argues that the OLI paradigm is not relevant to the circumstances facing most EMNEs since few possess any meaningful ownership advantages; EMNEs, therefore, use internationalization as a rapid means of gaining access to assets, resources and capabilities which are not readily available in their home markets (e.g. Mathews, 2002, 2006, 2017). Luo and Tung (2007) contend that EMNEs use rapid internationalization as a well thought-out and recursive strategy that helps to overcome the liability of late foreign market entry and a lack of strategic asset ownership. From the complementarity perspective, Hennart (2009) asserts that EMNEs can achieve new competitive advantages by bundling their FSAs with complementary resources in overseas locations. Taken together, these divergent views regarding EMNEs’ internationalization behavior raise two important questions: Do EMNEs possess FSAs? If so what is the nature of those FSAs?

This research partly accepts the critiques put forward by some of post-OLI theories concerning EMNEs mentioned above (e.g. Mathews, 2006, 2017; Luo and Tung, 2007; Hennart, 2009). It reviews the existing literature from the EMNEs’ country-specific advantage (CSA) as well as the FSA perspectives. Regarding FSAs, we examine EMNEs’ capacity for internationalization and competitiveness development. We do so by making use of three leading Chinese MNEs (i.e. BYD, Sany Heavy Industry and CSR China) in order to examine the preceding questions. We believe that this investigation offers a valuable reference for future studies of EMNEs’ internationalization. Our findings regarding Chinese EMNEs’ ownership advantages and their impact on these firms’ rapid expansion into foreign markets contribute new reflections to the theoretical debate on the causes of their OFDI.

This paper contributes to existing research on EMNEs by arguing that the FSAs of some Chinese EMNEs are not contingent on its unique, emerging market context. Our case study findings show that their FSAs seem to align with those enjoyed by traditional DMNEs. Thus, this study provides important insights into the way in which innovative EMNEs, particularly those from China are now developing FSAs which are becoming increasingly similar to those of DMNEs. We believe that, by so doing, it contributes to the EMNE literature regarding the motivation, rapid rise and home-based advantages of latecomer firms, and on the extent to which existing theories explain OFDI by EMNEs. Our study also bridges the gap between EMNE internationalization and traditional IB theories, based on our analysis of the three chosen companies from China and the unique way in which they are developing their FSAs.
The structure of the rest of the paper is as follows: first, we review the existing literature linking CSAs and FSAs to the internationalization of EMNEs (including those based in China). Second, we discuss our research context and methods. Third, we present our analysis of the three Chinese MNEs. We conclude with a discussion on the resultant insights into the internationalization of these EMNEs, their fueling by key FSAs and the resultant theoretical implications, current research limitations and suggested future research directions.

2. EMNEs and their internationalization

2.1 Do EMNEs internationalize to overcome ownership disadvantages at home?

Recent studies on EMNEs’ internationalization argue that EMNEs may internationalize in order to overcome their ownership disadvantages (see Mathews, 2002; Luo and Tung, 2007, 2018). In other words, EMNEs can realize their existing ownership advantages through internationalization and they can develop new FSAs by acquiring strategic assets in developed markets. Advocates of this view argue that EMNEs’ internationalization cannot be fully explained by existing IB theories such as OLI (Dunning, 1988a, 1995, 2000), which were developed mainly in the context of DMNEs.

More recent theoretical contributions take into account the problem that EMNEs (at least initially) lack FSAs, which asset-augmenting OFDI in developed countries and copycat product development and knowledge-acquisition strategies can help to provide (Ramamurti, 2012; Luo et al., 2010). Mathews’ (2006) pioneering work contributed to the development of this view by putting forward an LLL framework. He predicted that latecomer EMNEs’ internationalization is typically driven by the desire to overcome ownership disadvantages at home by acquiring strategic assets, resources and capabilities abroad through an accelerated process of internationalization. Thus, EMNEs’ learning and network development in foreign markets plays an important role in expediting their internationalization and the development of internal capabilities which become their new FSAs (cf. Mathews, 2017).

Others argue that EMNEs use of international expansion serves as a springboard enabling them to obtain critical resources by aggressively acquiring strategic assets in developed markets; global alliances as well as mergers and acquisitions can be used as a means to this end (Luo and Tung, 2007, 2018; Gubbi et al., 2010). EMNEs’ intangible resource-seeking OFDI in developed markets allows them to gain access to complementary local resources (Hennart, 2009). Luo and Tung (2007, p. 481), for example, argue that EMNEs often undertake acquisitions in order to gain “strategic resources and reduce their institutional and market constraints at home” and “overcome their latecomer disadvantage in the global stage.”

Taken together, the above views regarding EMNEs’ internationalization assume that most EMNEs initially lack FSAs. The use of OFDI can help them to develop FSAs, by overcoming the liabilities of foreignness, relative inexperience and their emerging market countries of origin (Chang et al., 2009; Madhok and Keyhani, 2012; Sun et al., 2012).

2.2 Do EMNEs internationalize in order to exploit home-based CSAs abroad?

A number of scholars argue that EMNEs possess few ownership-related FSAs, but that conversely, many enjoy a range of CSAs that enable them to benefit considerably from internationalization (e.g. Bhaumik et al., 2016; Guillen and Garcia-Canal, 2013; Hennart, 2012; Kotabe et al., 2011; Pananond, 2013). For example, Rugman (2008b, p. 17) maintains that “MNEs from emerging markets tend to lack [the] advanced managerial skills in internal knowledge generation and in […]systems integration required to develop FSAs […] [But some may] […] enjoy economies of scale based on home country CSAs in cheap labour
(even cheap skilled labour as in India’s case), natural resources and/or possibly cheap money (as in China’s case)."

In a similar vein, Dunning et al. (2008, p. 177) contend that although “emerging market [MNEs] rarely have the firm-specific advantages [needed] to ensure success in their outward FDI. […] they do appear to have […] a variety of home-country-specific advantages that they are able to internalise and use outside their national boundaries.” It follows from these views that EMNEs’ rapid internationalization behavior can be explained in terms of the exploitation of home-based CSAs, including low-cost labor, finance, favorable government policy, managerial talent and skills, and natural resources, despite their relative lack of traditional FSAs (e.g. Bhaumik et al., 2010; Gaffney et al., 2013; Guillen and Garcia-Canal, 2009; Mathews, 2002, 2006; Ramamurti, 2012; Rugman, 2009).

2.3 Is EMNEs’ internationalization based on their non-traditional FSAs?
Some scholars argue that EMNEs should be treated as a special case. This is because they possess unique FSAs such as organizational flexibility, coordination of diverse knowledge and possession of operational knowledge, developed as coping strategies in their weak domestic environments which are often characterized by institutional weaknesses and voids (Khanna and Palepu, 1997, 2000; Mair et al., 2012; Madhok and Keyhani, 2012). EMNEs are, therefore, quite cost efficient compared to DMNEs, while their ability to restructure processes efficiently and their ambidextrous capabilities also give them advantages compared to DMNEs (Luo and Rui, 2009; Madhok and Keyhani, 2012; Luo and Tung, 2018). Some emerging market firms have gained advantages over conventional DMNEs by leveraging their unique experience in managing diverse businesses and highly diversified strategic business portfolios. EMNEs also rely more on their home country-based social networks and government support in order to offset weak FSAs in the areas of technological know-how and global brand recognition, relative to many DMNEs (Gammeltoft, Barnard and Madhok, 2010; Gubbi et al., 2010; Peng, 2012).

Other scholars have a slightly different view concerning EMNEs’ internationalization. They believe that many EMNEs move beyond copycat product development and knowledge acquisition strategies to develop non-mainstream FSAs (Luo et al., 2010). Such advantages could differ from those based on innovative products and global brand reputation which DMNEs often possess. EMNEs tend instead to capitalize on the distinctive CSAs that they build in response to their home market conditions (Mathews, 2006; Ramamurti, 2009). Such home-based advantages take a variety of forms, including EMNEs’ ability to deal effectively with adverse institutional environments (Buckley et al., 2007; Morck et al., 2008; Khanna and Palepu, 2000; Madhok and Keyhani, 2012), their privileged access to resources, markets and to key domestic institutions (Hennart, 2012; Cuervo-Cazurra and Genc, 2008; Peng, 2012), and their ability to make use of domestic social networks and relational assets (Manolova et al., 2010; Erdener and Shapiro, 2005; Yiu et al., 2007; Gammeltoft et al., 2010). EMNEs can employ these CSAs to develop a variety of distinctive FSAs, such as an enhanced understanding of emerging markets’ customer needs, an ability to supply products and services at very low cost, and a capacity to develop new, stripped-down products quickly and cheaply (Kumar and Chadha, 2009; Guillen and Garcia-Canal, 2009; Ramamurti, 2009, 2012; Govindarajan and Ramamurti, 2011). Some of these FSAs may depend on EMNEs’ location in particular countries of origin, whilst others are likely to be available to all EMNEs (Amighini et al., 2009).

2.4 Is there a missing element – EMNEs’ traditional FSAs?
It can be argued that each of the theoretical perspectives discussed above carries attendant difficulties in terms of explaining the competitive advantages, internationalization and OFDI behavior of EMNEs. First, the pursuit of FSA-augmenting OFDI by EMNEs should not be
taken to exclude the possibility that they already possess ownership advantages developed in their domestic markets (e.g. Anwar and Nguyen, 2011; Bhaumik et al., 2010; Bhaumik et al., 2016; Luo and Rui, 2009; Madhok and Keyhani, 2012). Ramamurti (2012, p. 42), for example, lends support to this view, maintaining that “[…] while there is considerable evidence that EMNEs venture abroad in search of valuable technologies or brands, it is quite another thing to argue that they so without ownership advantages ex ante.”

Where EMNEs lack FSAs resulting in ownership disadvantages (see Table I), it is difficult to “explain how firms that are going abroad to learn can, at the same time, successfully compete with their teachers” (Hennart, 2012, p. 171). For example, recent IB research reports on the rapid rise of some globally competitive Chinese EMNEs, including Haier (Child and Rodrigues, 2005; Kotabe and Kothari, 2016; Meyer, 2017), Huawei and ZTE (Fan, 2011) and many equally competitive MNEs based in other emerging economies (Boston Consulting Group, 2006/2014). These studies indicate that taking the view that these EMNEs’ lack FSAs makes it difficult to fully explain their rapid internationalization, and the role that OFDI plays in contributing toward the success of this process.

The argument that EMNEs’ internationalization is driven by the desire to exploit home country-based CSAs (see Table I) should not, indeed be taken to equate with the view that they lack FSAs. Many Chinese MNEs have, for example, become increasingly prominent players in global markets, despite the fierce competition that they face from their domestic and foreign rivals (Mathews, 2006) and strategic coupling with lead firms in global production networks (He et al., 2017). Moreover, it is difficult to defend the view that EMNEs enjoy unique access to particular CSAs. For example, some of their alleged cost advantages are also available to DMNEs that undertake direct investment in emerging market countries, where they are able to develop connections with local network partners (Wright et al., 2005; Khanna and Palepu, 2010). Some scholars also suggest that not all EMNEs are able to utilize CSAs fully although these firms are better in exploiting their CSAs than non-MNEs operating in their domestic markets (e.g. Bhaumik et al., 2016, p. 1).

Much of the extant analysis of Chinese MNEs suggest that most are neither innovative nor competitive, thus their advantages lie with their monopoly position in their protected home market (see e.g. Rugman, 2008a, b, 2009). It can be argued, however, that this view

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<td>EMNEs lack traditional FSAs</td>
<td>EMNEs often copy products and know-how of others</td>
<td>Asset-augmenting OFDI should not exclude the presence of possible ownership advantages</td>
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<td>EMNEs learn from overseas’ networks, and then improve capabilities</td>
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<th>Exploiting home country-based CSAs</th>
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<th>Problems</th>
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<td>EMNEs lack traditional FSAs</td>
<td>EMNEs’ exploitation of CSAs, e.g., low cost labor, managerial talent, cheap financial and natural resources</td>
<td>Possession of CSAs should not equate lacking FSAs</td>
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<th>Building non-traditional FSAs and exploiting distinctive CSAs</th>
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<td>EMNEs’ limited FSA</td>
<td>Ability to deal with opaque environment; access to key institutions; networks; and relational assets; monopoly access to resources; understanding of the emerging market customers</td>
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Table I. Existing views on EMNEs’ CSAs, FSAs and internationalization
does not provide a full picture of Chinese MNEs’ ownership advantages as other sources (such as the Boston Consulting Group, 2006/2014) indicate that a number of internationalizing Chinese MNEs own more dynamic and ambidextrous capabilities than Rugman’s views suggest (see Luo and Rui, 2009; Luo and Tung, 2018).

The belief that EMNEs internationalize in order to exploit their distinctive but non-traditional FSAs is also debatable, since some FSAs can be limited in value or even disadvantageous for EMNEs in certain circumstances. The widely assumed cost advantages attributed to EMNEs, for example, are likely to disappear over time as labor costs rise in leading emerging market countries such as China (Buckley, 2007). EMNEs’ institutional assets may also turn into disadvantages in some cases. For instance, the “distinctive cultural and institutional legacy” of China can actually “increase the liability of foreignness” as well as exacerbate the “liability of emergingness” (Madhok and Keyhani, 2012) where internationalizing Chinese firms tend “[...]to rely on close personal relationships in business transaction” (Child and Rodrigues, 2005, p. 385). Strong relationships with national governments can also disadvantage EMNEs (Peng, 2012) in cases where state intervention restricts their commercial freedom, or the entrepreneurially active leaders of internationalizing firms are removed by the state (Child and Rodrigues, 2005).

The availability of non-traditional FSAs, often derived from CSAs, may also be confined to location-bound ownership advantages which enable MNEs to “generate profits, but only in a specific location, or, to an extent, in similar locations” (Narula, 2012, p. 191). For example, the value of their home country-based institutional assets may be of little or no value when operating abroad in countries with markedly different institutional frameworks. Similarly, their privileged access to local resources in the home country context is unlikely to be internationally transferable (Narula, 2012).

Taking all of these criticisms into account, it appears that each of the arguments for building FSAs and exploiting CSAs during the course of EMNEs internationalization have their limitations. Importantly, none of the key literature has been able fully to explain the reasons underlying the rapid rise and success of many EMNEs. The limited discussion around EMNEs’ FSAs still assumes these are CSA-derived and location-bound (see Luo et al., 2010; Ramamurti, 2009; Buckley et al., 2008; Hennart, 2012), with the result that it is not easy to transfer them to overseas markets. We summarize the results of our overall literature review in Table I.

Surprisingly, much of the existing scholarly work does not see innovation capabilities as a source of the FSAs underlying EMNEs’ rapid internationalization. Perhaps, the lack of such a view may stem from the lack of extant empirical evidence regarding the internationalization of MNEs from emerging and developing economies.

The following sections set out the research context and methods underlying our study, followed by an analysis of the links between EMNEs’ FSAs and their internationalization drawing on illustrative case examples of three Chinese MNEs from the engineering sector.

3. Research context and methods
3.1 Research context
Local institutional factors can and undoubtedly do contribute directly to the development of FSAs owned by EMNEs, including those originating in China. For example, the multiple embeddedness of firms, with the backing of state institutions in China as well as the strategic assets that they acquire in developed foreign markets, can facilitate their innovative capability development and internationalization (Meyer et al., 2011). The role of the state appears to have been critical in supplying the required resources to Chinese firms, including capital, power in the domestic market and firm-specific information tools (Li et al., 2014; Luo et al., 2010). Sustained government support for the building of China’s national innovative capacity has also helped both state and privately owned businesses to develop
innovative capabilities, thus adding to their ability to acquire technological competences that may help in successful internationalization (Hu and Mathews, 2008; Xu and Meyer, 2013; Wang et al., 2012; He et al., 2017).

Some Chinese MNEs have entered international markets quite late, employing copycat product development and knowledge-acquisition strategies. However, others are now entering these markets as “first movers,” employing distinctive innovation-led strategies to develop their knowledge-based FSAs (Williamson and Yin, 2014; Ramamurti, 2012; Williamson et al., 2013). Some are using their growing innovation capabilities to develop FSAs that are “cost saving” (delivering existing products at lower cost and price), “frugal” (reducing the complexity and cost of a good and its production by removing non-essential features), “architectural” (finding innovative applications for existing technologies and products), and reverse innovation-based (selling low-cost products developed at home in developed country markets) (Zeng and Williamson, 2007; Radjou et al., 2012; Govindarajan and Ramamurti, 2011; Yu and Hang, 2011; Govindarajan and Trimble, 2012). Others are engaging in “grafting” innovation involving the acquisition of new and innovative firms, or delivering low-cost improvements in business models by changing their customer value proposition and services, profit formulae, key resources or production processes (Christensen, 2006; Benner and Tushman, 2003; Puranam et al., 2003; Feng et al., 2010).

The potential for Chinese MNEs to develop or acquire such knowledge-based FSAs can reflect their evolutionary development in conjunction with the levels of foreign expansion maturity that they have attained. A number of studies regarding this topic argue that as EMNEs move from “infant” to “adult” and “mature” stages of development, their resources and capabilities evolve, as do their sources of competitive advantage (Ramamurti and Singh, 2009; Ramamurti, 2009; Narula, 2012). Early reliance on their home country-based advantages shifts gradually to a significant emphasis on the development of FSAs, which may in turn become increasingly sophisticated as international development intensifies. This section of the paper uses some illustrative examples of Chinese MNEs. Based on these examples, we argue that existing theories on internationalization and competitive advantages need to be revised and updated in order to explain how EMNEs’ FSAs are now contributing toward the development of their capabilities for internationalization and competitiveness in global market terms.

3.2 Research methods

In order to identify a set of innovative Chinese MNEs, we reviewed the EU Industrial R&D Investment Scoreboard (EU, 2016), a leading source of information and analysis for the world’s top innovative companies. Making use of data extracted direct from annual company reports from 45 countries, the Scoreboard ranks the world’s biggest 2,500 companies in terms of their R&D expenditure and groups them into broad industrial sectors. Over 50 manufacturing and services sectors are included, with a particular focus on those that are the most innovative, such as ICT-, health-, transport- and engineering-related businesses.

Taking account of information published in the Scoreboard, we based our sample on engineering-based Chinese MNEs. This was due to the fact that engineering is widely accepted as being one of China’s most innovative industrial sectors (see Williamson et al., 2009). We next employed judgemental and purposive sampling to select three leading Chinese innovative MNEs in the engineering-related sectors for our illustrative examples, BYD, Sany Heavy Industry and CSR China (see Table II). We examined and analyzed their innovation capabilities, related FSAs and internationalization records, and analyzed qualitative data drawn from academic research, media reports (both in English and Chinese), company websites and annual company reports.

The historical case analysis approach that we followed is in line with a number of recent studies in the field of IB, particularly in the context of EMNEs (e.g. Kotabe and Kothari, 2016). Our illustrative cases and their respective FSAs are presented in the following section.
4. Illustrative cases

4.1 BYD

BYD was established in 1995 and entered the rechargeable nickel-based (nickel-cadmium, NiCd) battery industry with little capital. Responding flexibly and quickly to changing demand in the cell phone batteries industry, the company had emerged by the end of 2002 as the world's largest producer of NiCd batteries and an important player in the NiMH and Li-ion battery markets, becoming the world's largest supplier of rechargeable batteries. BYD has also applied its new battery production technology to other industries, including the automotive industry. In 2008, it launched the world's first commercial plug-in hybrid electric vehicle not needing a professional charging station. Subsequent business expansion has also seen the company enter the green energy market.

BYD started its internationalization process at the end of the 1990s and now has offices located in the USA, Europe, Japan, South Korea, India, Taiwan and Hong Kong. In 2012, it sold electric buses to the Netherlands and announced that it was manufacturing electric buses for both Bulgaria and the USA. By 2011, the company had 14.9 percent of its sales and profits coming from regions outside China[1].

The development of BYD's F3DM (the first commercialized plug-in hybrid electric vehicle that does not need a professional charging station) provides a good example of the company's possession and utilization of FSAs. F3DM was launched in 2008, based on the application of the firm's FSAs in battery technology within the vehicle manufacturing field. Building on its existing hybrid vehicles development capabilities, BYD later produced a range of electric vehicles making use of its newly developed ferrous-based batteries. Further application of the company's battery technologies has resulted in its entry into the electricity grid energy storage sector. These illustrations show that EMNEs such as BYD are now developing flexible and ambidextrous FSAs (e.g. Luo and Rui, 2009; Madhok and Keyhani, 2012).

4.2 Sany Heavy Industry

Sany Heavy Industry was established in 1989 in what was initially a small welding material factory, but has since grown rapidly to become the world's fourth largest construction equipment manufacturer in terms of sales revenue by the end of 2012. In its early years of trading in the concrete machinery industry, Sany's products were inferior in quality and durability compared with those of leading foreign brands, yet it developed a competitive advantage in customer service based on faster and cheaper after-sales service. This enabled Sany to attract many customers from within China and overseas. Sany has recently reinforced this source of advantage by launching an Enterprise Control Center, allowing it to identify the location of each product sold, monitor its status, and provide tailored and timely customer services supported by periodic inspection training.

Sany has also focused on technological innovation. Its innovations have included the development of the world's first fully hydraulic motor grader, as well as its largest crawler crane and 86 meter, truck-mounted concrete pump (demonstrating its leadership in concrete

<table>
<thead>
<tr>
<th>Industry</th>
<th>BYD</th>
<th>Sany Heavy Industry</th>
<th>CSR China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year of establishment</td>
<td>1995</td>
<td>1989</td>
<td>1986</td>
</tr>
<tr>
<td>Revenue (2012), USD, bn</td>
<td>7.1</td>
<td>21.5</td>
<td>14.4</td>
</tr>
<tr>
<td>Profit/sales (2013, %)</td>
<td>3</td>
<td>6.1</td>
<td>9.8</td>
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<tr>
<td>Employees (2012)</td>
<td>150,000</td>
<td>60,000 (in 2011)</td>
<td>90,000</td>
</tr>
<tr>
<td>R&amp;D investment (2013, €m)</td>
<td>298.4</td>
<td>127.1</td>
<td>431</td>
</tr>
</tbody>
</table>

Source: EU Industrial R&D Investment Scoreboard
pumping technology). These innovations have led to impressive commercial growth, increasing revenue from RMB100m in 1993 to RMB50bn in 2011.

Sany has accelerated its pace of internationalization in recent years, on the basis of its innovative capabilities. It has invested in excess of US$1bn overseas, while setting up offices in more than 100 countries globally. In 2006, it launched its first overseas manufacturing plant in India since when it has added manufacturing plants in the USA in 2007, Germany in 2009, Brazil in 2010 and Indonesia in 2011. Particularly worth noting was its €100m investment in an assembly plant and R&D center in Bedburg, Germany in 2009, which represented the biggest Chinese corporate investment in Europe prior to 2012. Also significant was its acquisition of German manufacturer Putzmeister in 2012, which solidified the company’s position as the world’s largest concrete machinery manufacturer. Later in the same year, the company announced joint ventures in both Austria and China with Palfinger – the market leader in knuckle boom cranes.

4.3 CSR China
CSR China was a state-controlled company that designs, engineers and produces electric locomotives for China’s high-speed railway network[2]. It was one of the largest rolling stock manufacturers in China and became increasingly influential in global markets. CSR China possessed extensive research capabilities, enabling it to develop high-speed electric multi units (EMU) in 2002 that could operate at speeds of 200 km/h on China’s railway system. In 2004, it collaborated with Bombardier and Kawasaki Heavy Industries to jointly design and manufacture 100 high-speed EMUs for use in China that would run at 250 km/h. Within a short time, it was able to design, engineer and produce EMUs that ran at the considerably faster speed of 350 km/h, going on by December 2010, to set a world record operating speed of 486.1 km/h during trial operation of its new its CRH380A EMU unit. In the same year, the company also developed and strengthened its core technological capabilities in engineering and producing high-speed EMUs convertors, focusing particularly in the areas of propulsion and control systems.

CSR China extended the application of its core (propulsion and control) technologies to develop products in a number of new areas, such as urban metro transit, electric vehicles and wind power generation. Its launch of A-type metro vehicles in 2008 ended the foreign company monopoly in this growing Chinese market, enabling it to win nearly 68.5 percent of contracts awarded for such products in 2011. It has also emerged in recent years as an important player in the Chinese new energy vehicles and components markets. In 2008, it bought a 75 percent stake in Dynex, a specialist high power semiconductor company based in the UK, in order to make use of the latter’s advanced technologies in areas such as insulated gate bipolar transistors (IGBTs) to improve the performance of its high-speed trains. The company then began to develop IGBT modules to be used in wind power generation and in construction of smart electricity grids, so illustrating the way in which local factor market conditions in China were helpful to it in developing innovative capabilities and rapid internationalization.

Like BYD and Sany, CSR China also accelerated its internationalization in recent years. It recorded overseas revenue of $59m in 2001, rising quickly to $1bn by 2011; its overseas revenue doubled between the first halves of 2011 and 2012, rising to represent 11.3 percent of its total revenue by the latter time. CSR China also established R&D centers in the UK and USA, by acquiring a local company in the former case.

In 2015, the company merged with its home rival, CNR China becoming CRRC. The merged company then won a $1.31bn contract to supply 846 metro cars to Chicago Transit Authority, involving the opening of a new manufacturing plant in the city. Eager to further compete with the Japanese and German rivals, CRRC has already started research and development of maglev trains that can reach 600 km/h whilst advancing their EMUs.
5. Discussion and conclusion

5.1 Technological innovation as a source of FSA for EMNEs

These illustrative cases of Chinese MNEs demonstrate the existence of linkages between their innovative capabilities, resultant technological FSAs and their internationalization behavior. All of our sample case firms exhibited the propensity to find new uses and applications for existing technologies, leading to the development of new products and solutions based on the application of their core technologies to new markets. This indicates to us that these firms have developed technological competences in innovation as a source of FSA.

As discussed in the previous section, these three EMNEs should not be regarded mere “innovation copycats” (Luo et al., 2010). We would argue that their innovation competences are not simply rooted in CSA-dependent FSAs. They have, in our view clearly developed distinctive, technology-based FSAs which have helped to facilitate their internationalization process and global competitive development.

BYD, for example, entered the rechargeable nickel-based (nickel-cadmium, NiCd) battery market in the late 1990s, but in doing so, it did not simply follow its other competitors by purchasing an entire set of automated production lines from Japanese firms. Instead, it designed its own hybrid production lines, replacing many expensive machines with manual procedures that could be completed by the then-low cost workers in China. This allowed BYD to reduce production costs dramatically, reaching one fifth of the Japanese level (Kang and Ke, 2008); it also enabled it to manufacture different products with only minor adjustments in production and workforce training, rather than having to construct a completely new production line for each new product (Wang, 2009). The company was, thus, able to respond flexibly and quickly to changing demand in the cell phone battery market, helping it emerge by the end of 2002 as the world’s largest producer of NiCd batteries, and an important player in the NiMH and Li-ion battery markets (Kang and Ke, 2008).

Many other Chinese firms have also quickly enhanced their technological capability by employing different approaches. CSR China, for example, took advantage of technological transfers from leading global players and successfully combined them with in-house innovation efforts. This allowed it to design, engineer and produce EMUs that ran at speeds of 350 km/h, as noted above (He et al., 2017).

A strong competence in battery technology has also resulted in BYD producing and selling electric buses to developed countries, including the USA and the Netherlands. Similarly, Sany invested €100m in 2009 to build a mechanical manufacturing base in Germany. CSR China, in turn, bought Dynex in 2008 not only in order to facilitate its learning of the latter’s IGBT technology, but also with the aim of making use of its strong competences in propulsion and control systems, to better meet customer demands in the railway and other markets.

Our findings are in line with existing research concerning EMNEs’ competences. For example, Govindarajan and Ramamurti (2011) emphasize the need to study EMNEs’ ownership advantages where these allow them to pioneer innovations. Kumar (2007) argues that Indian MNEs’ main source of advantage lies in frugal innovation – the ability to reduce the complexity and production cost of goods by removing their non-essential features. In a similar vein, Zeng and Williamson (2007) argue that Chinese MNEs’ use their superiority in cost innovation to disrupt global markets and competition. Williamson and Yin (2014) further argue that some Chinese firms have found a way of achieving “accelerated innovation,” allowing them to reduce production lead times and accelerate problem solving. Other scholars argue that EMNEs have developed organizational ambidexterity in order to overcome their late mover disadvantages in global markets (e.g. Luo and Rui, 2009).

Taken together, the recent literature indicates that EMNEs’ innovation capabilities extend beyond cost or frugal innovation into areas such as grafting, service-inclusive and potentially ground-breaking innovation (as shown in our three Chinese MNE cases).
Our findings suggest that the development of such technological competence-based FSAs appears to be providing a major boost to leading innovative EMNEs’ competitiveness and internationalization both in emerging home markets and increasingly, in those of the developed world (Govindarajan and Ramamurti, 2011). This, in turn, allows an increasing number of these EMNEs (from China and beyond) to disrupt global markets and competition (Sinkovics et al., 2014; Williamson and Zeng, 2009; Zeng and Williamson, 2007), and to begin challenging established DMNEs in a growing range of industrial sectors and markets (Boston Consulting Group, 2006/2014; He et al., 2017).

5.2 Implications for existing IB theory
Our review of existing theoretical approaches, supported by our illustrative case study findings, identifies the need to revisit existing IB theory, in order to take better account of the role that knowledge-based FSAs play in mature EMNEs’ internationalization and global competitive development. As discussed above, many existing efforts to identify EMNEs’ competitive advantages consider their relatively low production costs, together with their distribution systems, institutional assets, government relationships and privileged access to local resources and home markets (Gammeltoft et al., 2010; Hennart, 2012). However, a number of commentators confine these advantages to “location bound FSAs” (Rugman et al., 2011) in which EMNEs cannot realize cost advantages abroad, while it is also difficult for them to transfer distribution systems, privileged government relationships and domestic monopoly positions to other countries. Pursuing this line of argument, it would still be difficult to explain why innovative firms from emerging economies are rapidly rising in global competitive terms and are displaying an increasing pace of internationalization (Gammeltoft et al., 2010; Ramamurti, 2012).

We agree with the view that EMNEs internationalize in order to compensate for their competitive disadvantages compared with DMNEs in traditional areas such as brand reputation and possession of key technological know-how (Mathews 2006, 2017; Child and Rodrigues, 2005; Luo and Tung, 2007, 2018). However, such a line of reasoning does not fully explain how some EMNEs are able to compete successfully with DMNEs in both domestic and foreign markets. Our identification of Chinese EMNEs’ innovation capabilities indicates that they also possess some of the non-location bound FSAs which DMNEs have traditionally enjoyed. For EMNEs, such FSAs are now internationally transferable, with the result that they can be realized overseas. As illustrated in the cases, their non-location bound FSAs now include the ability to efficiently package technological products and innovative solutions, as well as the achievement of accelerated internalization capabilities associated with being flexible and ambidextrous in overseas markets.

If we recognize that evolving EMNEs now develop technological innovation as a source of FSAs, as they advance their capabilities and their positions in the global value chain, then their rapid rise and internationalization can be seen as being less of a puzzle than before. The OLI paradigm can still have explanatory power regarding the internationalization of EMNEs, where their technological competences for innovation and ownership advantages help them to mitigate the costs of foreign expansion. For example, when Sany decided to invest €100m to build a mechanical manufacturing base in Germany and BYD announced that they would build a manufacturing facility for electric buses in California, neither of these firms was able to enjoy cost advantages and monopolized access to local resources in their host countries. They also suffered from a “liability of emergingness” as well as “liability of foreignness” (Hymer, 1976), arising from the fact that they came from an emerging market country (Madhok and Keyhani, 2012). It would, therefore, be difficult to understand their rationale in choosing to manufacturing in such high-cost countries without first developing the FSAs needed to overcome these liabilities.
One of the main problems on the part of critics of the OLI paradigm is that many take for granted the argument that EMNEs do not have non-location bound ownership advantages without examining this issue carefully. Advocates of the OLI paradigm, however, often focus only on non-traditional CSAs-derived FSAs with the result that they cannot articulate the linkage between the rapid rise of EMNEs and their unique FSAs. We also feel that there is a danger for scholars, having observed EMNEs’ asset-augmenting overseas investment, to rush to the conclusion that EMNEs do not possess any FSAs. Dunning (2006) and Narula (2012) both point out, however, that EMNEs’ asset-augmenting overseas investment implies that existing ownership advantages are there to be augmented. Therefore, asset-augmenting OFDI cannot exclude EMNEs’ existing ownership advantages.

For us, all three Chinese companies in our study had already accumulated significant technological capabilities (i.e. traditional and non-country bound FSAs) before their major push toward internationalization. We have observed them establishing manufacturing sites in developed markets in order to exploit their existing technological capabilities (including, for example, CSR in the train, BYD in the electric vehicle and Sany in the construction machinery market). We have also seen them launching R&D centers in developed countries in order to further strengthen and augment their existing technological capabilities for innovation.

Following a critical review of IB theories, this paper has drawn evidence from an analysis of three illustrative case studies, reflecting the evolution, internationalization and competitive development of three leading, innovative Chinese EMNEs from the engineering sector. Our findings indicate that each of these sample companies has developed knowledge-based FSAs, which have helped to facilitate their internationalization processes. Although our underlying study has considered a limited number of firms and a focus on innovation capabilities alone, we believe that these findings have contributed to the continuing academic debate on the causes of internationalization and global competitive development by mature and innovative EMNEs, and on the role that knowledge-based FSAs are playing in these processes. Thus, this paper contributes to the existing research on EMNEs by suggesting that the FSAs of some of the EMNEs from China are not entirely based on the unique context of emerging market conditions of China. On the contrary, the case firms’ FSAs seem to align with the features of DMNEs’ FSAs such as technological capabilities and innovations. We believe that this new insight has enabled us to add to the existing EMNE literature which has mainly highlighted the motivation and the rapid and aggressive OFDI of EMNEs, and to examine whether current IB theories explain their internationalization. Our study shows that technological innovations underpin the unique processes used by Chinese EMNEs as a means of developing their FSAs. Thus, this finding provides a valuable addition to current scholarly views about EMNE internationalization and to traditional IB theories.

5.3 Limitations and future research directions

Our discussion in this paper has been supported by the analysis of limited secondary data, linked to a review of the existing academic literature, and by insights from our analysis of a limited number of EMNEs in China. Although our illustrative cases demonstrate that Chinese EMNEs use FSAs in connection with rapid internationalization, the lessons drawn from these cases might not be applicable to all EMNEs’ internationalization processes. Thus, in order to overcome the methodological limitations of the current study, future empirical research could make use of in-depth interviews and surveys to provide a better understanding of Chinese EMNEs’ innovation capabilities, drawing on traditional vis-à-vis non-traditional FSAs and their respective roles in the internationalization process. Future research could also add to our analysis by carrying out a comparative study including EMNEs originating in several other emerging market countries, such as Brazil, Russia, India, South Africa, Turkey as well as China. Such studies could also examine the different
entry strategies adopted by these firms and how these entry mode choices interact with their FSAs (e.g. Li, Cui, and Lu, 2017; Li, Guo, and Xu, 2017). They could also focus on how EMNEs transfer and utilize their FSAs in developed markets, and how they influence the capability development of their local partners in such markets (e.g. He et al., 2018).

Notes
1. In 2015, the global market share of BYD in the electronic vehicle industry is 11 percent (61,722 cars sold), ranked at the top position, and followed by Tesla Motors (9 percent, 50,574 sold), Mitsubishi (9 percent, 48,204 sold), Nissan (9 percent, 47,671 sold) and Volkswagen (8 percent, 40,148 sold).

2. CSR Corp. Ltd, formerly known as China South Locomotive & Rolling Stock Corp. Ltd, was a Chinese manufacturer of locomotive and rolling stock. In 2015, the company merged with China CRNR Corp. Ltd to form CRRC Corp. Ltd.

3. Verbeke (2013) split FSAs into non-location bound FSA transferable and location-bound (home region-bound) FSAs.

References


**Further reading**


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Absorptive capacity and innovation in China

David McHardy Reid

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Abstract

Purpose – The purpose of this paper is to question the conventional wisdom that China fails to produce distinctive innovation; its capabilities limited merely to copying and reverse engineering. The author postulates that the lack of innovation is a delayed activity since China is undergoing a process of building absorptive capacity (AC) as a precursor to innovation.

Design/methodology/approach – The author probes this question by drawing on the concept of AC, a competence separate from innovativeness and a precursor to it. By drawing on the AC literature three propositions are established. Subsequently, these propositions are examined, in part, with data drawn from 34 interviews conducted in China with CEOs, other senior corporate officers and government officials. In this way, the author explores the challenges to innovating.

Findings – Thomson Reuters 2015 Top Global Innovators report listed no Chinese company among its top 100 list of innovative companies. The author’s belief, however, favors China to become a source of innovation. A positive tilt derived from both interviews and recent reports published by Bain & Company, Booz and Co as well as McKinsey & Co. This evidences, the author argues, China is acquiring AC, a competence independent of innovation but a necessary antecedent to decoding and deploying the intellectual property in its portfolio. The collective effect of this is that the perception of China as a source of innovative activity will show an uptick when the AC threshold is reached.

Research limitations/implications – This is a viewpoint paper grounded on an exploratory study.

Practical implications – Guidance on AC development is valuable to government policy makers promoting innovation in China and those attempting to arbitrage these developments. Similarly, policy makers in competitive nations should also be aware that their innovation-focused industries may need nurturing and bolstering since they may be at risk of being swept away by a tsunami-like innovation wave from China.

Originality/value – This is an original take on the relationship of AC and innovativeness in China. The author argues that in contrast to the conventional wisdom China has the potential for innovativeness.

Keywords China, Innovation, Knowledge spillovers, Absorptive capacity, Adaptation, Appropriability of innovation

Paper type Viewpoint

Introduction

“China can’t innovate. The United States attracts talent from all over the world, people with a passion for change. We [Chinese] are too short-term, only interested in how much money we will make and how quickly.” Such was the surprisingly frank and negative view of a high-ranking Chinese Communist Party official, an interviewee, in a Tier 2 Chinese city. This is a widely shared perception both inside and outside of China. But perceptions do not necessarily match reality and they may be skewed because China’s economy is biased toward large state-owned firms and big companies tend to be less innovative (Teschler, 2014). Moreover, innovation in Chinese firms tends to be more incremental than radical (Alcorta et al., 2008). Though, at a state level, China has completed some mammoth innovative projects, the degree to which innovativeness has permeated its private industries could arguably be greater (Clendenin, 2006). There are undoubtedly reasons for this but Feng (2007) maintains that in China’s private companies a shortage of funding is the greatest barrier to technological innovation aside from lack of highly educated staff.

Is it true that China cannot innovate? What is true is that many observers inside and outside China disparage Chinese innovativeness or its absence. A report by Thomson Reuters supports this view. No Chinese companies featured in its top 100 ranking of
innovative organizations (Thomson Reuters 2015 Top 100 Global Innovators, 2015). This perception of China’s lack of innovativeness may be influenced by the country being an “internet walled garden,” sheltered behind the “Great Firewall of China.” Internet-dependent companies like Facebook, Twitter and YouTube are blocked from prosecuting their business in China. That has offered opportunities to local players. Local internet companies, like Sina, which earned its initial success by developing Weibo, an analog of Twitter, reinforce the perception that China can copy but not create.

China is moving from imitation to innovation. Why? Yip and McKern (2014) suggest that the country’s rapid economic growth and increasing consumer income serve to boost market demand with wage inflation being a supply-related factor. Thus, Chinese companies, for a variety of reasons, are increasingly finding it necessary to innovate.

This shift is a critical one. In a recent study (Woetzel et al., 2015), it was observed that Chinese industry is more innovative than is generally acknowledged. Moreover, Chinese companies have established strong positions in two types of innovation – developing new products and services, which address consumer needs as well as efficiency-driving manufacturing process innovations. They also noted that China has a growing need to innovate more broadly, across more industries, and raise innovation performance in engineering and science. As their report put it China needs to evolve from an innovation “sponge” to an innovation leader to sustain future GDP growth as more traditional growth-drivers such as an expanding labor force and capital investment subside. They conclude that China has the potential to meet its “innovation imperative” and to emerge as a driving force in innovation globally. The “China effect” in global innovation would be felt in several ways. As the nation with the largest population and the second-largest economy in GDP terms, China will be a growing source of innovation to serve the needs of an enormous and increasingly demanding consumer market.

Over two years ago, this author attended the launch of a report on the theft of American intellectual property (IP) (NBR, 2013). John Huntsman, ex US Ambassador to China and Admiral Dennis Blair, former US Director of National Intelligence, funded it. Some well-connected people were in attendance. At that meeting one individual claimed, that in a discussion he had held with MI5, it was revealed that all British commercial secrets of any worth had been stolen by China. Someone capped this anecdote by asserting that China had already stolen all major US military secrets including all its nuclear technology. This trampling of others’ IP rights, Peng (2013) suggests is a rational institutional behavior. Otherwise foreign, primarily US-rights owners, would benefit more than Chinese players from the developing market conditions.

As worrying as this might be, it is clearly one thing to amass billions of gigabytes of data but it is yet another to interpret, assimilate then deploy the results. China may have acquired a great deal of IP, by subterfuge or legitimate means. However, is it not likely that it will take time to absorb and to make sense of the data before combining it with other homegrown IP in order to innovate and advance to superior technological solutions that ultimately contribute to a national competitive advantage (Porter, 1990, p. 18)? The theoretical construct known as absorptive capacity (AC) may explain this inherent time lag (Cohen and Levinthal, 1990; Zahra and George, 2002; Lane and Lubatkin, 1998; Lane et al., 2006).

Is this received wisdom and orthodoxy pertaining to China’s lack of innovation valid? After all, innovativeness is a perception-based quality and perceptions often tend to lag actuality and convergence of the two may be extant or imminent. Should not this China cannot innovate mantra be challenged or at least explored? The intent of this paper is precisely that: to examine the conventional wisdom. Therefore, it is a proposition of this paper that those who dismiss Chinese innovation do so foolishly and may have a big surprise in store. China-based innovation, it is hypothesized here, may be poised for an uptick, albeit difficult to pinpoint when. To explore this issue three literature-based
propositions are developed. In turn, these propositions are explored by drawing on the literature together with qualitative data from 34 face-to-face interviews recently conducted in China with CEOs and other senior corporate and government officers, on the topic of innovation in China.

**Methodology**

This viewpoint piece draws support, in part, from an ongoing study on “The Chinese Model of Product Innovation,” a grounded theory-inspired investigation (Doz, 2011; Welch *et al.*, 2011; Strauss and Corbin, 1990; Glaser and Strauss, 1967), designed to tease out perceptions of innovation in China. In this way, themes and perspectives can emerge from the data. As part of that exploratory study I conducted 35 interviews with CEOs and other senior officers concerned with innovation of both foreign and local players in China (Table I). These companies covered a broad cross-section of industries. They included consumer products, healthcare, automobile manufacturers, software and services.

Access to top executives for research purposes can be difficult. In this study, by leveraging a network of connections access was obtained to some major and minor companies operating in China, both foreign and locally owned. Innovation is a key concentration of their strategies. Among the companies studied were, for example, Unilever an Anglo-Dutch consumer products company with worldwide revenues of over $55bn,

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<tr>
<th>Company</th>
<th>Location</th>
<th>Interviewee</th>
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<td>8D World Inc.</td>
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<td>Chongqing</td>
<td>President</td>
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<td>Boson Data</td>
<td>Shanghai</td>
<td>Director</td>
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<td>Changan Auto</td>
<td>Chongqing</td>
<td>Chief Quality Officer (Twice interviewed)</td>
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<td>Chongqing</td>
<td>Deputy Director of Purchasing</td>
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<td>Corning Greater China</td>
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<td>President and General Manager</td>
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<td>Chongqing</td>
<td>Overseas Regional Manager</td>
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<tr>
<td>Kerui Pharma</td>
<td>Chongqing</td>
<td>Vice Director of R&amp;D</td>
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<td>Kerui Pharmaceuticals</td>
<td>Chongqing</td>
<td>R&amp;D Director Head</td>
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<tr>
<td>Microsoft</td>
<td>Beijing</td>
<td>Director Anti-Piracy Business</td>
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<td>Microsoft</td>
<td>Beijing</td>
<td>Senior Director Technology Strategy</td>
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<td>Microsoft</td>
<td>Beijing</td>
<td>Director Office China</td>
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<td>Microsoft</td>
<td>Beijing</td>
<td>Partner Devt. Manager</td>
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<td>Nenlu Tea</td>
<td>Chongqing</td>
<td>CEO</td>
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<td>Onstar Shanghai Telematics</td>
<td>Shanghai</td>
<td>General Manager</td>
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<td>Unilever China</td>
<td>Shanghai</td>
<td>Chairman Greater China (Thrice interviewed)</td>
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<td>Unilever China</td>
<td>Shanghai</td>
<td>Vice President R&amp;D</td>
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<td>Unilever China</td>
<td>Shanghai</td>
<td>Regional Director-Beverage</td>
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<td>Global Director Skincare</td>
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<td>Unilever China</td>
<td>Shanghai</td>
<td>Director of R&amp;D Oral Care SEA</td>
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<td>Winboth</td>
<td>Chongqing</td>
<td>CEO</td>
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<tr>
<td>Zongshen Industrial</td>
<td>Chongqing</td>
<td>Strategy Director</td>
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<tr>
<td>ZTE</td>
<td>Shenzhen</td>
<td>Vice President</td>
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Table I. List of interviewees
40 percent of which is derived from emerging markets including China. The company has been in business since the 1880s. It owns 400 brands that are used by 2bn people each day. Its survival and existence is predicated on delivery of new products that meet the needs of new generations of consumers across the global marketplace. One of its six global research and development (R&D) centers is based in Shanghai, representing an investment of close to $95m with 600 scientists working across most product categories. I made three visits to this center and interviewed several high-ranking managers concerned with research and innovation. Unilever has been named by the Top Employer Institute, as the No.1 employer in China. Another participant, Corning Inc. ($9bn revenue 2015) is a 160-year-old company with unparalleled expertise in specialty glass, ceramics and optical physics. Its products form the backbone of the internet and other arenas. It has a network of companies across China. Honeywell ($40bn revenues in 2016), another company studied, boasts more than 125 years of innovation, much of it around control engineering. Several interviews were conducted in Changan, a state-owned automobile manufacturer. Other Chinese companies like Huawei and ZTE, rank among the top three world leaders in terms of international patent filings, formed part of the observational framework and are referred to in the subsequent text.

The same topics were covered on each occasion and the interviews conducted as a conversational interaction, usually lasting between 1 and 2 h. The meetings were recorded, then transcribed and the transcripts subsequently imported into NVivo 11, a qualitative software analysis suite that enables the text to be coded and recoded in line with emergent themes as they were identified. The software enables the themes to be interrogated across all interview transcripts simultaneously.

More specifically as Gioia et al. (2012) explain, constructs are formulated so that they may be measured, but the pressure for quantification often impedes appropriate concept development in an organizational context. As Cameron (1963) puts it “Not everything that can be counted counts, and not everything that counts can be counted.” So, it is first necessary to discover relevant concepts that enable theory building which in turn may guide the creation and validation of constructs. Since much of the organizational world is socially constructed this implies that we ought to focus on understanding how organizational members go about constructing and understanding their experience, viewing through their lenses and less on frequency counts.

The approach adopted here recognizes that the interviewees are, as Gioia et al. (2012) put it, “knowledgeable agents” who know what they are trying to do and can explain their thoughts, intentions and actions. The researchers’ role is to report and interpret without imposing prior constructs on the informants as a priori explanations for interpreting their experience. The coding and analysis of the data deployed here involves first-order analysis that utilizes informant-centric terms and a second-order analysis that draws in researcher-centric concepts, themes and dimensions (van Maanen, 1979). Typically, and it was so here, a myriad codes and categories emerged at the first-order reading and analysis of the transcripts. This is akin to what Strauss and Corbin (1990) call open coding. Further reading and analysis progressed to what they refer to as axial coding where the coding categories were collapsed from many to a more comprehensive set of 28. At this stage the researcher behaved more like a knowledgeable agent by interpreting emergent patterns. Particular attention was given to nascent concepts that do not seem to have adequate referents in the literature (Gioia et al., 2012). When a functional system of themes was observable the process led to what (Glaser and Strauss, 1967) refer to as theoretical saturation.

In this way, the three propositions were identified, first from a literature trawl, and subsequently examined by identifying supporting constructs that emerged from the analysis of the interview data in the way described above. These emergent themes were examined for congruency with and support for the propositions.
Here three propositions are developed relating to AC at the level of the firm, region and China overall.

**AC at the firm level**

In a seminal paper, Cohen and Levinthal (1990) postulated that the ability of a firm to recognize the value of new information, assimilate it, then apply it toward commercial ends is critical to its innovative capabilities. They label this capability “AC” and suggest that it is largely a function of the firm’s prior related knowledge. AC forms part of a company’s decision-making calculus when allocating resources to innovation. Moreover, when the knowledge that the firm wishes to exploit is closely related to its current expertise AC is more likely to be developed and maintained as a byproduct of its routine activity. But, when a firm aims to obtain and employ knowledge unconnected to its ongoing interests, Cohen and Levinthal (1990) assert the firm must allocate a separate investment effort solely to creating AC. Possibly AC may not even appear to the firm as an investment option. Even if it does, its management may be reluctant to make the investment to enable its technical talent to acquire the scope of expertise that would permit absorption of knowledge from new spheres.

AC at the firm level is a competence that determines how able a firm is to recognize the value of, acquire, internalize and exploit external new knowledge (Bradford and Saad, 2014; Cohen and Levinthal, 1990). Knowledge is often transmitted via joint venture arrangements. Using longitudinal dyadic data from international joint venture (IJV) companies in China, Fang and Zou (2010) determined that local and foreign IJV parties’ absorptive learning capacity decreases one party’s dependence on the other, while joint learning capacity in an IJV increases both parties’ dependence on each other. These findings lend support to what is known as the expanded inter-partner learning perspective of IJV instability. One firm’s ability to learn from another firm as Lane and Lubatkin (1998) argue depends on the similarity of both firms.

In evaluating the contribution AC makes to firms’ R&D-derived profits, Egbeokun and Savin (2014) appraised the effects of cognitive distance, value appropriating conditions and external knowledge. They developed a model of inter-firm cooperation in which partners increase their inventory of knowledge by the intentional sharing of complementary information. The amount of external knowledge absorbed, they determined, depends on AC and the resulting new knowledge affects firm performance by way of innovation-driven profit. Liao *et al.* (2012) differentiated the AC of Chinese manufacturing firms in relation to different spillover channels, and could provide insights into how different dimensions of AC moderate the impact of the various channels. They could show that AC is a significant factor that explains intra-industry productivity differences among Chinese firms.

Taking account of the disparity between knowledge comfort zones and unfamiliar domains can help distinguish voluntary spillovers within an alliance from other types of external knowledge. Moreover, a firm chooses its cooperation partner depending on the investments in AC it is willing to make to solve what Egbeokun and Savin (2014) refer to as the “understandability/novelty trade-off.” Organizations, Ernawati and Flanagan (2012) argue, cannot rely entirely on their own internal sources to compete in the market and sustain growth; every organization needs to be able to absorb and benefit from new knowledge and technology. This reinforces the need to invest in AC as a precursor to innovation. Figure 1 illustrates how the processes are separate but interdependent.

Figure 1 is merely illustrative. It indicates that as China’s AC accumulates and approaches a theoretical threshold, an uptick in innovativeness or at least the perception of
it may be expected. In this illustration, it occurs at $t_6$. At that point or some other time juncture China’s innovativeness may begin to be registered and as the curve continues its upward trajectory China will increasingly begin to be perceived as a country of innovation. I repeat that these are not real data, merely illustrative to emphasize this exploratory concept. Moreover, we cannot adequately predict how long the period would be. It may be far off or that punctuation may already be close.

McManus (2011) offers an example based on the software industry. He maintains that where appropriate levels of scale exist there also exists the possibility of making the essential investments to acquire AC. Specifically, when compared to India, the Chinese software industry is disadvantaged as it suffers from fragmentation. It has many thousands of small players, but Indian software companies are much larger, both in terms of their annual revenues and human capital resources and are thus able to invest in acquiring pertinent AC. Whereas Chung and Lee (2015) suggest that AC requires learning capability (LC) coupled with problem-solving skills. LC being the capacity to assimilate knowledge for imitation. Problem-solving skills offer the potential to create new knowledge for innovation. Thus, the building of AC is a dynamic process and collectively these capabilities enable a firm to generate and manage technical change.

Chung and Lee (2015) stress that the process of AC building is more effective when combined with access to foreign knowledge, particularly tacit knowledge or know-how. Their specific policy recommendation for a late entrant into an arena is that any technology licensing contracts should include know-how transfer as a prerequisite. This bolsters the argument that where there is lack of extant germane background knowledge, recently acquired IP may not have immediate value to the acquirer because manuals and blueprints may be poor guides for innovation especially when low levels of AC exist.

An oft only superficially addressed issue is the process whereby domestic firms gain know-how and expertise to boost productivity because of inbound FDI and trade in general. Borensztein et al. (1998) helps us better understand that the degree to which host companies benefit is a function of AC. They demonstrate empirically that FDI and trade can contribute
to overall domestic productivity growth when a sufficient AC is available in domestic firms, especially in terms of R&D and human capital. It is worthwhile to emphasize the human factor. Minbaeva et al. (2014) conceive AC as being comprised of employees’ ability and motivation. Both these properties are needed to facilitate the transfer of knowledge from other parts of an enterprise.

Knowledge transfer is a process to be managed. So, organizations need to institute various internal policies, structures and processes to facilitate learning (Inkpen, 1998). Newbury et al. (2016) provide guidance to firms investing in emerging markets on how to better capitalize on innovations stemming from their investments within these markets. They do so by envisioning institutions, innovation and geography as three interconnected constructs that reinforce each other, while also serving as key drivers of internationalization. Much of the empirical research on intra-company knowledge transfer focuses on different factors that hinder or stimulate its transfer. Borini et al. (2016) consider the power of strategic integration between headquarters and subsidiaries as one of the important antecedents of reverse innovation, which refers to low price-point innovations originating in the developing world to generate new market demand back in the richer economies (Govindarajan and Trimble, 2012).

Notwithstanding, per Lin et al. (2002), many Taiwanese firms focus on product and process technology transfer (44.94 and 41.57 percent, respectively), rather than on management capability transfer (11.24 percent). The most popular transfer channels among Taiwanese firms are contract research (28.30 percent), licensing (27.36 percent) and equipment purchasing (21.70 percent).

Further, the importance of the absorption of external knowledge for companies can be explained with the help of the resource and capabilities approach pioneered by Edith Penrose (1959). While much prior research on AC has focused primarily on the ability dimension of AC, Minbaeva et al. (2014) argue that capability is necessary but insufficient. The AC of a subsidiary company facilitates transfer of knowledge from other parts of the enterprise. This is an acute issue for MNEs since the greater and more pervasive is the AC of subsidiary companies the higher the level of knowledge transfer may be expected.

In practice, Li (2011) maintains, it is challenging for recipient firms to utilize knowledge from external sources to boost their own innovation. During the early catch-up stage in China, despite Beijing’s policy goal of “trading market for technology,” Chinese indigenous firms often could not, in practice, even acquire or have access to state-of-the-art technology through direct foreign investment inflow and import of foreign technology. By citing examples in the Chinese automobile and civilian aircraft industries, Li (2011) indicates that a frequently occurring situation among indigenous Chinese firms is that their weak technological capability forces a continuous reliance on foreign technology. Whereas Contractor (2013) found that a degree of humility that recognizes the need to catch-up by learning from foreign allies and customers is a source of competitive advantage for emerging market multinationals. From a strategic perspective, firms can better use foreign technology by first enhancing their AC then progress can be made through their own R&D activities. He maintains that when acquiring external technology, firms ought to pay attention to those contextual factors congruent with accumulation of tacit knowledge and which enable a valuable symbiosis because of being associated with the extant technology.

This introduction to the concept of AC emphasizes the many impediments to innovation-linked organizational learning and serves to highlight the risk of information overload. That challenge leads to:

P1. Chinese firms are typically overwhelmed by an abundance of new technical knowledge.

So far we have focused on AC at the level of the firm. Now we will discuss AC at a regional level.
AC at the regional level

The concept of AC, the foundations of which were originally designed in the context of firm theory, can be extended to complex systems, such as regions and countries (Pittz and Intindola, 2015; Prevezer et al., 2013; Usman et al., 2015; Ndebbo, 1980; Xiaolan, 2008; Uotila et al., 2006). In this vein, Caragliu and Nijkamp (2012) argue that regions display similar patterns to firms. For instance, if prior knowledge is needed for a firm’s staff to understand and decode new knowledge, why, they ask, should not regions behave similarly? Besides, if exerting a higher effort and being culturally and socially close helps employees in similar firms to grasp new knowledge, perhaps aggregated entities such as regions are also likely to obey these rules.

Contractor (1980) showed that the level of economic development and industrialization of a recipient nation influenced the composition and the organizational modes of international technology transfers. Thus, the AC of a society to make sense of “acquired” technology can be expected to increase as development progresses. Studies by Borensztein et al. (1998) on the effects of foreign direct investment on host country economic growth have found that FDI has a positive impact on per capita income growth only in those developing countries that have attained a certain minimum level of AC.

The problem is that although regions may produce new knowledge, only part of it is efficiently adopted in the regional economy. That we know from Criscuolo and Narula (2008). They developed a precise specification and understanding of the process of national-level knowledge accumulation and absorptive capabilities by building on the seminal analysis of Cohen and Levinthal (1990). The share of efficiently adopted technology depends on what they deem to be cognitive capital (CC), the set of all local, spatially bounded characteristics that determine an area’s capability to grow. A region’s insufficient endowment of CC, Criscuolo and Narula’s (2008) study showed, may cause locally produced knowledge to spill over to surrounding competing areas.

Buckley et al. (2002) determined that non-Chinese MNEs generate technological and international market access spillover benefits for Chinese firms, while overseas Chinese investors confer only market access benefits. State-owned enterprises (SOEs) reap no benefits, and indeed receive negative spillovers from overseas investors, in contrast to the positive spillovers gained by collectively owned firms. Buckley et al. argued their findings underline the need for reform in SOEs to raise the AC of SOEs. Moreover, Chang et al. (2013) found that foreign-acquired local firms outperform comparable local firms in China, especially when the foreign firm acquires local target firms with higher AC or with a modernized ownership structure. A lower regional AC increases “knowledge spillovers” toward surrounding areas. This in turn hampers a regions’ capability to decode and efficiently exploit new knowledge irrespective of its source. Positive productivity spillovers from FDI and trade only occur when the country has AC in terms of ongoing R&D activity (Castillo et al., 2011). Where trade competition is tough, larger spillovers are in evidence.

The measurement of R&D spillovers presents two primary methodological challenges. Delineated by Tarek (2011), there is the challenge of the analysis of the aggregation process of AC on a macroeconomic scale by distinguishing the various sources of the spillovers, national, foreign, intra-industrial or inter-industrial. This illustrates the importance of AC in the determination of international competitiveness of a country insofar as product variety tends to be higher in the sectors with strong absorption of R&D. Using an empirical analysis that targets the sources of R&D spillovers, Tarek (2011) concludes that national technological spillovers occur where there is great product variety and per capita income from foreign sources is growing, a feature of openness.

Criscuolo and Narula (2008) posit a non-linear relationship between the ability of a country to absorb foreign knowledge and its stage of technological advancement. They distinguish between four stages of knowledge accumulation: the pre-catching-up stage, the catching-up stage, the pre-frontier-sharing stage and the frontier-sharing stage.
Their paper concentrates on understanding and distinguishing between the dynamics of the catching-up and that of pre-frontier sharing. They attempt to explain why, as countries approach the technological frontier, the rapidity of technological accumulation associated with catching-up is not usually sustained at the same level. It is because AC supports further accumulation of technological knowledge, and technological advances support the further development of AC in a cumulative, interactive process during that catching-up stage.

Criscuolo and Narula (2008) recognized that significant cross-border effects exist due to the dual role of inward and outward FDI. Assimilation of foreign knowledge, they acknowledge, is not only confined to emerging economies but is carried out by countries with leading edge technology-sharing experience. Because of the cumulative nature of the learning process and the increase in complexity of external knowledge, as the country approaches the technological frontier national AC and the accumulation of knowledge stock are determined simultaneously.

This implies that different phases of technological development require different strategies. During the catching-up phase, knowledge accumulation occurs predominately through the absorption of trade and/or inward FDI-related R&D spillovers. Whereas at the pre-frontier-sharing phase onwards, increases in the knowledge base occur largely through independent knowledge creation supplemented by actively accessing foreign-located technological spillovers. Those access points are joint ventures and strategic alliances as well as outbound FDI-related R&D.

These patterns of knowledge spillover and the way they mediate through states of market openness with stages of economic advancement lead to:

\[ P2. \] China has reached a level of development enabling deployment of its newly acquired technology.

**AC in China**

In this paper, I am considering AC in the context of China, an agglomeration effect where the AC of multiple firms contributes not only to a region but an entire economy: that of China’s.

Yang and Lin (2012) investigated the impacts of openness on regional innovation in China, in particular the role of AC in reconciling the spillover effect brought about by that openness. They harness 1997–2007 provincial-level data and adopt patents as a surrogate indicator of innovation. Their results demonstrate innovation is lower than that for OECD countries, even though there is a significant R&D spillover effect across regions in China. Technology import overall, they maintain, has no significant influence generally on fostering innovations. Though it was significantly positive for coastal regions. Yang and Lin (2012) also determined that different innovation effects are brought about by a variety of channels of openness between coastal and noncoastal regions.

However, some interesting results arise. For coastal regions, FDI and high-tech product exports continue to have a significantly positive impact on promoting innovation. Technology imports seemingly exert a positive influence on invention patents (perhaps due to emulation of foreign technology). For the noncoastal regions, the innovation effects (in terms of patents) of technology imports and FDI appear not to be significant, still high-tech product exports continue to be a significantly positive driver of innovation. In terms of strictly defined innovations – invention patents, technology imports and high-tech product exports – exhibit a significantly negative influence in noncoastal regions. These empirical findings, Yang and Lin (2012) maintain, highlight the importance of the role played by AC in assimilating and the embedding of advanced knowledge.

The role performed by human capital in absorbing and revising imported technologies to develop adapted technologies is considerable. AC is likely to play an essential role in facilitating the spillover effect brought about by FDI and high-tech product exports. Nevertheless, it is interesting, per Li (2011), that domestic technology purchases have a
favorable direct impact on innovation. This suggests that firms encounter less of a challenge in absorbing domestic technological knowledge than utilizing foreign technology and that AC may be contingent upon the source or nature of the external knowledge.

During the time of the Hu-Wen administration (2002–2012), China introduced a policy of “indigenous innovation.” The policy was designed to identify so-called strategic emerging industries and turn the country into a technology powerhouse by 2020 (Pernicious Innovation, 2010). Officially, the policy was supposed to guide China up the technological value chain to enable economic growth to be driven more by homegrown innovation and less by copying. Nonetheless some argue that this was more of a ploy to shelter Chinese companies from the competitive winds blown by foreign companies. The CEO of General Electric caused a stir by offering some forthright criticism of China’s intent (Dinmore and Dyer, 2010), as did a US International Trade Commission (ITC) report (USITC, 2010). Domestic companies rather than foreign businesses, so the rationale goes, should take the lead in this technological upgrading. For Chinese policy makers, this shift is crucial to reducing the country’s dependency on expensive foreign technologies because most value captured from China’s manufacturing activity accrues as royalties to foreign owners of patented technology.

The ITC report maintained that China’s indigenous innovation policies impede foreign companies’ business opportunities in China’s marketplace. “Foreign companies active in China have repeatedly stated that they support China’s efforts to increase its innovation capabilities; however, they fear that China’s introduction of policies favoring domestic companies and products that rely on Chinese-owned IP will erode opportunities for foreign investors in China” (USITC, 2010). That report was, in turn, criticized by IP practitioners in China as containing many factual inaccuracies (US report on China’s indigenous innovation slammed, 2011), on the basis that the foreign companies owning the 2000 or so R&D centers would be largely unaffected by the policy.

China announced its 13th five-year plan, on October 29, 2015. The priorities in the plan deal with linking up China’s manufacturing and infrastructure through the resource and logistical efficiency enabled by the “Internet of Things,” what the Chinese call “Internet Plus.” The focus will be on “circular” use of resources in which waste is recycled. It concentrates on integrating development via decentralized, smart infrastructure in the northern provinces surrounding the capital so “weakening the urban concentration of Beijing.” Under the new plan the first criterion in the promotion evaluations of mayors, governors and party secretaries will be their “green” accomplishments (Gardels, 2016). Above all, the words frequently to be mentioned by cadres across China are “innovation” and “mass entrepreneurship.” This reflects the recognition of China’s leaders that the longstanding export-manufacturing model has run its course. New wealth and sustained growth must come from the innovation of industry by the application of information technology. This leads to:

P3. China’s innovation environment has reached a level that suggests innovation acceleration is imminent.

Proposition examination
We shall now examine the “Propositions” with a view to providing some insights based on the recent literature and the field research in China:

P1. Chinese firms are typically overwhelmed by an abundance of new technical knowledge. Acquired IP may not have immediate value to the acquirer, as Chung and Lee (2015) argued. Manuals and blueprints may be poor guides to real innovation where there is a lack of symbiotic background knowledge. For example, a company in my field research built a $300m manufacturing facility in China only to learn that a startlingly accurate copy of its
plant had opened nearby. Despite having access to the blueprints, the operators of that copy facility lacked the know-how to operate it efficiently and requested help to do so.

In the field research drawn on in support of this paper several interviewees commented on the tendency of Chinese employees to expect to be told what to do. This is an impediment to innovation and may suggest that the threshold level of AC has not yet been met. A Unilever Global Director and Regional Director for Greater China and Northeast Asia revealed that this tendency slows down progress. They (Chinese employees), in his view, show too much respect for hierarchy, “[…] Sometimes we have videoconferences and the Chinese side is completely quiet. We shouldn’t misinterpret that they don’t know anything. It may be that they think they need or feel more comfortable with a deeper level of knowledge […] In terms of innovativeness speed is what I don’t see much of. Often they want to go into greater detail before coming out with an innovative solution.” However, presaging improvement, there is a sea change in the quality of younger recruits. The same interviewee, “What I’m finding very interesting is the [young] people quality is outstanding. The clarity of what they want to do is outstanding. I have been interviewing people [recently] and I have noticed a step change.”

Companies frequently referred to the “talent challenge.” A VP for Global R&D with Unilever explained, “R&D requires many skills some of which are very easy to get in China such as industrial chemistry. If you’re looking for something more esoteric such as dermatology or dental care, supply is less in China. Many of them are in the US already. We are then challenged by competition with salaries. If we try to extract a dermatologist from a practice in the US or Singapore, the salary differential is too big. It is the same with patent attorneys. They are constantly being courted.” These “talent challenges” no doubt impede the development of AC in China. And it is an acute issue for startups. The CEO of Bosun, a tech startup in Shanghai, explained how behemoths like Baidu tend to monopolize the talent pool. “They pay up to 2,000,000 Rmb to hire engineers. Those engineers just sit there doing nothing. […] These huge companies bid up the price of real talent.” He explained how he offered a Baidu engineer a 20 percent salary hike to join Bosun but Baidu immediately offered him a 100 percent retention increase.

The situation in China is by no means static, rather the opposite. An important China development in efficiency-driven innovation is the evolution of open manufacturing platforms. Woetzel et al. (2015) of McKinsey describe a China-based ecosystem that supports individuals and small entrepreneurs who can also work on a global scale. Offering Shenzhen as an example, which harbors a network of component suppliers, design services, business incubators, and outsourced assembly capacity that enables rapid prototyping and scaling up of manufacturing businesses. Incubators in Shenzhen and San Francisco coordinate to bring startup teams from around the world to Shenzhen when they are ready for prototyping. With its labor force of 9m and a rich manufacturing infrastructure this means that design firms in Shenzhen can turn ideas into prototypes in as little as one-fifth the time and at half the cost for doing the work in-house. This all points to a tipping-point scenario where knowledge can be deployed in China with speed and efficiency.

Based on the performance of Chinese industries, coupled with prior investments designed to build innovative capacity and grow opportunities for greater innovation success, Woetzel et al. (2015) believe that China can not only meet its innovation imperative but can even emerge as a dominant global force in innovation. They estimate that progress in service- and manufacturing-sector innovation could contribute as much as $1.0 trillion to $2.2 trillion per year in value to the Chinese economy by 2025. This is a huge claim and a significant one.

Two companies visited in China during the field research, ZTE and Huawei, both headquartered in Shenzhen are highly active in building their IP portfolios. The latter made
3,442 international patent filings in 2014, ahead of ZTE with 2,179 (Figure 2). And ZTE was
the leader of the international field twice running in the previous years. It is arguable that at
some point their IP portfolio may be vigorously leveraged and demonstrably innovative
products may be forthcoming. Among the top 10 filing countries, China alone exhibited
double digit growth. As the commercial effect of this activity registers with China watchers,
the perception of China as an innovative economy will likely shift.

Also, we can expect to see a disruptive “China effect” on innovation globally, one that
will affect many industries and markets. China, Woetzel et al. argue, can become a platform
for accelerated innovation, not just for Chinese companies, but also for foreign
multinationals that want to take advantage of Chinese cost and speed to produce global
innovations. Will the next and imminent wave of outsourcing to China be the outsourcing of
innovation? As an interviewee, the CEO of 8D in Shanghai put it, “[...] there are other core
competencies that are indigenous to China. Particularly around tempo, cost and scale,
meaning [they have] the speed to drive down the learning curve.” In that way China’s
players can compete on cost and be unrivaled in speed to market.

China, Yip and McKern (2014) maintain, has several specific advantages that favor
innovation on both the innovation supply and demand sides, even relative to developed
countries. These enablers of innovation provide incentives to differing degrees, for both
local and foreign companies, to innovate in China. Ostensibly Chinese companies are
opening a new front in global competition, what Williamson and Yin (2014) label accelerated
innovation – reengineering R&D and innovation processes to make new product
development dramatically faster at lower cost. While this may be unlikely to generate
stunning technological breakthroughs, it allows Chinese competitors to reduce the time it
takes to bring innovative products and services to mainstream markets as well as signifying
an alternative approach to exploiting Chinese cost and volume advantages in competitive
business arenas globally.

![International Patent Applications 2014](source: WIPO Statistics Database)

Figure 2. Comparative innovation performance
Typically, new product and service development has been organized as a sequential process, where specific steps must be complete before subsequent stages may commence. In recent years, companies have tried to speed things up by tackling certain steps in parallel, an approach pioneered by NASA. Williamson and Yin (2014) refer to this as “simultaneous” or “concurrent” engineering. This accelerated innovation process involves processes of parallel development, long since institutionalized in Japan (Reid, 1991, p. 125). It enables companies to speed things up by tackling key processes in tandem always with an eye on market launch dates. This is born of necessity insofar as it is a response to competition both global and local. The competition in many fields across China is intense. The automobile business is no exception, so a player that can enter the market faster with a better product is likely to win. For this reason, product development must be so much faster. That is where much of the innovation in the Chinese automobile industry has been focused: on speed to market. Many automobile product-to-market cycles are less than two years. In total, 30 months, 48 months is typical in the western world according to Changan, one of the companies studied.

Changan Automobile Group is an SOE in Chongqing. To be remotely competitive in the automobile business it has had to learn to truncate the product development cycle. As the Chief Quality Officer explained, “We don’t have the luxury to wait. It forces us to think what we can do to make things better to guarantee the quality of the product, get a safer product and a beautiful product and still get to market. […] Fortunately a lot of advanced know-how, like simulation technology, developed 20 to 30 years ago is now mature so it helps us meet the challenge of being quick to market and improving quality. We have hired 770 experts from Chrysler, Ford and GM, etc., who have had experience to apply it and that helps us to expedite and speed up our time-to-market.” The coexistence and representation in China of the automobile global supply chain is also a major advantage. Designers, manufacturing engineers and suppliers are often co-located. They can talk to each other and gain immediate access to the supply chain and all that implies. And being an SOE means some advantages are conferred to the likes of Changan. Making money is important but the company also has societal objectives that impose a longer-term planning horizon. Being unconstrained by 90-day results reporting they are less inclined to make potentially detrimental short-term tradeoffs.

What is now noteworthy about China, Williamson and Yin (2014) maintain, is the widespread ability to achieve accelerated innovation, with rapid scale-up, low cost and “good enough” quality across a wide range of industries. Perhaps, it may not lead to fundamental breakthroughs, it may, however, mean that the resulting innovations disrupt incumbent players’ business models. In addition, this Chinese model for rapid, low cost and nimble innovation can also be adapted for global use. Woetzel et al. (2015) believe that it may result in accelerated innovation globally, challenges to market leaders from new innovators, and new, lower-cost products and services that fill unmet needs of emerging market consumers that also keep pace with the shifting demands of consumers in advanced economies.

While there are many positive winds blowing for Chinese innovation, whether of the accelerated or slow kind, there are also forces working against it. The CEO of a software company in Shanghai, Bosun, which is pursuing a niche in natural language programming: “[…] anything you do will be copied as soon as possible. That’s why some people do not want to do innovation. […] In China you have so much overcapacity that there is always a risk that everyone will dive into a given market.”

Examination of this first proposition reveals some insight into the overwhelming nature of information acquisition in China. Though one must be careful not to overgeneralize there is emergent evidence that progress in China continues apace based on knowledge assimilation and its deployment. One company alone, Changan, hired 770 experts from around the world to facilitate making sense of acquired and available knowledge. They not only make sense of
available knowledge, they also bring additional knowledge and expertise, both explicit and tacit (Nonaka, 1994). If this is typical, it is likely that much of the recently acquired IP is being progressively digested with a view to becoming manifest by way of innovation:

P2. China has reached a level of development enabling deployment of its newly acquired technology.

There is an amounting body of evidence that suggests that the tide is turning and real signs of innovation are beginning to come out of China. A study conducted on behalf of Booz and Co (Veldhoen et al., 2012) surveyed more than 100 leading Chinese companies and MNEs, operating in China. These covered the fields of sciences, consumer goods and chemicals and energy. Surprisingly, MNEs saw Chinese companies as having better support, and superior ability to deliver products rapidly to markets due to their superior top management decisiveness, speed-of-action and proximity-to-market. Moreover, 45 percent in the foreign companies said their Chinese competitors were more innovative. Looking to the future, both MNEs and Chinese companies saw all types of R&D as moving up the value chain with a growing emphasis on fundamental research and idea generation. This closing of the gap is also true in the world of brands. In China, foreign branded goods are losing their allure, as shoppers determine that local products are not necessarily inferior. A recent study by Bain & Co indicated that foreign brands were losing market share in China in 18 out of 26 categories of consumer products (Schumpeter: it’s the real thing, 2015).

The CEO of Unilever China, in a 2010 interviewee, revealed, “We innovate physically and conceptually. The track record of our Chinese colleagues inventing developing new formulations, new molecules, new packaging, branding concepts, phenomenal advertising is lousy. The quality of originality I have bumped into is quite poor.” Two years later his perception had modified, “I do think we are seeing more signals of inventiveness: much more from Chinese players. This notion that China can’t innovate is nonsense. I expect to see continued technological leadership coming out of China. The level of patenting seems to be going up and up. The proportions that are original patents seem to be increasing. In our own industries, we see very fast derivative innovation from Chinese companies, quite successfully in categories like skincare, which has one of the highest levels of innovation. Most of the multinationals are losing share to the Chinese players.”

This research identified several examples of emerging Chinese innovation. The Head of R&D as well as VP and General Manager of Honeywell Integrated Technology (China) Co., Ltd described the process and success he had in incentivizing innovation in that company. “The tricky thing about innovation is that you don’t see it while it’s happening. You see the results. During the last 30 years, you can now relate things and see how things have developed but at the time it was not so obvious how each step interlinked. Every ‘Great’ in the innovation story including Apple, we noticed after it had happened but they were already doing it (for a long time); […] So to me in Honeywell it was about creating that space, free space, for my engineers to think and develop solutions. I told them I know you’re working on project ABC; it’s a big job I understand. But here is $2000; you can buy things that enable you to do some experiments. I’m not going to punish you if you don’t have a result but I might give you a reward if you have a good result. […] After six months 19 proposals came to me. […] Out of 19 projects five went really well […] way beyond my expectations. I wanted to give them freedom to think without the fear of failure. It’s important to ensure that no one loses face. Most of innovation is about failure. But it’s difficult to get your head around that. So, I said just do it, experiment. Five projects turned into real products, five out of the 19. So, when these guys did it the others said, ‘I could’ve done that as well.’ In that way waves were made and others were prepared to try. Certainly, five products to market from 19 proposals is a respectable success rate, reflecting the potential of Chinese innovation.”
A key takeaway is that a culturally specific driver of innovation in China is the need and motivation to develop Chinese technological solutions. Local development is valued. MNEs operating in China are pressured into solving problems locally even though solutions from elsewhere may exist. The General Manager Shanghai OnStar Telematics Co., Ltd, a General Motors subsidiary, “They want to develop in China for China. You may be doing something exactly that they could’ve done in the US. But there is the pride of doing it. That is perceived as being innovative as to doing business in China. It’s a government mandate […] we must show that we were doing local development to get the government license. We made a big deal about the self-development piece.” This national pride permeates many areas of policy decision making. Another Chinese company, among those interviewed, rejected alliances with foreign players, preferring instead for their achievement to be entirely Chinese. It took longer and cost more and had little to do with strategy, it was a matter of pride.

Another example uncovered by this research relates to a university lecturer who became involved with making personal care products. His company is now estimated to be worth $3–$400m. Yet he is content to prosecute the business. He refreshes his Mercedes Benz every year. He is bullish about competing against the likes of Unilever and Procter & Gamble and when these companies broach the subject of acquiring his company it holds little appeal. Early retirement does not figure highly in his scheme of ambitions. Like many Chinese his work ethic is very strong.

Though by no means exhaustive this research is beginning to reveal that new knowledge is being generated and extant knowledge is being applied in ample measure. Now we will consider the next proposition regarding the imminence of accelerated innovation:

**P2. China’s innovation environment has reached a level that suggests innovation acceleration is imminent.**

There are many pointers that suggest the imminence of innovation acceleration in China. As the Microsoft Senior Director Technology Strategy in Beijing put it, “The US is a leader in academic research […] But if you look at the investment that’s been placed in top Chinese universities, over time we can expect them to do better research. It’s hard to say that one is destined to be the leader forever.” This thrust for innovation pervades industries of many types even the most traditional. TCM: Traditional Chinese Medicine is partaking of the surge. A company in the study, Chongqing Kerui Pharmaceuticals Company, an SOE focused on TCM is answering the call. Because “TCM is very difficult and time-consuming to prepare and consume, much of our focus is on making it more simple to consume.” The R&D Section Head explained they are working on this by figuring out how to deploy encapsulation and other alternative delivery systems.

We must consider that China is relatively new to the innovation game. For example, with a company such as Unilever China, the VP of its R&D Center, “It’s a young lab. The talent is in extremely short supply, 4.7 is the average years of service. Those other labs [in Unilever] the average time of service is above 16. […] For leadership, we are very reliant on [Unilever companies in] developed countries with expats. This speaks to needing to get a local talent pipeline going.” As the talent pool deepens and gains more experience so will the AC grow and with that the potential for visible innovation.

This research has uncovered many exceptional examples. For instance, Chongqing Haifu Technology Co., Ltd is a company dedicated to using ultrasound technology to ablate tumors. As its Director and President put it, “We’re a Chinese company and we started this research very early […] Our technology is like a knife that can be positioned in three-dimensional space.” The company operates at the intersection of biomedical science and engineering. It is Haifu’s judgment that in ten years one-third of all surgeries will involve ultrasound technology. It is not only just because it avoids open-wound surgery but also it will significantly reduce healthcare expenses. Over 50,000 procedures have been
conducted using Haifu technology. Moreover, the company claims it is competing at a price premium in the global marketplace against, GE, Phillips and Siemens.

Another company in this study, Chongqing Jinshan Science & Technology (Group) Co., Ltd describes itself as a private company dedicated to micro-electro-mechanical systems (MEMS) technology. They offered an application demonstration involving a capsule that contained a micro-camera. The one-time-use capsule is swallowed and images of the gastro-intestinal tract are transmitted to a computer screen. As its Vice General Manager explained, “We see opportunities to develop the application of this technology. We are one of the foremost developers of this technology in the world. We have 95 percent of the market in gastroenterology. We want to be the leader in MEMS technology.” This is no modest aim. To achieve this goal, they have established a keiretsu like network that involves the sharing of technology and, in that way, they can support the aspiration to invent something significant. Their technology has widespread applications in military, IT and the medical field. Usefully for Jinshan the Chinese Government makes available abundant funds to support R&D on these types of devices and Jinshan obtains many projects in this way. They frequently apply for these funds, but “If the government did not give us the funds we would do it [the projects] anyway. If you have government funds it is nicer” the Vice General Manager informs. Their obligation to the government is to deliver innovative products to the market faster than without its support. If they fail to do so the government funds will dry up.

Consider Hujiang.com for instance, another company studied. It is an educational portal established by its founder in 2001 when he was still an undergraduate. The company was incorporated in 2005. In total, 11 years later Hujiang.com had over 100m users, 20m of them registered, more than 1m are paying customers. At the headquarters in Shanghai they have more than 500 full-time workers, plus more than 2,000 part-time. The enthusiasm and creativity inside this company is palpable. Its success is predicated on passion. Revenues and net income are byproducts. Its website enables users to find many different courses via download or chat room. Initially, Hujiang.com served college students in Shanghai. Now 15 percent of users are in Shanghai, 10 percent Rest of World: Japan, USA, Australia and the UK, the remainder in China. With retired people accessing the service in increasing numbers the age demographic they serve ranges from 3 years to 70.

The motivation to succeed may on occasion transcend ethical boundaries. Interviewees described blatant theft of their IP, sometimes outside of China then acquired by Chinese companies. There are courts and legal processes but one interviewee, the Chinese CEO of an American MNE, described how they came under pressure to settle a five-year court action because the defendant had been awarded a large government contract, “They stole my IP from Korea. My Korean employees stole standing operating procedures and specifications. They stole thousands of documents, computers, several thousand files from us in Korea. Then they sold it to a local company in China. We fought for five years. I brought them to court last November but the Chinese court always wants to protect them [local companies]. Finally, we’ve reached a settlement and they paid us and we’re happy, they’re happy. We received huge pressure from the Chinese government. If we want to operate in China, then we cannot fight with them.” That US firm lost its IP but was compensated, in part, with a handshake from a vice minister.

So, has the innovation environment reached a stage that innovation acceleration is imminent? Quite possibly so; as one of the interviewees informed, “we don’t recognize the background innovation activities until we see the results in the marketplace.” This experience of doing research in China suggests that if you look for innovation you will find it.

Concluding observations

This paper has explored the issue of low innovation in China. It has suggested that the time consumed in the process of accumulation of AC might explain the existence of a perceptual
lag between the existence of innovative activity in some Chinese companies, large and small, with the recognition of China's innovativeness in the global marketplace. Figure 3 depicts the progression of AC accumulation from company level through regional to national level.

The concept of AC was utilized to suggest a possible explanation for why Chinese innovation may appear to lag its international comparators. By drawing from the literature on AC this paper developed three propositions by which to view and appraise the status of innovation in China. By combining secondary and primary data it becomes clear that there is support for the proposition that Chinese innovation is burgeoning. P1 questioned whether Chinese firms are overburdened with new technical knowledge. There are instances where this has been shown to be so. But there are positive as well as negative aspects to this issue. For example, a case was identified where a factory was cloned and its local Chinese management was challenged to derive economic yields. They, however, did have an up to date facility to work with and they possessed the ability to improve quickly by seeking and eliciting cooperation.

In terms of talent challenges the human resource base is progressing dramatically. Chinese firms are quickly developing their IP portfolios while bringing "speed to market" competencies into the competitive frame. Talent hiring internationally is ensuring that the ability to apply knowledge exists in Chinese companies.

P2 queried the deployment of newly acquired technology. Evidence emerged showing that companies can deploy new technologies from wherever they emerge. An uptick was observed in attitudes by foreign management toward Chinese innovation. Moreover, Chinese players are dominating skincare innovation by deploying technology that stems from Korea. Companies report positively on efforts to stimulate innovation from their China-based subsidiaries. This is so for software, skincare and control engineering applications as well as non-invasive medical procedures.

P3 asked whether the China innovation environment is promulgating innovation. Indeed, the mantra of innovation is reaching far and wide through Chinese industry. As the local talent pool continues to deepen innovativeness will be palpable.

From this convenience sample of companies, this exploratory study has highlighted some examples where real innovation is already occurring. Examples were found in the skincare category, in MEMS, ultrasonic medical applications, as well as online education. Local Chinese innovators were competing with giants like Procter & Gamble as well as Unilever in skincare. In medical diagnostics, world-class competitive positions have

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Figure 3.
Process of AC accumulation
been secured. For example, Jinshan Capsule has become a world leader in the MEMS medical devices area one of two players dominating the field of capsule endoscopy. Moreover, Chongqing Haifu Technology Co., Ltd has overseen over 50,000 procedures ablating tumors using ultrasound with its technology. It claims world leadership in key arenas with its equipment selling at price premiums to Siemens, Philips and GE.

More embedded examples came to light in the automobile and software sectors. In the automobile sector, they are developing AC rapidly. Pursuant of that one company alone had recruited international talent, amounting to 770 hires, from major industry giants. In the introduction, an oblique mention was made of the Chinese internet company Sina having produced a successful analog of Twitter with Weibo. Similarly, Tencent produced a clone of a Facebook product: WeChat. But Tencent like other Chinese companies, with WeChat, may have started with a cloned version of a western product yet it very quickly innovated beyond what the competition offered. So, as Yannick Bolloré, the Chief Executive of Havas, one of the world’s largest advertising firms put it, “Social platforms are very important in my industry. I would say that the best social platform in the world for me is WeChat, it’s much better than the Facebooks of the world […] We always say that Chinese people are very good at copying. Now they are very good at creating things [that] it could roll out one day eventually in the rest of the world” (French ad firm CEO says China’s WeChat ‘much better than the Facebooks of the world’, 2016).

We should not be surprised, therefore, to see significant Chinese innovations break into the market because companies across China are, in a variety of ways, attempting to expand their technological frontiers, as this paper has shown, and are bolstered by a strong motivation to produce Chinese successes. Yet despite this positive-leaning message suggesting a Chinese innovation breakthrough, none of the Thomson Reuters Top 100 Global Innovators are Chinese. It remains a close tie between American and Japanese companies. There are several alternative innovation rankings, however, using differing methodologies. For example, Boston Consulting Group (BCG) (The Most Innovative Companies 2015: Four Factors that Differentiate Leaders, 2015) ranks against four criteria: emphasis on speed, well-run (and lean) R&D processes, the use of technological platforms and the systematic exploration of adjacent markets. Using these criteria BCG lists Chinese companies Xiaomi at No. 35 and Huawei at No. 46. Whereas Forbes (2017) deploys a method that accesses the “wisdom of the crowd” by tapping investors’ ability to identify firms they expect to be innovative now and in the future. It ranks Chinese companies Shanghai RAAS Blood Products at No. 4 and Tencent at No. 24. So, we are beginning to see some recognition of Chinese innovativeness.

Leaving aside questions of the universal applicability of these lists, it is plausible that while some Chinese enterprises are acquiring IP in the form of international patents, many are still going through a phase where they are investing in and acquiring AC as a precursor to the flourishing of innovation (Figure 1). How long this period will be is difficult to assess and beyond the aim of this paper. Therefore, it would be interesting to see further research focusing on the operationalization of AC. In that way, we might better estimate when the perhaps inevitable technological breakthroughs might occur.

Insights from this paper may be valuable to government policy makers charged with promoting innovation in China but also to management of companies with an interest in arbitraging these developments by way of investing in Chinese firms or indeed becoming alerted to licensing of Chinese technology opportunities. Policy makers may be informed by the understanding that investment in AC is a precursor to innovation and the development of AC should be a separate target for funding. Foreign companies serving the same markets as those served by Chinese enterprises are advised not to sit on their laurels by assuming they are invulnerable, on the assumption that innovation will not flow from their Chinese competitors. This could change quickly. An uptick in innovation from China, as hypothesized by this paper, may catch them unaware and lead them rapidly to positions of competitive disadvantage.
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Managers’ psychic distance and its impact on Chinese FDI to Germany in the environmental industry

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Abstract

Purpose – The purpose of this paper is twofold. First, to analyze the impact of Chinese managers’ psychic distance (PD) with Germany on their businesses; and second, to investigate whether managers’ previous experiences affect their PD.

Design/methodology/approach – A multiple case study research design is adopted. It is based on six Chinese companies that have recently entered Germany through FDI.

Findings – PD influences the decision making of Chinese FDI to Germany, it has an impact on Chinese businesses in Germany on 4 out of 12 dimensions, namely, legal, political, cultural aspects as well as language. Managers with no international experience (study, work, foreign investment practice) perceive a higher impact of PD dimensions on business with the host country, whereas the opposite is true for experienced ones.

Originality/value – While extensive research has been conducted on the PD construct under the point of view of the differences between the home and host country’s characteristics, this paper sheds lights on the impact of pre- and post-periods of investment, as well as over international experiences of managers investing abroad. It examines the environmental industry for Chinese FDI to Germany.

Keywords China, Germany, Psychic distance, Environmental industry, Foreign direct investments (FDI), Impact on doing business

Paper type Research paper

1. Introduction

One of the determinants of location choice in foreign direct investments (FDI) is psychic distance (PD), defined as the distance perceived by managers between the characteristics of the home country and the foreign country (Beckerman, 1956; Linnemann, 1966; Gruber and Vernon, 1970; Johanson and Wiedersheim-Paul, 1975). Perceived differences between the home and host country’s characteristics generate unfamiliarity and distance among managers (Marini Thomé et al., 2017). The way these differences are perceived by managers have an impact (italics added for emphasis here and elsewhere in the paper) on the business in the host country, which, in turn, also generates uncertainty and distance. As such, these perceptions affect managers’ decisions in the internationalization process.

Some recent international business (IB) studies prove the impact of PD on FDI (e.g. Child et al., 2002; Brewer., 2007; Child et al., 2009; Hashim, 2012; Puthussery et al., 2014; Hertenstein et al., 2015) and show that managers’ perceptions are different before and after entering a market, due to their gathering of experiences over time (Vaccarini et al., 2017). Other recent studies demonstrate the need for investigating the differences between FDI
This research follows up on these recent observations and analyzes if PD perceptions by Chinese managers—pursuing FDI in the German environmental industry—affect their business with the host country. The focus is on the impact rather than the difference that managers perceive. More specifically, this paper investigates which dimensions of PD affect Chinese FDI to Germany in the environmental sector for its relevance in the Chinese economy and its role in the global expansion of Chinese firms[1].

This research is based on Child et al.’s (2009) PD concept with 12 dimensions, which will be illustrated later in this paper. This study aims to detect the extent to which managers perceive the impact of these dimensions on their businesses within the host country. It also examines if managers’ international experience has an influence on their perceived impact.

A multiple case study research design was adopted for this study. It is based on six Chinese companies, which have recently entered Germany through FDI. The main findings show that:

1. decision making in the context of Chinese FDI to Germany is influenced by PD;
2. PD has an impact on Chinese businesses in Germany on various PD dimensions, namely, legal, political, cultural, and language; and
3. managers with no international experience (study, work, foreign investment practice) perceive a higher impact of PD dimensions on their business with the host country while the opposite is true for experienced ones (legal, political, cultural, and language determinants are perceived as having low impact by experienced managers).

This paper uncovers the relevance of PD perceptions in the context of Chinese FDI to Germany in the environmental industry, especially in cultural, language, legal, and political aspects. It provides a more in-depth analysis on Child et al.’s (2009) PD dimensions and the impact—rather than the differences—perceived by managers on their businesses. Finally, this research detects how managers’ international experiences (previous study, work and investment experiences) affect their perceptions about the impact on certain PD dimensions for conducting business abroad.

The paper contributes industry-specific and nation-specific insights into the PD concept, with implications for both theory and practice. It advances the body of knowledge of PD. It indicates to international managers which PD dimensions should be monitored in order to undertake preventive actions and develop a successful internationalization path, from before market entry to the period after.

This paper is structured as follows. Section 1 provides an outlook on Chinese FDI to Europe in the environmental industry. Section 2 reviews the related literature on PD. Section 3 illustrates the theoretical framework of PD as a determinant in FD decision making. Section 4 illustrates the methodology, and Section 5 presents the results of this multiple case study. Section 6 discusses results and draws conclusions.

2. Chinese investments to Europe in the environmental industry
According to the European Parliamentary Research Services, the European Union “attracted €35 billion in completed Chinese FDI transactions in 2016, corresponding to a 77% increase compared to 2015 levels” (Grieger, 2017, p. 3). As for geographical distribution, Chinese FDI in Europe has mainly concentrated on the “Big Three,” France, Germany, and the UK. Germany (€11bn) and the UK (€7.8bn) together accounted for more than half (53 percent) of the total investment value last year (Hanemann and Huotari, 2017, p. 6).
In terms of sectorial distribution, green Chinese FDI has experienced a fairly moderate growth up to 150 percent in 2016, compared to the annual average growth of the previous years (2013–2015, nearly 0 percent) (Grieger, 2017, p. 4; Hanemann and Huotari, 2017).

The environmental sector provides an interesting setting for analyzing Chinese FDI. The green tech industry is among the most targeted destinations for Chinese investments. Because of measures foreseen by the Chinese Five Year Plans aimed at reducing carbon dioxide emissions and other pollutants for a healthier population, China has shifted its priorities by focusing on sustainable and green growth. China is the current leader in the environmental industry (wind and solar), stimulated by production-oriented subsidies; however, over-production capacity has been a major side effect of this rapid growth. China’s successful expansion abroad is driven by the Go Global strategy – the cooperation of a competitive renewable energy industry at the national level with world-class wind power and solar companies. Today, China has become the largest worldwide investor in the renewable energy industry. Domestic supportive policies, international cooperation, diplomatic relations, global technology acquisitions, and expertise constitute a combination of supporting factors in China’s push for greener energy. The motives for Chinese firms to invest abroad in this industry are access to markets, access to new technologies, and favorable access to assets due to the financial crisis (2007–2010) (Costa et al., 2017). In addition, because of the implementation of the Renewable Energy Directive (2009/28/EC) and the Europe 2020 targets, Europe has become one of the biggest sales markets for renewable energy products and solutions over the past two decades (Curran, 2015; Lv and Spigarelli, 2015, 2016). Since 2005, Chinese outward FDI flows have been growing at an average rate of 15 percent per year. In 2016, Germany received 31 percent of total Chinese investment in the environmental industry in Europe, corresponding to €11bn (Hanemann and Huotari, 2017; Federal Foreign Office, 2017).

As far as China’s target markets are concerned, Europe has been the main destination for Chinese renewable energy businesses. According to an analysis conducted at the industry level by Lv and Spigarelli (2015) Spigarelli and Lv (2016), on a data set provided by the Chinese Chamber of Commerce (MofCom), 208 investment initiatives to Europe were promoted by 135 Chinese entities between 2004 and 2013. Mostly private and not publicly listed companies invested and used greenfield investments, rather than acquisitions, as an entry mode. In total, 40 percent of investments were addressed to Germany, followed by Bulgaria, Luxembourg, and Italy. Chinese investors came from 19 Chinese provinces. In total, 30 percent of the investors came from the Jiangsu Province.

3. Psychic distance as a determinant in FDI decision making
The first form of “distance” that was analyzed in IB research is “geographic distance,” as well as its impact on internationalization decisions (Linnemann, 1966; Leamer, 1974). Later scholars introduced economic distance (Berry et al., 2010), institutional (Xu and Shenkar, 2002; Salomon and Wu, 2012), cultural distance (Brouthers, 2002), and the concept of differences (Campbell et al., 2012) to the IB literature. Empirical research suggests that managers' unfamiliarity, uncertainties, and perceptions of differences between the home and host country’s characteristics are relevant for IB (Powell and Ansic, 1997; Vaccarini et al., 2017) because it affects managers’ decisions in the internationalization process of firms (Child et al., 2002, 2009). In particular, the extant literature suggests a deeper investigation of these issues in the context of FDI from emerging market multinationals, since they are different from developed countries’ FDI (Chikhouni et al., 2017). This section illustrates these differences as distances, and follows up the argument from Zaheer et al. (2012, p. 19) that “international management is management of distance.” Cognitive distance or “psychic distance” perceived by managers is especially relevant as it determines managers’ decision-making. The term “psychic distance” was coined by Beckerman (1956) and was
later applied in the context of the internationalization process of firms (Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne, 1977).

In this section, the literature on “distance” and “perceptions” is incorporated into IB in the context of Chinese FDI to Germany. This research is conducted by building on Child et al.’s (2009) model of PD, which was derived from both theoretical and empirical studies (e.g. Ghemawat, 2001; Child et al., 2009). Child et al. (2009) conceptualize PD as the existing perceived distance between home and host country on the dimensions mentioned in the following list.

PD dimensions according to Child et al.’s (2009) conceptualization and operationalization:

(1) Culture
(2) Political system
(3) Legal system
(4) Language
(5) Regulations
(6) Geographical distance
(7) Business ethics
(8) Accepted business practices
(9) Level of technological development
(10) Level of economic development
(11) Logistical infrastructure
(12) Level of education

PD is not simply a perception of the difficulties in entering and doing business in a foreign market, but has a real manifestation through its consequences. The literature suggests, in fact, that low PD encourages managers to enter foreign markets or increase investments (Johanson and Vahlne, 2009).

Child et al. (2009) operationalize PD by asking two types of questions along each of these dimensions.

Question 1. “What is the degree of difference between the home and host country?”

Question 2. “What is the extent to which it impacts businesses with the host country?”

In this research, respondents rated their perceptions on a five-point Likert scale, where 1 means “no real difference”/“it does not impact on my business at all,” and 5 “very great difference”/“impacts on my business very much” (Child et al., 2009, p. 221). For the purpose of this study, in which the main aim is understanding the perceptions of Chinese managers on FDI to Germany in the environmental industry, the focus is on Question 2. This enables the impact of the 12 dimensions on the businesses with the host country to be determined.

PD was measured by asking Chinese managers to express their perceptions of differences between the firms’ home country and host country characteristics, and their perceptions of the impact of each dimension on businesses with the foreign country. Managers rate their perceptions on five-point Likert scales (from “very low” to “very high”). The “psychic” part of the concept relates to individuals’ perceptions and cognitions, which describe the core elements of the PD definition (Evans et al., 2000; Powell and Ansics, 1997). The in-depth study of managers’ perceptions is derived from their crucial role as decision makers, whose perceptions and skills in facing PD affect the firm’s internationalization process (Harzing, 2003; Brewer, 2007; Child et al., 2009; Hashim, 2012).

In the next section, the methodology of the multiple case study is illustrated.
4. Methods
For the purposes of this study, a “convenience sampling” approach (Miles and Huberman, 1994; Patton, 2002) of six Chinese companies from the same industry has been adopted. These companies entered the German environmental industry through FDI between 2008 and 2015. Each company made sure to provide a link to an internal contact person of Chinese nationality at top management levels, who covered one of the following positions: manager’s assistant, general manager, director of global sales, marketing manager, general manager, and chief liaison officer (Table I).

Because of its explorative nature, a multiple case study research design was adopted (Eisenhardt, 1989), with a triangulation approach for data collection (Yin, 2013). Data have been collected from a number of sources, such as surveys, websites, the annual reports of the companies, and other publicly available pieces of information (e.g. newspapers, scientific publications, and existing case studies). In addition, data collection is based on a questionnaire composed of five sections, addressed to the above-mentioned managers. For those based in China, the interviews were conducted by phone, IP calls, in personal meetings, or by e-mail. The extant literature confirms that collecting data through questionnaires is considered an effective way to investigate companies’ perceptions, especially in the case of a small sample (Doherty, 2000; Shi et al., 2001). This qualitative

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<th>Company</th>
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<td>Marketing manager, Chinese</td>
<td>General manager, Chinese</td>
</tr>
<tr>
<td>Chinese headquarters location</td>
<td>Beijing</td>
<td>Ningbo</td>
<td>Wuxi</td>
<td>Changsha</td>
<td>Nanjing</td>
<td>Shenzhen</td>
</tr>
<tr>
<td>Turnover in China (USD)</td>
<td>3,000,000</td>
<td>50,000,000</td>
<td>22,000,000</td>
<td>280,000,000</td>
<td>28,000,000</td>
<td>55,000</td>
</tr>
<tr>
<td>FDI entry mode</td>
<td>Wholly owned subsidiary Hamburg</td>
<td>Wholly owned subsidiary Nurnberg</td>
<td>Wholly owned subsidiary Frankfurt am Main</td>
<td>100% acquisition</td>
<td>Wholly owned subsidiary</td>
<td>Wholly owned subsidiary</td>
</tr>
<tr>
<td>Location in Germany</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core business</td>
<td>Renewable energy, service and distribution</td>
<td>Renewable energy, service and distribution</td>
<td>Renewable energy, service and distribution</td>
<td>Construction machinery and distribution, Waste management, Efficient processing, optimized design, sustainable materials</td>
<td>Renewable energy, electric power infrastructure, R&amp;D and marketing services</td>
<td>Renewable energy, electric power infrastructure, green building, efficient processing, optimized design, sustainable materials, monitoring systems, marketing services</td>
</tr>
</tbody>
</table>

Notes: aThe names of the companies are not disclosed and kept as confidential information. To this purpose, they are named by capital letters in the next sub-sections.

Table I. Company profiles
methodology allows us to derive propositions after conducting accurate analyses, including a description of each firm’s profile, and look at similarities and differences among the cases.

The interviews were conducted with managers from six Chinese firms who had already invested in Germany. In this way, the following issues are addressed: first, the extent to which managers are aware of PD between China and Germany; second, the focus on the relevance that they attribute to the 12 PD dimensions by looking at their impact on conducting business abroad; and third, how managers’ international experience affects their perceptions of impact on the business with Germany.

Section 1 of the questionnaire aimed at gathering general information about the respondents, focusing in particular on study and work experiences, as well as previous experiences with foreign investments. Section 2 asked for details about the Chinese headquarters, the investments in Germany, and the chosen entry modes. In Section 3, managers were asked about their perceptions before entering Germany (in retro-perspective). Section 4 investigates their perceptions in the post-market entry phase. As such, managers were asked for perceptions in two different points of time, before and after market entry. Sections 3 and 4 are the key parts of the questionnaire, since they ask about managers’ PD perceptions before and after market entry, respectively. They contain the 12 dimensions elaborated by Child et al. (2009) and a five-point Likert scale each, in order to grade the PD perceptions. In Section 5, managers were asked about their understanding of “culture” in the form of an open-ended question (Vissak, 2010).

This research will primarily present results from the described Sections 3 and 4 of the questionnaire, where Chinese managers were asked about their perceptions of differences and impact on the 12 dimensions in two points of time. For the purpose of this study, however, the focus will be on impact rather than differences.

First, this study detects the relevance of each of the 12 PD dimensions in both points in time by conducting a static analysis and identifying the perceived importance of each dimension in terms of degree of impact. The static analysis shows how managers perceive PD at two separate points in time without comparing them directly. Second, these perceptions are analyzed to see if they vary over time, namely, from the period before market entry to the period after entering the foreign market (dynamic analysis). Asking managers to go back in time and recall their perceptions before entering the market may constitute a weakness of the adopted method since the interviews were conducted in a different point in time (after the market entry). To try to combat this, the interviewers made sure to introduce this research project in detail to the interviewees and explain the purpose of the qualitative nature of the study in depth. Although their perceptions could have been affected by what happened between the pre-market entry (retro-perspective) and the post-market entry (actual perspective), additional pieces of information and motives were available, such as their responses provided during the interview, and in the e-mail conversations. This helped to increase the coherence between their given answer (actual perspective) about their perceptions back in time (retro-perspective) (Agarwal and Ramaswami, 1992). Once each interview was completed, an e-mail with the elaboration of their replies was sent back, including their responses and the key additional information, which were written down in the form of notes during the conversation or contained in the e-mail conversation. In this way, the accuracy of the qualitative material available was double-checked. Based on managers’ answers on their perceptions of the impact on the 12 dimensions on a five-point Likert scale (1 = “very low” to 5 = “very high”), defining the importance of each PD dimension was possible. All dimensions that were rated higher than the midpoint of the Likert scale (3) + 15 percent ( = 3.45) on average were defined as having an “important” impact on businesses. In the next section, the main findings are illustrated.
5. Results
The six interviewed Chinese managers came from different cities and regions in China, i.e. Beijing, Ningbo, Wuxi, Changsha, Nanjing, and Shenzhen. They cover different positions in their respective companies, i.e. manager’s assistant, general manager, director of global sales, marketing manager, general manager, and chief liaison officer (Table I).

Three out of six managers have had international experiences before entering the German market and have lived, worked, or invested in countries other than Germany. The other three managers had no previous work or investment experiences, and had not studied abroad (cf. Table II).

Company profiles
In this section, the six companies are described (Table I).

Company A is located in Beijing and established its wholly owned subsidiary in Hamburg in 2012. It is a service and distribution company in the RE sector – solar photovoltaic and solar thermal energy. Access to the local market, availability and acquisition of key technologies and brands, as well as incentives and supportive policies, were the main reasons for choosing Germany. The entry mode choice was driven by existing personal contacts and political factors. The general manager did not have any previous work experience in the host country and did not study or invest abroad.

Company B is headquartered in Ningbo and settled its wholly owned subsidiary in Nuremberg in 2011. Service and distribution of solar technology constitute the core business of the German company. The main entry mode determinants were political and economic factors. The most relevant reasons for choosing Germany were access to the German market as well as the availability of incentives and supportive policies. The manager representing this company had not worked in the host country or studied abroad in the past. This is the manager’s first experience regarding investments abroad.

Company C is headquartered in Wuxi and entered Germany – Frankfurt am Main – in 2008 by establishing a wholly owned subsidiary. The core businesses include service and distribution of photovoltaic panels. The company chose Germany in order to have access to the local market, and because of the presence of local business partners. The Chinese manager did not work in Germany previously and did not study abroad. He had previous experience with foreign investments outside Germany (not further specified).

Company D is headquartered in Changsha and established its investment in Aichtal in 2012 through a 100 percent acquisition. The main drivers for choosing this country were previous experience with investments in Germany, key technologies, and relevant brands. This company operates in the construction machinery industry – manufacturing, development, and services. In addition, their business includes waste management and efficient processing. The interviewed manager did not work in the German market before, but had graduated from a US university.

Company E is based in Nanjing and started its wholly owned subsidiary in Willich in 2005. Legal factors, access to the local market, presence of local business partners, and

<table>
<thead>
<tr>
<th>Manager/company</th>
<th>Previous international experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Yes (investments in countries other than Germany)</td>
</tr>
<tr>
<td>D</td>
<td>Yes (study abroad in a country other than Germany)</td>
</tr>
<tr>
<td>F</td>
<td>Yes (work and study in Germany)</td>
</tr>
<tr>
<td>A</td>
<td>No previous international experience</td>
</tr>
<tr>
<td>B</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
</tr>
</tbody>
</table>

Table II. Chinese managers’ previous experiences (study, work and foreign investments)
existing connections were the main drivers for choosing Germany. The core business of the company in the host country is related to the research and development of solar products and solutions, as well as marketing services. The manager had no previous work experience in Germany and did not study abroad. This is his first experience with foreign investments.

Company F is headquartered in Shenzhen and established a wholly owned subsidiary in Bremen, Germany in 2014 because of existing local business partners, key technologies, relevant brands, and a favorable logistic infrastructure. The parent company is a manufacturer of measuring instruments and technologies. The entry mode choice was mainly driven by economic reasons. The manager has worked and studied in Germany, but this is his first experience in investing abroad.

**Company-specific results: static analysis**

Table III shows the results of the interviews by listing the average values for the perceived impact of PD mentioned by Chinese managers on FDI to Germany (Sections 3 and 4 of the questionnaire). The italicized numbers in Table III represent the values that are equal or above the previously defined thresholds (i.e., 3.45 points), and therefore highlight managers who think that PD dimensions impact decision-making in FDI.

Table III shows that the managers from Companies A, B, and E perceive a high impact on PD dimensions with their businesses with Germany. More specifically, before market entry, the Chinese manager of Company A expected that the 12 dimensions would have a very high impact on conducting businesses with Germany (4.00). After entering the market, and after establishing and gathering experiences in Germany, his perceptions changed: the manager perceives that the impact of PD dimensions is even higher than before entering the market (4.08). The manager representing Company B reported quite high values on the perceptions of the impact of doing business in Germany. The perceived impact was higher in the pre-entry stage (4.16) than in the post-entry phase (3.83). In this case, experiences also influenced the perceived impact of PD on FDI, but in the opposite direction than in the case of Company A. Both cases indicate that experiences influence the perceived impact of PD on FDI.

The managers’ perception of Company E did not change over time (4.25 points both in the pre- and the post-entry period), although the managers perceived PD as relevant for decision-making in FDI, as the value overcomes the established threshold. The managers of Companies C, D, and F do not perceive a high impact of PD on FDI (according to the defined cut-off criteria); however, by referring to the total average of all six firms (3.58 before entering the market, 3.36 after entering the market, 3.47 on average over all periods and firms) the results show that PD is relevant in the internationalization of the firms. As such, PD impacts FDI decision, and the perceived impact changes with experience.

<table>
<thead>
<tr>
<th>Companies</th>
<th>Pre-entry</th>
<th>Impact Static analysis</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.00</td>
<td>4.08</td>
<td>4.04</td>
</tr>
<tr>
<td>B</td>
<td>4.16</td>
<td>3.83</td>
<td>3.99</td>
</tr>
<tr>
<td>C</td>
<td>2.91</td>
<td>2</td>
<td>2.45</td>
</tr>
<tr>
<td>D</td>
<td>2.75</td>
<td>2.58</td>
<td>2.66</td>
</tr>
<tr>
<td>E</td>
<td>4.25</td>
<td>4.25</td>
<td>4.25</td>
</tr>
<tr>
<td>F</td>
<td>3.41</td>
<td>3.41</td>
<td>3.41</td>
</tr>
<tr>
<td>Total average</td>
<td>3.58</td>
<td>3.36</td>
<td>3.47</td>
</tr>
</tbody>
</table>

*Table III.* Company-specific results on perceived impact on the 12 PD dimensions (average values, five-point Likert scale questions)
The importance of 12 PD dimensions

Table IV shows the values of managers’ perceptions of the impact on FDI decisions of single PD dimensions in the pre- and post-entry period (Sections 3 and 4 of the questionnaire). Table IV also illustrates the average values (over the six firms) along the 12 dimensions.

Overall, the most relevant PD dimensions above the 3.45 threshold are “culture,” “political system,” “legal system,” and “language” (Table IV).

The case of Chinese FDI to Germany in the environmental industry shows that there are two policy-related dimensions among the four most important dimensions, i.e. “political system” and “legal system,” next to “culture,” and “language.” This might lead to the conclusion that, for example, the differences among countries with respect to legal and political systems should be uncovered and made more transparent, especially in the pre-entry step. In this way, the pre-entry and the post-entry impact of such dimensions may coincide. This means that managers’ post-entry experience would be coherent with what they expected before entering the market. These findings further lead to the conclusion that bridges between the systems in different countries should be built, and that detours to complete these bridges between the two systems could be suggested.

The open-ended question was introduced – in addition to the closed ones – from Section 5 of the questionnaire. It contributes to the enrichment and validation of the results emerging from Sections 3 and 4. The open-ended question includes several advantages, as the opportunity to penetrate complex issues and to detect if the replies provided by the respondents are coherent throughout the questionnaire or interview (Vissak, 2010). Specifically, asking managers about “culture” was an expedient in order to collect illustrative examples for the impact of the single PD dimensions. This is confirmed by the fact that managers’ answers to the question about “culture” include reference to political system, legal system, and language and not just to “culture.” While PD, and its components, are our theoretical construct, managers make reference to “culture” as a very inclusive construct. Managers’ responses were read under the perspective of “perceptions of impact”; therefore, the textual elements and expressions were checked accordingly. Furthermore, their replies were analyzed in order to identify explicit references to the impact of factors that affect business activity between China and Germany. Extensive passages of the open-ended questions have been introduced in the text. Main findings show that the managers of Companies A and B limited themselves to provide their general understanding of culture, without specifying anything about its impact:

Culture means that people thinking with different systems, communicate different. Not only language, but most import is how to do things, with which systems and under which values (Company A).

Culture is the characteristics and knowledge of a particular group of people (Company B).

<table>
<thead>
<tr>
<th>PD dimensions</th>
<th>Pre-entry</th>
<th>Impact</th>
<th>Post-entry</th>
<th>Average values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture</td>
<td>3.83</td>
<td>3.83</td>
<td>3.83</td>
<td>3.83</td>
</tr>
<tr>
<td>Political system</td>
<td>3.66</td>
<td>3.83</td>
<td>3.74</td>
<td></td>
</tr>
<tr>
<td>Legal system</td>
<td>3.83</td>
<td>3.66</td>
<td>3.74</td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>3.33</td>
<td>3.66</td>
<td>3.49</td>
<td></td>
</tr>
<tr>
<td>Regulations</td>
<td>3</td>
<td>3.83</td>
<td>3.41</td>
<td></td>
</tr>
<tr>
<td>Business ethics</td>
<td>3.5</td>
<td>3</td>
<td>3.25</td>
<td></td>
</tr>
<tr>
<td>Accepted business practices</td>
<td>3</td>
<td>3.33</td>
<td>3.16</td>
<td></td>
</tr>
<tr>
<td>Level of technological development</td>
<td>3.33</td>
<td>3</td>
<td>3.16</td>
<td></td>
</tr>
<tr>
<td>Level of economic development</td>
<td>3.16</td>
<td>3</td>
<td>3.08</td>
<td></td>
</tr>
<tr>
<td>Geographical distance</td>
<td>3</td>
<td>3.16</td>
<td>3.08</td>
<td></td>
</tr>
<tr>
<td>Logistical infrastructure</td>
<td>2.66</td>
<td>3.5</td>
<td>3.08</td>
<td></td>
</tr>
<tr>
<td>Level of education</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td></td>
</tr>
</tbody>
</table>

Table IV. Static analysis and perceived impact

Managers’ PD and its impact
Company C reports an interesting attitude toward the impact of culture, confirming that it does not affect their activity in Germany. This is also coherent with their results emerging from Sections 3 and 4, as Table III confirms. The value corresponding to the pre-entry impact accounts for 2.91 points, and after the market entry equals 2. This company reported the least average values with respect to the others, with a total of 2.45 points: “The cultural impact does not affect us, there is no impact on our business because we talk per phone, e-mail and we don’t have any other contacts with the target country, like those people who live in the target country. So, there is no direct involvement, and the conversation are limited to our business. The decision makers in Germany give us a lot of freedom.”

Company D provides a wide understanding of culture, stressing that not only language, but a series of other factors (and PD dimensions) are relevant (e.g. language, business practices, regulations). Company D highlights the following detail regarding the business relationships between China and Germany: “Regarding the approach, I can go more into detail about it: being more careful about the approach, being careful about conducting analysis in business, strategic analysis and so on. Compared to the Chinese way, Germans are more careful, there is more thinking and planning before doing things.”

Company E reported the relevance of culture, language, and legal systems: “If we focus on company management, culture very important, in terms of language, legal system and so on. Culture is the most important factor.”

They also stressed their concerns about attitudes in doing business, more specifically, the way internal conflicts are managed:

As far as company culture is concerned, there are different attitudes regarding management power. For example, China is a symbol of Eastern Asia and if you understand China, then you understand all Eastern Asia. The Chinese company management core idea is about controllable internal conflict, this is the core spirit of Eastern Asian companies. Meaning that in Eastern Asia, if there are internal conflicts, for example idea A is very different from idea B or the opposite, it is the CEO who solves them. That’s why Eastern Asian companies prefer to have someone whose tasks is controlling internal conflicts. In other words, Eastern companies are more people oriented, while Western companies are more mission oriented, their aim is the vision and idea of the company and think about choosing the right people to accomplish the mission. So, according to my understanding of culture, Eastern companies aim at the procedure, while Western companies aim at the result.

Company F gives examples of how personal relationships impact business activity between China and Germany in the context of business meetings:

As about culture, I can give you some example regarding personal relationships in marking. In China this is very important, while in Germany this is just business. In China relationships are very among colleagues, between the business partner, while in Germany the relationship in the business environment are considered business. They keep personal and work relationships separated. In China companies organize dinner after the meetings, as a custom because they want to improve relationships from the table. And they don’t speak about business. In Germany, when it is about having dinner after a meeting, they talk just about business. In China there is high corruption and maybe the government changes policies quite quickly over the years, while Germany, with respect to this, everything is very stable.

These key responses from Section 5 provide additional information “for understanding complex aspects in the field of international business. Moreover, making interviews may highly increase the possibility of getting the answers from the ‘right’ respondent. Even if a survey is addressed to a CEO, he/she might let his/her office assistants or other staff members fill it out” (Vissak, 2010, p. 374).
Chinese managers’ previous “experiences” in Germany

The questions from the first section of the questionnaire (general information about the respondents) allows for the combination of the results shown above with managers’ foreign experiences (in terms of study abroad, investment, or work).

The data show that the managers representing companies C, D, and F had studied and worked abroad and gathered experience with foreign investment before they entered Germany. The three Chinese managers representing companies A, B, and E had not gained any such experiences.

The combined analysis of Tables II and III shows that previous experiences have a moderating role and affect Chinese managers’ PD perceptions on the impact of doing business with Germany. Inexperienced managers scored very high values on perceived impact (Company A: 4.04, Company B: 3.99, and Company E: 4.25, respectively). While Chinese managers with study, work, and foreign investment experiences (Companies C, D, and F) perceived that the PD dimensions impact the conduction of business in Germany to a smaller degree (2.45, 2.66, and 3.41). Hence, previous work, study, and investment experiences clearly influence the perceived impact of PD on FDI.

Summarizing the main findings leads to the following propositions:

*P1.* International experiences (study, work, and prior experience in foreign investments) have a moderating role with respect to Chinese managers’ perceptions on the impact of doing business in the environmental industry in Germany through FDI.

*P2.* The greater the international experience, the lower the perceived impact on businesses with the host country; the less the experience, the higher the perceptions on the impact of doing businesses.

These propositions may suggest that, in specific cases, Chinese managers seem to underestimate or overestimate the importance of certain aspects of their business in Germany before entering the market. Once they enter the market and gain experience, Chinese managers seem to adjust their perceptions. Therefore, the above-mentioned propositions may be confirmed since the less their prior experience, the higher the difficulty of doing business in Germany. The uncovering of the key PD dimensions, especially the legal and political aspects, were revealed to be fundamental for Chinese managers in the pre-entry phase.

6. Discussion and conclusion

In this study, the relevance of PD in the context of Chinese FDI to Germany was investigated. The focus was on the environmental industry. This study builds on extant empirical research on the internationalization of other emerging markets, such as Hong Kong firms (Child et al., 2002) and UK firms in Brazil (Child et al., 2009), and positions itself in the IB studies of “distance” (e.g. Ghemawat, 2001), showing that PD perceptions may increase or decrease from the period before and the period after market entry (Vaccarini et al., 2017).

The results show that “culture,” “political system,” “legal system,” and “language” affect Chinese business activities with Germany and create distance, as well as potential difficulties (impact). Next to the cultural factor, political and legal aspects are key dimensions to consider in the pre-market entry period. The combined analysis of managers’ experiences and PD confirm that study, work, and foreign investment experience affect managers’ perceptions on doing business abroad. This is particularly relevant for the environmental sector, as it is a highly regulated industry (Appolloni et al., 2012, 2014).

A careful interpretation of the results might lead to the statement that (Chinese) managers seemed to underestimate, overestimate, or even misperceive, the importance of
certain aspects in the pre-entry phase. In the presented case, Chinese managers adjusted their perceptions once they gained experiences in Germany. The less of these experiences they had, the higher the PD perceptions were in terms of impact on business activity.

Some managerial implications from the analysis can be carefully derived:

1. Tailored preventive actions for Chinese managers dealing with the German market might be undertaken in order to decrease cultural barriers, and to increase market knowledge about rules and legislation.

2. Managers from emerging countries need to be trained to be able to make correct assumptions about critical factors determining FDI decisions (Puri et al., 2015). These aspects will become more and more relevant with increasing FDI flows from emerging markets to developed nations (Lattemann and Alon, 2015).

3. Companies should be particularly careful in selecting internationally acting managers and should avoid appointing unexperienced ones, especially in terms of the cultural issues illustrated by the Chinese managers during their interviews. Going in depth and understanding – as well as having actual experience – of what “the Chinese way” means is necessary. In other words, the Chinese attitude adopted in the company compared to the “German way” (Company D) is an important factor. Prior experience, especially in Chinese-owned companies in Germany, is fundamental to comprehend what Company E reports: “In other words, Eastern companies are more people oriented, while Western companies are more mission oriented.” These aspects impact business activity. Specific training sessions may help raise managers’ awareness of the risk of “mis-match of perceptions.” Furthermore, they might make emerging market firms aware of the different perceptions, which might lead to more aware decision making regarding FDI.

Next to these managerial implications, additional theoretical implications and contributions can be derived. This study examines the impact – rather than the differences – of PD dimensions on the business activity between the home and host countries. Both aspects of the PD construct, differences and impact, are operationalized by Child et al. (2009) in his study regarding the internationalization of British companies in Brazil in a single point of time. This research investigates the impact only and focuses on investment relationships in the context of Chinese FDI to Germany in the environmental industry. In doing so, it adds an additional country pair (China-Germany) to the literature of PD, an industry focus (environment), and the impact of the PD dimensions on businesses in two different points in time (pre- and post-market entry). This additional perspective of time may raise managers’ awareness on their expectations in the period before entering the foreign market and the period after that.

This analysis has some limitations. First, the analysis was conducted in an industry-specific setting – environmental industry – and in the context of Chinese FDI to Germany. Therefore, the analytical generalization applies to this context only. Second, several data sources for collecting data were used, ranging from online publicly available data, to questionnaire surveys and interviews. Having said that, despite the extant literature confirming that collecting data through questionnaires is an effective way to investigate the perceptions of a small sample of companies, the adopted method shows some weaknesses. The interviews were conducted after the Chinese companies entered the German market, while an important question required managers to rely on their perceptions in a point of time belonging to the past, the pre-market entry period. Third, the perceptions of managers may change with conditions and the passing of time. There is no reason, however, to assume that these limitations should affect all the cases in the same direction so that the multiple case study design is a guarantee for internal validity and soundness of results. Future research paths may consider conducting similar analyses into other industries and different country pairs.
Note

1. In recent years, the combination of the increasing environmental awareness in China and slow growth in Europe has created an increasingly conducive economic climate to Chinese FDI in the environmental industry (Lv and Spigarelli, 2016; Wübbeke et al. 2016). China has been devoting increasing attention to environmental issues and pollution reduction. Wide and comprehensive green and environmental protection policies have been embedded in the latest Five-Year Plans (FYPs) and in the “Made in China 2025” strategy (KPMG Global China Practice, 2016). In particular, China supported the environmental industry by devoting gradual emphasis on green issues since the 6th FYP (Hu, 2014). In Europe, many governments have also heavily subsidized the green industry over the past decades but have reduced their public support to this sector recently. As a consequence, European firms, in particular in the environmental industry, have recently become more and more open to joint ventures, strategic alliances or merge with foreign firms, especially with firms from emerging markets (Lv and Spigarelli, 2015).

References


Further reading


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The transition from relation-based to rule-based governance in East Asia 
Theories, evidence, and challenges

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Department of Management, Elon University, Elon, North Carolina, USA

Abstract

Purpose – The purpose of this paper is to use the framework of rule-based and relation-based governance to examine the evolution of governance environment in the East Asian region including China, South Korea and Taiwan.

Design/methodology/approach – Both qualitative and quantitative evidences are presented to demonstrate the paths these East Asian countries take in their transitions from relation-based governance to rule-based governance. Based on the framework, this analysis sheds light on the debate on whether East Asian economies will eventually move away from relation-based governance to rule-based societies.

Findings – The authors find that relation-based governance has helped East Asian countries achieve rapid economic growth in the early stages of their development. However, as the scale and scope of East Asian economies expand, continuing to rely on it may hinder their further development and therefore these countries should adopt a rule-based governance system in order to be efficient and competitive in the world market. While South Korea and Taiwan have made substantial progress in this transition, China has just embarked on the process.

Originality/value – This paper is among the first to systematically review the theories and evidence of the transition and the challenges East Asian countries face during the process.

Keywords China, South Korea, Taiwan, East Asia, Transition, Governance environment, Relation-based governance, Rule-based governance

Paper type Viewpoint

1. Introduction

In the last 50 years or so, East Asia has experienced phenomenal economic growth, creating what is called the “Asian Miracle.” One of the major advantages of the East Asian model of economic development, in addition to high savings and investment rates, is the prevalence of family businesses in which “all family members work together harmoniously and efficiently without worrying about who gets how much” (Li, 2013). Policy makers and academics have praised the model; for example, Michael Porter refers to it as “dedicated capitalism” (Porter, 1996).

Then in 1997 the Asian Financial Crisis swept through the region (mostly East Asia) with powerful destructive blows on the financial institutions and operations in the region, causing loan defaults, free falls in the exchange rate of the local currencies and dramatic stock market declines, eventually bringing the region into a deep recession. The crisis served as a watershed moment for how the world viewed the East Asian development model. Policy makers and scholars began to cast doubts on its effectiveness; after all, having the boss’s wife serve as the chief accountant and his sons on the board of directors seemed to be poor governance practice, prompting some to call it “crony capitalism” (Krugman, 1998).
How did the reversal happen? How did the phenomenon in which family members work together in the same firm change from being positively viewed as representing dedicated management to an indicator of corruption? Obviously the scholars of international business and the political economy owe the public in general, the policy makers and the business community in particular a more consistent theoretical explanation for this shift from the East Asian Miracle to the East Asian Financial Crisis (Li, 2013).

Many scholars have attempted to explain the 1997–1998 East Asian financial crisis, resulting in a rich literature on the topic (Mishkin, 1999; Dowling and Zhuang, 2000; Moon and Mo 2015). However, few have been able to provide a consistent explanation for the causes of both the miracle and the crisis. A notable exception is the approach by Li, Park and Li, who attempt to explain what distinguishes East Asia from the economies in the West in terms of how economic activities are conducted. Specifically, they offer an explanation from a governance perspective that can more consistently explain both the East Asian Miracle and the East Asian Crisis, which they term as rule-based vs relation-based governance (Li, 1999; Li and Li, 2000; Li et al., 2004). According to Li, Park and Li, the governance of economic activities, based on different types of information and enforcement, is what makes East Asia different from the West. More specifically, this difference is primarily based on private vs public economic governance. In East Asia, private ordering is applied in relation to relation-based governance, whereas economic activities in the West basically depend on public ordering in relation to rule-based governance (which will be described in more detail later). Li, Park and Li argue that the effectiveness of the two methods of governance differs in relation to the type of the economy they are applied to. Relation-based governance, as used in East Asia, is only efficient in an economy with a smaller scope and scale such as a local domestic market, whereas rule-based governance is more applicable to a larger national/international economy. As an economy expands in scale and scope, relation-based governance will become ineffective and costly, which will then force the economy to embrace public ordering.

According to Li, Park and Li the relative low cost of implementing relation-based governance during the early stages of economic development has provided a platform for the East Asian Miracle, that is, the East Asian economies have had the opportunity to rapidly grow without the involvement of a sound legal system. The expansion of the economies in East Asia has then resulted in the adaptation of rule-based governance, diminishing the use of traditional relation-based governance. However, during this transition, before new rules materialized to replace the old relation-based ways, governance voids emerged, serving as a main cause for the 1997 financial crisis in East Asia (Li, 1999; Li and Li, 2000; Li et al., 2004).

Since the 1980s the newly developed East Asian countries, such as South Korea and Taiwan, have made substantial efforts to transition from relation-based to rule-based governance, while at the same time engaging in rapid democratization. During the same period, China has embarked on major economic reforms, which can be viewed as an intense effort to move away from relying on private relations to public rules (Li et al., 2004)[1]. But can East Asia really abandon the relation-based way and embrace rule-based governance?

An increasing number of studies have analyzed the differences between the public (western) vs private (non-western) models of governance since the publication of the relation-based vs rule-based framework, with particular interest on whether these frameworks will converge (Dixit, 2003a, b; Lu, 2014). Central to the debate is whether a new emerging country should utilize established modes of economic governance from the West or should they consider adapting new frameworks for economic governance and management activities to reflect their own unique culture and heritage (Qian, 2002; Barney and Zhang, 2009; Leung, 2009; Li and Nair, 2009; Alon et al., 2011; Lin, 2011; Lau and Young, 2013; Li, 2013).
In a 2013 article, Li made the case why China will transition from relation-based to rule-based governance (Li, 2013). Based on this framework, we will demonstrate theoretically why East Asia will transition from relation-based to rule-based governance, provide the evidence of the transition and discuss the challenges East Asia faces in its transition.

2. Rule-based vs relation-based governance environment

The underlying logic of the differences of the two methods of governance, rule-based vs relation-based, is based on the reasons why individuals/organizations prefer one mode from the other when it comes to protecting their interests related to socio-economic exchanges (see Li (2009) for the framework details). Governance is primarily described as the monitoring, controlling, protecting and enforcing activities an organization takes. The type of enforcement and information available are the core factors that determine which mode of governance an individual or organization would use to govern/protect their interests. They may opt to rely on private information which may include rumors or secret codes and to use enforcement tactics such as private settlement such as using a hit-man. In contrast, they may use available public information such as accounting disclosure and credit reports and rely on public enforcements such as sanctions or court rulings.

The governance environment, a set of prevalent economic, social and political institutions, shapes individuals/organizations’ decision-making on their preferred mode of governance, and as such, is the praxis for the framework of governance mechanism (private vs public) chosen. The governance environment gives individuals/organizations the necessary platform to settle on either private or public modes of economic governance. In cases where courts are efficient and impartial, people will opt to use it as a medium through which they enforce contracts. In instances where courts are less effective and judges in the society are more corrupt, people tend to opt for extra legal means which may include private mediation to settle disputes.

The two most predominant governance environments across countries are rule-based and relation-based governance. Rule-based governance environments mostly exist in societies where the laws are transparent and impartial, and their enforcement is fair and unbiased. Accordingly, most individuals and organizations will opt for public rules to protect their socio-economic interests in business exchanges (Li et al., 2004).

Two important features necessitate and support the existence and operation of the rule-based governance environment. First, a rule-based governance environment is facilitated by well-laid-out infrastructure of public ordering, which includes law-making bodies, bodies that interpret the law and finally bodies that enforce the law. Second, the efficiency of the rule-based governance environment is largely contingent on the existence of a high-quality public information system. This means that public information required for governance, such as credit ratings, financial reports/bank statements, should be reliable and trustworthy.

Unlike in a rule-based governance environment, a relation-based governance environment fully relies on private ordering, where individuals and organizations are not prompted to follow public rules but rather adapt to private relations to protect their socio-economic interests and solve business disputes. The existence of a relation-based governance environment is due to the failed functionality of public ordering, that is, when courts are biased and rules are made without a fair representative process. Private means of socio-economic protection and dispute resolution may include bribing government officials, hiring criminal organizations and obtaining scarce resources such as licenses/business permits or public projects through bribing. Individuals may also resort to developing or joining private networks to provide protection in an informal manner.

Relation-based governance is quite different from doing business using relational marketing. Relational marketing involves using established relationships to provide customers goods and services, while relation-based governance is about obtaining public goods or services through personal connections, sometimes even involving corruption.
Based on the discussion of the rule-based and relation-based governance environment frameworks above, research conducted on the East Asian region has concluded that the dominant way of doing business is the relation-based governance (see Li, 2009, for a review). Hence we seek to address the following question: will East Asian countries continue to be predominantly relation-based societies or will they gradually evolve into rule-based societies? In the following paragraphs, we evaluate arguments for both sides.

3. Arguments why East Asia will not transition to rule-based governance
The arguments why East Asia will not transition from relation-based governance to rule-based governance are to a great extent driven by the view that East Asia is unique and has its own model of development that is dramatically different from the West. This idea has been a main school of thought in the debate of the “Eastern model” (especially the “Chinese model”) vs the “Western model,” a hotly contested topic in social sciences during the last 50 years or so since the advent of the “East Asian Miracle” (Li, 2013). Scholars who believe that East Asia cannot or is not ready to adopt the western style of governance such as the rule of law, transparency and accountability, and even to some extent democracy, argue mainly from two perspectives.

The first and foremost perspective is the “cultural argument,” which argues that the cultural heritage of East Asia such as Confucianism strongly emphasizes informal social networks of reciprocity and mutual obligations. Since the impersonal rule-based system is not congruent with such values, the East Asian societies will not transition from the relation-based to a rule-based governance (see Dirlik, 2012; Zhang and Zhu, 2012 for reviews on the cultural view).

The second perspective is referred to as the “Entrenchment argument” (Li, 2013), which states that the elite societies, especially those in China, have greatly benefited from the system of relation-based governance. The intertwined political and economic interests of the powerful elites are deeply entrenched in the relation-based way of doing business, making them strongly resist any changes from it.

4. Arguments why East Asia will transition to rule-based governance
Below we argue on logical, theoretical and empirical grounds why East Asia will make the transition from relation-based to rule-based governance (Li, 2013).

4.1 The logical argument
The rationality of the logical argument is dependent on the various cost structures of the two governance systems. The functionality and sustainability of the rule-based system is contingent on a viable and stable legal infrastructure which is comprised of three major pillars: a legislature such as a parliament or congress, a judiciary system with its own independent structure including state and federal courts with specialized and unbiased judges, and an executive branch which includes the administrative and law enforcement agencies such as the police. There is also the need for a high-quality public information system, which should consist of auditing, accounting, trustworthy media and rating organizations. Regardless of the number of business transactions, the infrastructure based on these elements must exist in order to guarantee the effective enforcement of transactions through public means. Furthermore, once established, the system can support a large volume of transactions, and the incremental cost due to the application of an additional transaction is minimal, making the maintenance and upgrading costs of the rule-based governance infrastructure relatively affordable. As such, the rule-based governance system favors large scale economies and provides a platform for firms to establish and enforce contracts with unknown agents in the same way they would with friends. In other words, rule-based governance enables business transactions to be kept at arms’ length.
In relation-based societies, however, the lack of an efficient and effective legal infrastructure makes it less desirable to do business at arms’ length. Individuals and organizations in relation-based societies always tend to carry out business with parties they are well acquainted with (such as families, and other friends as their business grows) to reduce the monitoring costs. Therefore, unlike rule-based governance, the need to have laws and their enforcement by a court system is absent in relation-based societies as most firms establish private relationships for their own protection and rely on public order only as their last resort for help when conducting business. However, as an economy expands and businesses grow to a point when recruiting strangers becomes inevitable, the increasing marginal cost of monitoring opportunistic behaviors in business transactions makes relation-based governance lose its cost advantage and relation-based societies will be forced to transition to the rule-based governance (see the turning point in Figure 1).

In their early days of economic development after the Second World War, South Korea and Taiwan did not have many effective public rules to govern economic transactions, and people and firms there relied on private relations to protect their business activities. Similarly, three decades ago when China began its economic reforms, fair and effective public rules were virtually nonexistent. Essentially these economies rapidly developed without sound legal systems. Indeed, South Korea, Taiwan and later China have greatly benefited from relation-based governance by avoiding the establishment of costly legal and public information infrastructures, both necessary building blocks for a well-functioning rule-based system. In the past 50 years the economies of South Korea, Taiwan and more recently China have been rapidly expanding from local to global markets. While empirical studies are needed to estimate where they are along the cost curve of the relation-based governance (as in Figure 1), one thing is certain: as their economies grow in scale and scope, to be efficient and effective they will have to move away from relation-based governance and transition to rule-based governance.

Social justice theory (Rawls, 1971) also predicts this transition will occur. The relation-based way of obtaining public goods, services and protection with the help of one’s connections is a disadvantage for those that are not well connected. Only those few individuals with elite family backgrounds, connections and power are likely to enjoy these privileges. Thus the relation-based system lacks social justice. The emphasis on an elite
group as a dominating social force leads to non-transparent businesses as well as national governance structures that have relied on a group of powerful people’s discretionary decisions rather than on market disciplines based on the rule of law (Jwa, 2000). East Asia must change to a rule-based governance to ensure it meets the social and economic development standards of today’s world.

Theoretically, the two modes of governance cannot co-exist or function in parallel in East Asia. To achieve equilibrium, one of the two dominant governance systems has to be chosen in the society. This is because the rule-based system predominately relies on faith in public rules and orders, while the relation-based way encourages avoiding or circumventing such rules and orders, rendering them ineffective and reducing the rule-based system to a residual mode of governance (Platteau, 1994). Even though the existing governance environments in most countries are not completely one-fold since the two modes are logically not compatible, for practical purpose, we treat societies in which the rule-based governance mode dominates, such as Finland, as a rule-based society, and societies that are primarily reply on private ordering, such as China, as a relation-based society.

4.2 The problem with the cultural argument

One way to test the culture-determination argument is to compare the cultures among East Asian countries and their governance environments. As can be seen from Table I, China, Korea and Taiwan are remarkably similar in several cultural dimensions, especially in individualism and long-term orientation. And they are significantly different from the USA in these dimensions.

On the other hand, despite their cultural similarity, the governance systems of China, Korea, and Taiwan show large discrepancies. We will use two sets of governance measures to examine the gaps. The first is the Governance Environment Index (GEI) developed by Li (2009) based on five governance dimensions: political rights, rule of law, level of public trust, free flow of information and quality of accounting standards. The first and second dimensions measure the development and enforcement of public rules, the third and fourth measure the quality of public information and the fifth captures the culture element that facilitates the rule-based system. Based on the GEI ranging from 6.41 (the most rule based: Finland) to –8.13 (least rule-based: Iran), South Korea is the most rule-based among the three (GEI = 0.24); Taiwan is a close second, with a GEI of –0.13; and China has the lowest GEI of the three –5.92, the second least rule-based society next to Iran. The GEI of the USA is 2.30.

We also use World Bank’s Worldwide Governance Indicators (WGI) (World Bank, 2012) as an alternative measure to examine the differences in governance among the three societies. The WGI has six governance indicators: voice and accountability, political stability/absence of violence, government effectiveness, regulatory quality, rule of law and control of corruption. Based on the sum of the six WGIIs ranging from 15 (can be interpreted as the most rule-based) to –15 (can be interpreted as the least rule-based), South Korea

<table>
<thead>
<tr>
<th>Country/region</th>
<th>Power distance</th>
<th>Individualism</th>
<th>Masculinity</th>
<th>Uncertainty avoidance</th>
<th>Long-term orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>80</td>
<td>20</td>
<td>66</td>
<td>30</td>
<td>87</td>
</tr>
<tr>
<td>Korea (South)</td>
<td>60</td>
<td>18</td>
<td>39</td>
<td>85</td>
<td>100</td>
</tr>
<tr>
<td>Taiwan</td>
<td>58</td>
<td>17</td>
<td>45</td>
<td>69</td>
<td>93</td>
</tr>
<tr>
<td>East Asia average</td>
<td>66</td>
<td>18</td>
<td>50</td>
<td>61</td>
<td>93</td>
</tr>
<tr>
<td>USA</td>
<td>40</td>
<td>91</td>
<td>62</td>
<td>46</td>
<td>26</td>
</tr>
</tbody>
</table>

**Source:** Hofstede (2012)
and Taiwan are more rule based (scored 4.38 and 5.82, respectively), while China is the least rule based (scored −3.34). The USA has a high WGI of 7.53.

These comparisons show that although the three East Asian countries have similar cultures, their governance systems are substantially different, with Korea and Taiwan substantially more rule-based than China. In fact the governance environments of Korea and Taiwan are closer to that of the USA than China. Therefore, the argument that culture determines the governance system does not hold.

4.3 The need for relation-based countries to make the transition

The governance indexes quoted above (Table II) show that Korea and Taiwan are well underway in their transition from relation-based to rule-based governance, while China is still a relation-based society. However, the need for China to make the transition has been increasingly recognized by both scholars of political economy and Chinese policy makers (Li, 2013).

Zhou Xiaochuan, governor of China’s central policy bank (2002-2018), the People’s Bank of China, strongly advocates for financial reforms to help establish rule-based governance in China. He criticizes the relation-based way in high profile interviews, stating that those in the central government are the ones that hinder and interfere with the efforts to establish the reforms. He argues that fundamental financial reforms must be laid down with respect to legal regulations and rules (Backchina.com, 2012). Zhou’s comments are rather unusual in a relation-based society such as China, where public officials maintain low profiles and avoid making substantial public statements to avoid political repercussions. Zhou’s strong advocacy of public rules not only signals the urgency of financial reforms in China but is also indicative that the relation-based way of punishing officials who break the code of silence is weakening. Several scholars echo Zhou’s view that China’s relation-based way of doing business hinders the sustainability of future economic growth (Chen, 2012), damages the fairness of court decisions (Huang, 2012; FlorCruz, 2012) and leads to political instability as the demand for civil rights, democracy and economic reforms continues to grow (Pei, 2012; Gongshiwang, 2012).

5. The transition in East Asia

5.1 South Korea

Like the rest of East Asia, South Korea has traditionally been a relation-based society in which informal networks among big businesses and between big businesses and governments were extensive, strong and exclusive. The unique Korean organization that best symbolized the relation-based way of doing business is chaebol, which literally refers to a clan that owns wealth or property. It is a South Korean-style business conglomerate with the following characteristics: Typically, it is a holding (controlling, or parent) company that owns numerous enterprises that operate in diverse industries in multiple locations. The head of the holding/controlling company, usually the head of the family that founded the conglomerate, controls all operations. Informal collusion among the chaebols is believed to be widespread. Controlling families of chaebols maintain their close relationships

<table>
<thead>
<tr>
<th>Country/region</th>
<th>Governance Environment Index (GEI)</th>
<th>World Governance Index (WGI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>−5.92</td>
<td>−3.34</td>
</tr>
<tr>
<td>Korea (South)</td>
<td>0.24</td>
<td>4.38</td>
</tr>
<tr>
<td>Taiwan</td>
<td>−0.13</td>
<td>5.82</td>
</tr>
<tr>
<td>USA</td>
<td>2.30</td>
<td>7.53</td>
</tr>
</tbody>
</table>

with each other through marriages and through industrial associations, such as the Federation of Korean Industry.

The close relationship between the chaebols and the government can be viewed as mutually beneficial: businesses were backed by the government to grow and expand, and the government used chaebols to develop the country’s economy (Huang and O’Neil-Massaro, 2001). From the 1960s to the 1980s, the Korean economy took off rapidly and by the late 1980s, it had become an industrialized nation with a per capita income of $8,600 (1990s purchase power parity adjusted) (World Bank, 2015). With the scale and scope of its economy greatly expanded into the world market, there was a need for Korea to move away from the relation-based system. Since the late 1980s, Korea has been steadily transforming its governance system toward a more rule-based one by opening up its economy. During this period, two major events accelerated the process. One is the democratization in the late 1980s and early 1990s and the other is the 1997 Asian Financial Crisis.

The democratization process started when the long-time authoritarian ruler Park Chung-hee was assassinated in 1979. From 1980 to 1987, the democracy movement and government give-ins pushed through many measures geared toward implementing a more rule-based system. These measures included reforms such as limiting presidential terms and strengthening the authority of the National Assembly. Popular protests forced the government to implement additional social reforms and hold presidential elections in 1988. The 1992 election of President Kim Yeong Sam can be viewed as a new era of greater rule-based governance. For example, he implemented the real-name financial transaction act to end the relatively easy ways bribe money could be hidden (Koreabridge, 2012).

The 1997 Asian Financial Crisis hit South Korea extremely hard because of the vulnerability of the economy due to its heavy exposure to international finance and trade and more importantly the cozy relationship between the chaebols, the government, and the banks (which were used by the government to finance the chaebols’ aggressive expansions). Lee Yong-Keun, chairman of the financial supervisory commission said in 2000 “Anachronistic activities by chaebol were part of what caused Korea’s economic crisis and the government has the responsibility to protect the rights of the people.” In addition to the Korean stock market crash, the exchange rate of the Korean currency had a free fall by losing more than half of its value to the US dollar (from 800 won/$1 to 1,700 won/$1), further exacerbating Korea’s ability to service its foreign debt, and, as a result, more than doubled its national debt-to-GDP ratio from approximately 13 to 30 percent (Wikipedia, 2015).

Responding to the crisis, the government, led by the newly elected president Kim Dae Jung, made sweeping structural reforms that fundamentally changed the governance environment of Korea, and greatly contributed to its transition from relation-based to rule-based governance. These reforms included labor reforms that broke the relation-based, rigid employment practices; financial reforms targeting the relation-based banking practice that increased transparency, accountability, sound management and stopped government’s subsidizing of big banks; corporate reforms that specifically targeted the chaebols with five principles of corporate restructuring, which are essentially rule-based governance and economic liberalization. In sum, these reforms opened the banking and other sectors to foreign competition (Moon and Mo, 2015). As a result of these reform measures and the resolute effort to implement them, Korean’s economy quickly rebounded and the governance environment was substantially improved, moving from relation based to more rule based (see Table II).

5.2 Taiwan
The political and economic environment of Taiwan since the 1950s was similar to that of South Korea in that it was under an authoritarian rule with pro-business economic policies. The business-government relationship was cordial and family businesses dominated the
economy (Lien et al., 2016). From the 1950s to the 1980s, Taiwan enjoyed fast economic growth and became one of the four tigers that created the Asian Miracle, reaching per capita income of $10,000 (purchase power parity based) in 1990 (IMF, 2003).

In the late 1980s, Taiwan began to democratize. In 1986, the first opposition party, the Democratic Progressive Party, was founded. Instead of dismantling it, the ruling party under Chiang Ching-kuo allowed and recognized it, precipitating rapid democratization. In 1987, Chiang ended the martial law and restored constitutional rule. In 2000 the opposition party won the first presidential election, successfully and peacefully ending the one-party rule in Taiwan.

At the same time, Taiwan has made great strides in corporate governance reforms. Until the late 1990s, the business environment of Taiwan can be characterized as informal and family based, with modern, rule-based corporate governance virtually missing (Lien et al., 2016). The 1997 Asian Financial Crisis adversely impacted Taiwan’s economy.

In the aftermath of the crisis, from 2001 to 2003, the Taiwanese government embarked upon a series of reforms to introduce more rule-based corporate governance. These included amending the Company Law to require companies to disclose cross-holding information, directing the Taiwan Stock Exchange (TSE) to establish an online system of information disclosure for all the listed firms, and promulgating a set of new regulations to improve the quality of information disclosure. In addition, in 2003, the TSE began to conduct annual reviews and evaluations of the quality of firms’ information disclosure, and the results were published online as a reference for all investors. Since 2003, to ensure board independence, the TSE has also required newly listed firms to reserve at least two seats for independent directors. These measures have greatly facilitated the transition of Taiwan’s governance system from relation based to rule based, which is evident in the improvement in “Shareholder Protection Index” (SPI): in 1995, Taiwan’s SPI was 5.25, and by 2005, it had reached 7.17, a 37 percent increase (Lien et al., 2016).

5.3 China

In the late 1970s, the Chinese government started economic reforms which were aimed at introducing market forces, establishing new economic laws and regulations intended to more clearly demarcate and protect property rights, and gradually divesting the government of businesses. The reform has released a tremendous force of productivity in the Chinese economy that was suppressed under Mao’s ultra-leftist policy. The Chinese economy took off and has witnessed double-digit growth for decades, creating the world’s second largest economy.

From the governance perspective, all the reform efforts are geared toward shifting away from the old relation-based way of governing economic activities to the establishment of more effective public rules (Li, 2013). In this sense, the economic reform is an attempt to transition from a relation-based system to a rule-based system. In the late 1990s, the government called for banking reforms to make bank financing more accessible to non-state firms and firms without good connections to government officials, an effort that would undermine the relations-based way of banking. The government also announced its intention to eliminate smuggling, which is essentially relation-based trading in which the well-connected firms can import without paying tariffs and to wean government organizations from conducting business, thus reducing the opportunities in which officials and their relatives can enter restricted and lucrative industries (Hofman and Wu, 2009).

Further evidence of the transition comes from China’s attempt to adopt international standards governing trade and finance. In 2000, China entered the World Trade Organization. Six years later, China made an effort to converge to the International Financial Reporting Standard or IFRS. Based on Li’s GEI, the quality of accounting is an important part of rule-based governance (Li, 2009). The fact that China has (at least...
partially) adopted IFRS, which provides more stringent standards and open criteria for the public to access and evaluate firm’s financial information, a vital element of a rule-based system, shows the Chinese government’s effort to become a member of the international, more rule-based community. Research shows that investors of the Chinese stock market increasingly rely on publicly released financial information since China’s convergence toward IFRS (Qu et al., 2012).

While data on how China has evolved in terms of its governance system over time are difficult to obtain, we can gage it by examining the changes in the Economic Freedom Index (EFI) published by the Fraser Institute (Gwartney et al., 2012) and changes in the World Governance Index. The EFI “measures the degree to which the policies and institutions of countries are supportive of economic freedom” (Gwartney et al., 2012). It is based on 42 variables to measure the degree of economic freedom in five broad areas: size of government, legal system and property rights, sound money, freedom to trade internationally and regulation. As can be seen, three areas (2, 4 and 5) are pertinent to a sound rule-based governance system, and we thus can use it as a proxy to examine China’s transition toward a rule-based system. In 1980, China’s EFI was 3.64. By 2010, it was much higher: 6.37 (Note: the EFI has a range from 1 (least free) to 10 (most free)).

A comparison of China’s WGI between 1996 and 2014 reveals mixed results: of the six governance indicators, two (rule of law and government effectiveness) showed slight improvements, two (regulatory quality and control of corruption) remained more or less unchanged (with control of corruption slightly better due to the recent anticorruption campaigns), and two (voice and accountability and political stability) showed deterioration in the level of rule-based governance (Figure 2).

Summarizing the observations from the two indices, we see that in a 30-year span since China started economic reforms, its economic institutions have become substantially more rule-based (as seen in the change of EFIs from 1980 to 2010); however, we also notice that in the second half of the 30 years, the move toward a more rule-based system not only slowed down, but stopped or even was reserved in several dimensions, in particular in voice and accountability and political stability (as seen in the changes of the WGs from 1996 to 2014). Obviously, the transition is anything but smooth and there continues to be obstacles.

### Worldwide Governance Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Country</th>
<th>Year</th>
<th>Percentile Rank (0 to 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice and Accountability</td>
<td>China</td>
<td>1996</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>Political Stability and Absence of Violence/Terrorism</td>
<td>China</td>
<td>1996</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>Government Effectiveness</td>
<td>China</td>
<td>1996</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>Regulatory Quality</td>
<td>China</td>
<td>1996</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>Rule of Law</td>
<td>China</td>
<td>1996</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>Control of Corruption</td>
<td>China</td>
<td>1996</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2014</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** World Bank (2015)
6. Challenges of the transition for East Asia

6.1 Governance vacuum during the transition

The transition from relation-based to rule-based governance may present a governance vacuum that can cause disruptions to the economy, especially in the financial markets, and increase risks for foreign investors to a much higher degree than before. The main reason for the market disruptions and increased risks for foreign investors is that the usefulness of private relations are declining as new rules are established to replace them, and at the same time, the new rules are often merely ink on paper and are not fully enforced. For example, since the beginning of the reform in 1978 to 2004, China has enacted 307 new laws and thousands of regulations associated with legal power (Liang, 2008) in an effort to introduce rule-based governance in the economy. Many of the new commercial laws are indeed meant for providing better protection for property rights in general and for foreign investment in particular. Unfortunately, these improved laws have not been universally and effectively enforced. What often happens in such markets undergoing the transition is that for (naïve) foreign investors, the newly published laws are opportunities to invest; but for insiders, they are opportunities to loot (Economist, 2000).

Shuhe Li argues that the dislocation associated with the transition from a relation-based to a rule-based system is the main cause of the 1997 Asian Financial Crisis (Li, 1999). Anecdotal evidence seems to support his argument: the countries that took faster steps to liberalize and opened up their economies and financial markets, such as South Korea, Thailand and Indonesia, were hit harder than countries that were more closed, such as China.

6.2 Too many new rules during the transition

An interesting and yet intriguing observation of the transition from relation-based to rule-based governance in East Asia is that people in these traditionally relation-based systems have a tendency to create many new rules to govern virtually all aspects of their work and life, from kindergarten enrollment to office promotion. Often these rules, rather than improving efficiency as intended, are onerous and stifling to individuals, businesses, and government. (Li, 2009; Park et al., 2015). This is because East Asia has had a long history of authoritarian rule (which is a form of relation-based governance) and people had suffered power abuse and unfairness for ages. Now the prospect of doing away with the exclusive private network system is met with great enthusiasm by the populous. People in East Asian societies have seized the opportunity to make stringent rules to limit officials’ discretion of power and establish fair and reliable governance. However, in the process, they have created too many new rules.

The overreliance on public and organizational rules and regulations is common in all sectors of East Asian societies. While the education systems of East Asian countries have been reformed and became decentralized in the early 1990s in line with their political systems (Lo and Gu, 2008), the college admission systems are rule-heavy. In a well-developed rule-based society, such as the USA, the admission decision considers recommendations by teachers and school counselors, test scores, personal statements, high school grades and self-reported activities. In East Asia, college admission relies heavily on the entrance examination. The reason is that if recommendation letters were allowed, people would use personal connections to get favorable evaluations from powerful people. In 2009, leading universities in China initiated a new recommendation-based policy in lieu of the traditional examination to reflect students’ overall character in admission decisions. However, the public became very critical of the new policy as they doubted the integrity and credibility of recommendations. Universities eventually succumbed to public perception and decided to drop the well-intended policy in 2015. There are similar issues with evaluating university professors’ research. Since there is little faith in administrators’ or colleagues’ evaluation of others’ work, universities rely exclusively on standardized journal lists, such
as The Financial Times 50 list or the SSCI journal list (Social Science Citation Index developed by Thomas Reuters), to evaluate, reward or punish professors. There are also generally more regulations and scrutiny within the organizational hierarchy. The lack of trust in people and overreliance on rules and procedures cause a heavy toll on efficiency and effectiveness, while suffocating talented individuals and their input on governance. East Asian societies have become a giant battlefield of examinations: there are examinations for kindergarten, elementary school, middle and high school, college, jobs and promotions. The examination-only teacher-hiring-system selects a group of high IQ-test performers who are not necessarily capable teachers. Colleges are full of test-taking wiz-kids with little creativity. Professors game the indexed journal list by publishing in some that are relatively easy to get into even if they are not in one’s own field of scholarship.

6.3 The political difficulty for China’s transition
We agree with the entrenchment argument that the main obstacle for the transition in China is not culture, but the entrenched government and officials (Li, 2013). Currently the Chinese Communist Party monopolizes the political power and controls the economy and the society, and clearly states its intention to maintain its total control forever. Such a totalitarian rule is an extreme form of the relation-based governance. In order to adopt more public rules that are fair and open, a political reform that promotes pluralism and power sharing is the most important first step.

Rule-based governance and democracy are two different phenomena (e.g. Hong Kong has rule-based governance, but no democracy). They are however correlated and operate over a similar denominator, that is, mature democracy and rule-based governance require the strong protection of the rule of law. Hence calling for democracy/political reform is largely the same as calling for rule-based governance.

Indeed, political entrenchment is the biggest obstacle to political reforms. Government (i.e. the Communist Party) officials are the major stumbling blocks to the achievement of the needed political reform. There is much debate on how China will be able to break down this form of political entrenchment, how China will start political reforms to move away from dictatorship, and when these reforms can be complete (see, e.g. Chen, 2012; Huang, 2012; Pei, 2012).

7. Concluding remarks: when and how, not if and why
This paper argues that the choice of governance at the organizational and individual level is influenced by the external governance environment: the prevailing political, social, cultural and economic institutions at the national level. As the scale and scope of their economies increase, East Asian countries’ transition from relation-based to rule-based governance is a matter of time. Culture is not the major obstacle delaying or derailing such a transition. In the same way that several East Asian countries have fully embraced democracy, they should be able to adopt rule-based governance. However, the question still remains on “when” and “how” this transition takes place.

For the case of China, scholars strongly believe that for the transition to take place, political reforms must come first. According to Minxin Pei, democratization is a priori for continuous economic development in China, and that the system of dictatorship has reached its limit (Pei, 2012). Yasheng Huang strongly advocates for the establishment of the rule of law since without it even the most influential and powerful individuals in the society will be victims of persecution if they fall out of their positions (Huang, 2012). According to Huang, if these officials realize the value of personal security and value it more than collecting economic rents, they would promote the establishment of the rule of law. Zhiwu Chen states that if the Chinese government does not take quick actions to enact political reforms, social instability will become uncontrollable (Chen, 2012). Even though consensus has been
reached for the need to have political reforms, whether it will be a top-down process initiated by the ruling party or a bottom-up process led by the middle and lower class remains to be seen. Completion of the transition to a rule-based way of governance is necessary to facilitate further economic development as well as reduce social inequality in China. Both policy makers and organizations in China need to fully recognize this transition is logical and unavoidable, and take the initiative to embrace rule-based governance in a peaceful manner.

Although South Korea has gradually transformed from a relation-based governance system to a more rule-based one with the opening of its economy in the 1980s, corporate restructuring programs are still being developed and improved to reflect on the changes in the external governance environment. The recent trend that Korean companies are moving away from relying on government funding to private equity funding has reduced the government’s ability to control or interfere with the chaebols and facilitated more comprehensive corporate restructuring (Solomon et al., 2002). Moreover, the dispersion of shares to minority shareholders, accompanied with the transformation of the traditional chaebols from a family-run, insider-dominated system to an outsider-dominated one similar to the western system in the recent years (Solomon et al., 2002) has started the transition to a rule-based governance at the firm level. However, unethical and corrupt practices related to chaebols emerged during this transition. For instance, the avoidance of corporate tax payments by connected chaebol families emerged as a result of the loop holes in the rules. In addition, top management of Samsung and Hyundai have been both accused of illegal transferring of funds to sister companies or customer’s trust funds to manipulate the overall financial picture of the companies (Korea Herald, 2000a, b, March and April). Such corrupt corporate practices call for more effective enforcements in the new rule-based system.

Similar to South Korea, Taiwan has embarked on the transition to rule-based governance in the past few decades. However, as new rules were being developed and the society went through this transition, corporate scandals occurred and revealed that the road to rule-based governance was full of potholes. For example, in 2007, Rebar group, one of the largest conglomerates in Taiwan had committed fraud of $2.21bn embezzlement by its controlling family, violating multiple laws of banking, accounting and securities and causing Taiwan’s top financial regulation official to resign (Liu and Yang, 2008). Such failures in the governance system, accompanied with other problems such as lack of transparency of companies’ financial status, related party transactions, excessive financial leveraging and excessive bonus offerings (Liu and Yang, 2008) have prompted the Taiwanese government to introduce more rule-based governance measures through new governance reforms. In 2007, a new amendment was added to Taiwan’s Securities and Exchange Act (SEA), including crucial components such as implementing the independent director system to prevent future failures in governing corporations (Liu and Yang, 2008).

East Asian countries are not only close to each other by culture heritage, political and economic development, but also follow similar routes in the transition of national governance systems. With the globalization of the world’s economy and the internationalization of business transactions in East Asia, a common attempt for China, Korea and Taiwan, following the opening of their markets, is to reform, restructure and harmonize their governance systems to become more globally competitive. As the economy of these East Asian countries develops to a much larger scale and scope, rule-based governance system should be embraced to maintain their competitiveness as well as to achieve further social and political development. Despite the abundant research and knowledge on how a society transitions from autocratic dictatorship to democracy, the theoretical guidance in structuring and implementing governance reforms still remains quite inadequate. This paper is our modest attempt to fill this void in the literature by contributing to the understanding of the two different governance systems, their
characteristic differences and cost advantages in different stages of economic development, the predominate influence from the external governance environment on the choice of governance mechanisms at the organizational level and the reasons and timing for transitions to take place for East Asia.

Note
1. The reason we choose China, South Korea and Taiwan as representatives of the East Asian economies is that they share the same cultural background, have achieved rapid economic growth, and are in various stages of economic and/or political reforms.

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Further reading


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How does home government influence the internationalization of emerging market firms?

The mediating role of strategic intents to internationalize

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Abstract

Purpose – The purpose of this paper is to focus on the differential impact of government promotional measures and government ownership on two internationalization variables: location and speed of internationalization of emerging market multinationals (EMNEs). Central to the authors’ study is the mediating role of strategic intents to internationalize. In particular, we study how government impacts the resource-seeking, market-seeking and technology-seeking motives to internationalize.

Design/methodology/approach – The empirical setting for the paper is Chinese companies that have internationalized via an equity based entry mode. The authors employ 672 firm responses collected by the Asia Pacific Foundation of Canada and the China Council for the Promotion of International Trade.

Findings – The empirical results demonstrate that different home government measures have differential impact on internationalization outcomes. Government promotional measures (such as direct incentives and bilateral agreements to support internationalization) have only an indirect effect on international location and speed through the effect they have on the strategic motives to internationalize; while government ownership in the company has a direct impact on international location.

Research limitations/implications – The study highlights that home governments are shaping EMNEs strategic intent. Home government can influence EMNEs internationalization choices by providing resource flows through financial resources and state ownership or through asset-accumulation mechanisms via promotional measures.

Practical implications – Policy makers in emerging markets need to develop policies focused on the specific motivations that firms have when internationalizing. EMNEs are suggested to take advantage of government policies more intentionally.

Originality/value – The theoretical contribution centers on identifying important mediating mechanisms pointing to the interplay between government policies and international location and speed of firms. The authors contribute to the growing stream of research on internationalization of emerging market firms by building a sound theoretical model and examining empirically the role of home government in the internationalization of EMNEs.

Keywords Motives, Government ownership, Home government, Support policies, International location, Speed of internationalization

Paper type Research paper

1. Introduction

The importance of emerging market firms to the global economy is undeniable with more than 15 percent of global outward foreign direct investments (OFDI) now coming from emerging markets (Ramamurti, 2012). In 2016, the OFDI from emerging markets reached US$230.131bn, which accounted for 15.8 percent of the world total (UNCTAD, 2017). With the growing importance of emerging markets, scholars have started to examine how firms from such markets differ in their internationalization compared to their counterparts from developed economies (e.g. Buckley et al., 2016; Cuervo-Cazurra and Genc, 2008; Luo and Tung, 2007). One important aspect considered to make the internationalization of emerging market firms...
different is the institutional environment in which they are embedded (Luo et al., 2010; Wang et al., 2012). In many emerging markets governments play a more significant role in shaping internationalization business strategies and behaviors by e.g., offering specific incentives or having an ownership stake in strategically important companies (Luo et al., 2010).

Current literature has focused primarily on the influence of government ownership (e.g. state-owned enterprises) on the internationalization of EMNEs (e.g. Cui and Jiang, 2012; Ramasamy et al., 2012; Wang et al., 2012; Xia et al., 2014). Recent literature examines the role ownership plays in entry mode in cross border acquisitions (Xie and Li, 2017), and whether state ownership can offer institutional advantages for overseas expansion of EMNEs (Li et al., 2017). Additionally, Yang and Stoltenberg (2014) suggest that Chinese MNEs were able to leverage the financial crisis by taking advantages of opportunities to purchase cheaper assets in the West. Following the current literature, the present study takes the critical impact of state ownership into consideration. However, a stream of research that needs further attention is how government ownership and government promotional measures impact differentially the OFDI behavior of EMNEs (e.g. Liu et al., 2013; Lu et al., 2010; Panibratov, 2016; Rasiah et al., 2010). Therefore, the current study focuses on how government ownership and government promotional measures impact the internationalization of EMNEs. Central to our model is the mediating role of strategic intents to internationalize. In particular, we demonstrate how home government impacts the resource seeking, market seeking and technology seeking motives to internationalize (Buckley et al., 2007; Dunning, 1988), which in turn influence internationalization decisions such as international location (developed economy vs emerging country) and speed of internationalization for EMNEs. Following Luo and Tung (2007), we define EMNEs as international companies that originated from emerging markets and are engaged in OFDI, where they exercise effective control and undertake value-adding activities in one or more foreign countries. Following Lu and Beamish (2001), internationalization is defined as the process of geographic expansion of firms, as they grow larger by diversifying outside of their home country origin.

Our empirical context is Chinese companies that have internationalized via an equity based entry mode. Chinese MNEs have attracted attention in recent years because of their rapid and aggressive FDI, particularly after the “go global” policy of the Chinese government. China’s OFDI has grown at an accelerated pace since early 2000, and in 2016 China became the second largest source of OFDI in the world. Chinese outflow of capital reached US$183.1bn in 2016 (UNCTAD, 2017). By the end of the same year, the stock of China’s OFDI had grown to over US$1,280.975bn. Over 16,000 Chinese companies had created nearly 254,000 enterprises overseas in 184 countries or regions in the world (MOFCOM, 2016). Thus, China represents a particularly relevant context for understanding home government’s role in the internationalization of companies.

As a research context for exploring home governmental influence in internationalization, China is especially relevant because of the active role of the Chinese state in guiding business decisions. Peng et al. (2008) point that China’s specific institutional characteristics, of one party system, and reliance on state owned enterprises contribute to a need for distinctive research on China’s context. The strategic intent of Chinese firms is also influenced by the Chinese state. Chinese firms “need to comply with the rules set by the Chinese government, which provide incentives to and impose restrictions on Chinese firm’s FDI ownership decisions,” (Cui and Jiang, 2009, p. 434). Lu et al. (2011) find that that government policies are essential to strategic asset seeking and market seeking outward FDI of Chinese firms, in a way that “government support in China is more than background conditions, but is an active agent,” (p. 26).
The paper makes the following contributions to the literature on EMNEs. First, while prior studies have investigated the relationship between state ownership and OFDI (e.g. Cui and Jiang, 2012; Wang et al., 2012), it is unclear how government involvement through different modes (i.e. ownership vs promotional measures) impacts internationalization (e.g. Panibratov, 2016; Rasiah et al., 2010). We, therefore, theoretically open the “black box” of how home government impacts internationalization, by providing a theoretical model linking home government to three major strategic motives to internationalize. Thus, the strategic motives serve as mediators between home government and internationalization outcomes. Such mediating mechanisms are theoretically important to establish since not all government involvement measures may have the same impact on internationalization, and it is important to unravel the mechanisms by which the home country government can influence companies' internationalization. Indeed, our empirical results demonstrate a differential impact of home government on internationalization depending on the nature of home government variables examined. While government ownership in the company has a direct impact on internationalization (possibly because strategic decisions in state-owned enterprises are aligned with state objectives, such as the “going global” policy of China), home government promotional measures work their way through the mediating effect of organizations’ strategic motives to internationalize. Second, we demonstrate that not all government involvement is designed to influence all internationalization outcomes in the same way. Thus, we provide a more nuanced understanding of the relationship between home government and internationalization. Finally, we contribute to the understanding of institutional theory, by going beyond the idea that institutions matter to how they matter (Cui and Jiang, 2009). The theoretical model links firms' resource-seeking motives to firms' strategic behavior. This behavior is determined by firms responding to incentive structures provided by country institutions. At the same time, institutions shape firms' capabilities, which then shape firms' speed of internationalization and international location decisions.

The paper is organized as follows. First, we present the theoretical framework and hypotheses on the impact of home government on the internationalization of EMNEs. Then, we present the methodology of the paper including the sample, measures and analytical models. Next, we describe results. Finally, we present discussion and conclusions.

2. Theoretical framework and hypotheses development

2.1 The influence of home government on EMNE's internationalization motives

Institutional theory argues that formal and informal rules determine the acceptable patterns of organizational structures and actions (North, 1990, 2005). Thus, institutions can influence and constrain the strategic choices of firms (DiMaggio and Powell, 1983). The institutional environment can affect directly the access to critical resources for EMNEs. Oliver (1997) argues that the institutional environment has a significant influence on a firm's selection of resources and strategies (Yamakawa et al., 2008). A home government can be a strong ally to EMNEs by offering a number of promotional measures (Luo et al., 2010).
Policy-makers have their biggest influence on businesses through regulative measures (Scott, 1995). This influence can be through, e.g. taxation, or more direct involvement into the resource flows available to firms (Dierickx and Cool, 1989). For example, some country governments offer fiscal incentives, provide insurance against political risk, assist in the international expansion, sign double taxation avoidance agreements, enact bilateral and regional treaties to protect investment abroad, and arrange a bilateral or multilateral framework to liberalize investment conditions in host countries, among others (Luo et al., 2010).

Country governments can also participate directly in the development of the firm by having an ownership stake, which is the case of the Chinese government.

Mainstream literature on public policy support has studied two types of support measures: financial and non-financial support (Pergelova and Angulo-Ruiz, 2014). The international business literature has examined financial support measures such as state financial support and government ownership in the form of state owned enterprises (Cardoza et al., 2015; Cui and Jiang, 2012; Ramasamy et al., 2012; Wang et al., 2012; Xia et al., 2014); and non-financial support measures such as government assistance, favorable treatment from government for exports, help by government to participate in international trade fairs in the local area, across domestic regions or in overseas markets, provision of information, support and legal aids (Cardoza et al., 2015; Liu et al., 2013; Lu et al., 2010). We include in our analysis both government ownership as the involvement of the state in the ownership of the firm, and government promotional measures such as “going global” policy-related incentives and bilateral trade or investment treaties.

We argue that the two types of home country involvement (government ownership and government promotional measures) will have a differential impact on the internationalization of EMNEs, with government ownership having a direct impact, while promotional measures having an indirect impact on EMNEs’ internationalization strategies. We argue that government ownership has a more direct impact on internationalization because of the power of decision on the strategic direction of the company (Cui and Jiang, 2012). On the other hand, government promotional measures are likely to have a more indirect impact, pushing companies to internationalize with one motive or another (seeking technology, seeking markets, etc.) depending on the direction of the specific promotional measures that EMNEs can take advantage of.

2.1.1 The influence of government ownership. The power of decision on the strategic direction of the company afforded by government ownership means that this type of government involvement will have a more pronounced direct effect on internationalization. Another important way through which government ownership can affect strategic choices, and consequently the development of internationalization motives, is by providing resource flows through financial resources (and in the case of EMNEs also political support).

Financial resources are considered a general type of resource that can be converted into other types of resources, such as new technology that can help firms expand more and perform better (Bamford et al., 1997). By providing capital to EMNEs, government ownership can therefore enhance EMNEs ability to access technology, new markets and raw materials that will allow them to build strategic intent to internationalize. In addition, financial capital and government backing may provide resource slack, which further allows experimentation with new strategies and innovative projects, and increases the willingness of firms to pursue new opportunities (Wiklund et al., 2009), arguably in international markets. In this way, home governments through government ownership (and the financial “slack” that it provides) may be able to play a significant role in shaping EMNEs’ strategic intents to internationalize. Formally, we posit that:

\[ H1. \] Government ownership is positively and directly related to the internationalization of EMNEs.
2.1.2 The influence of government promotional measures. Large sums of money are put by emerging markets governments into encouraging EMNEs to expand operations abroad through different promotional measures. From both theoretical and practical perspective, it is important to understand how (through which mechanisms) such government incentives (promotional measures) might impact internationalization. Failure to understand this might lead to underappreciation of the richness and complexity of the internationalization process. Furthermore, if the relationship between government promotional measures and internationalization outcomes is indirect, instead of direct, lack of understanding of the mediating mechanisms might lead to the mistaken belief that such measures are ineffective. It has been suggested that government involvement influences EMNEs decision to internationalize in various ways, among which through influencing companies’ strategic objectives and decisions (Wang et al., 2012). Such strategic objectives and intents, thus, act as mediating mechanisms between government promotional measures and internationalization.

Through enhancing the ability of EMNEs to access resources such as those included in the promotion of internationalization, government promotional measures can affect project developments in international markets. Those government resources can provide knowledge of incentives to internationalize (e.g. fiscal incentives, assistance) as well as knowledge of bilateral agreements with potential countries where to internationalize. EMNEs can later employ this knowledge to acquire, combine and recombine resources to formulate and implement international strategies that bring competitive advantage. Home country governments influence OFDI allowing EMNEs to integrate their resources, products and knowledge on an international instead of a domestic basis (Luo et al., 2010).

Empirical research also lends support for an indirect relationship between government promotional measures and internationalization. For instance, Lu et al. (2010) study the influence of government programs on internationalization and argue that government programs help firms build adaptive capabilities which, in turn, influence international performance. In a similar vein, Liu et al. (2013) argue that government promotional measures help firms build strategic flexibility which positively impacts international venturing. Thus, we propose:

**H2.** Government promotional measures are indirectly related to the internationalization of EMNEs such that the internationalization motives (seeking technology, seeking market and seeking resources) mediate the relationship between government promotional measures and internationalization.

2.2 The influence of EMNE’s internationalization motives on international location and speed of internationalization

The RBV postulates that a firm’s assets will determine its competitive advantage and performance (Barney, 1991). Assets have been defined as “the set of difficult to trade and imitate, scarce, appropriate and specialized resources and capabilities that bestow the firm’s competitive advantage” (Amit and Schoemaker, 1993, p. 36). Examples of assets commonly considered in the literature are R&D capability, strong brand name, reputation, buyer-supplier relationships, knowledge and proprietary technologies (Teece et al., 1997).

The traditional approach about internationalization of the firm has relied on the asset-exploitation perspective according to which the firm successfully undertakes FDI by exploiting its ownership advantages. This view assumes that possession of ownership advantages is a necessary pre-condition for a firm to overcome the liabilities of foreignness (Buckley et al., 2016; Liang et al., 2012; Ramamurti, 2012; Wang et al., 2012). However, a strand of literature has provided an alternative view, according to which firms
internationalize not to exploit, but to acquire competitive advantages and to escape from their home country institutional environment which impedes development and leads the firms to competitive disadvantages (Child and Rodrigues, 2005; Cuervo-Cazurra and Genc, 2008; Deng, 2009; Enderwick, 2017; Mathews, 2006).

That EMNEs tend to internationalize (particularly through equity-based modes such as FDI) in order to acquire assets is an issue oftentimes cited in the literature (Child and Rodrigues, 2005; Luo and Tung, 2007; Mathews, 2006; Ramasamy et al., 2012). The literature has assumed that the only ownership advantages those companies possess are the ones coming from their home country – low cost production, home networks, and experience in operating in unstable institutional environments with significant government presence (Ramasamy et al., 2012). Thus, the search for assets is a different route – one that is placed within the asset-augmentation perspective (Buckley et al., 2016) because emerging market firms internationalize to augment their home country assets with foreign ones and as such using internationalization as a “spring-board” for growth and further internationalization (Luo and Tung, 2007). The literature has also highlighted that acquisitions are generally undertaken by emerging market firms in order to acquire strategic resources such as technology or recognized brands (Deng, 2009). EMNEs are not only deficient in such resources, but they do not have access to them in their domestic (developing-country) market; yet, those resources are critical for competing in global markets (Buckley et al., 2016). The acquired technology, brands, or other strategic assets can help provide the emerging market firm with reputation and prestige and furthermore earn legitimacy and social support (Deng, 2009).

Turning now specifically to Chinese firms, it is established in the literature on Chinese FDI that the Chinese government has an expressed goal for Chinese companies to access advanced technology and immobile strategic assets such as brands and that this is a dominant strategic motive for Chinese companies going abroad (Rugman et al., 2016; Rui and Yip, 2008). Importantly, it is assumed that Chinese firms would direct their asset-seeking behavior toward developed economies with significant levels of human and intellectual capital (Buckley et al., 2007) as presumably developing countries are not able to offer such assets. Thus, the asset seeking motivation of EMNEs is driven by strategic intent to complement and upgrade their assets and capabilities overseas, especially in developed economies (Cui and Jiang, 2009). Therefore, we hypothesize that:

H3. Seeking technology is positively related to the internationalization of EMNEs into developed countries.

Based on Dunning’s (1988) eclectic model, mainstream internationalization literature has assumed that a firm will internationalize if it possesses certain ownership-specific assets not possessed by competing firms, so as to increase profits by exploiting its assets in overseas markets; and this is particularly a relevant aspect when firms have a market-seeking intent for internationalization (Ramamurti, 2012). While more recent models and empirical works have documented the existence of other internationalization motives and patterns and have challenged the conventional thinking (e.g. Mathews, 2006), scholars have also noted that the core explanation for the existence of MNEs remains, i.e. in order to pursue international expansion the firm needs to possess some resources and capabilities allowing it to overcome the liability of foreignness (Guillen and Garcia-Canal, 2009). EMNEs are latecomers to the global markets and do not have the classic ownership advantages possessed by developed market firms related to technology, brands and marketing capabilities, but they do possess other “nonconventional” capabilities (Guillen and Garcia-Canal, 2009; Williamson and Wan, 2018) such as networking and political skills that they have gained in their home country over the years of developing and growing their market nationally and navigating the local political landscape. Such capabilities may be especially relevant when
internationalizing into other developing markets operating under political uncertainties (Cuervo-Cazurra and Genc, 2008). Research also suggests that Chinese firms use other home based competitive advantages in their internationalization, stemming from lower costs of labor, used initially for direct production work but also increasingly for engineering and other support activities (Rui and Yip, 2008). Such advantages, combined with the “political capabilities” of EMNEs and their ability to navigate the institutional landscape in uncertain political circumstances, make it especially appropriate for them to engage in market seeking and resource seeking in other developing markets (Wei and Alon, 2010). In those countries, EMNEs can have an advantage over their developed market rivals and leverage those advantages to access markets and resources.

The aim of market-seeking investment is to promote local sales through access to market channels thus increase local market share. Generally speaking, the size of the market measured by GDP, GDP per capita, GNP or GNP per capita are found to have a direct influence on investment inflows (Wei et al., 2007). Through expanding market size and creating opportunities for scale economies, EMNEs can improve their competitive advantages by entering into other emerging economies. Thus, we hypothesize:

**H4a.** Seeking markets is positively related to the internationalization of EMNEs into emerging markets.

Literature suggests that EMNEs pursue resource seeking when internationalizing in order to build capacity at home (Cui et al., 2014; Luo and Tung, 2007; Luo et al., 2010). Emerging markets multinationals in their formative years are faced with resource and environmental constraints (Shu, 2017). The main objective of resource seeking is to secure stable, low-cost, and high quality natural resource supply, and typically the target in host countries are supply of natural resources such as commodities or internal production inputs (Cui et al., 2014). EMNEs may find the access to capital and labor easier when entering similar emerging economies (Wei and Andreosso, 2008).

Chinese companies, in particular, tend to invest in countries rich in natural resources (Buckley et al., 2007; Giorgioni, 2018). Kolstad and Wiig (2012) found that Chinese investment is attracted to large markets with a combination of large natural resources and poor institutions. Buckley et al. (2007) argued Chinese OFDI to be associated with high levels of political risk in, and cultural proximity to, host countries throughout, and with host market size and geographic proximity and host natural resources endowments. Thus, we expect:

**H4b.** Seeking resources is positively related to the internationalization of EMNEs into emerging markets.

We also argue that EMNEs that internationalize with a market-seeking intent will have a lower speed of internationalization. The growth trajectory of Chinese firms has typically started in their home market, and after years of competition at home, accumulating experience and expanding sales nationally, Chinese firms recognize that to compete successfully they need to enter “their global rivals’ home or backyard” (Deng, 2009). According to Luo and Tung (2007), one of the major forces driving the Chinese overseas expansion is the emerging of a new generation of Chinese firms determined to become players in the global market. Those firms have been successful in the domestic market and are working to establish themselves internationally as well (Deng, 2009). Therefore, we expect that firms that have accumulated ownership-specific assets in their home markets will be in a better position to internationalize. These firms will wait longer after inception to build the necessary resources and capabilities to be successful in international markets. As indicated earlier, firms need to possess certain ownership-specific assets to have a successful internationalization, in particular for the market-seeking intent (Ramamurti, 2012). As Guillen and Garcia-Canal (2009) put it
in order to pursue international expansion the firm needs to possess capabilities allowing it to overcome the liability of foreignness; no firm-specific capabilities, no multinationals” (p. 34). Thus, we posit that:

H5. Seeking markets is negatively related to the speed of internationalization of EMNEs such that the higher the market-seeking intent, the more years need to pass after inception to internationalize.

Figure 1 provides a schematic view of our theoretical framework of the influence of home government support measures on the internationalization of EMNEs and the mediating role of internationalization motives.

3. Methodology

3.1 Sample

The China Council for the Promotion of International Trade (CCPIT) and the Asia Pacific Foundation of Canada conducted a survey between February and June 2013. This survey provides a snapshot of Chinese firms’ OFDI behavior and intentions. The field work was done by the CCPIT with a questionnaire containing 39 questions. The questionnaire was sent to 3,000 Chinese firms with or without experience in international business (Asia Pacific Foundation of Canada, 2013). We used a data set containing 1,090 firms that responded to the questionnaire. Without including foreign owned firms, the number of firms in the data set reduces to 979 Chinese firms. After cleaning the data set and taking into account all variables relevant for this study, the final sample with valid responses is 672 firm-observations. Some of these firms have already internationalized to other emerging markets or developed economies and have the intention to continue to do so in the coming years.

Of all firms included in the sample, a majority (54.15 percent) of companies have businesses in the manufacturing sector, followed by those in wholesale and retail (9.38 percent), mining (4.17 percent), and agriculture, forestry and fishing (2.98 percent). The respondents represented a variety of sectors and the industry distribution in the sample is very similar to the one of the population of Chinese firms.
3.2 Operationalization of variables

3.2.1 International location. Our dependent variable includes three categories, whether a firm stays domestic (coded as “0”), whether a firm internationalizes to emerging markets (coded as “1”), and whether a firm internationalizes to developed countries (coded as “2”). These categories are the result of the following steps. First, we used the three countries that each Chinese MNE in the sample has invested the most up to now and the ratio of total offshore investments in each of these countries. We classified each of these countries using the country classification in the World Economic Outlook 2014 which divides the world into two major groups: advanced economies (36 members) and emerging markets and developing economies (153 members) (IMF, 2014). Second, we computed the product sum of whether the country the firm has invested in is a developed country or emerging/developing market and the percentage of OFDI in that country. Third, firms that have invested 60 percent or more in developed countries were coded as developed country; while, firms that have invested 60 percent or more in emerging/developing countries were categorized as emerging markets. Those firms that have not invested in developed or emerging/developing markets were coded as domestic. The number of firms that have invested 50-50 in developed and emerging/developing countries is six and those firms were not included in the analysis.

3.2.2 Speed of internationalization. We subtracted the year the firm started operations from the year when the firm made its first international entry. The higher the resultant number of years the more time the firm took to make its first international entry.

3.2.3 Seeking technology, seeking markets and seeking resources. We measure seeking technology, seeking markets and seeking resources based on Dunning’s framework. We use the survey question “Which of the following factors will be the driving force for your company to expand overseas?” This question asks to rate a number of items from 1 (not important) to 5 (very important). We include three items to measure seeking technology motives: acquire overseas assets with intellectual property rights, acquire overseas R&D team, and acquire overseas R&D management experience. We employ three items to measure market seeking motives: expand upstream and downstream industry chain, expand sales in international markets and avoid saturated domestic market. We use two items to measure resource seeking motives: acquire overseas energy and raw materials and acquire overseas parts supply. We reduced those items to underlying factors by using principal components analysis with varimax rotation. In the exploratory factor analysis, we included all items for these three motivations. Kaiser-Meyer-Olkin (KMO) is 0.835 and the variance explained is 79.70 percent. Cronbach’s α of seeking technology, markets and resources are 0.91, 0.77 and 0.80, respectively.

3.2.4 Government promotional measures. We include two items to measure use of government promotional measures: make use of “going global” policy-related incentives and take advantage of bilateral trade or investment treaty. We reduced these two items to one underlying factor, employing principal components analysis with varimax rotation. KMO is 0.50 and the variance explained is 85.3 percent. Cronbach’s α for this factor is 0.82.

3.2.5 Government ownership. We coded as 1 firms that are state owned or state controlled, and as 0 firms that are completely private. This is a measure used in extant literature (e.g. Wang et al., 2012).

3.2.6 Control variables. Firm international experience. Similar to Liang et al. (2012), we use the number of years since the company made its first international entry until the year of survey data collection.

Firm size. We use the number of employees the firm had in the year the survey data were collected, which is in line with previous literature (Liang et al., 2012).

R&D. We use the ratio of R&D to total sales, a measure used by current literature (Wang et al., 2012).
Industry. We use ten industry sectors: 11: Agriculture, forestry and fishing; 21: Mining; 22: Electric, gas and sanitary services; 23: Construction; 31: Manufacturing; 42,44,45: Wholesale and retail trade; 48,49: Transportation, warehouse and telecommunications; 51: IT; 53: Real Estate and Leasing and business services; 99: Other industries. The base category for all empirical analyses is the manufacturing sector.

3.3 Analytical models
We test the mediation effect of internationalization motives on the relationship between home government variables and internationalization variables following Hayes’s (2013) procedures. These procedures are an advancement of the procedures suggested by Baron and Kenny (1986). For more details please review Hayes (2013).

We employ five separate models. Models 1, 2 and 3 include the effect of government promotional measures, government ownership and control variables on seeking technology, seeking markets and seeking resources, respectively. Models 4 and 5 specify the effect of the three internationalization motives under study, government promotional measures, government ownership and control variables on international location and speed of internationalization, respectively.

To estimate models 1, 2, 3 and 5, we employ ordinary least squares with robust standard errors and present standardized coefficients. To estimate model 4, we employ multinomial logistic regression because of the nature the international location variable. In models 4a and 4b, the baseline outcome is the category “staying domestic”; while, in model 4c, the baseline outcome is the category “emerging markets.”

4. Results
4.1 Descriptive statistics and correlations
Descriptive statistics are presented in Table I. Approximately, 16 percent of Chinese MNEs in the sample have internationalized to an emerging market, while 14 percent have entered a developed country. On average, firms in the sample made their first international entry 12 years after inception. In total, 16 percent of sampled firms are state owned/controlled enterprises. All Pearson bivariate correlations are presented in Table II.

4.2 Testing H1: the direct effect of government ownership on internationalization
Table III – models 4 and 5 – presents the direct effect of government ownership on international location and speed of internationalization. Government ownership is significantly related to international location in emerging markets (1.002, \( p < 0.10 \)) and with international location in developed countries (1.124, \( p < 0.05 \)). In addition, government ownership is weakly related to the speed of internationalization (0.129, \( p < 0.139 \)). Given that government ownership is directly related with internationalization variables, these results provide support to H1 which states that government ownership is positively and directly related to the internationalization of EMNEs.

4.3 Testing H2: the effect of government promotional measures on internationalization motives
Models 1 to 3 in Table III show the effect of government promotional measures on seeking technology, seeking markets and seeking resources, respectively. Government promotional measures have a positive relationship with seeking technology (0.258, \( p < 0.001 \)) in model 1, with seeking markets (0.506, \( p < 0.001 \)) in model 2, and with seeking resources (0.145, \( p < 0.001 \)) in model 3. These findings provide support for the role of government policies in shaping strategic intent of Chinese EMNEs. Altogether, findings provide support to H2 which states that government promotional measures are indirectly related to EMNE’s internationalization through the effect they have on motives of technology seeking, market seeking and resource seeking.
4.4 Testing H3, H4a and H4b: the effect of internationalization motives and home government variables on international location

Models 4a, 4b and 4c in Table III present results of the effect of internationalization motives and government promotional measures on international location in emerging markets and developed countries. In models 4a and 4b, firms that entered either emerging markets or developed countries are compared to those that are domestic; and in model 4c, firms that entered developed countries are compared with those that entered other emerging markets. In model 4c, seeking technology is positively related with international location in developed countries (0.664, \( p < 0.001 \)). These results provide support to H3.

In models 4b and 4c, government promotional measures do not have a direct and significant relationship with international location in developed countries. In model 1, government promotional measures have a significant and positive relationship with seeking technology (0.258, \( p < 0.001 \)), and in model 4c, seeking technology has a positive and significant relationship with international location in developed countries. These findings indicate that government promotional measures have an indirect relationship with international location in developed countries through the mediation of seeking technology, in support of the mediation hypothesis.

In models 4b and 4c, seeking resources has a negative relationship with international location in developed countries (−0.39, \( p < 0.05 \); −0.364, \( p < 0.05 \), respectively). Seeking markets does not show a significant relationship with international location. These findings provide support to H4b which states that seeking resources is positively related to the internationalization of EMNEs into emerging markets.

Findings also indicate that government promotional measures have a positive and significant relationship with seeking resources in model 2 (0.145, \( p < 0.001 \), and seeking resources has a significant relationship with international location in emerging markets, as indicated previously. Thus, results indicate that government promotional measures have an indirect relationship with international location in emerging markets through the mediation of seeking resources.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Min.</th>
<th>Max.</th>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emerging markets</td>
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<td>0.369</td>
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<td>1.000</td>
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<td>0%</td>
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Table I. Descriptive statistics
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<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
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<td>2. International location in developed countries</td>
<td>−0.170***</td>
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<td>−</td>
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<td>−0.195**</td>
<td>0.231***</td>
<td>−0.010</td>
<td>0.149*</td>
<td>0.145*</td>
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<td>0.007</td>
<td>0.390***</td>
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<td>0.026</td>
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<td>0.231***</td>
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<td>−0.053</td>
<td>−0.038</td>
<td>−</td>
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<td>5. Seeking resources</td>
<td>0.039</td>
<td>−0.209***</td>
<td>−0.004</td>
<td>0.025</td>
<td>1.000</td>
<td>0.237***</td>
<td>0.150*</td>
<td>0.047</td>
<td>−0.060</td>
<td>−0.053</td>
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<td>6. Government promotional measures</td>
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<td>7. Government ownership</td>
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<td>0.102**</td>
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<td>0.051</td>
<td>0.023</td>
<td>0.070***</td>
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<td>0.168*</td>
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<td>0.425***</td>
<td>0.155***</td>
<td>0.090*</td>
<td>−0.069****</td>
<td>0.156***</td>
<td>1.000</td>
<td>0.175***</td>
<td>0.197***</td>
<td>0.033</td>
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<td>9. Firm size</td>
<td>0.089*</td>
<td>0.234***</td>
<td>0.077*</td>
<td>0.080*</td>
<td>−0.065****</td>
<td>0.090*</td>
<td>0.263***</td>
<td>0.254***</td>
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<td>10. R&amp;D to total sales</td>
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<td>0.026</td>
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<td>0.082*</td>
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<td>11. Speed of internationalization</td>
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<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
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</tbody>
</table>

Notes: Pearson correlations below diagonal are for variables included in international location models (n = 672), above the diagonal include correlations for all variables included in speed of internationalization model (n = 212). *p < 0.05; **p < 0.01; ***p < 0.001; ****p < 0.10
<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Model 1 Seeking Technology</th>
<th>Model 2 Seeking Markets</th>
<th>Model 3 Seeking Resources</th>
<th>Model 4a Location in Emerging Markets</th>
<th>Model 4b Location in Developed Countries</th>
<th>Model 4c Location in Developed Countries</th>
<th>Model 5 Speed of Internationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeking technology</td>
<td>-0.402***</td>
<td>0.262</td>
<td>0.664***</td>
<td>-0.006</td>
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<tr>
<td>Seeking markets</td>
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<td>0.025</td>
<td>0.239</td>
<td>0.214</td>
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<td>Seeking resources</td>
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<td>-0.027</td>
<td>-0.390*</td>
<td>-0.364***</td>
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<td>Government measures</td>
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<td>0.506***</td>
<td>0.145***</td>
<td>0.003</td>
<td>-0.090*</td>
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<td>0.002</td>
<td>0.025</td>
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<td>0.122</td>
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<td>International experience</td>
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<td>0.005</td>
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<td>R&amp;D to total sales</td>
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<td>-0.001</td>
<td>0.03</td>
<td>0.289*</td>
<td>0.01</td>
<td>-0.279***</td>
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<td>-0.499</td>
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<td>Mining</td>
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<td>$R^2$</td>
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Notes: Robust standard errors are available on request. Standardized coefficients are shown for OLS regressions. *p < 0.05; **p < 0.01; ***p < 0.001; ****p < 0.10
4.5 Testing H5: the relationship among internationalization motives, home government variables and speed of internationalization

Model 5 shows results of the effect of internationalization motives, government promotional measures and government ownership on speed of internationalization. Seeking markets has a positive and significant relationship with speed of internationalization (0.184, \( p < 0.01 \)). This result indicates that the more motivated EMNEs are to internationalize with a market-seeking intent, the more time they wait for international entry. This result provides support to \( H5 \) which states that seeking markets is negatively related to the speed of internationalization of EMNEs.

In model 5, government promotional measures do not have a direct and significant relationship with speed of internationalization. In model 3, government promotional measures have a significant and positive relationship with seeking markets (0.145, \( p < 0.001 \)), and as already indicated, seeking markets has a positive and significant relationship with speed of internationalization. These findings point that government promotional measures have an indirect relationship with speed of internationalization through the mediation of seeking markets, in support of the mediation hypothesis.

As for the control variables, in all models, firm international experience is significantly related to (+) seeking technology, (-) seeking resources, (+) international location in emerging markets and developed countries, and (-) speed of internationalization. Firm size is significantly related to (-) seeking resources, (+) international location in developed countries, and (+) speed of internationalization. R&D is significantly associated with (+) seeking technology, (+) international location in emerging markets when base category is domestic, and (-) international location in developed countries when base category is emerging markets. All models are statistically significant, and multicollinearity is not a problem.

5. Discussion and conclusions

This paper set out to offer a more complete account of how home government influences the internationalization of EMNEs. To achieve this, we combined institutional and resource-based logics in order to offer a more comprehensive theoretical picture of how company strategic choices are embedded in institutional policies and goals. Our results indicate that government promotional measures have an indirect and significant impact on international location in developed countries by shaping technology strategic intents; on international location in other emerging markets by forming resource seeking intents; and on the speed of internationalization by shaping market seeking intents. Findings also reveal that government ownership has a direct and significant influence on international location in emerging markets and developed countries.

5.1 Theoretical implications

Our study contributes to the literature on EMNEs by deepening the understanding of how home government impacts internationalization outcomes (e.g. Cui and Jiang, 2012; Luo et al., 2010; Panibratov, 2016; Rasiah et al., 2010; Wang et al., 2012). Importantly, government promotional measures (such as direct incentives and bilateral agreements to support internationalization) have only an indirect effect on internationalization through the effect they have on strategic motives to internationalize. Government ownership, on the other hand, has a direct impact on internationalization. Thus, it is important to consider that strategic choices are not only influenced by firm-specific resources, but also can be the response to the institutional framework in which the firm is embedded (Checchinato et al., 2017; Kittilaksananawong, 2017; Wang et al., 2012). At the same time, government policies may not be able to exert a direct effect on firm behaviors, but only indirectly through the influence on strategic intents or motives. Our theoretical contribution then centers on
identifying important mediating mechanisms pointing to the interplay of government policies and firm strategic intents. Our theoretical framework based on institutional theory and RBV suggests that home government can influence EMNEs internationalization choices by providing resource flows through financial resources and state ownership or through asset-accumulation mechanisms via promotional measures. Our study offers a theoretical contribution by assessing how the institutional environment interact with asset-seeking and asset-exploiting strategic intents in the internationalization of EMNEs.

This paper contributes to institutional theory through elaborating on two angles of home country institutional dynamics: direct government ownership, and governmental support policies. In doing so it answers the call of Cui and Jiang (2009), who describe the institution-based view research agenda, calling for deeper insight into connecting institutions to behavior. This paper contributes by arguing that institutions matter because through operating in home country institutional contexts, firms develop nonconventional capabilities, helping them navigate shifting institutional environments common to emerging economy firms. These abilities give them an advantage in other emerging markets. In doing so our study agrees with Dunning and Lundan (2008) who argue that “institutional analysis, both at the macro and micro level, offers great promise for reinvigorating many areas of international business research by providing the intellectual tools that allow scholars to confront the complexities that characterize the contemporary global economy.”

Our study highlights that home governments are shaping EMNEs strategic intents. We join Cui et al. (2014) who argue that strategic intent is a critical concept for understanding the internationalization strategy of firms. This research contributes not only to a more nuanced understanding of the antecedents of strategic intent to internationalize but also to its effect on internationalization behavior. The three strategic intents we examine have a differential impact on internationalization outcomes. The strategic motive of seeking technology is positively related to internationalizing into developed markets, while seeking resources is negatively related to developed country international location. These findings contribute to the literature suggesting that EMNEs expand into developed countries in the input market (rather than the product market) to obtain sophisticated technology, possibly without having to establish production subsidiaries abroad (Madhok and Keyhani, 2012).

Additionally, the strategic motive of seeking markets impacts internationalization speed, i.e. EMNEs internationalizing with the intent of seeking markets take more time to build their resource base at home and to develop competitive advantages before venturing into international markets. This finding has implications for the literature suggesting that MNEs need ownership advantages to internationalize with a market seeking intent (Guillen and Garcia-Canal, 2009; Ramamurti, 2012). Arguably, EMNEs need to build ownership advantages that can then be exploited in international markets.

Findings from control variables deserve attention as well. Firm international experience has a significant impact on strategic intents to internationalize as well as on international location and speed of internationalization. Firm size has also a significant impact on the speed of internationalization and international location decisions, in particular those that involve decisions to enter developed countries. R&D is also a critical aspect that further motivates firms to seek technology and to internationalize in emerging markets. These findings respond to a call of Ramamurti (2012) for an empirically grounded search for the ownership advantages of EMNEs.

5.2 Managerial and policy implications
Our findings provide important implications for EMNEs. Findings indicate that emerging market firms’ strategic intents are influenced by home government policies. EMNEs are suggested to take advantage of government policies more intentionally.
These policies will facilitate international location in other emerging markets by building resource-based strategic intents, facilitate location in developed countries by building technology-based strategic intents, and slow their speed of internationalization by building market-based strategic intents. Managers of EMNEs should consider not only the difference in strategic intents and location decisions, but also the speed of internationalization. The findings also suggest EMNEs with strategic asset seeking motivations to focus on search for technology in developed countries and leverage such technology to eventually build in-house competitiveness. EMNEs with market seeking motivations will spend more time to access the market and build brand awareness both in developing and developed countries.

For managers of EMNEs, our findings also help them understand the speed of internationalization. International experience and firm size also influence EMNEs speed of internationalization. EMNEs are encouraged to build first tangible (e.g. size) and intangible (e.g. experience, R&D) assets. In this way, EMNEs can make better entry timing decisions.

Our findings also offer government policy implications. Government policy, which provides direct incentives and bilateral agreement, may influence the strategic intents of EMNEs in a short run, but may have other consequences on the internationalization process of EMNEs in a long run and affect the absorptive capabilities of EMNEs when seeking strategic assets through outward FDI (Muralidharan et al., 2017). These findings suggest that policy makers in emerging markets need to develop policies not only generalizing to all firms, but also to help firms with specific motivations. Government policy makers should have a clear strategy to motivate EMNEs to follow government initiatives to enter new markets.

6. Limitations and further research
As with every research, this study has limitations that can serve as opportunities to be explored in the future. A promising research line is to focus on the performance implications of foreign entry mode decisions of EMNEs. Since our focus here was on home government, the motives, the location choice of internationalization and speed of internationalization, we did not venture into examining companies’ performance. However, this is an area that we still know little about (Surdú and Mellahi, 2016). In a recent research about the performance of Chinese multinationals, Rugman et al. (2016) suggest that their performance is poor relative to their global peers. Rugman et al.’s study focused on large manufacturing firms only and examined financial performance (e.g. net profit margin, return on assets). Further research is needed in order to understand the performance of EMNEs across different industry types and different firm sizes, as well as closer consideration is warranted to a broader set of performance metrics that can account for the diversity of company objectives and institutional environment of emerging market firms. For instance, it may be that EMNEs underperform on traditional financial performance, but achieve other goals (e.g. political goals, social impact, etc.). Therefore, we suggest performance in consideration of context and goals as an important future line of inquiry.

From a methodological perspective, the unit of analysis of future research can be the location behavior. A more fine-grained analysis would need to tackle the issue of whether particular internationalization motives are related with investments in developed economies or with investments in emerging economies. By aggregating location as a firm-level measure, the current research may not be able to provide such fine-grained analysis. Another future avenue includes dealing with the potential endogeneity problem between government policies and internationalization motives. In the current paper, we theorize on government policies as potential antecedents of motives; however, internationalization motives may also influence how EMNEs take advantage of government policies. Future research may need to use longitudinal data sets to deal with this problem[2].
Finally, future research can provide light on how manager’s characteristics, such as managerial knowledge and international experience influence foreign entry decisions and their performance implications. In the current study, we did not have data about manager-specific variables. However, research has suggested that scholars move from the study of “factors to actors” (Surdu and Mellahi, 2016). The literature on international entrepreneurship provides a fruitful point of departure for such an inquiry. Thus, we hope to see more studies that consider the interplay of firm-specific and manager-specific variables that affect internationalization and performance of EMNEs.

7. Conclusion
We contribute to research on the internationalization of emerging market firms by building a rigorous theoretical model that includes the mediating role of strategic intents to internationalize. In particular, we demonstrate how home government institutional support and government ownership impact the resource seeking, market seeking, and technology seeking motives to internationalize, which in turn influence internationalization decisions (location and speed of internationalization). Our empirical results demonstrate that government ownership in the firm has a direct impact on internationalization and government promotional measures work their way through the mediating effect of organizations’ strategic motives to internationalize.

Acknowledgement
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Notes
1. We also estimate models using step 1 of Baron and Kenny’s process: the effect of government promotional measures and government ownership on dependent variables, without including mediating variables. These (unreported) results indicate that government ownership has a direct and positive relationship with international location in emerging markets and developed countries, and with the speed of internationalization.
2. We are thankful with comments and suggestions provided by peer reviewers.

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Returnee entrepreneurs and the institutional environment: case study insights from China

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Abstract
Purpose – The purpose of this paper is to investigate the phenomenon of returnee entrepreneurs, their venturing efforts and the impact of the institutional environment they operate in, and thereby to propose a conceptual model depicting how returnee entrepreneurs create and operate new ventures and interact with the institutional environment.

Design/methodology/approach – This study followed a multiple case study approach based on data collected from in-depth inquiries into 11 returnee entrepreneurs and their ventures in China which was analysed inductively.

Findings – Analysis of case study data resulted in a conceptual model of returnee entrepreneurs illustrating micro-level characteristics of the phenomenon and the interplay with the institutional environment of an emerging economy. Insights from the case study are discussed in terms of implications for entrepreneurial motivations, human and social capital, estrangement from the home country, internationalisation behaviour and objectives of returnee-owned ventures.

Originality/value – Previous research on the phenomenon of returnee entrepreneurs is highly fragmented and has largely focussed on specific and isolated outcomes. This study offers a holistic inquiry contributing to a better understanding of the phenomenon as a whole and presenting key properties of the phenomenon.

Keywords China, Entrepreneurship, Emerging economies, Returnee entrepreneurs

Paper type Research paper

Introduction
The global mobility and flow of highly educated migrants has raised more and more attention as an important phenomenon (Zweig et al., 2006). In particular, the reverse migration from industrialised to emerging economies has attracted a growing interest among entrepreneurship researchers (Liu et al., 2015). For decades, many developing and emerging economies have had to struggle with a “brain drain” of talents endowed with high education. However, many of those who once left their home countries for work or education return back facilitating a “reverse brain gain” or a “brain circulation” (Liu et al., 2015; Saxenian, 2005; Zweig and Wang, 2013). While some returnees aim for dependent employment in their home countries, others utilise their knowledge and skills acquired during their stay overseas to become an entrepreneur in their home country (Zweig and Wang, 2013). Several of these returnees have emerged as business elites in a variety of sectors and important role models in their home countries (Liu and Xing, 2012; Zhang et al., 2011). Thereby, these individuals are suggested to contribute to the economic development of emerging economies and to become important change agents (Bruton et al., 2008; Kenney et al., 2013). Yet, scholarly inquiry into the phenomenon of returnee entrepreneurs has only recently begun and research is still limited (see Liu et al., 2015). The objective of this study is to investigate the phenomenon’s actors, their venturing efforts and the impact of the institutional environment the actors operate in.

To date, research on the phenomenon of returnee entrepreneurs is highly fragmented and has largely focussed on specific and isolated aspects or outcomes; leaving knowledge gaps and a lack of a shared understanding of the phenomenon. The present study follows an exploratory approach allowing an open investigation of the phenomenon under a tentative
theoretical framework as a means to discover emerging themes of relevance. An approach utilising case studies is particularly useful for investigating “a contemporary phenomenon in its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident” (Yin, 1981, p. 59). By following an open investigation and a comprehensive approach, this study aims to contribute to the small stream of literature on returnee entrepreneurs and to a better understanding of the phenomenon as a whole. The structure of this study is as follows: first, a review of relevant literature and theoretical frameworks for the investigation of the phenomenon is presented. Second, the methodological approach for this research is explained. Third, based on the insights from cases, a model of returnee entrepreneurs’ venture creation and the interplay with the institutional environment is proposed. Finally, insights and their implications are discussed and related to relevant literature.

The results of this study expand the literature on the phenomenon of returnee entrepreneurs by proposing a conceptual model of returnee entrepreneurs and their interplay with the institutional environment. More specifically, the study enhances knowledge about motivational processes among returnee entrepreneurs, the role advanced human capital gathered overseas plays for motivational processes and venture operation, their brokerage with social capital, how returnee entrepreneurs seek to overcome disadvantages faced due to estrangement, and how they are impacted by formal and informal institutions. In doing so, this study also draws links between individual, firm and macro level. Overall, the study highlights important facets and questions relevant for the enquiry into the phenomenon of returnee entrepreneurs; opening up a stream of potential research opportunities for investigating specific aspects of the phenomenon.

Literature review

This section first presents an overview of the literature on the phenomenon of returnee entrepreneurs to introduce into the subject matter and context under investigation. Second, relevant theories are reviewed to introduce a preliminary theoretical framework that will guide the empirical investigation of the phenomenon. The theoretical framework presented is tentative to allow an open investigation of the phenomenon (Eisenhardt, 1989; Yin, 2011).

The phenomenon of returnee entrepreneurs

Returnee entrepreneurs are “scientists and engineers returning to their home countries to start up a new venture after several years of business experience and/or education in another (developed) country” (Drori et al., 2009, p. 1006). Early examination of the phenomenon of returnee entrepreneurs emerged within the migration and economics literature (see Athukorala, 1990; Ilahi, 1999). According to previous findings, experience from overseas suggests a positive impact on the probability of being self-employed in the home country (McCormick and Wahba, 2001; Thomas and Inkpen, 2013). This positive effect of experience in another country appears to be more distinct for returnees with higher education and high-level skills (Gubert and Nordman, 2011; McCormick and Wahba, 2001).

Only recently has the phenomenon gained some attention within the entrepreneurship and international business literature. One catalyst was observations by Saxenian (2006) on migrant entrepreneurs from Silicon Valley who returned to their home country and engaged in entrepreneurial activities. These actors were able to transfer knowledge to their home countries (Saxenian, 2006). Key determinants for the success of these returning entrepreneurs were social network relations, high education and contextual factors like political stability and an entrepreneurship-friendly environment in the home country. Since the beginnings of research into returnee entrepreneurs, most research has focussed on isolated aspects of the phenomenon rather than approaching a more holistic enquiry into the phenomenon.
A respectable stock of research on returnee entrepreneurs has revealed important insights into different aspects of the phenomenon. These studies emphasise the importance of social ties and networks for the creation of returnee-owned ventures. Despite presumed benefits due to international networks established overseas, local networks are seen as crucial for venturing efforts in the native country (Pruthi, 2014; Qin and Estrin, 2015). This is not limited to professional networks, but also extends to personal ties and relationships (Farquharson and Pruthi, 2015). Likewise, different types of human capital endow returnee entrepreneurs with a stock of knowledge and skills that may contribute to triggering the venture idea and to different aspects of operating the new venture (see Bao et al., 2016; Hagan and Wassink, 2016; Wright et al., 2008; Zhou et al., 2016; Zweig et al., 2006). However, while advanced human capital and international networks may endow returnee entrepreneurs with an advantage, they are assumed to also face disadvantages due to a lack of local social capital and perceived readjustment difficulties upon returning home (Dai and Liu, 2009; Li et al., 2012; Lin, Lu, Liu and Zhang, 2016; Ojo, 2017). A number of studies also compared returnee to local entrepreneurs. These studies found various differences, such as how returnee and local entrepreneurs cope differently with uncertainty (Liu and Almor, 2016), how they differ in terms of formality and informality (Lin et al., 2015), or highlight the differences between female returnee and domestic entrepreneurs (Alon et al., 2011).

Less research has focussed on internationalisation activities undertaken by returnee entrepreneurs. Within this research stream, studies have primarily focussed on the export orientation of returnee-owned firms (Filatotchev et al., 2009; Prashantham and Dhanaraj, 2010). Studies found that experience from having been overseas has the potential to foster internationalisation activities (e.g. Bai et al., 2017). Likewise, only a small stream of research has investigated multi-level relationships and/or between the micro-level phenomenon and the macro-level environment. This research concluded that returnee entrepreneurs have a favourable impact on innovation, job creation and the development of an entrepreneurial culture (see Avle, 2014; Hausmann and Nedelkoska, 2018; Tynaliev and Mclean, 2011). Other research, however, suggests that returnee entrepreneurs’ impact on social change is of a rather modest nature (Dahles, 2013). Single studies have also focussed on institutional support mechanisms and the relevance of social capital for acquiring funding (Armanios et al., 2017).

Theoretical background

Building upon previous literature on the phenomenon, different theoretical perspectives partially explain different aspects of the phenomenon. Accounting for the exploratory nature of this research, the following paragraphs introduce a tentative theoretical framework conducive for the holistic exploration of the phenomenon. In particular, the elaboration of theoretical frameworks focuses on social capital theory, human capital theory, internationalisation theories and institutional theory. The development of a preliminary theoretical framework assists to shape the scope of enquiry (Eisenhardt, 1989; Yin, 2011).

Social capital theory

Social capital theory focusses on the importance of social networks and ties to gain benefits (Portes, 1998). The theory can provide insights into the venturing efforts undertaken by returnee entrepreneurs. More specifically, the theoretical notion indicates to be of relevance for the phenomenon of returnee entrepreneurs considering international networks accumulated during their time spent overseas as well as local networks sourced from their domestic relationships. For new ventures in particular, initial ties have been found to be influential (Zhou et al., 2007). Returnee entrepreneurs’ initial ties are frequently sourced and developed from and during their stay overseas (Dai and Liu, 2009; Liu, Lu, Filatotchev,
Buck and Wright, 2010). Networks sourced from international experiences of an entrepreneur facilitate extending contacts across national borders (Madsen, 2013). The founders of an organisation are the main suppliers of network ties and, hence, social capital of the firm ( Arenius, 2002). The international new venture framework implies that international networks are a determinant for early internationalisation activities (Oviatt and Mcdougall, 1994). Not only formal networks such as sourced from business or education, but also informal networks through personal contacts play a role for the internationalisation process (Coviello and Munro, 1995). These networks can facilitate the access to international opportunities and markets and help to overcome a liability of foreignness (Arenius, 2002). Previous research on returnee entrepreneurs investigated the impact of networks and ties accumulated during their time overseas on venture creation, venture performance, or innovation (Dai and Liu, 2009; Li et al., 2012; Liu, Wright, Filatotchev, Dai and Lu, 2010; Pruthi, 2014; Qin and Estrin, 2015). Scarce studies of returnee entrepreneurs also suggest an impact of these networks and ties on internationalisation activities (Filatotchev et al., 2009; Prashantham and Dhanaraj, 2010).

**Human capital theory**

Human capital theory proposes that individuals possess an accumulation of skills and knowledge that can be developed over time and results in more productive activities (Becker, 1993). In contrast to local entrepreneurs, returnee entrepreneurs possess human capital in the form of knowledge and skills acquired overseas (Li et al., 2012). This knowledge may not only comprise technological knowledge, but also knowledge about foreign markets, language, culture and business practices (see Qin et al., 2017). Entrepreneurs with a larger stock of prior knowledge due to international work experience or education are also more prone to follow internationalisation activities in the early ventures stages (Clarke et al., 2013; Oviatt and Mcdougall, 2005). They are argued to have the necessary skills to operate in foreign markets (Reuber and Fischer, 1997), and hence pursue international opportunities (Oviatt and Mcdougall, 2005).

**Internationalisation theories**

Endowed with international experiences and international networks, returnee entrepreneurs are presumed to create and operate entrepreneurial ventures with an international orientation and outlook (Cumming et al., 2015; Kiss et al., 2012; Lin, Mercier-Suissa and Salloum, 2016). However, research-based empirical evidence on the internationalisation of returnee-owned firms remains limited (Cumming et al., 2009). Previous research suggests that returnee entrepreneurs with their international background and international networks foster export orientation and performance of new ventures (Filatotchev et al., 2009). These returnees transfer knowledge to emerging economies and based on their experiences they drive the internationalisation path of a new venture; adding advantages to returnee-owned new ventures compared to local ventures (Filatotchev et al., 2009). Particularly, social capital accumulated during their international experiences suggests to facilitate the international growth of returnee entrepreneurs’ ventures (Prashantham and Dhanaraj, 2010).

Within the research stream on international new ventures, networks and international experiences are seen as important antecedents of early internationalisation activities (Mcdougall et al., 2003). In contrast to domestic ventures, international new ventures “from inception seek to derive a significant competitive advantage from the use of resources and the sale of outputs in multiple countries” (Oviatt and Mcdougall, 1994, p. 49). Internationalisation activities conducted by new ventures comprise different modes and forms such as traditional exporting activities, but also international licensing, the import of resources and the transaction of knowledge (Oviatt and Mcdougall, 1994). While traditional international business research has focused on firms following a stage-based internationalisation process
beginning with culturally and geographically close markets (Johanson and Vahlne, 2009),
international new ventures are international at very early stages; facilitated by the capabilities
of the entrepreneur (Acedo and Jones, 2007; Oviatt and McDougall, 1994).

**Institutional theory**

Institutional theory describes the formal and informal macro-level settings that shape the
framework for returnee entrepreneurs (see Ahlstrom and Bruton, 2006; North, 1990; Scott, 2007).
Formal institutions include rules, regulations and laws, whereby informal institutions relate to
normative behaviour, conventions or cultural aspects (North, 1990; Urbano and Alvarez, 2014).
The institutional framework determines the overarching setting for returnee entrepreneurial
activities which can both enable and constrain entrepreneurial activities (Urbano and Alvarez,
2014). In the context of emerging economies, formal institutions are frequently unstable and
underdeveloped leaving institutional voids (Puffer et al., 2010). These voids are often overcome
by informal institutions in the form of building networks with key stakeholders; both from the
government and from the industry (Bruton et al., 2010; Peng and Luo, 2000; Puffer et al., 2010).
However, a reliance on informal institutions may pose particular risks especially in the longer
term (Mcmillan and Woodruff, 2002). Accordingly, a well-balanced level of both formal and
informal institutions would foster entrepreneurship (see Bruton et al., 2010).

Returnee entrepreneurs have been exposed to different institutional environments
during their time overseas and subsequently after returning to their home country; this may
lead to potential conflicts when interacting with the environment – for example, concerning
the relative importance of formal and informal institutions. Previous research suggests that
returnee entrepreneurs have a beneficial impact on emerging economies (see Kenney et al.,
2013). However, this might be dependent on the arrangement of the institutional framework
and as to how returnees allocate their entrepreneurial activities; such as in terms of
productivity or formality (Autio and Fu, 2014; Baumol, 1996). Likewise, returnee
entrepreneurs may act as institutional entrepreneurs and influence structures and the
macro-level environment (Bruton et al., 2010; Levy and Scully, 2007).

Thus, this study draws on social capital theory, human capital theory, internationalisation
theories and institutional theory to explore the phenomenon of returnee entrepreneurs and
address the following research question:

*RQ1*. How do returnee entrepreneurs with their human and social capital create and
operate new ventures and interact with the institutional environment?

**Method**

This study follows a qualitative research design employing an exploratory case study
approach in order to address the research objective (Yin, 2011). The rationale for the choice
of the methodology is that it facilitates an open investigation of the phenomenon by
incorporating the context; thereby relevant themes can be discovered throughout the course
of the study (Amit and Zott, 2001; Edmondson and Mcmanus, 2007). While the investigation
remains open, inquiry is guided by previous literature and different theoretical lenses, which
serve as an orientation of the initial design of the study (Eisenhardt, 1989). The research
design followed a multiple case study approach applying replication logic to allow more
robust findings (Yin, 2003). In-depth inquiries into 11 returnee entrepreneurs and their new
ventures were conducted for this study.

**Study setting**

China was chosen as the context for the study of returnee entrepreneurs for two reasons.
First, the increased global mobility of Chinese students results in a high number of returning
students who engage in entrepreneurial activities in China (see Filatotchev et al., 2011).
Second, China is a suitable laboratory considering the status as an emerging economy which runs different programs and initiatives to attract overseas students and professionals back to China in order to foster entrepreneurship (see Zhao and Zhu, 2009; Zweig and Wang, 2013). Thereby, it was feasible to collect rich data on returnee entrepreneurs and their acting within the institutional environment. All returnee entrepreneurs and their new ventures are located in Chengdu, Sichuan Province. The city was chosen because it recently announced to increase policy efforts to foster returnee entrepreneurship and the city hosts an incubation centre for returnee entrepreneurs making data collection more feasible.

**Sampling**

Sampling for obtaining access to returnee entrepreneurs involved a purposive and snowball approach (Malhotra, 2006). Two strategies were followed in order to establish contact with returnee entrepreneurs as potential participants in this study. The two strategies had the objective to liaise with returnee entrepreneurs who start their venture within a hi-tech zone and with returnees who undertake venturing efforts outside such a business incubator. Therefore, Chengdu Hi-Tech Development Zone (CDHT) was approached with the aim to obtain access to returnee entrepreneurs starting their ventures within their incubator for returning students. Additionally, snowball sampling was used to establish contact with returnee entrepreneurs operating outside of the hi-tech zone. Therefore, extensive networking was necessary in order to compile a unique sample for this study. The final sample comprises of 11 returnee entrepreneurs. Table I summarises basic characteristics.

**Data collection**

Data collection was based on a case study protocol, which served as a guide for the collection of research data (Yin, 2003). The collection of primary data mainly involved interviews with a series of open-ended questions, structured by different topic areas. Due to the exploratory nature of this research project, relevant methodological literature was followed intending to engage in a fluid but guided conversation allowing to understand the interviewee’s opinions and insights crucial for an in-depth examination (Yin, 2003). During the interviews the following areas were broadly addressed and covered: returnee entrepreneurs and their social and human capital in the background of their overseas experience; returnee entrepreneurs and their new ventures; if applicable the environment of the hi-tech zone and business incubator; the broader institutional environment; and the objectives of the returnee-owned venture. To facilitate open and unbiased conversations, the interviewees were guaranteed anonymity. Interviews were audio-recorded and then transcribed verbatim. If the respondent did not agree to be audio-recorded, notes were taken during the interview.

During the research visit in Chengdu additional data sources were utilised. Informative conversations with representatives of Chengdu hi-tech zone were conducted to gather information on support schemes, tenants of the business incubator and the environment for returnee entrepreneurs in general. Additionally, field visits were made to different locations of the hi-tech zone as well as to public events for entrepreneurs and start-ups in Chengdu. Furthermore, secondary data were approached including company websites, government websites and newspaper articles. Relying on multiple sources allowed data triangulation aiming to increase credibility and validity of the study (Yin, 2003).

**Data analysis**

Data analysis followed an inductive approach within the tentative framework of the previously applied theoretical lenses and the overarching research question (Eisenhardt, 1989; Yin, 2011). At the first stage, interview transcripts and interview notes were repeatedly read line by line to strengthen the familiarity with the data. Next, interviews were coded in order to organise the data in terms of similar codes within and across cases (Saldaña, 2012).
<table>
<thead>
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<th>No.</th>
<th>Domestic education</th>
<th>Overseas country</th>
<th>Overseas education</th>
<th>Overseas work experience</th>
<th>Years spent overseas</th>
<th>Year of start-up</th>
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<th>No. of employees</th>
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<td>2014</td>
<td>Organising internship and summer abroad programs in South West China</td>
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<td>Master (ICT)</td>
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<td>Master (communication)</td>
<td>Journalist, tutor</td>
<td>4</td>
<td>2013</td>
<td>Education provider (profit and non-profit)</td>
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Coding was done manually as well as with the help of the software NVivo 10. Categories and overarching themes were established emerging from the data. Data analysis was an iterative process, constantly going back to the data and cycling between data, codes and categories. Cross-case analysis facilitated exploring patterns and themes in the data (Yin, 2003). The iterative process of coding and data analysis facilitates cycling between data, literature and theories which allows to refine and relate findings (Santos and Eisenhardt, 2009). At the final stage, data analysis with the emerged themes facilitated the development of a tentative model of returnee entrepreneurs’ venture creation and the interplay with the institutional environment. The model is proposed in Figure 1.

Insights from the case analysis
The proposed model addresses the study’s research question as to how returnee entrepreneurs with their particular human and social capital create and operate new ventures and interact with the institutional environment. The model derived from the insights from the case study analysis is structured in sequential order on the individual and firm level, both of which are embedded in the institutional environment. Logically, model and presentation of results commence with the individual entrepreneurs’ characteristics and motivations, then sequentially move towards their start-up efforts, followed by the further development of their new ventures. These sequential processes occur within the formal and informal institutional environment. While the conceptual model depicts a temporal sequence, it cannot and does not intend to propose any causality.

The data analysis providing the foundation for the model points to characteristics and capital of returnee entrepreneurs, which endow them with knowledge and skills beneficial for the entrepreneurial process. However, data suggest that they also face disadvantages due to their absence from the home country for which they seek remedy. Analysis indicates that returnee entrepreneurs have been shaped by their overseas experience and that knowledge gain and personal change are related to the approach how they create and operate new ventures. It also provides insights as to how returnee entrepreneurs interact with the institutional environment.

The following sub-sections report the findings for each of the model’s constituents and present exemplary quotes from the interviews conducted with returnee entrepreneurs. The section’s structure follows the sequential nature of the model by starting on the micro- and firm-level, moving from returnee entrepreneurs’ characteristics and motivations, over start-up efforts, to business development. Subsequently, the focus is on the macro-level formal and informal institutional environment. However, since the insights into returnee entrepreneurs do not always make it feasible to fully discriminate between micro and macro levels as well as in terms of the process of venture creation, some of the upcoming sections overlap regarding the levels and stages discussed.

**Figure 1.**
Returnee entrepreneurs’ venture creation and the institutional environment
Returnee entrepreneurs’ characteristics and motivations

Data from the case-based study indicate how international experiences, their impact on the individual entrepreneur and their reasons to return are interrelated and influence the venturing efforts. Overseas experiences endow returnee entrepreneurs with human capital in terms of technological knowledge, professional skills, cross-cultural capabilities and business models. Data suggest that the time spent overseas also involves personal change processes. Interviewees indicate that they were exposed to a “reverse cultural shock” when returning to their home country resulting in a phase of re-adaptation. Personal change processes, however, also broaden the returnee’s horizon in terms of new ways of thinking, creativity and the ability to combine perspectives and approaches sourced from two culturally and institutionally different environments. Case study data suggest that reasons to return involve push and pull factors. While some returnees are pulled by perceived viable business opportunities, a favourable economic development, a growing market demand and personal motivations, others are pushed to return due to perceived unfavourable conditions and liabilities in the host country. Overall, interviewees reported their overseas experience as valuable and beneficial for their professional and personal development; even though some faced difficulties due to a different environment and culture. Many of those interviewed report that – apart from their actual studies – they learned about differences of cultures and to combine their “Western” and “Chinese” way:

I really think my experiences are broad and seeing people there how they market, and the innovation, they gave me a lot of great ideas and I use those things for doing business in China. It is really helpful; it gives me a lot of ideas from another side while I also understand the Chinese way of operating a business.

The cases in the study exhibit a diverse range of time spent overseas. Returnee entrepreneurs studied and/or worked in another country from half a year to more than 13 years. Within and cross-case analysis suggests that the time they spent overseas is related to a variety of other factors. In particular, returnee entrepreneurs who spent a long time overseas appear to have adapted more to the host country’s culture than those who spent only a fairly short time in another country. Similarly, those having been overseas for a long time report difficulties to re-adapt in their home country and appear to have lost local networks in their home country. This loss appears to result in an estrangement from the home country; creating hurdles for the venture creation process. Interviewees believe that they did not only bring back experiences from overseas, but that they also changed personally. In particular, interviewees who stayed abroad for many years mention a “reverse cultural shock” and that they need to personally re-adapt to China:

I lived in the US for 13 years, so kind of adapted to the culture over there [...]. When I came back to China I got a brief depression during that period of time because the things are so different.

Overall, returnees see their personal change as positive. Some reported that they became more open-minded due to their stay overseas, took a different way of thinking with them, or learned how to think in a creative way. Others report the benefits of being endowed with two perspectives and the ability to combine their “Western” and “Chinese” way.

The reasons for overseas students and employees to return to China are diverse and at times intertwined. Interviewees reported that personal reasons motivated them to return to China; for example, family, partner and friends still live in China. Others mentioned that they see viable business opportunities in China; due to the economic development, market demand, availability of venture capital and potential support by the government. Sometimes a local partner attracts returnees back offering network support and funding. Also the returnees’ technological expertise can be a reason for deciding to come back to China; to introduce technology which is new to the Chinese market. Another reason is that
interviewees did not feel comfortable and did not adapt for the long term in their host country due to a different culture and lack of contacts.

**Start-up efforts**

Insights from the interviews suggest that experiences from overseas are an important trigger for the venture idea. Overseas experiences may trigger the venture idea because returnees recognise products or services overseas which are not yet broadly available in their home country’s market. In the context of highly skilled returnees this frequently involves technologically advanced products and services. Consequentially, highly skilled returnees who are engaged in the development or research on advanced technologies appear to recognise the chance of bringing this technology into their home country and create demand for this technology.

However, data also suggest that the venture idea is not necessarily triggered during the time period overseas. Some cases reported that they discovered or were actively seeking a business opportunity after return; or they rather came across an idea by accident. Networks and relationships appear to play an important role for the creation of a business idea. While the idea may only emerge after return, overseas experiences still appear to be valuable for the further development of the idea. Compared to local networks the availability of international networks plays a more subordinate role for most of the interviewees. However, data suggest an importance of international networks for the venture idea and the start of the entrepreneurial venturing process. If returnees possess international contacts they are sourced from their previous study and work experience abroad. Those contacts can act as a trigger for the venture idea or being kept to ask for advice for the current business.

Human and social capital are important constituents for seeking funding for the operation of a returnee entrepreneur's venture. Those who are based within a hi-tech zone have the advantage of having easier access to financial capital for their venture due to the social capital that accompanies being a tenant of a hi-tech zone. Partially, the hi-tech zone itself provides funding, or it can act as an agent to facilitate access to funding. Contrarily, those entrepreneurs outside of a hi-tech zone tend to feel more pressure imposed by their investors to generate revenue within a short time-frame. In contrast, companies within the hi-tech zone appear to have less pressure which allows them to focus on the long-term development of their products and services:

The major concern for a developer is not the money. It is do my job in high quality. If every developer thinks like that I think we come up with the high-level product. So we are not just a follower, we can become an explorer. [...] My investor is patient, so I am patient. If other people push me, I have to push my fellow. Then we probably can come up with a product in short time, and push that to the market and get some revenue, but that is not my destination. I don’t want this. What I want is much bigger. [...] We need to have this kind of long-term attitude to do the R&D job.

A liability in terms of human and social capital that many returnee entrepreneurs have to face is a degree of estrangement from the home country owing to longer periods of absence. This results in a lack of knowledge of local markets, a lack of local networks, and some extent of unfamiliarity with local norms and customs. Interviewees adapted to culture and lifestyle in their host country and after coming back they realise that a lot of things have changed in China. Important to notice for starting up a business is the lack of local contacts which play a crucial role for doing business in China. In order to overcome this burden many returnees were seeking local partners to enter business and government networks:

[I found] some local people knowing the local customers, the business opportunities, and they have connections. So I think this is important. [...] That is why we have this local partnership, trying to figure out something I could not figure out.
Accordingly, most of the interviewed returnees have started their venture with at least one partner; some have several partners who run the company together. In many cases those partners bring complementary skills and may help to overcome a liability of estrangement after return. In particular, highly technically specialised returnees choose a partner with complementary skills and local knowledge to access viable business networks. As indicated by interviewees, local networks – or guanxi – are essential for doing successful business in the context of China. A local partner can ease access to these crucial networks:

Guanxi is the word, the businessmen know that. I have the ability to open a business, to be a manager, but maybe I have not enough ability to deal with the guanxi.

Insights from the data analysis suggest that returnee entrepreneurs integrate experiences from overseas when operating their new venture. Study and work experiences appear to have an influence on leadership, management styles and business culture. Respondents reported that their overseas experiences have impacted on different dimensions of operating a venture such as how they try to motivate employees, how they manage their firm or how they define the objectives of their firm. New ventures opened within a hi-tech zone are – as expected – focussing on business model and industry involving advanced technology and innovative developments. Also those ventures opened outside of the hi-tech zone are frequently related to technology, but also operate in less high-potential industries such as education or sales. Cases from high-tech industries report that they particularly focus on research and development (R&D). Data suggest that highly skilled entrepreneurs bring their knowledge from overseas to found an innovative company which gains a competitive advantage by dedicating most resources to R&D:

For the past couple of years we focussed on research and development. We do not have manufacturing, we do not have marketing, we just put our eyes on the research job. We do the hardware development, do the software implementation and we conduct lots of clinical trials in hospitals. At this time the majority of my people is in R&D. Probably next, we will start the marketing job, so we will have some new fresh air coming.

Support by the hi-tech zone as well as a division of labour with the help of a local partner appear to facilitate that the returnee is able to focus on innovative developments. Similarities in the data emerged as to how important the cases evaluate an advanced quality of their products and services. Most cases in the study, even if still at the beginning, have created jobs by employing others. Those employees are mainly related to the core business – e.g. software development – or complement the skill set.

Business development
Insights from the case analysis indicate that returnee entrepreneurs within hi-tech zones exhibit a certain degree of patience in terms of the development of their business. At the first stage, they tend to focus on the development of their products and services followed by marketing efforts in order to acquire customers and eventually become profitable. Overall, these ventures hope to gain a competitive advantage and a long-term market share by providing high quality products and services. A long-term outlook for the business development focusing on growth is partially facilitated by support schemes and government assistance. Returnee-owned ventures outside of industry clusters tend to aim for a faster pace in order to rapidly earn revenue and make profits. Factors influencing growth aspirations also depend on business model and industry. Some cases appear to be primarily motivated by their internalised interest in
development and innovation, rather than focusing on the business side aiming to
accumulate as much profit as possible:

We are trying to do a technology-driven company. We develop products, provide value to our
customers. That is my core. I think if that changes the company does not exist, and maybe I start
just looking for a job.

If I can only do a small business, let it be. I do a small business, I can have the cash flow support the
whole system; that would be fine. So I can do something I am truly interested in and then deliver
values to industry, to our customers; that is what I am trying to do.

During their early stages of business development, returnee-owned ventures from the
sample primarily focus on the domestic market environment. However, there is also an
indication of different dimensions and extents of internationalisation activities. Data
analysis suggests, though, that these internationalisation activities and aspirations are more
of an inward than an outward nature. Returnee-owed ventures engage in several types of
inward internationalisation activities. In terms of R&D, new ventures cooperate with foreign
firms to develop new products and services. Knowledge is transferred from overseas to the
domestic environment. These linkages are often connected to and evolved from previous
international experiences and networks of returnee entrepreneurs. Thereby, human and
social capital forms the basis and trigger for further cooperation and inward cross-border
activities complementing and extending the movement of individual human capital of the
returnee entrepreneur.

Furthermore, returnee-owned ventures provide service and consultancy for
overseas-based customers. These activities are in particular prevalent among ventures
within high-tech industries. Similarly, these business activities naturally evolved and
developed from previous international experiences and networks of returnee entrepreneurs.
Following case-study data, new ventures did not appear to actively plan acquiring new
customers overseas; rather they maintained professional networks formed overseas and
continue providing services after having returned to their home country. Thereby, they
utilise their expertise and reputation to provide, for example, technical services or
consultancy for overseas companies; complementing their domestic business activities:

Because I worked over there for eight years and I know a lot of customers and some systems
I developed. I guess if they are having some troubles I am the right person to call. So they are calling
me for consultancy.

Another venture in the sample followed a business model heavily relying on inward
internationalisation activities. This company offers education and tourism services in China
for overseas-based customers. The services are provided in the domestic market but
exclusively target overseas customers who eventually cross borders in order to make use of
the services. For example, the company acts as an agent for internships and summer-abroad
programs. Another type of inward internationalisation activity is the import of goods from
overseas-based suppliers, which are subsequently being used for the development and
production of products offered by the returnee-owned venture in their domestic market.

Indication of outward internationalisation activities in the case-study sample remains
scarce. Data analysis shows that most ventures target and operate within the domestic
market, to some extent utilise inward internationalisation activities but largely refrain
from engaging in outward internationalisation. One type of outward internationalisation
is the provision of services to overseas-based customers. One case developed a mobile
phone application that is distributed overseas and targets customers who are based in
foreign countries.

Case study analysis suggests that future outward internationalisation is not a main focus
of business development among the sample. Interviewees emphasised their focus on the
domestic market primarily due to an expected high domestic market demand, which they aim to satisfy first. Outward internationalisation, on the other hand, frequently is associated with obstacles and barriers that are not worth tackling at an early stage given promising opportunities in the domestic market:

Doing international business is very costly. You have to travel internationally, that is a lot of cost when you are in this stage. And right now we do not have a mature product. The communication cost is pretty high for international business. So right now we focus on the domestic market.

However, while it is currently not of a major concern, interviewees do not rule out future outward internationalisation activities. Analysis suggests that, if any, these outward internationalisation activities would follow and complement activities in the domestic market; rather than being capitalised on in the very early stages.

**Formal and informal institutional environment**

Insights from the case study analysis suggest that the formal and informal institutional environment with its policies and regulations, support mechanisms and the level of acceptance of entrepreneurship have a considerable impact on returnee entrepreneurs’ start-up efforts. As indicated by interviewees and secondary data, recent changes in the informal environment have enhanced the societal acceptance of entrepreneurship. While a position in an established and well-known corporation used to be the most desirable career choice for overseas returnees, entrepreneurship has become more and more reputable and accepted. Additionally, external enablers on the macro level such as government support schemes and business incubators within an entrepreneurship ecosystem made start-up efforts more feasible and desirable. This appears to have a favourable impact on the motivation and intentions of returnees to start their own venture. On the other hand, returnee entrepreneurs need to overcome formal institutional voids.

Findings show that the Chinese Government is particularly interested in attracting highly skilled overseas students and professionals back and encourage them to start up their own business. A range of programmes has been set up which support returnee entrepreneurs with start-up funds. Data point out that the government has recognised the value returnee entrepreneurs can bring into the economy. Those cases in the study who are supported by the government describe the support as extremely valuable in particular at the beginning of the venturing process. They tend to heavily rely on governmental help through different support plans:

The government has different levels of this plan. [...] The government national level, provincial level, city level and Hi-Tech Zone level. I got three levels already. I push my stuff to the highest level. Hopefully next year if I get some revenue from my new products I hope I can get the highest level plan support for me. And also for the company. The plan they provide lots of resources for me, like money.

A subordinate level of government support is the support offered by business incubators for returning overseas students within hi-tech development zones. Approximately half of the cases in this study have started their ventures within the hi-tech zone under investigation and receive support and assistance. At the time of data collection between 700 and 800 start-ups were located in Chengdu Hi-Tech Development Zone mainly in the areas of IT, biotechnology and medicine. The hi-tech zone offers support in terms of office space free of charge or at a reduced rate, start-up funding, training schemes and networking opportunities. Similar to support on the national level, the support administered by the hi-tech zone helps returnee entrepreneurs particularly in the first stages of their ventures and gives them some freedom to focus on the development of their products and services. Data also suggest that besides the monetary
support, assistance in terms of networking and creating a favourable image are perceived as valuable:

We need the clinical trial in hospital and they can just provide some connections for me, networking. They provide this networking. At this time at the beginning we do not know anybody in hospital and we do not know how to start and we do not know how the clinical standards are; we are just engineers. The government provides this kind of networking for us. They just bring big guys from hospital and say this company is one of our plan, we support them. They are brilliant people and they have a brilliant idea and probably will generate a lot of profit for people and country and themselves.

Also this park provides an image for you. Your business address over here, if you look at your card, you know that this is some legitimate stuff, not just some random small company.

Findings suggest that the perception of entrepreneurship has changed in the society and being an entrepreneur is seen to be more and more favourable. On the one hand, the government encourages to become engaged in entrepreneurial activities which are perceived as a legitimation. On the other hand, successful and celebrated entrepreneurs in particular from e-businesses act as a role model and their success increases legitimation of entrepreneurial activities:

Probably 10 or 20 years ago the target of highly trained people is to work in big company and get well paid, the white collar. But now the situation is different. Probably the reason is first the government pushes people to start their own company. Also there are some demonstrations from other successful company managers who run their own company and also the atmosphere because in the society, from the society, people around me are willing to start their own company. Actually lots of people get success. And also they get good example from other people. I can feel from the whole society that people think it is the time to start-up my own company and I am able to do that, I have the ability to do that, so why not. This is a very good atmosphere for the time being.

Besides an enhancing societal acceptance of entrepreneurship and various support mechanisms, interviewees indicated that policies and regulations within the formal institutional environment have become more favourable; for example, in terms of business registration procedures and protection of intellectual property. However, a weak IP protection is still a major concern of many returnee entrepreneurs:

It is not well protected. We are constantly being exploited by other companies. So if we deliver products they are trying to start from it, to duplicate and copy it. So we are kind of careful.

Registering for IP protection does not work. You only need to be faster and faster, make better user experience, get more users, and win this competition. People would copy anyway.

While returnee entrepreneurs operate within the institutional environment, insights from the case study also suggest an impact of returnee entrepreneurs on the institutional environment in terms of economic and societal factors. Many returnee-owned ventures engage in research-intensive industries and, hence, move forward the development of innovations. Additionally, most cases in this study created employment in the early stages of their venturing efforts. Besides productive outcomes, data analysis also points towards rather unproductive entrepreneurial activities. Informal institutions such as networks and guanxi appear to facilitate circumventing rules and regulations; for example, in order to reduce the tax burden. On the societal level, data suggest that returnee entrepreneurs can act as change agents by introducing new cultural and societal perspectives. Interviewees and secondary data also indicate that returnee entrepreneurs can act as role models increasing the societal acceptance of entrepreneurship.

Discussion
Data analysis points to patterns and relationships that depict how returnee entrepreneurs with their characteristics operate in terms of creating and running their new ventures and
how they interact with the institutional environment. Those patterns and relationships offer insights and indicative illustrations of the phenomenon of returnee entrepreneurs in the context of emerging economies. The conceptual model that emerged from the qualitative analysis exhibits characteristics and capital of returnee entrepreneurs which impacts on their start-up efforts in the home country and as to how they operate their new ventures. Human capital gained overseas, frequently in the form of technological knowledge, may shape the venture idea. Social capital, sourced both internationally and domestically, is utilised for start-up efforts and the development of the venture. The conceptual model also depicts liabilities returnee entrepreneurs face due to their absence from the home country and a potential estrangement thereof. This relates to a lack of local knowledge and networks, and cultural estrangement from the home country. However, the findings point towards means as to how returnee entrepreneurs overcome these disadvantages. In particular, returnee entrepreneurs seek local partners with complementary skills to support their venturing efforts and to overcome a lack of local social capital. Additionally, meso-level institutional support from business incubators is sought in order to gain legitimacy for venturing efforts and to re-localise into the domestic environment.

Findings from the study as incorporated into the conceptual model also demonstrate interactions between the macro and individual level. While entrepreneurial activities have been more and more encouraged by normative and regulatory institutions, returnee entrepreneurs need to overcome institutional voids, such as in the form of insufficient protection of intellectual property. Likewise, returnee entrepreneurs may utilise institutional voids in order to gain advantages for their ventures. The study suggests that returnee entrepreneurs may follow different paths with their ventures in terms of rather productive or unproductive entrepreneurial activities. Key insights from the analysis are further discussed in the following sub-sections.

Reasons to return: push and pull motivations
Analysis suggests that the reasons to return for returnee entrepreneurs are a multi-faceted concept. A variety of reasons and motivations appears to be related to the decision to return and to start-up a new venture. First, personal ties in terms of family, partner and friends are a pull motivation to return to the home country. Second, the perceived favourability of market, economy and business opportunities are an additional pull motivation. Third, as a distinct reason, the knowledge about a technology that is new to the home country market appears to motivate overseas students or professionals to return back. Fourth, data suggest a push motivation; that is, returnees perceive to be disadvantaged in terms of starting a business in their host country or report difficulties to adapt to the host country environment. Empirical insights emerging from this study, therefore, reflect different notions of motivation theories. Insights from the case study data show that motivational processes are intertwined and potentially nested. While some returnees may aspire an entrepreneurial career and subsequently identify a business idea, others may have a business idea at hand which triggers pursuing an entrepreneurial career path (see Bhave, 1994). The latter in particular appears to be the case for highly educated overseas students who – endowed with advanced knowledge from their stay overseas – translate this knowledge into a viable business idea in their home country. These motivational patterns and processes are supported by previous enquiries into the sources of returnee entrepreneurs’ venture ideas (see Zweig et al., 2006).

Likewise, empirical insights from this study add to a theoretical distinction between opportunity and necessity motivation (Reynolds et al., 1999); and push and pull motivation, respectively (Verheul et al., 2010). Opportunity entrepreneurs are motivated by a business idea they perceive as promising in terms of economic gain, while necessity entrepreneurs start their own business due to a lack of alternatives (Reynolds et al., 1999). While this study
can only present a retrospective enquiry into start-up motivations, it suggests that both opportunity and necessity, or push and pull, motivations are prevalent among returnee entrepreneurs. An important role, again, plays the actual or perceived availability of a viable new venture idea. This may translate into a pull or opportunity motivation to return home and start a new business.

Case study insights demonstrate that returnee entrepreneurs are not a homogenous group of actors. Returnees endowed with advanced technological knowledge acquired overseas appear to be more inclined to utilise this for entrepreneurial endeavours out of the perception of having a viable opportunity – rather than being pushed into entrepreneurship as a last resort. This adds an important human capital variable to the theoretical processes of entrepreneurial motivations. The human capital component of advanced knowledge accumulated overseas may facilitate following the path of an “opportunity entrepreneur”. Likewise, it also suggests that returnees endowed with advanced knowledge may follow the motivational route of possessing a solution to a problem which then triggers a business idea (Bhave, 1994).

While the case-based study offers some insights into the reasons and motivations to return, it cannot entirely depict the relative importance and how those reasons are intertwined with each other. However, greater clarity would be desirable since it would offer insights as to how governments would need to design effective policies to attract talents back and influence the intention to return home and start a new venture. Similarly, it would give insights into how governments of host countries could prevent a brain drain.

**Returnee entrepreneurs’ human and social capital**

Insights from the case study emphasise the relevance of human and social capital in the form of international ties and knowledge particularly during the early stages of venture creation. This is in line with previous literature on the phenomenon of returnee entrepreneurs, which suggests that the distinct capabilities and knowledge accumulated overseas are utilised for the venture creation process in the home country’s market (see Li et al., 2012; Liu, Lu, Filatotchev, Buck and Wright, 2010; Liu, Wright, Filatotchev, Dai and Lu, 2010). Technological knowledge acquired overseas is transferred to the domestic market and acts as a trigger for the venture idea. Following previous research, this advanced knowledge does not necessarily need to be related to the latest international technology, but a technology new to the domestic market is sufficient (Zweig et al., 2006). Thereby, returnee entrepreneurs are agents for knowledge transfer across country borders (see Lin, Lu, Liu and Zhang, 2016).

Insights from this study show that international networks are primarily seen as a source of advice, support and ideas. Returnee entrepreneurs maintain their networks with prior overseas contacts in order to gain benefits for their ventures. This study adds to the theoretical assumption that intensity and magnitude of social capital change over time. Particularly in the early phases of venture creation, returnee entrepreneurs appear to rely on bridging social capital in order to access their international networks and exploit these ties for realizing their venture idea (see Putnam, 2001). The intensity and magnitude of these ties, however, appear to diminish over time. Rather, returnee entrepreneurs switch over to relying on domestic networks in their native country environment. However, these processes expose returnee entrepreneurs to particular challenges as brokers of social capital. While the bridging social capital to their overseas networks fades, their bonding social capital in their native country needs to be rebuilt since once they left their local community this valuable and formerly established source of social capital tends to be destroyed (see Portes, 1998).

**Estrangement and strategies to mitigate estrangement**

Consequently, returnee entrepreneurs may suffer from estrangement from their home country. Findings from previous studies demonstrate that returnee entrepreneurs may face
disadvantages after return due to a loss of local knowledge and networks (Li et al., 2012; Wahba and Zenou, 2012). While individuals tend to expect challenges when adapting to a host country – for example, when going through stages of acculturation (Gillespie et al., 2010) – difficulties of a re-acculturation upon returning home may be rather unexpected, since they presume to come back to a familiar cultural context (see Martin, 1984).

However, data also suggest that the acquisition of a local partner can act as a remedy for estrangement. A lack of local networks and knowledge about the local market can be substituted by partnering with locals who are familiar with the environment and the market, and who can ease access to information and networks. These local partners possess complementary skills and assist the returnee to overcome disadvantages in terms of local knowledge and ties owed to their time overseas. Thereby, ventures partially owned by a returnee entrepreneur synthesise advantages from international experiences and knowledge with advantages of possessing local knowledge and networks. It is, therefore, argued that returnee entrepreneurs who spent a considerable time overseas are better off seeking support from a local partner to mitigate potential disadvantages. This is, on a firm level, supported by international business literature when investigating firms’ internationalisation and market entry efforts (Lu, 1998). Data point to another means to overcome disadvantages; which is being located within a hi-tech zone. This institution appears to act as an intermediary to overcome disadvantages and help to “localise” the returnee entrepreneur. Consistent with applying a context-incorporating view on cultural and institutional settings, the establishment of networks and social ties for facilitating support and idea exchange can be based to a greater extent on informal networks and ties. Following different cultural understandings and perceptions, informal relationships may be seen as sufficient in the context of China, whereby actors in western countries would require more formal networks and ties (Lin et al., 2015; Rottig, 2016).

Internationalisation
Case study insights suggest that the perception of business opportunities is strongly related to the domestic market rather than to perceived international opportunities. Returnees are attracted by a favourable economy, availability of capital and market demand. Consequently, it is suggested that returnee entrepreneurs do not systematically start a new venture with an international orientation despite their internationally influenced human and social capital. While these factors theoretically have an impact on the propensity to be “born global” or an international new venture (Oviatt and Mcdougall, 1994; Rennie, 1993), returnee entrepreneurs appear to have a primary focus on the domestic market due to promising opportunities with ample growth prospects.

While individual human and social capital related to overseas experiences of the founder play a key role for venture creation, actual cross-border business activities remain rather limited. Data suggest that firms in their early stages primarily engage in inward internationalisation (see Bianchi, 2011; Fletcher, 2001; Welch and Luostarinen, 1993). Single cases utilise importing from overseas-based suppliers or engage in inward internationalisation of consumer services by offering services to overseas consumers. Analysis points out that the scope of inward internationalisation is frequently linked to previous international networks and experiences of the founders.

This study demonstrates that outward internationalisation, on the other hand, does not play a major role during the young firm stage or is limited to a vague intention. Despite their international networks and experiences, returnee entrepreneurs appear to be hesitant to engage in outward internationalisation fearing costs and barriers of international business; despite presumed knowledge and ties related to overseas markets. Partially consistent with the international new venture framework (Oviatt and Mcdougall, 1994), returnee-owned firms are international from inception; however, largely in terms of inward
internationalisation activities. In terms of outward internationalisation, they may rather follow a traditional stage-based process (see Johanson and Vahlne, 2009). This is partially due to expected barriers to internationalisation and mainly on account of a sufficient domestic market demand.

Insights from this study add to the stream of literature that emphasises the need for a refined view on internationalisation activities by highlighting and differentiating between inward and outward internationalisation activities (Fletcher, 2001; Welch and Luostarinen, 1993). Traditionally, research on internationalisation has strongly focused on outward links such as exporting (Welch and Luostarinen, 1993). In line with other authors it is argued that firms are also international by engaging in inward-driven internationalisation activities (Fletcher, 2001). In terms of returnee entrepreneurs, these inward activities are frequently associated with the flow and transfer of human and social capital from overseas to the domestic market. As suggested by previous studies (Fletcher, 2001; Welch and Luostarinen, 1993), outward internationalisation activities may be linked to and build on inward internationalisation. This study, therefore, suggests that returnee entrepreneurs are a distinct case in terms of new venture internationalisation; determined by their international experience and the context they operate in.

Objectives of returnee-owned ventures
Analysis indicates that overseas experiences shape the objective returnee entrepreneurs follow for their business. In particular high-tech ventures tend to focus on R&D and the creation of an innovative long-term business activity. This appears to be valuable for an emerging economy in order to allow for a shift from the factor-driven over the efficiency-driven to the innovation-driven developmental stage. Entrepreneurial activities are seen as a mechanism for this economic shift (Acs et al., 2008). Consequently, it is supposed to be in the interest of an economy and its institutional framework to foster this type of entrepreneurship.

The institutional environment and its interplay with the individual returnee entrepreneur appears to be a diverse and multi-faceted theme. Analysis points out that while entrepreneurs willingly accept support for their business venture, there also appears to be a culture to circumvent rules and regulations if it is perceived as being beneficial for one’s own venture. Weaker formal institutions in an emerging economy may allow the exploitation of benefits via informal institutions (see Ahlstrom and Bruton, 2006). This may have implications for the allocation of entrepreneurial activities. While data suggest that in particular high-tech ventures aim for a productive allocation in terms of innovation and creation of employment, others may attempt to engage in rent seeking and the avoidance of taxes (see Baumol, 1996).

Implications for practice
Insights derived from this study offer several implications for practitioners, policy makers and education providers.

Governments and policy makers such as those in China have discovered the potential that returnee entrepreneurs may offer in terms of a beneficial impact on the development of emerging economies and have designed policies in order to attract returnees back and provide support mechanisms for their venturing efforts. Case study insights suggest that a strong and stable institutional environment may be a key determinant for the decision to consider returning home and starting a new venture. Policy makers may need to consider regulatory arrangements, but also contributing to a positive climate and perception of entrepreneurship in the society. In terms of regulatory arrangements, results show that returnee entrepreneurs are particularly concerned about an insufficient protection of intellectual property. If entrepreneurs fear that their advanced technologies might be
exploited by competitors without having adequate regulatory and legal protection against this, they may be reluctant to invest considerable efforts and funds into R&D. Policy makers also need to make sure that – despite a potential culturally routed focus and reliance on informal networks and relationships – these are not being misused and result in unproductive entrepreneurial activities. This also relates to the design of transparent and objective mechanisms for determining who receives access to governmental support.

A particular emphasis should also be put on aiding returnees with overcoming potential disadvantages due to estrangement after having been absent. Case study insights demonstrate that estrangement from the home country is perceived as a considerable liability. Government support mechanisms could not only target on providing financial means for venturing efforts, but also offer means to help returnees re-localise in their native country. This could, for example, be achieved by fostering social groups, re-acculturation training and mentor schemes with experienced locals. Thereby, it could facilitate and accelerate processes of re-acculturation and re-localisation of returnees. This also includes seminars and workshops targeting a lack of knowledge regarding conducting business in the returnee’s native country.

While countries such as China have put considerable emphasis on supporting promising venturing efforts in selected and seemingly promising industries including biotechnology or information technologies, policy makers should be careful that a vast majority of ventures outside of business incubators do not fall under the radar. Due to resource-constraints and limited funding capacities, it may not be possible or desirable to financially support all kinds of ventures. However, findings suggest that beyond financial support, an entrepreneurship-friendly environment is deemed to be a motivating factor that may facilitate venturing efforts. This includes a normative institutional framework that encourages and non-monetarily rewards individuals who undertake entrepreneurial efforts and that stimulates the emergence of vibrant entrepreneurial eco-systems. This may be of particular strategical interest for countries that face larger resource-constraints than China does; for example, developing economies in Africa or South-East Asia. While these may not have the means to actively gear large financial funds into business incubators and technology parks, they may well be able to foster an entrepreneurial culture that contributes to the emergence of new economic activities.

**Conclusion**

Based on case study insights, this research proposes a tentative model of returnee entrepreneurs incorporating the creation and operation of new ventures and the interplay with the institutional environment. Thereby, this study adds to the evolving stream of literature on returnee entrepreneurs and enhances the knowledge about the phenomenon in the context of emerging economies. Insights derived from case study data from China illustrate the different motivations and reasons why highly skilled individuals return from overseas and start a new venture in their native country, how they utilise their international experience for their venturing efforts and depict their personal change processes. While human and social capital accumulated overseas suggests to be beneficial for starting an entrepreneurial business, returnees also have to cope with a lack of local networks and local knowledge. Institutional support mechanisms and local business partners appear to be an effective means to overcome these liabilities. Case study data also provide insights into different business objectives and growth aspirations returnee entrepreneurs pursue. This study, furthermore, illustrates how the formal and informal institutional environment of an emerging economy affects returnee entrepreneurial activities and how returnee entrepreneurs may themselves influence institutions.

Future research could empirically and quantitatively investigate particular relationships between different factors proposed in the model. Considering the suggested impact of
returnee entrepreneurs on the economic development of emerging economies, two-way relationships between the individual and firm level and the macro level are of particular interest. Limitations of this study include that it is based on interviews and secondary data from one city in one country with a particular institutional environment. This limits the generalisability of insights to other geographical and contextual settings. Another limitation includes that a response bias cannot be completely eliminated. Interviewees may not have revealed sensitive information and may have responded in a socially desirable manner.

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When institutions matter: 
a gravity model for Chinese 
meat imports

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Abstract

Purpose – In international trade differences in political and legal systems confront trading partners with relatively greater information asymmetry and contract enforcement problems than in domestic trade, resulting in higher transaction costs. Nevertheless, well-functioning institutions in the exporting country could prove beneficial for the agricultural importer, as institutions generally establish food and product regulations and ensure that they are enforced and serve as a last resort for dispute resolution and contract enforcement. Given China’s increasingly stricter control of its food supply chain and its rising imports of meat products, the purpose of this paper is to analyze whether institutions in the exporting country matter for Chinese meat imports.

Design/methodology/approach – To analyze the effect of the exporters’ institutions on Chinese meat imports, the authors estimate a gravity model for the 1990-2013 period. The authors apply the method suggested by Helpman et al. (2008) to correct for sample selection and firm heterogeneity. To estimate the effect of time-invariant variables, the authors apply the Fixed Effects Vector Decomposition method proposed by Plümper and Troeger (2007).

Findings – The results show that institutions affect Chinese trade flows. In particular, the authors find that China imports more meat products from countries who host qualitatively better institutions and are geographically closer, and that the country’s imports rise with its GDP level. This confirms our hypothesis that institutions in the exporting country are positively associated with meat exports to China.

Originality/value – The importance of the exporters’ institutions for Chinese meat imports has not been studied so far and is of great interest given China’s rising role as a sizable importer. Furthermore, Chinese meat imports have attracted much attention recently due to the country’s potentially significant impact on world food security and sustainable development. Hence, this paper aims to make a substantial contribution to the literature, both from a scientific and a policy perspective.

Keywords Markets and institutions, International trade, Food imports

Paper type Research paper

1. Introduction

Apart from the widely acknowledged barriers to trade discussed in the economics literature, such as quota and tariffs, a further potential impediment to trade has recently gained attention: institutions. Generally, institutions are formed to overcome frictions in trade and to reduce related costs (North, 1990). In international trade, however, differences in political and legal systems confront players with relatively greater information asymmetry and contract enforcement problems (Rodrik, 2000; Belloc, 2006). The resulting uncertainty in exchange translates to higher costs for both trading partners. Consequently, this affects the profitability and feasibility of exchange and patterns of international trade (North, 1991; Berkowitz et al., 2006).

China’s nutrition transition led to an increase in consumption and imports of livestock products. Since joining the WTO in 2001, China became the second largest importer of agricultural products (WTO, 2015). China’s increasingly dominant role in international agricultural markets raised serious concerns regarding international food security and questions on “who will feed China” (Brown, 1995). Given the country’s rapid economic growth and sheer population size, such international repercussions are not surprising. The pace of China’s massive nutrition transition has not yet slowed, and Dong et al. (2015)
predict that consumers’ unabated appetite for meat will result in increased imports of livestock products in the years to come.

While the consumption of meat products continues to grow, exporting livestock products to China has become a bureaucratic endeavor. Following numerous food scandals, the Chinese Government has realized that ensuring food security and safety are essential for guaranteeing its legitimacy and has, therefore, made these issues its top priorities in the last decade. The Chinese Government notably aimed at advancing its food supply chain and improved its standards and controls (Jia and Jukes, 2013). Not surprisingly, these measures also affect meat imports: while the government of the exporting country must agree on a protocol with the Chinese Government on meat products allowed to be exported beforehand, exporters must also follow specific regulations to ensure that Chinese requirements are met (EU SME Centre, 2013). All procedures strongly involve the institutions in the exporting country and directly affect the firms’ fixed costs of market entry.

This raises the question as to whether the institutions in the exporting country are essential for Chinese meat imports, and if so, to what extent. There are numerous reasons for which a positive correlation between institutions and trade flows is expected. First, well-functioning institutions might spur higher product quality, as they are associated with implementing and ensuring stringent food and product regulations (Yu, 2010). Second, legal institutions in the exporting country are essential for the importer, given that they allow him/her to fall back on effective mechanisms for dispute resolution and contract enforcement (Berkowitz et al., 2006). Third, well-functioning institutions could potentially facilitate export promotion efforts undertaken by the government, such as the establishment of protocols with Chinese authorities (Alvarez, 2004; Lederman et al., 2010; Görg et al., 2008). Hence, we propose that well-functioning institutions have a positive effect on the intensive margin of trade.

We explore our research question by estimating the effect of institutions on Chinese meat imports using a widely applied model of international trade, the gravity model. This model relates trade flows between two countries to their economic size as well as trade costs and allows us to include the institutional environment of the exporting country as an additional explanatory variable (comparable to a variable of “institutional distance”) (Anderson, 1979). We assume that the volume of Chinese meat imports is positively affected by well-functioning institutions in the exporting country. As our data set covers the 1990–2013 period, we estimate our model controlling for country fixed effects (FE), which capture unobserved and unchanged country heterogeneities. To estimate time-invariant variables, we apply the fixed effects vector decomposition (FEVD) method proposed by Plümper and Troeger (2007). We also correct for sample selection and firm heterogeneity by applying the method suggested by Helpman et al. (2008).

While numerous studies have analyzed the effect of institutions on trade, to the best of our knowledge, no study has so far scrutinized the importance of institutions for Chinese meat imports. Given China’s increasingly stringent control of its food supply chain and the predicted increase in meat imports, it is important to understand whether institutions in the exporting country affect those imports. Furthermore, Chinese meat imports have recently attracted much attention due to the country’s potentially vast impact on world food security and sustainable development. Hence, this paper aims to make a substantial contribution to the literature, both from a scientific and a policy perspective.

The rest of the paper is organized as follows. In Section 2, we provide an overview of China’s meat consumption and imports. In Section 3, we present further details on the link between institutions and trade. In Section 4, we describe and discuss the data we use in our analysis. This is followed by a presentation of the gravity model and the FEVD method applied in Section 5. In Section 6, we report our results and conclude with final remarks in Section 7.
2. Background: China’s meat consumption and trade

Since China initiated market-oriented reforms in 1978, its economic progress has not only lifted millions of people out of poverty but has also induced a dramatic change in food consumption patterns. Three decades ago, the traditional Chinese diet was rich in complex carbohydrates and fiber, and low in animal protein and fat. Today, Chinese food intake consists of energy-dense foods that are high in fat and low in carbohydrates (Cheng, 2009; Du et al., 2002; Guo et al., 2000; Tian and Yu, 2013). This trend is particularly apparent in the consumption of livestock products. In the 1993–2013 period, China’s meat supply (and consequently consumption) doubled from a low 28.7 to an impressive high of 61.8 kg/capita/year or equivalently from 35.2 to 87.6m tons in total (FAO, 2016)[1]. Reasons for this nutrition transition are numerous, such as economic growth, globalization, urbanization and technological change (Popkin, 2003; Delgado, 2003; Pingali, 2006; Cheng, 2009).

To satisfy China’s increasing appetite for meat, the country consistently expanded its livestock population throughout the last three decades and, consequently, remained largely independent of meat imports until 2006 (Yu and Cao, 2015). Furthermore, Yu and Cao (2015) attribute scant meat imports to low domestic meat prices relative to international market prices, probably due to lower production costs as well as sustained tariff and non-tariff barriers for meat imports. However, given the country’s resource limitations, it had to drastically boost its imports of feed grains such as maize and soybeans to sustain its livestock population[2]. Consequently, China became one of the biggest soy importers in the world (Dong et al., 2015).

Since 2006, China is a net importer of meat products and has also experienced rising import values ever since. Yu and Cao (2015) report substantial increases in the imports of edible offal and pork, as well as poultry and mutton meat. One of the main reasons for the surge lies in higher earnings of Chinese workers, which result in higher production costs and hence, a convergence of domestic and international meat prices. At the same time, numerous food safety scandals concerning food contaminated by toxic materials or infectious organisms have eroded the trust of consumers in the Chinese food control system (Luo et al., 2017). Not surprisingly, in the last two decades, food safety ranked high among the main concerns of Chinese consumers (Pew Research Center, 2015). The distrust in the current food control system results in consumers’ willingness to pay a higher price for certified food and generates demand for imported food products (Wang et al., 2007).

Due to expanding income levels and urbanization, the demand for meat products is forecasted to increase further over the next two decades, rendering higher meat imports inevitable (Hansen and Gale, 2014; Dong et al., 2015). Dong et al. (2015) predict that China will not be able to satisfy its rising demand for grain to sustain its livestock population, which will, in turn, increase the gap between production and demand for meat products. Therefore, China will have to increase meat imports substantially to satisfy a growing demand. Given the sheer size of China’s population, an increase in demand will result in international repercussions concerning food security and environmental impacts, as meat production entails large amounts of inputs in terms of land and water (Shimokawa, 2015). Furthermore, China might not solely increase the volume, but also the quality of imported meat. Bils and Klenow (2001) show that consumers do not only consume more goods as their income increases, but also consume products of higher quality. Gale and Huang (2007) and Yu and Abler (2009) find this to be applicable to China; as the average income of Chinese consumers rises so does the consumption of high-quality products.

Nevertheless, exporting meat products to China is a bureaucratic effort. As the Chinese population requests more stringent controls of the food supply system, the central government continuously aims at raising its standards, following WHO and FAO suggestions (Jia and Jukes, 2013; FAO and WHO, 2003). Chinese imports of agricultural products are just equally affected by these regulations. When a company plans on exporting...
meat products to China, the government of the exporter must set up a protocol with China beforehand, which transfers obligations concerning inspection and quarantine measures to the exporting country’s institutions. Additionally, Chinese authorities must individually approve each exporting company, which requires a high degree of involvement of the exporting country’s authorities (EU SME Centre, 2013).

Given China’s potential future increase of meat imports and intensified control of its food supply system, it is essential to understand the main determinants of the surge in trade volumes. In particular, we conjecture that apart from the well-known determinants of trade, such as economic size or transportation costs, the institutions in the exporting country are essential for China. Well-functioning institutions could ensure Chinese importers of contract enforcement mechanisms and reduce potential information asymmetries concerning food standards and controls and, consequently, result in safer food imports (Wu et al., 2017).

3. Literature review: linking institutions to trade

North (1990) defines institutions as “the humanly devised constraints that structure political, economic and social interaction.” As such, institutions refer to informal constraints (e.g. customs, traditions and code of conduct), formal rules (e.g. constitutions, laws and property rights), as well as enforcement mechanisms. Constructed by humans, the “rules of the game” “create order and reduce uncertainty in exchange” and, consequently, “determine transaction and production costs and hence the profitability and feasibility of engaging in economic activity” (North, 1990, 1991). Although institutions were created by humans, they are not necessarily the result of deliberate action (Ostrom, 1986). As such, formal rules are not only reinforced and supported by implicit rules but also contradicted (North, 1990). Furthermore, Williamson (2000) illustrates that the institutional environment of formal rules is embedded in a set of informal institutions, which exhibits constraints on the former and changes at a relatively slower rate.

As noted by North (1991), institutions determine transaction costs in international trade. Institutions gained increasing attention in possibly explaining the “mystery of missing trade” (Trefler, 1995); e.g., Anderson and van Wincoop (2004) emphasize that tariffs and quotas matter less than institutions, such as law enforcement, property rights or regulation. While a trade transaction can be distilled into three stages – contact, contract and control – costs occur at all three stages (den Butter and Mosch, 2003). The literature highlights two main causes of international transaction costs: asymmetric information (Rauch and Casella, 2003; Kranton and Minehart, 2001; Anderson and Marcouiller, 2002) and imperfect contract enforcement (Rodrik, 2000; Anderson and Young, 2002; Dixit, 2003; Berkowitz et al., 2006; Belloc, 2006).

In this study, we focus on three pathways through which institutions affect transaction costs and consequently trade flows. First, well-functioning institutions ensure higher product quality, as they guarantee consumer rights, implement and ensure stringent food and product regulations and consequently reduce information asymmetries (Yu, 2010). Numerous studies find a positive association between democracy and trade (Eichengreen and Leblang, 2008; O’Rourke and Taylor, 2007). Political accountability is usually associated with better legal and economic institutions (Olson, 1993; Giuliano et al., 2012, Rigobon and Rodrik, 2005). Following Yu (2010), this results in the creation of a fair and competitive market and, consequently, stricter regulations (Barro, 1996, 1999; Rodrik, 2000). Hence, products of high quality are produced, increasing the trust of the international community in the exporters’ commodities. Furthermore, Hasiner and Yu (2016) find that domestic meat consumption and democratic institutions are positively associated. Since the right to food represents a basic human right, and democratic institutions tend to uphold those rights, they could potentially ensure a higher level of
food security. Given that consumption is a basic driving force for international trade, democratic institutions could affect trade indirectly.

Second, well-functioning institutions reduce difficulties concerning contract enforcement or incomplete contracts and, consequently, reduce related transaction costs (Belloc, 2006; Nunn and Trefler, 2014). Berkowitz et al. (2006) show that the importer is heavily dependent on the institutions in the exporter’s country. In case, the exporter does not comply with a contract, these institutions are usually the last resort for conflict resolution and contract enforcement. Similarly, Levchenko (2007) and Nunn (2007) show that better institutions impact production cost as they resolve contractual incompleteness and consequently, affect comparative advantage.

Third, governments are usually highly committed to export promotion and aim to reduce transaction costs for exporters (Alvarez, 2004; Lederman et al., 2010; Görg et al., 2008). Establishing free-trade agreements (FTAs) or other necessary protocols are part of this approach; hence, well-functioning institutions facilitate these operations as well as trade in general. To conclude, an environment of well-functioning institutions results in reduced information asymmetries and fewer problems of contract enforcement. Hence, we assume that institutions affect the volume of exports or the intensive margin of trade. Regarding Chinese meat imports, we expect China to import more meat products from countries holding qualitatively better institutions.

Legal, political and economic institutions depict a strong correlation. According to the “hierarchy of institutions hypothesis,” postulated by Acemoglu et al. (2005), political institutions affect economic institutions and, consequently, economic performance. Furthermore, Rodrik (2000) refers to democracy as a “meta-institution,” which fosters general institution building. Given the strong correlation of various institutions, their disentanglement seems difficult, as it is assumed that their effectiveness depends on their interaction, rather than their isolated functioning. Hence, in this paper, we choose indices of institutions which aim at representing a complete picture of the quality of the institutional environment in a country, rather than specific institutions.

4. The data
To consistently estimate a gravity model for Chinese meat imports, we draw upon various data sources. Export values expressed in free on board prices and GDP in current international prices (dollars) come from the FAOSTAT database and the World Development Indicators database of the World Bank. Furthermore, we collect agricultural land size area and agricultural trade flows, defined as exports and imports of crops and livestock products from the FAOSTAT database. We also include a set of bilateral covariates in our augmented gravity model. We gather bilateral distance between two trading partners as well as common language from the website of the French Research Center in International Economics, CEPII. The distance variable we apply refers to the great circle distance between two capitals, measured as the shortest span between them, irrespective of sailing routes or highways. Finally, we retrieve information on WTO membership as well as accession dates from the WTO homepage, which allows us to determine whether both trading partners are members of the WTO in a given year. Considering China’s recent dedication to the advancement of FTAs, we gather information on whether such agreements are in place from the homepage of China’s Ministry of Commerce. Our data set covers 194 countries for the 1990–2013 period. A more detailed description of our variables, summary statistics, and a correlation table can be found in Tables AI–AIII.

We employ the following three proxies for institutions in our model: the Worldwide Governance Indicators (WGI) published by the World Bank; the Freedom Rating published by the NGO Freedom House (FH); and the absolute institutional quality variables (political,
economic and legal) provided by Kuncic (2014). The WGI measure six dimensions of governance: voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law and control of corruption since 1996 and on a yearly basis since 2002. The estimates are based on numerous underlying variables collected from enterprise, citizen and expert surveys, conducted in both developing and developed countries. The indicators range from $-2.5$ to $2.5$, where a higher value corresponds to a better rating (Kaufmann et al., 2011). For our study, we use the average of the six aforementioned indicators (WGI). The Freedom Rating captures political rights and civil liberties since 1972. In-house and external advisors measure political rights by evaluating: electoral process, political pluralism and participation and functioning of government. Their evaluation of civil liberties encompasses the areas of: freedom of expression and belief, associational and organizational rights, rule of law and personal autonomy and individual rights/property rights. In both areas, one to seven points are assigned and the resulting average of the two areas represents the “Freedom Rating.” On a scale from one to seven, one stands for the greatest degree and seven for the smallest degree of freedom. To ensure comparability with the other proxies, we reversed the order of the rating and normalized it to lie in the range from $-2.5$ to $2.5$ (FH).

Our third empirical proxy of the quality of the institutional environment represents a composite indicator based on a data set developed by Kuncic (2014). Given the strong correlation between different types of institutions, a separation of their effects is difficult (Woodruff, 2007). Hence, a composite indicator representing a combination of various institutions proves useful. While the aforementioned proxies focus on specific institutions, Kuncic (2014) aims at presenting an overall picture of the institutional environment of a country, as well as conceptualizing the theoretical construct developed by North (1990, 2005). The author draws on a broad set of already existing proxies; Kuncic (2014) uses the abovementioned indices but adds further variables, such as indices on economic freedom published by the Fraser Institute, The Heritage Foundation and The Wall Street Journal as well as the International Country Risk Guide published by the PRS Group. Although Kuncic (2014) categorizes them into political, economic and legal institutions, we consider the average of the three dimensions in our analysis. Furthermore, we normalize the proxy to lie in the range from $-2.5$ to $2.5$, where a higher value corresponds to a better rating ($K$). Using three different measurements allows us to check for the robustness of our hypothesis.

Although the aforementioned measures are extensively used in cross-country studies, strong criticism concerning the operationalization of the construct “institution” exists. Generally, objections regarding transparency of computation, objectivity, unbalanced data sources and other biases are raised (Arndt and Oman, 2006; Knack, 2006; Thomas, 2006; Langbein and Knack, 2010). Furthermore, criticism concerning methodological aspects is strong, e.g., Glaeser et al. (2004) stipulate that the currently used proxies are measures of outcomes rather than institutions and that they do not represent durable rules, procedures or norms. The authors suggest employing constitutional measures, which can be objectively verified. Alternatively, Voigt (2013) suggests measuring institutions by distinguishing de jure from de facto implementation, which are usually worlds apart. In a nutshell, the indices used are not ideal given that definition and correct measurement are contested and ample room for improvement exists. Hence, all aforementioned measures represent solely crude proxies for the quality of institutions.

Using the above outlined empirical proxies, it proves essential to ascertain how institutions developed on a global scale. The Freedom Rating gives some insights into the development of political rights and civil liberties over time. The share of democratic countries in the world surged from a low level of 27 percent in 1974 to an impressive high of 60 percent by the mid-1990s (Diamond, 2005). Nevertheless, according to FH (2016), more countries experienced a decline in their rating rather than a gain in the 2006–2015 period. Diamond (2015) describes this
development as a “mild but protracted democratic recession.” While this deterioration is still of minor magnitude, a continuation of this trend might have detrimental effects for trade relations and trade gains for different partners worldwide.

Exploring our data on Chinese meat imports, we find that since 1990, China’s import values of meat products have steadily increased. According to the FAOSTAT database, imports rose from $81.5m in 1990 to $987.3m in 2000 and finally, to $5731.8m in 2013 (all values expressed in current prices). In 2013, the largest exporters of meat products to China were Australia, the USA and New Zealand with 20.9, 20.0 and 12.6 percent of total import volume, respectively. The main exporters are followed by Brazil with 7.8 percent and Uruguay, Germany and Denmark with approximately 5.6 percent each. Nevertheless, the share of meat imports in total quantity consumed remained relatively low (Yu and Cao, 2015). Furthermore, in 2013, Chinese consumers consumed on average 61.05 kg of livestock products, only about half of the amount consumed by American consumers (115.13 kg) (FAO, 2016).

5. Method: a gravity model incorporating FEVD

The gravity model relates bilateral trade flows directly to the economic mass of the trading partners and indirectly to the trade costs they are facing (Tinbergen, 1962; Pöyhönen, 1963). In particular, exports from one country to the other are explained by the economic size of the exporter and importer in terms of GDP and the geographical distance between them. While the former is indicative of the exporter’s level of production and the importer’s potential to purchase goods, distance serves as a proxy for trade costs, as countries farther apart must bear higher transportation costs. The gravity model has been largely applied to different data sets and augmented by further bilateral trade covariates, such as common language, contiguity, population size and per capita income (Linnemann, 1966; Bergstrand, 1989). The model was used to analyze the effect of regional trading blocks, home-market effects and WTO membership on trade flows (Frankel, 1997; Rose, 2004; Davis and Weinstein, 2003).

While a first theoretical foundation of the gravity equation was only developed in the mid-1970s, multiple models now show that the equation can be derived from various trade frameworks. In 1979, Anderson presents a theoretical foundation incorporating the Armington (1969) assumption for a demand function with constant elasticity of substitution. Hence, products are differentiated by country of origin and all countries are active in foreign markets. This structure of preferences was incorporated in further models, such as the monopolistic competition framework (Krugman, 1980; Bergstrand, 1985, 1989), Heckscher–Ohlin models (Deardorff, 1998) and Ricardo models (Eaton and Kortum, 2002). Recent theoretical models consider firm heterogeneity and sunk market entry costs in their analysis, considering that not all firms serve foreign markets (Bernard et al., 2003; Melitz, 2003).

Given the established theoretical foundations, de Benedictis and Taglioni (2011) point toward two key issues essential for the correct estimation of the gravity equation: the multilateral dimension of the model and selection bias due to heterogeneous firms operating in the international market. Concerning the multilateral dimension, the contribution of Anderson and van Wincoop (2003) ranks among the most prominent. The authors show that trade is not solely influenced by bilateral trade obstacles, but also by the relative weight of these obstacles compared to obstacles encountered with other trading partners. The authors coin these terms “inward and outward multilateral resistance” and show that not taking these terms into account can lead to serious bias in the estimation. Consequently, numerous methods for the inclusion of multilateral resistance terms were developed, such as the use of proxies (Wei, 1996; Helliwell, 1998; Baldwin and Harrigan, 2011), the application of an iterative structural estimation (Anderson and van Wincoop, 2003) or FE estimation (Harrigan, 1996; Head and Mayer, 2014). To date, the FE estimation represents the most popular and easily applicable approach, which encompasses the inclusion of importer and exporter FE and yields consistent estimates.
Another strand of literature focuses on the selection bias due to firm heterogeneity. While in Krugman’s model of monopolistic competition (1980) all firms serve foreign markets, in reality not all firms export to all countries nor do they all operate internationally. This is mainly due to high market entry costs; only highly productive firms can afford to bear them, which in turn results in a “self-selection of the firm.” Hence, applying an OLS estimation would deliver biased results rendering it unsuitable (Chaney, 2008; Helpman et al., 2008). Accordingly, Helpman et al. (2008) propose a two-stage estimation procedure incorporating Heckman’s (1979) correction for sample selection and a correction for the bias generated by firm heterogeneity. This approach allows us to analyze zero trade flows between two countries, which frequently occur in disaggregated data sets. The main goal of Helpman et al. (2008) is to eliminate the extensive margin and to estimate the intensive margin of trade (de Benedictis and Taglioni, 2011). While the intensive margin refers to the trade volume per firm, the extensive margin refers to the number of firms exporting (Eaton et al., 2004; Hillberry and Hummels, 2008; Bernard et al., 2007).

Building on the theoretical model developed by Anderson and van Wincoop (2003), we estimate a generalized gravity model augmented by various explanatory variables. Moreover, we correct for sample selection and firm heterogeneity by applying the method proposed by Helpman et al. (2008). Their approach contains two stages; first, an equation for selection into trade and, second, a trade volume equation. Following the authors, we estimate a probit model in the first stage, which accounts for the probability that country $i$ exports to country $j$ given a set of explanatory variables:

$$\rho_{ijt} = \Pr(T_{ij} = 1) = \Phi\left(\hat{a}_0 + \sum_{k=1}^{K} \hat{\beta}_{kijt} + \sum_{m=1}^{M} \hat{\gamma}_{m}k_{mijt} + \hat{a}_1\text{comlang}_{ijt}\right),$$  \hspace{1cm} (1)$$

where $t$ represents time-variant and $k$ time-invariant variables[4]. Following Helpman et al. (2008), we choose the variable “common language” as the excluded variable in the probit equation. We argue on theoretical terms that common language is a serious obstacle for entering a trade relationship. While language might affect the decision to trade, it can be expected that it does not necessarily affect the trade volume, once the hurdle is overcome.

In the second step, we estimate the log-linear specification of the trade flow equation and incorporate predictions of the first stage:

$$\ln x_{ijt} = a_0 + \sum_{k=1}^{K} \beta_k l_{kijt} + \sum_{m=1}^{M} \gamma_m k_{mijt} + \alpha_1 \tilde{\eta}_{ijt} + \alpha_2 \tilde{\eta}_{ijt} + \epsilon_{ijt},$$  \hspace{1cm} (2)$$

where $x_{ijt}$ refers to total Chinese meat imports. To correct for sample selection, we include the inverse mills ratio, given by $\tilde{\eta}_{ijt} = \phi(\tilde{Z}_{ijt})/\Phi(\tilde{Z}_{ijt})$, where $\tilde{Z}_{ijt}$ represents the fitted values of the latent variable from the probit model. To correct for the bias stemming from firm heterogeneity, we follow Helpman et al. (2008), who approximate $\tilde{\pi}_{ijt}(\delta) = \ln(\exp[\delta(\tilde{Z}_{ijt} + \tilde{\eta}_{ijt})] - 1) = \ln(\exp[\delta(\tilde{Z}_{ijt})] - 1)$ with a polynomial in $\tilde{Z}_{ijt}$ of third order, where $\tilde{Z}_{ijt} = \Phi^{-1}(\hat{\rho}_{ijt})$.

In both steps, we include time-variant as well as time-invariant variables. By time-variant variables, we refer to the GDP of the exporter and importer, the institutional environment of the exporter (FH, WGI or K), and the GDP per capita of the exporter. The latter variable serves as a control variable, as institutions are expected to be correlated with per capita income (Berkowitz et al., 2006; Yu, 2010). Given that we solely consider Chinese imports and the country’s institutions do not vary considerably over the observed time period, we do not control for the importers’ institutions. Furthermore, we include the absolute value of agricultural exports (absolute value of agricultural imports, excluding meat products) of the
exporter (importer) as well as the total agricultural land area of the exporter in the equation. Additionally, we include two dummy variables on WTO membership and FTAs which take on a value of one in case the exporter and importer are both members of the WTO or have signed an FTA. Finally, we include two time-invariant variables in our estimation: distance and contiguity. The later variable represents a dummy which equals one if exporter and importer share a common border. All variables are subscripted by \( t \), indicating time, except for the time-invariant variables; \( e_{ijt} \) represents an idiosyncratic error term.

For the variables GDP, distance and institutions, numerous studies indicate the expected sign of the coefficients. Given that a high GDP is indicative of a high level of production and consumption, we expect high income countries to export and import more goods. Hence, we predict the coefficient on GDP for both trading partners to be positive (Tinbergen, 1962; van Bergeijk and Brakman, 2010; de Benedictis and Taglioni, 2011). The effect of distance on imports is expected to be negative, given that the variable can be regarded as a proxy for transportation costs, which increase with distance and therefore represent an obstacle for trade (Disdier and Head, 2008). According to the literature on the link between institutions and trade, we expect China to import more from countries who hold qualitatively better institutions (Berkowitz et al., 2006; Levchenko, 2007; Yu, 2010). Hence, we expect the coefficient on all three proxies – K, FH, and WGI – to be positive.

Concerning the signs of the coefficients of the remaining control variables, we make further assumptions. We expect the sign on the exporters’ agricultural outward shipments to be positive, as this might generate more exports of agricultural products to China. We expect the sign on Chinese agricultural inward shipments to be negative, as China’s imports of feed grains allow the country to sustain a higher livestock population and therefore might reduce meat imports (Dong et al., 2015). Furthermore, we predict the coefficient on contiguity to be positive, and, hence, for China to trade significantly more with its immediate neighbors (Eichengreen and Irwin, 1998). The coefficient on WTO membership could be positive, as the WTO aims at reducing trade barriers and functions as an arbitrator in case of trade disputes. Nevertheless, different studies show varying effects; while Rose (2004) finds a negligible (often negative) effect of WTO membership on trade, other authors (Subramanian and Wei, 2007; Chang and Lee, 2011; Rose, 2005) find a strong positive effect on trade volumes. Furthermore, we would assume the coefficient on FTAs to be positive, as these agreements specifically aim at enabling trade. Nevertheless, numerous studies find contradictory results (Kepaptsoglou et al., 2010).

To account for multilateral trade resistance, we include exporter FE in the gravity equation[5]. Unfortunately, when doing so, we run into the vexing problem of estimating time-invariant variables (Baltagi, 2001; Wooldridge, 2002). Plümper and Troeger (2007) provide a remedy for this dilemma; they propose an estimator, which allows to measure the effect of time-invariant variables in panel data models containing unit effects while at the same time increasing the efficiency of variables with little within variance. They coin their approach the FEVD model.

Given that our data set contains the time-invariant variables distance and contiguity, we apply the FEVD method proposed by Plümper and Troeger (2007). The FEVD method comprises three steps. In the first stage, we estimate a FE model; the data generating process of a FE model takes the following form:

\[
x_{ijt} = \alpha + \sum_{k=1}^{K} \beta_k l_{kijt} + \sum_{m=1}^{M} \gamma_m k_{mij} + u_{ij} + e_{ijt},
\]

where \( l_{kijt} \) represent time-variant variables, \( k_{mij} \) time-invariant variables, \( u_{ij} \) the \( N-1 \) unit specific effects, and \( e_{ijt} \) the iid error term.
Averaging Equation (3) over time and subtracting it from (3), we get the following equation:

$$\bar{x}_{ijt} = \sum_{k=1}^{K} \beta_{k} \tilde{t}_{kt} \hat{e}_{ijt},$$

(4)

which removes the individual effects $u_{ij}$ as well as the time-invariant variables $k_{mij}$. Estimating the resulting model, we can obtain the unit effects $\hat{u}_{ij}$ given by:

$$\hat{u}_{ij} = \bar{x}_{ijt} - \sum_{k=1}^{K} \beta_{k} \tilde{t}_{kt} \hat{e}_{ijt}.$$

(5)

In a second stage, the unit effects are regressed on the time-invariant variables, such as distance and contiguity:

$$\hat{h}_{ij} = \sum_{m=1}^{M} \gamma_{m} k_{mij} + h_{ij}.$$

(6)

This procedure allows us to decompose the unit effect into explained as well as unexplained parts and to predict the unexplained part $h_{ij}$:

$$h_{ij} = \hat{u}_{ij} - \sum_{m=1}^{M} \gamma_{m} k_{mij}.$$

(7)

In a third step, we estimate the baseline model by pooled OLS, including time-invariant variables as well as the predicted part of the unit effect obtained in stage 2:

$$x_{ijt} = \alpha + \sum_{k=1}^{K} \beta_{k} \tilde{t}_{kt} + \sum_{m=1}^{M} \gamma_{m} k_{mij} + v_{ij} + e_{ijt}.$$

(8)

Hence, Equation (2) is deconstructed into Equations (4), (6) and (8). This procedure allows us to estimate the effect of the time-invariant variables such as contiguity and distance.

6. Results

To test for the positive association between institutions and Chinese meat imports, we introduce two trade flow equations. The first model integrates the FEVD (Plümper and Troeger, 2007) and the second model represents an extension of the first model by correcting for sample selection and unobserved heterogeneity (Helpman et al., 2008). As outlined above, we employ three proxies for the institutional environment of the exporting country: the average of Kuncic’s (2014) absolute institutional quality variables ($K$), the average of the WGI, and the FH rating. Given that the institutional quality variable provided by Kuncic (2014) represents a summary of the overall quality of institutions, we report the results using this proxy in the main body of the text. The inclusion of the other proxies serves as a robustness check and we present the results in the appendix. We estimate six models and refer to them by model number and proxy used, e.g., Model-1K, Model-1FH, ..., Model-2WGI. Given that the periods for which the indicators are available vary, the number of observations in each model differ.

In columns (1) and (2) of Table I, we present the results of Model-1K; the signs of all coefficients of the main variables are consistent with our expectation, except for the GDP of the exporting country. We find that China’s imports rise with its GDP level, reflecting the
Table 1. Gravity model for Chinese meat imports

<table>
<thead>
<tr>
<th>Variables</th>
<th>Equation (1)</th>
<th>Equation (4)</th>
<th>Equation (1)</th>
<th>Equation (4)</th>
<th>Equation (8)</th>
</tr>
</thead>
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<td>GDP exporter</td>
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<td>-0.358</td>
<td>0.148</td>
<td>-0.358</td>
<td>-0.357</td>
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<td>GDP importer</td>
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<td>1.865</td>
<td>0.787</td>
<td>1.865</td>
<td>1.880</td>
</tr>
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<td>1.36e-08</td>
<td>6.29e-10</td>
<td>1.36e-08</td>
<td>1.27e-08</td>
</tr>
<tr>
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<td>1.268</td>
<td>0.036</td>
<td>1.268</td>
<td>1.266</td>
</tr>
<tr>
<td>Agr. flows exporter</td>
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<td>0.191</td>
<td>0.394</td>
<td>0.191</td>
<td>0.198</td>
</tr>
<tr>
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<td>-1.006</td>
<td>-0.615</td>
<td>-1.006</td>
<td>-1.011</td>
</tr>
<tr>
<td>WTO</td>
<td>0.225</td>
<td>0.225</td>
<td>0.196*</td>
<td>0.225</td>
<td>0.218</td>
</tr>
<tr>
<td>FTA</td>
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<td>-0.519</td>
<td>-0.144</td>
<td>-0.519</td>
<td>-0.528</td>
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<tr>
<td>Institutions: K</td>
<td>0.549*</td>
<td>0.549*</td>
<td>0.531***</td>
<td>0.549*</td>
<td>0.563***</td>
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<td>-0.305***</td>
<td>0.570**</td>
<td>-1.345***</td>
<td>-0.298</td>
</tr>
<tr>
<td>Contiguity</td>
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<td>-0.299*</td>
<td>0.299*</td>
<td>0.299*</td>
<td>0.203*</td>
</tr>
<tr>
<td>Common language</td>
<td></td>
<td></td>
<td>1.000***</td>
<td></td>
<td>0.999**</td>
</tr>
<tr>
<td>Constant</td>
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<td>-11.00***</td>
<td>-13.22***</td>
<td>-25.12**</td>
<td>-27.52***</td>
</tr>
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<td>719</td>
<td>719</td>
<td>2914</td>
<td>719</td>
<td>719</td>
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<tr>
<td>R²</td>
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<td>0.826</td>
<td></td>
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<td>0.826</td>
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<td>Number of id</td>
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<td>83</td>
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</tr>
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</table>

Notes: Standard errors in parentheses. *p < 0.1; **p < 0.05; ***p < 0.01
Source: Kuncic (2014)
country’s increasing appetite for foreign meat products. As outlined above, the main reasons for this development are a convergence of local and foreign prices, a leveling off in imports of feed products, and subsequently, restrained local production. While China demands fewer meat products from countries depicting a higher GDP, the country imports more livestock products from countries that are geographically closer.

The remaining control variables also depict interesting results. We find that resource endowments prove essential for exporting to China; the coefficient on the exporters’ agricultural land area is positive and highly significant. Furthermore, our results show that China imports more meat products from countries that are strong agricultural exporters, indicated by the positive and significant sign of the exporters’ agricultural trade flows. Nevertheless, China imports relatively fewer meat products, the more it engages in agricultural trade. This reflects China’s increasing imports of feed products to sustain its livestock population, which could potentially result in lower meat imports. WTO membership and FTA agreements have no significant effect on Chinese meat imports. Given China’s recent expansion of its food supply chain regulation, this result is not surprising. Interestingly, the coefficient on contiguity depicts a negative and significant sign, indicating that China imports less from adjacent countries. This might be explained by the fact that the main global exporters of meat products are not located in countries sharing a common border with China; hence, contiguity does not necessarily result in a reduction of trade frictions. The results of Model-1FH and Model-1WGI can be found in columns (1) and (2) of Tables AIV and AV and depict similar results.

Our main variable of interest – the quality of the institutional environment in the exporting country – is highly significant and shows the expected positive sign in all three models: Model-1K, Model-1FH and Model-1WGI. Model-1K shows that an increase in the institutional quality variable by 1 unit, being indicative of an improvement, increases meat imports by 73.15 percent \(\exp(0.549)-1 \times 100\). Similarly, an increase of the FH rating (Model-1FH) and the WGI indicator (Model-1WGI) by one unit, increase meat imports by 130.71 percent \(\exp(0.836)-1 \times 100\) and 81.3 percent \(\exp(0.595)-1 \times 100\), respectively. Hence, the effect of institutions on Chinese meat trade can be considered substantial. The difference in effects is not surprising, given that all indicators measure diverse sets of institutions.

Columns (3)–(5) of Table I depict the results of Model-2K, which incorporates the correction for sample selection and firm heterogeneity. Following Helpman et al. (2008), we estimate a probit equation in the first stage, using common language as the excluded variable. Our results show that common language and the variables that affect trade volume also affect the probability of trading. Nevertheless, their effects differ from the trade flow equation; the probability of entering a trade relationship with China increases with the GDP of the exporter and importer, decreases with distance and most interestingly increases with the quality of the institutional environment of the exporter. In the second stage, we estimate the trade volume equation and include corrections for sample selection and firm heterogeneity. We find that the effects of the control variables on the volume of exports are very similar to the effects in Model-1K and that the included corrections are statistically significant. Model-2FH and Model-2WGI give similar results, the outcomes can be found in columns (3)–(5) of Tables AIV and AV.

Furthermore, we find that the effect of the institutional proxies is positive and highly significant in Model-2K, Model-2FH and Model-2WGI. Controlling for firm heterogeneity proves essential in our analysis due to a possible correlation with institutions. Helpman et al. (2008) show that when sample selection and firm heterogeneity are not considered, coefficients depict an upward bias. We observe a similar tendency in our results with some coefficients slightly smaller in Model-2 than in Model-1. Yet, we find that when correcting for sample selection and firm heterogeneity, our assumption concerning the association between institutions and meat imports remain valid. The institutional environment affects
the intensive margin of trade; well-functioning institutions ensure high-quality products, increase the importers trust in contract enforcement mechanisms and support firms’ export activities by taking appropriate measures. Hence, they reduce transaction costs and affect trade positively. Consequently, China tends to import more meat products from countries hosting qualitatively better institutions.

The applicability of our results to other agricultural trade flows would need to be tested separately. As outlined in Section 2, numerous studies find a positive effect of institutions on trade, e.g., Nunn (2007) shows that better institutions facilitate relationship specific investments as they resolve contractual incompleteness and consequently, affect comparative advantage. Furthermore, Yu (2010) shows that democratic institutions result in higher product quality and reduce trade costs and therefore, stimulate trade. Given China’s increasingly stringent regulation of agricultural imports, well-functioning institutions can be expected to also affect trade in other agricultural products positively; nevertheless, separate testing is inevitable.

Regarding the managerial implications of our results, we conclude that the success of two trading partners in the meat sector will depend heavily on a well-functioning environment of institutions in the exporting country. Should this be partially or fully non-existent, higher transaction costs might arise, which could potentially reduce the profitability of exchange. In particular, a potential exporter should be aware of the fact that the support of local authorities in the exporting country is essential, as they have to negotiate a protocol with Chinese authorities before trade can take place and play an essential role during the registration process. Additionally, a reliable Chinese trading partner, who has a good understanding of the specificities of the Chinese meat market and import requirements might facilitate the management of various institutional hurdles (EU SME Centre, 2013).

7. Conclusion

Well-functioning institutions generally guarantee that food-control systems work effectively and that rules and regulations are followed which results in higher product quality and lower information asymmetries. Furthermore, well-functioning institutions are essential for conflict resolution and contract enforcement. Given China’s increasingly stricter regulation of its food supply chain and its rising imports of meat products, we analyze whether well-functioning institutions in the exporting country affect Chinese meat imports given the potential benefits.

To test our hypothesis, we estimate two gravity equations for the volume of Chinese meat imports. In our estimation, we incorporate FE, account for bias stemming from sample selection and firm heterogeneity, and apply the FEVD method. We consider three indices as proxies for the institutional environment, which allows us to check for the robustness of our results: the Freedom Rating, the average of the WGI and the average of the institutional quality variables provided by Kuncic (2014). Our results confirm our hypothesis that China imports more meat products from countries holding qualitatively better institutions, as they are indicative of transparent product quality standards, allow the importer to draw on well-established compensation mechanisms and are suggestive of stronger government support.

According to the NGO FH, in the last ten years more countries experienced a deterioration rather than an improvement in their home institutions. As our results, as well as numerous other studies (Yu, 2010; Berkowitz et al., 2006; Levchenko, 2007) show, this can have detrimental effects on international trade. While exporters themselves might have to operate under increasingly unfavorable conditions in their home country, their customers might lose trust in their products and contract enforcement mechanisms. Hence, we believe that a focus on building well-functioning and sustainable institutions is essential, as it proves fruitful for trading partners and can foster trade relations.
Nevertheless, how to effectively change institutions and which institutions to adopt remains largely debated and is beyond this study. As shown by Ostrom (1986) and Williamson (2000), changes in institutional settings are neither always deliberate nor quick. Furthermore, formal and informal rules can sometimes be incompatible, and path dependency can substantially restrict options for change. Additionally, there is no one-size-fits-all solution and a simple transfer of institution from one country to the other seems futile (North, 1990, 1991). Following Shirley (2013), the upcoming research questions should focus on why some countries are more effective in creating well-functioning institutions than others, so that more actors can benefit from lower transaction costs and free trade.

Notes
1. By meat products, we refer to the items summarized under group 17 “Products from Slaughtered Animals” in the FAOSTAT Commodity List.
2. China is home to approximately 20 percent of the world population, but possesses only 7 percent of arable land and water resources.
3. Following the overview given by de Benedictis and Taglioni (2011).
4. While we only consider China as sole importer in our analysis, we will keep the well-known subscript of j (representing the importer) in all equations.
5. Given that our data set merely captures Chinese meat imports, we solely include exporter fixed effects.

References


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**Appendix**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP exporter</td>
<td>GDP of the exporter, current USD, log</td>
<td>WDI database</td>
</tr>
<tr>
<td>GDP importer</td>
<td>GDP of the importer (China), current USD, log</td>
<td>WDI database</td>
</tr>
<tr>
<td>GDP exporter pc</td>
<td>GDP of the exporter, per capita, current USD, log</td>
<td>WDI database</td>
</tr>
<tr>
<td>Agr. area exporter</td>
<td>Agricultural area of the exporter, log</td>
<td>FAOSTAT</td>
</tr>
<tr>
<td>Agr. flows exporter</td>
<td>Exports of agricultural products by the exporter, log</td>
<td>FAOSTAT</td>
</tr>
<tr>
<td>Agr. flows importer</td>
<td>Imports of agricultural products by the importer, excluding meat products, log</td>
<td>FAOSTAT</td>
</tr>
<tr>
<td>WTO</td>
<td>Trading partners are WTO members, in given year, dummy</td>
<td>WTO homepage</td>
</tr>
<tr>
<td>FTA</td>
<td>FTA between trading partners is in place, in given year, dummy</td>
<td>China’s Ministry of Commerce</td>
</tr>
<tr>
<td>Institutions: K</td>
<td>Absolute institutional quality values, average of (1) political, (2) economic and (3) legal institutions; rescaled on range (−2.5, 2.5)</td>
<td>Kuncic, 2014</td>
</tr>
<tr>
<td>Institutions: FR</td>
<td>Freedom Rating; average of (1) political rights and (2) civil liberties, reversed ranking, rescaled on range (−2.5, 2.5)</td>
<td>Freedom House</td>
</tr>
<tr>
<td>Institutions: WGI</td>
<td>World Governance Indicator; average of (1) voice and accountability, (2) political stability and the absence of violence, (3) government effectiveness, (4) regulatory quality, (5) rule of law and (6) control of corruption; rescaled on range (−2.5, 2.5)</td>
<td>World Bank</td>
</tr>
<tr>
<td>Distance</td>
<td>Great circle distance between two capitals, measured as the shortest span between two capitals on the earth’s surface, irrespective of sailing routes or highways, log</td>
<td>CEPII database</td>
</tr>
<tr>
<td>Contiguity</td>
<td>Trading partners share a common border, dummy</td>
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<tr>
<td>Common language</td>
<td>Trading partners share a common official or primary language, dummy</td>
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Table AI. Definition and source of variables
Table AII. Correlation table

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<th>GDP exporter</th>
<th>GDP importer</th>
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<th>Agr. flows exporter</th>
<th>Agr. flows importer</th>
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<td>0.323</td>
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<td>Agr. exports, exporter</td>
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<td>Agr. imports, importer</td>
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<td>2.89E+07</td>
<td>3.16E+07</td>
<td>3,310,799.00</td>
<td>1.06E+08</td>
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**Note:** Values in 1,000 current USD

Gravity model for Chinese meat imports

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Table AIV. \[ 
\begin{array}{|c|c|c|c|c|c|}
\hline
\text{Variables} & \text{(1) Model-1FH Equation (4)} & \text{(2) Model-1FH Equation (8)} & \text{(3) Model-2FH Equation (1)} & \text{(4) Model-2FH Equation (4)} & \text{(5) Model-2FH Equation (8)} \\
\hline
\text{GDP exporter} & -0.515* (0.310) & -0.515*** (0.0533) & 0.187*** (0.0352) & -0.515* (0.310) & -0.518*** (0.0833) \\
\text{GDP importer} & 2.140*** (0.298) & 2.140*** (0.271) & 0.765*** (0.183) & 2.140*** (0.298) & 2.097*** (0.387) \\
\text{GDP exporter pc} & 1.36e–08 (9.95e–09) & 1.36e–08*** (3.86e–09) & 8.49e–09*** (2.79e–09) & 1.36e–08 (9.95e–09) & 1.27e–08*** (4.81e–09) \\
\text{Agr. area exporter} & 0.0622 (0.924) & 0.0622** (0.0289) & -0.0133 (0.0221) & 0.0622 (0.924) & 0.0602** (0.0346) \\
\text{Agr. flows exporter} & 0.299 (0.250) & 0.299*** (0.0533) & 0.404*** (0.0368) & 0.299 (0.250) & 0.296* (0.165) \\
\text{Agr. flows importer} & -0.965*** (0.262) & -0.965*** (0.227) & -0.653*** (0.155) & -0.965*** (0.262) & -0.945*** (0.330) \\
\text{WTO} & -0.332* (0.181) & -0.332*** (0.147) & 0.0684 (0.0935) & -0.332* (0.181) & -0.325** (0.151) \\
\text{FTA} & -0.345 (0.309) & -0.345 (0.243) & -0.168 (0.206) & -0.345 (0.309) & -0.298 (0.251) \\
\text{Institutions: FR} & 0.836*** (0.192) & 0.836*** (0.0492) & 0.232*** (0.0260) & 0.836*** (0.192) & 0.833*** (0.0864) \\
\text{Distance} & 0.336*** (0.0658) & 0.336*** (0.0734) & 0.336*** (0.0658) & 0.336*** (0.0734) & 0.488*** (0.146) \\
\text{Contiguity} & -1.893*** (0.252) & 0.174 (0.149) & -1.893*** (0.252) & 0.174 (0.149) & -1.011*** (0.262) \\
\text{imr} & 2.940*** (0.690) & 2.940*** (0.690) & 1.602*** (0.321) & 2.940*** (0.690) & 1.602*** (0.321) \\
\text{z1} & 19.04*** (3.505) & 19.04*** (3.505) & 0.993*** (0.0271) & 19.04*** (3.505) & 0.993*** (0.0271) \\
\text{z2} & -8.936*** (1.814) & -8.936*** (1.814) & -8.936*** (1.814) & -8.936*** (1.814) & -8.936*** (1.814) \\
\text{z3} & 1.602*** (0.321) & 1.602*** (0.321) & 1.602*** (0.321) & 1.602*** (0.321) & 1.602*** (0.321) \\
\text{h} & 1.000*** (0.0254) & 1.000*** (0.0254) & 1.000*** (0.0254) & 1.000*** (0.0254) & 1.000*** (0.0254) \\
\text{Common language} & -20.16** (5.519) & -20.16** (5.519) & -20.16** (5.519) & -20.16** (5.519) & -37.54*** (5.865) \\
\text{Constant} & -23.04*** (2.670) & -23.04*** (2.670) & -12.94*** (1.808) & -23.04*** (2.670) & -12.94*** (1.808) \\
\text{Observations} & 871 & 871 & 3,616 & 871 & 3,616 \\
\text{R}^2 & 0.282 & 0.796 & 0.282 & 0.796 \\
\text{Number of id} & 88 & 88 & 88 & 88 \\
\hline
\text{Notes:} Standard errors in parentheses. *p < 0.1; **p < 0.05; ***p < 0.01
\end{array} \]
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<td>GDP exporter</td>
<td>−0.582 (0.477)</td>
<td>−0.582*** (0.0663)</td>
<td>0.161*** (0.0460)</td>
<td>−0.582 (0.477)</td>
<td>−0.606*** (0.0881)</td>
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<td>GDP importer</td>
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<td>1.882*** (0.466)</td>
<td>0.539 (0.350)</td>
<td>1.882*** (0.531)</td>
<td>1.849*** (0.523)</td>
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<td>GDP exporter pc</td>
<td>1.70e−08 (1.57e−08)</td>
<td>1.70e−08*** (5.29e−09)</td>
<td>−4.40e−09 (3.66e−09)</td>
<td>1.70e−08 (1.57e−08)</td>
<td>1.82e−08*** (6.35e−09)</td>
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<td>Agr. area exporter</td>
<td>1.316 (1.462)</td>
<td>1.316*** (0.0449)</td>
<td>0.00902 (0.0282)</td>
<td>1.316 (1.462)</td>
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<td>0.0700 (0.377)</td>
<td>0.0700 (0.0642)</td>
<td>0.386*** (0.0453)</td>
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<td>0.0671 (0.187)</td>
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<td>−0.625 (0.400)</td>
<td>−0.466 (0.301)</td>
<td>−0.625 (0.462)</td>
<td>−0.601 (0.451)</td>
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<td>1.000*** (0.0299)</td>
<td>0.0967 (0.146)</td>
<td>1.000 (1.084)</td>
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<td>−0.396* (0.227)</td>
<td>−0.124 (0.214)</td>
<td>−0.396 (0.330)</td>
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<td>−0.804*** (0.248)</td>
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Notes: Standard errors in parentheses. *p < 0.1; **p < 0.05; ***p < 0.01
A typology of market-seeking investments: Swedish firms in China

Hans Jansson
School of Business and Economics, Linnaeus University, Växjö, Sweden, and
Sten Söderman
Stockholm Business School, Stockholm University, Stockholm, Sweden

Abstract
Purpose – Regarding globalization trends, it is essential for multinational corporations (MNCs) to operate in China if they are to succeed in the international business environment. It is therefore vital to study how those MNCs investing in China have fared. The purpose of this paper is to devise a robust conceptual framework for the evolvement of market-seeking investments in emerging markets.
Design/methodology/approach – The typology is based on a network approach to internationalization processes, where a case study is made of Swedish MNCs’ experience of the Chinese market.
Findings – The case study contributes to the mostly static foreign direct investment (FDI) theory as well as the entry mode approach, both of which have paid little attention to the FDI carried out by MNCs in emerging markets 5–15 years after initial entry.
Originality/value – The case study also contributes to the mostly static FDI theory as well as the entry mode approach, both of which have paid little attention to the various types of FDI carried out by MNCs in emerging markets 5–15 years after initial entry.

Keywords Emerging markets, Foreign direct investment (FDI) motives, Internationalization processes, Marketing investments, China

1. Introduction
China is a major recipient of foreign direct investment (FDI), but its economic outlook suggests it will attract significantly more. Its share of world FDI stock grew from 1 percent in 1980 to 18 percent of world FDI in 2013, equivalent to $253bn (OECD, 2013). How multinational corporations (MNCs) choose to invest in China will then be of critical importance for future international business. Due to this incredibly rapid development, any MNCs seeking to capture global market share simply must establish a presence in the Chinese market. It is therefore vital to study how the MNCs investing in China have fared. What are their motives for market-seeking investments, and how do those Stockholm motives change after entry into a national market, for example?

There is a lack of knowledge regarding the details of western firms’ responses to China’s economic development and government policies. Moreover, theoretical explanations are underdeveloped with respect to emerging markets and need to be complemented, according to Child and Tse (2001), Ghemawat (2003), Child and Rodrigues (2005), Jansson (2007b, p. 48) and Jansson and Söderman (2012).

Research exists into the motives behind FDI (Dunning and Lundan, 2008), but little of it addresses how these motives relate to each other in space and over time. The basic motives behind foreign production are usually divided into four types of MNC activity: natural resource seekers, market seekers, efficiency seekers and strategic asset or capability seekers. These have also been used to explain the FDI of Chinese MNCs abroad (Buckley et al., 2007; Cui and Jiang, 2009; Deng, 2009; Morck et al., 2008). There might be more than one motive behind an investment and motives may change over time in relation to each other. Moreover, these motives mainly concern production, omitting investments in marketing.
This is a serious limitation since it overlooks a considerable part of the FDI in a country, primarily intangible investments in customers, suppliers and marketing channels, and MNCs that only invest in marketing, such as service providers. Furthermore, investments outside the market are usually excluded. This could underestimate the FDI, especially in emerging markets, where governments typically involve themselves in business. A deeper insight into marketing investments would also contribute to better understanding the basic motives behind production investments and how they relate to other motives.

Investments in marketing are more developed in internationalization process theory, which also addresses how different types of investments relate to each other over time. We therefore combine FDI theory with internationalization process theory to complement the motives for production investments with those of marketing investments. To develop further the latter aspect, including investments in customers, suppliers and government, we incorporate business marketing theory.

Our purpose is to devise a robust theoretical framework for market-seeking investments in emerging markets. We categorize different factors to constitute a typology linked to Swedish interests in China, which, since 2003, has been Sweden's biggest Asian trading partner. Hence, we focus here on the market-seeking motive and relate it, over time, to the other motives for MNCs investing in China.

2. Methodology

“Types” have played a significant role in the development of empirical science (Hempel, 1965; Sköldberg, 2002; Kearney, 2012). Methodologically, a classificatory-type formation in empirical science is subject to the requirement of systematic fruitfulness. The characteristics defining the different types should not merely provide neat pigeonholes to accommodate all the individual cases in the inquiry, but should lend themselves to sound generalization (Hempel, 1965, pp. 156-157).

The methodological strategy is abductive (Alvesson and Sköldberg, 2009), where the goal is to develop concepts by creating classifications through empirical support, rather than validating theory. The concepts are continuously assessed, and the reality’s theoretical support investigated through the matching of theory with reality. This continuous matching of the conceptual typology and the empirical world is done through case studies of the FDIs of Swedish firms in China (Dubois and Gadde, 2002; Jansson and Söderman, 2012; Hilmersson and Jansson, 2012a, b; Kao, 2013). We have been involved in this research for a long time, benefiting from “getting behind the veil” (Marshall, 1997, p. 42). Over time, therefore, many Swedish MNCs’ business models in China have been scrutinized. Of the more than 11,500 Swedish companies trading with China since the 1980s, nearly 600 have had an active local presence. About half were established between 2000 and 2009 (Carlsson et al., 2005; Demir and Söderman, 2007; Swedish Industrial Corporations in China, 2010, p. 15; Swedish Embassy, 2013), however, we estimate that up to 400 of these 600 mostly small firms have disappeared from China. We selected manufacturing firms that established themselves before 2000; our typology is valid for engineering firms, associated service firms and international retailers. The study concerns China prior to 2015 when government-led investment growth was driven by low-cost manufacturing and exports.

Primary data were collected through biannual, one-and-a-half-day focus groups. Since the purpose was to achieve within-group interaction, these were preferred to group interviews (Wilkinson, 2004). To safeguard interaction, we used a version of the mutual experience exchange learning methodology, turning the focus groups into a collaborative type of action research (Lundgren and Jansson, 2016). Respondents were sampled from a network of Swedish MNC subsidiary expatriates, with an average of 15 representatives attending each session. In total, 55 MNCs participated in the 30 sessions spread over 15 years. The overall aim was to discuss complex strategic issues with the objective of each
meeting being to encourage peer learning and advice seeking. The issues were discussed based on their strategic relevance and topicality. We also collected secondary data about the establishment and evolvement of Swedish investments in China, mainly from various interest organizations and the web. Based on this extensive empirical platform, we established the conceptual typology through pattern matching, i.e., by dividing the MNCs into different groups based on the main motives behind their investments. We looked for commonalities behind the FDI of a certain group as we separated groups from each other. This way, we developed an emerging classification of nine groups, based on our conceptual foundation and the findings of the case studies.

3. The typology

3.1 The theoretical foundation

Dunning and Lundan (2008) identified four reasons that MNCs engage in market-seeking investments in manufacturing: they “follow their customers abroad”; they invest to “adapt the products to local market conditions”; local “production and transaction costs are lower”; and the MNC needs to have a local presence because its main competitors have one. Moreover, they indicate that the host government is a crucial factor influencing market-seeking investments, typical for the situation in China. We relate these market-seeking motives to each other through the internationalization process. Two phases from Dunning and Lundan (2008) are added to Johanson and Wiedersheim-Paul’s (1975) originals: one addresses how to integrate parts of the value chain already established and add new local activities; the other concerns how to coordinate the local organization with the international organization of the MNC. This now five-stage pattern relates to the inter-country internationalization process of the firm. Furthermore, most research on within-country investments relates to mode of entry, paying little attention to operations taking place 5–15 years after entry (Jansson and Sandberg, 2008; Sandberg, 2013).

In the network approach, internationalization results from firms’ actions to establish relationships by strengthening network positions (Johanson and Vahlne, 2009). The international network extension process is incremental and founded on the same basic traits as internationalization processes in general. Firms build relationships differently depending on stage of internationalization, i.e., the higher the degree of internationalization the more likely that firms act proactively in business networks (Agndal and Chetty, 2007).

Capability profiles. Experiential know-how is important in internationalization because it reduces uncertainty about further commitments and enables firms to discover opportunities for expansion. Compared to the general internationalization knowledge, market-specific knowledge is explored locally and hard to transfer between environments, e.g., societal and business network knowledge (Johanson and Vahlne, 1977, 2009; Blomstermo et al., 2004). The nodes used to establish network relationships with local firms are defined as entry nodes (Jansson and Sandberg, 2008). First, a distinction is made between two main types of marketing investment in terms of solving customer problems (Jansson, 2007b): those that satisfy specific customer needs and those that satisfy general customer needs, with problem-solving capability behind each type. Ability to solve the problems of the individual customer is given a “customer specialist” profile, while more general problem-solving abilities are given a “product specialist” profile.

Second, a distinction is made between bridging needs and solutions through a dyad or a triad. The relationships of the two specialists above are dyadic, while distributor and distribution network specialists handle triadic relationships through intermediaries. The former is specialized in using external distributors, while the latter has the distribution capability “in-house.” These four capability profiles show a company’s ability to operate within various types of customer or supplier network relationships. Depending upon entry node, we distinguish one type of marketing investment in triads and three types of
investments in dyads. Dyads include both direct sales from a subsidiary and direct exports from the home market to customers in the foreign market. Triads exclude subsidiaries and are located in between the two above in extent of market investment.

Due to the importance of the government for successful business in China, investments involving government are included among the marketing investments. Founded on Jansson (2007a), they are defined as business-to-government (B2G) marketing investments as distinct from B2B or B2C investments.

3.2 The typology specified and illustrated
The proposed typology is depicted in Figure 1 as well as described and exemplified based on the cases studied. Market-seeking investments are either customer market driven or supplier market driven. In the former case, investments are made in marketing knowledge to sell products/services through relationships with local customers, whereas in the latter case investments are made in relationships with local suppliers of relevant products. Additional market-seeking investments could be made along the establishment chain in marketing (mainly distribution), in government relations, manufacturing and, finally, in other types of activities such as acquiring competitors.

Customer–market-driven investments. Two types of investors in marketing assets were found: first, a distributor specialist that invests in customer relationships, either of its own company (i.e. in a dyad), or of a local intermediary/agent (i.e. in a triad), often a product specialist or a customer specialist; and second, a distribution specialist that focuses on its distribution chain and local marketing knowledge as a product specialist or as a customer specialist. These investors represent the most common Swedish industrial SME profile. However, they rarely survive more than a few years in China.

The distributor specialist (DrS), Type 1, is the most common among the SMEs established in China to export components, and where the brand is usually unknown outside Sweden. Typical of these local investments in marketing high-quality products sold globally in a B2B context is the intense competition from local suppliers. The “distributor specialist” is the classic low-commitment investor, especially those investing in a triad of agents/distributors.

The distribution specialist (DiS), Type 2, mainly invests in marketing channels and has marketing competence as a product or customer specialist. Mainly high-quality components are sold in a B2B context based on a self-constructed sales and distribution network.

Customer–market and manufacturing-driven investments. Companies have made marketing investments in service facilities and local production. Our findings indicate that such FDI is
more diverse than previously found (Dunning and Lundan, 2008). Five types were found of such combined FDI in marketing and manufacturing.

The product specialist and manufacturing (PS-M), Type 3, is often a hi-tech engineering joint venture with a local SOE with well-developed and clearly defined long-term investment concepts based on superior technology. This product specialist is involved in a larger part of the local value chain, having invested in local manufacturing of components and in B2B marketing networks, e.g., its own distribution channels. These are well-known firms, notably SKF (ball bearings), Atlas Copco (compressors), Alfa Laval (mainly separators) and Sandvik (tools).

The follow-the-customer service provider or manufacturer (FCS/M), Type 4: there are two varieties of this product specialist: one passively “piggybacks” its main customer abroad by being “recruited” to the foreign market; the other establishes itself more actively, when most customers in its industry have moved to the foreign market. This type caters to the local needs of its Swedish client companies, e.g., all four big Swedish banks have invested in their own service facilities in China. Most “piggybackers” found are service firms, but there are also manufacturers.

The distribution product specialist and manufacturing (DiPS-M), Type 5, is a combined distribution and product specialist engaged in B2C marketing based on a global brand. The major marketing investment is in its own distribution network and in building its brand locally. Manufacturing of high-volume products is also local, mainly due to government requirements. This FDI stands out in that the foreign firm is acquired by a local firm. The motive is to buy a strategic asset and for the foreigner to expand its business locally and globally with significant government support. In 2010, Volvo Car Corporation (VCC) was acquired from Ford by the Zhejiang Geely Holding Group, which wanted to bolster its business in China and Europe. VCC got access to the largest automotive market in the world, financing for expanding in China and its new global models program. The technology and brand of Volvo will help Geely to expand in China and overseas. Geely allows VCC to operate largely independently, having full control over its domestic, new and global manufacturing operations and distribution network within China, now effectively VCC’s second “home” market with a share of global revenue greater than 20 percent.

The customers’-customer specialist and manufacturer (CCS-M), Type 6, markets equipment used in local production, and therefore needs to know the business of the customers of these producers, i.e., the customers’ customers. This type provides development technology, consultancy, components and systems, sometimes in joint ownership, with production bases located close to customers. Tetra Pak (TP) is the world’s largest manufacturer of aseptic packaging – based on Swedish innovations but owned by the Swiss DeLaval Group – and is driven by understanding the business logics of its vertically integrated customers. TP arrived in China in 1972, where it now produces food and beverages packaging from four factories. Sustainable growth has been achieved by developing innovations for the Chinese market. In 2003, the firm becomes embroiled in an antitrust case, being accused of misusing its dominant position to limit competition. A spin-off company from TP, Greatview, initiated this with the government. Six years later, Greatview’s market share was 10 percent, while TP’s share of the dairy industry had dropped from 95 to 70 percent. Greatview has also moved abroad, mainly to TP’s European home market, trying to copy its international strategy. In 2010, for example, TP sued Greatview in a German court for infringing one of its European patents. TP has taken over Alfa Laval’s dairy business in China, making it possible for them to collaborate on dairy projects since 2003. They have contributed to China’s dairy industry by developing about 40 new dairy products.

The projects’-customer specialist and manufacturer (PjCS-M), Type 7, is another distinct type of systems provider and customer specialist – selling even larger projects to private and
public customers in China, mainly to SOEs – whose business is based on a system with highly recognized quality founded on a global brand. PjCS-Ms might also be standard setters or market creators, especially if they are a world-leading brand. Marketing of projects is a question of networking in accordance with the “guanxi” system of social networks and influential relationships. Ericsson is a Swedish-origin telecommunications equipment provider that established itself in China as early as 1895. Later, Ericsson made large B2G and local R&D investments in close collaboration with the government to build China’s first digital mobile network (2G), paving the way for subsequent 3G, 4G and ongoing 5G development and standardization. Ericsson also employs a growing number of local engineers. A major challenge is that its major competitors are the two Chinese MNCs Huawei and ZTE; a sensitive situation, given that Ericsson has contributed much toward the development of these companies and they have learned a lot from Ericsson’s activities in China and Sweden. This has resulted in an ambivalent relationship with the government due to it being both a customer and supporter of Ericsson’s major competitors. Being an innovative first-mover has been important in the fast-growing Chinese economy, especially in this strategic industry.

Customer–market, manufacturing- and competitor-driven investments. The product specialist, manufacturing and competitor (PS-M-Co), Type 8, invests initially in distribution networks and manufacturing facilities for the high-end market segment. Later, it penetrates the market further by acquiring a local competitor or brand to add the mid-market segment, avoiding the low-end segment. This additional investment is asset seeking. For example, a major problem for Volvo Construction Equipment has been saturation of the high-end market segment. So, in 1997, they acquired SDLG, who produces cheaper, less sophisticated equipment for the mid-market segment. SDLG’s products were also launched as a second brand in markets outside China.

Supplier–market-driven investments. The supplier and distribution (SD), Type 9, represents off-shoring, cost-driven market investment by shifting supplier sources to the Chinese market. Marketing investments are made in the purchasing of locally produced goods and in the supply network. In this uncommitted industry, suppliers with poor service records or little growth opportunity can be replaced quickly. This type of investment is efficiency seeking since its motive is cost saving – especially from the Group HQ’s global perspective – yet, the motive is also market seeking for the investment in the local supplier market.

Swedish international retailers H&M and IKEA are representative of this type, being a vital part of their business model. Since they are not producers themselves, they go for the cheapest suppliers around the world. Thanks to the growing middle class, both retailers have recently established several stores in China. Therefore, it is a B2B operation in a B2C marketing industry.

4. Discussion
In order to draw a complete picture of market investments, any explanation of the FDI of the MNCs must include the motives for investments in marketing. Three types of pure marketing-seeking motives are found, i.e., where investments are only made in marketing assets. The DiS type concerns a combined B2B marketing investment founded on being both a distribution specialist and a product or customer specialist. The DrS also makes marketing investments in customer relationships by having either of these special marketing capabilities, but as a distributor specialist. Industrial products, with highly recognized quality standards, are sold through local intermediaries. The SD type represents both efficiency and market-seeking investments in supplier networks to procure locally produced goods from pattern makers (Jansson and Söderman, 2012). These investments were later followed by unrelated customer–market-driven investments in department stores.
Companies have invested in marketing as well as production. Our typology, containing five such types of combined investment, shows that market-seeking investments in production result from marketing investments, and how they are related to each other over time. The PS-M type refers to a product specialist that has also invested in the manufacturing of high-quality equipment, based on strong global brand. The FCS/M type follows its customers abroad to cater for the local needs of its client companies. There are two varieties of these product specialists with local production: one passively piggybacks its main customer abroad and the other establishes itself more actively, when most customers in its industry have moved to the foreign market. The DiPS-M type is a combined distribution and product specialist engaged in B2C marketing of a global brand. The investment is in its own distribution network and in building its brand locally in conjunction with local production investments in high-volume products. The CCS-M type is involved in a highly integrated business, where it is vital to understand the end user’s business. This customer specialist makes a huge investment in a deep vertical network, brand management and local manufacturing. The PJCS-M type is another systems provider and customer specialist with a global brand, investing in complex networks to sell very large projects to both private and public customers, frequently SOEs. Key components of such projects are mostly locally produced.

The PS-M-Co type invests in customer relationships and distribution networks jointly with manufacturing facilities, penetrating the Chinese market by acquiring a local competitor. Over time, this FDI is both market and asset seeking. The DiPS-M type is interesting because it represents a new type of FDI in emerging markets. Instead of expanding into China via the traditional internationalization process, the mature MNC gained entry by “allowing itself” to be acquired by an immature MNC from the emerging market; a win-win situation, since both firms rapidly gained access to local and government resources – the local MNC acquired a strategic asset to become competitive at home and abroad in a global industry with an immense local growth potential. Due to the Chinese MNC’s inability to absorb and manage such a hi-tech brand at first, the main operations of the foreign firm are kept overseas, at least for the time being.

5. Conclusions and future research
Our findings offer a few substantive contributions. A primary contribution lies in relating market-seeking investments to the other three major FDI motives over time through the internationalization process, thereby supplementing classic FDI theory such as the eclectic paradigm, by adding a dynamic element. The PS-M-Co type is a good illustration of the fifth phase of the internationalization of firms, as identified by Dunning and Lundan (2008), i.e., the integrated network multinational. As explained by Jansson and Söderman (2013, p. 560), this additional investment in a mid-market brand to compete head-on with local firms is also a response to the Chinese threat to global market positions. By taking on new competitors in their home market, newcomers will have fewer resources available to move up to the high-end, high-price segment in foreign markets. Thus, this investment provides the possibility of internationalizing an acquired firm by establishing it in an emerging market and competing with other Chinese and local construction equipment firms in the mid-market, lower-price segment. Such acquisition of a competitor stands in stark contrast to the competitive situation faced today by the companies described as CCS-M and PJCS-M types. Rather than gaining competitive strength by acquiring a competitor, they have created their own major competitors, threatening their position in home, local and global markets. This seems to be the fate of market leaders, especially if they manage to achieve near monopoly status in the local market, increasing the risk of attracting antitrust cases. It also stimulates local start-ups, a real risk in China with its strong entrepreneurial culture and significant support from government. A dilemma then arises for the MNC’s B2G investment in that the investment in one part of the government can be nullified by its consequences in another.
As mentioned, this study is tentative. The typology is mainly valid for Swedish firms investing in China, but is probably also valid for other Northern European MNCs and emerging host markets, especially large Asian countries. To confirm this, the preliminary theory needs to be developed and tested on a larger sample of MNCs' FDI in other emerging markets.

Our study also has important practical implications. Here, the researcher's task is not to reach a higher level of abstraction but rather to develop a language more suitable for dealing with important business problems in emerging markets. We are therefore convinced that the typology developed will help managers classify the type of investment made, better understand available strategic options and identify which assets to invest in during the different phases of investment in China and other emerging markets.

References


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