

**The Intra-Firm Knowledge Transfer in the Outward M&A of EMNCs: Evidence
from Chinese Manufacturing Firms**

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Abstract This paper examines the intra-firm transfer of tacit and explicit knowledge in the post-acquisition integration stage in the outward mergers and acquisitions (M&A) of multinational corporations from emerging economies (EMNCs). It also explores rationales underlying the tacit and explicit knowledge transfer in the cross-cultural context. Drawing from the empirical evidence of three Chinese firms' outward M&A in three European countries, we argue the Chinese acquiring firms emphasised the transfer of explicit over tacit knowledge in the post-acquisition integration in their outward M&A. This can be attributed to complementarity in explicit knowledge, home market advantage, scarcity of key staff and cultural differences.

Keywords Mergers and acquisitions • Post-acquisition integration • Knowledge transfer • Absorptive capacity • EMNCs • China

Multinational corporations (MNCs) have an inherent advantage in acquiring and transferring knowledge across geographically dispersed units, so as to maintain their competitive advantage (Kogut & Zander, 1993; Grant, 1996; Gupta & Govindarajan, 2000; Michailova & Mustaffa, 2012). International M&As - as a key component of foreign direct investment (FDI) - have long been used by MNCs from developed countries (DMNCs) as an important corporate growth and renewal strategy to access new and transfer existing knowledge (Bresman et al., 1999). In recent years, EMNCs have become significant outward investors. They conducted 38 % of global FDI outflow and 30% of global outward M&A in 2014 (UNCTAD, 2016). Compared with

DMNCs, EMNCs have been depicted as lacking superior knowledge due to their latecomer disadvantage and weak institutions at home (e.g., Luo & Tung, 2007; Meyer et al., 2009; Peng et al., 2008; Peng, 2012; Hoskisson et al., 2013). Therefore, they tend to seek knowledge and other forms of strategic assets from developed economies through outward M&A, so as to overcome their latecomer weakness and compensate for competitive disadvantage (e.g., Child & Rodrigues, 2005; Deng, 2009; Rui & Yip, 2008). Yet, what knowledge - in terms of the tacit/explicit knowledge differentiation - do EMNCs try to transfer from acquired firms in the post-acquisition stage of their outward M&A? This is central to what we intend to explore in this paper.

Extant research on EMNCs' international M&A of firms from developed economies primarily focused on pre-acquisition issues, such as their motivations (Deng & Yang, 2015) and underlying rationales (Deng, 2009; Rui & Yip, 2008), location choices (Sun et al., 2012), and the impact of home country government (Chen & Young, 2010; Tan & Ai, 2010). In contrast, there is a lack of understanding on post-acquisition integration stage in general, and post-acquisition intra-firm knowledge transfer in particular (Lahiri, 2011; Lebedev et al., 2014). This is a significant research gap because post-acquisition knowledge transfer is an important prerequisite for successfully completing complex M&A endeavors (e.g., Capron, 1999; Zollo & Singh, 2004; Ranft & Lord, 2002; Sarala & Vaara, 2010; Ahammad et al., 2016). Based on experiences of DMNCs, M&A researchers have identified key factors influencing post-acquisition knowledge transfer (Bresman et al., 1999), and

called for empirical research on EMNCs' outward M&A in developed economies, which could have "a new layer of complexity" (Birkinshaw et al., 2010; Rui et al., 2016). In responding to this call, we seek to answer two questions: first, *what is the nature of the transferred knowledge - in terms of the tacit/explicit knowledge differentiation - by EMNCs in the post-acquisition integration stage of their outward M&A?* Second, *what are the rationales underlying such knowledge transfer by EMNCs in developed economies?*

Intra-firm knowledge transfer in M&A involves knowledge flowing in either or both directions: from the acquiring to the acquired firm and vice versa (Bresman et al., 1999; Junni & Sarala, 2013). EMNCs acquire firms from developed economies for various reasons. Gaining knowledge from the target firm is one of the most important motives (Deng, 2009; Liu & Giroud, 2016; Zheng et al., 2016). Thus, this research focuses on knowledge transfer from the acquired firms in developed economies to developing country acquirers.

Based on a multiple case study of three leading Chinese EMNCs, we found that Chinese acquirers emphasised the transfer of explicit over tacit knowledge in the post-acquisition integration of their outward M&A in developed economies. Such imbalance of explicit and tacit knowledge transfer is a function of the complementarity in explicit knowledge, home market advantage, cultural differences and scarcity of key members of staff.

This study offers several contributions. First, it contributes to the understanding of knowledge transfer in EMNCs' outward M&A by identifying the nature of the

transferred knowledge. The findings on the imbalance between explicit and tacit knowledge transfer are different from existing literature built on the experience of DMNCs, which emphasises the significance of the tacit knowledge transfer in achieving competitive advantage (Michailova & Mustaffa, 2012). Second, the rationales underlying such imbalance enrich our understanding of the facilitators and hindrances of the post-acquisition knowledge transfer in EMNCs' outward M&A to developed countries. Third, it contributes to the absorptive capacity literature by linking absorptive capacity to the transfer of explicit and tacit knowledge separately (Volberda et al., 2010), and by uncovering two new antecedents of absorptive capacity (knowledge complementarity and home country advantage) in this important research context.

Literature review and theoretical foundation

We will firstly review the literature on knowledge transfer in M&A and EMNCs' knowledge seeking through international M&A to derive our first research question. The second research question will then be identified by reviewing the literature on tacit and explicit knowledge transfer in M&A.

Knowledge transfer in M&A

The knowledge perspective has been dominant in mainstream research on M&A integration (e.g., Bresman et al., 1999; Birkinshaw et al., 2000). The knowledge based view (KBV) argues that knowledge is a firm's most significant resource, and that

heterogeneous knowledge bases are the major determinants of a firm's sustained competitive advantage (Kogut & Zander, 1992, 1993; Nonaka, 1994; Grant, 1996). One of the most important features of MNCs is their ability to utilise knowledge residing in geographically dispersed units. The benefit inherent in being able to transfer knowledge across borders contributes to MNCs' competitive advantage and superiority compared to alternative organizational configurations (Gupta & Govindarajan, 2000; Michailova & Mustaffa, 2012). The value associated with knowledge transfer lies in the reapplication and redeployment of knowledge across units (Sarala & Vaara, 2010). Therefore, we define 'knowledge transfer' as the process through which a partner's knowledge is successfully transmitted and beneficially utilised by the recipient.

Scholars have established that there is a clear connection between knowledge transfer and M&A success (e.g., Capron, 1999; Vermeulen & Barkema, 2001; Zollo & Singh, 2004; Makri et al., 2010). In their seminal book, Haspeslagh and Jemison (1991) claimed that the value creation linked to M&A lies in the transfer of knowledge and capabilities. They emphasised the unification of the post-acquisition integration process and value creations of M&A. The proponents of Haspeslagh and Jemison's 'process perspective' constantly argue that M&A's value creation and a firm's competitive advantage are achieved by means of the knowledge transfer between the combined units in the post-acquisition integration process (Bresman et al., 1999; Larsson & Finkelstein, 1999; Ranft & Lord, 2002; Westphal & Shaw, 2005; Reus, 2012). Zollo and Meier (2008) reviewed M&A papers published in top

management and finance journals between 1970 and 2006, and considered knowledge transfer to be one of the most important task levels in M&A performance measurements. Empirical research on knowledge transfer in international M&A has largely looked at how facilitators and hindrances - such as absorptive capacity of the involved firms (Zaheer et al., 2010; Reus, 2012; Junni & Sarala, 2013), cultural differences and human resource related issues - impact knowledge transfer (Datta, 1991; Datta & Puia, 1995; Morosini et al., 1998; Lubatkin et al., 1999; Bresman et al., 1999; Empson, 2001; Bjorkman et al., 2007; Sarala & Vaara, 2010; Varra et al., 2014; Varra et al., 2012; Sarala et al., 2014; Ahammad et al., 2016).

However, these studies are mostly built on the experiences of MNCs from developed economies. Recent high-profile cases of EMNCs buying firms in developed economies have attracted the interest of both practitioners and scholars, and called for more research and evidence involving the exploration of knowledge transfer in this context (Birkinshaw et al., 2010). Is EMNCs' knowledge transfer through international M&A different from those of DMNCs? We will discuss this in later sections.

EMNCs' knowledge seeking through international M&A

Due to their latecomer disadvantage and weak institutions at home, EMNCs lack superior knowledge to compete with DMNCs in the global market (e.g., Luo & Tung, 2007). Firms may develop knowledge endogenously, but the process of knowledge development is a complex and slow one. Seeking crucial knowledge externally is both

quicker and cheaper. Therefore, outward M&A is adopted by EMNCs seeking knowledge and other forms of strategic assets from firms that originate in developed countries so as to strengthen their competitive advantage in the global marketplace (e.g., Cui et al., 2014; Luo and Tung, 2007; Rui and Yip, 2008; Deng, 2009).

However, we know little about what knowledge has been transferred in EMNCs' knowledge-seeking M&A. A recent study suggested that Chinese MNCs tend to seek complementary, rather than similar, knowledge in similar domains in their outward M&A in developed economies (Zheng et al., 2016). Another study on Indian MNCs indicated that Indian firms seek to acquire complex knowledge in their outward M&A, and that a higher level of knowledge complexity leads to a greater extent of reverse knowledge transfer (Nair et al., 2015). Yet, neither study reveals the nature of transferred knowledge (tacit vs explicit) in the post-acquisition integration phase. This is an important question, because the experience from DMNCs suggest that the transfer of tacit and explicit knowledge in the post-acquisition integration stage is facilitated by different factors, for instance, Bresman et al. (1999) found two forms of knowledge transfer that have different facilitators: the transfer of tacit knowledge is facilitated by communication, time, visits and meetings; while explicit knowledge transfer is affected by the size of the target, knowledge articulability and time elapsed.

Therefore, uncovering the nature of knowledge that EMNCs try to transfer in the post M&A integration phase will help us further explore EMNCs' post-acquisition knowledge transfer mechanisms and facilitators. This leads to our first research question: *what knowledge has been transferred - in terms of the tacit/explicit*

knowledge differentiation - by EMNCs in the post-acquisition integration stage of their outward M&A?

Tacit and explicit knowledge transfer in M&A

We follow Polanyi (1966) and Nonaka (1994) and contend that knowledge comprises both tacit know-how and explicit know-what forms of knowledge. Most knowledge transfer literature regarding the characteristics of knowledge is concentrated on examining the different influences of tacit and explicit knowledge (e.g., Szulanski, 1996; Michailova & Mustaffa, 2012). Tacit knowledge is embedded in practices, routines, values and norms. It is usually intuitive, unarticulated, non-verbalised, and not readily accessible or transferable. Conversely, explicit knowledge is articulable, codifiable and easily transmitted (Kogut & Zander, 1993). The mainstream knowledge management literature has provided sufficient support for the impact that the nature of knowledge² has on knowledge transfer (Becerra et al., 2008; Van Wijk et al., 2008; Nonaka & Von Krogh, 2009; Michailova & Mustaffa, 2012). The likelihood of a successful knowledge transfer process is positively related to the degree of articulability, codifiability and transferability of the knowledge that needs to be transferred (Kogut & Zander, 1993; Michailova & Mustaffa, 2012; Minbaeva, 2007). The embedded, contextual-specific and personal nature of tacit knowledge makes it more difficult to be transferred between organisations (Li et al., 2013), consequently many knowledge management researchers have found that it significantly affects

² The term 'nature of knowledge' refers to the tacit/explicit knowledge continuum (Michailova and Mustaffa, 2012).

organisational performance (Grant, 1996; Nonaka & Takeuchi, 1995).

In the M&A context, existing research also examines the effect that the nature of knowledge has on the post-acquisition intra-firm knowledge transfer. In general, post-acquisition explicit and tacit knowledge transfer is influenced by different factors (Bresman et al., 1999). Ranft and Lord (2002) argued that greater autonomy granted to the acquired firm might inhibit the transfer of the acquired firm's technologies and capabilities inherent in its tacit knowledge. Despite the distinctions between the mechanisms and processes of the transfer of tacit and explicit knowledge, both types of knowledge transfer are likely to be concurrent in M&As (Becerra et al., 2008). EMNCs tend to use outward M&A to access and source both explicit and tacit knowledge in order to address their competitive disadvantage (Child & Rodrigues, 2005; Deng, 2009). However, very limited research has been conducted to understand the nature of the transferred knowledge and its underlying rationales.

The unique characteristics of EMNCs may allow them to emphasise the transfer of either explicit or tacit knowledge in the post-acquisition stage. Firstly, while it is widely accepted that the inimitable and immobile nature of tacit knowledge makes it the most significant element for an MNC's long-term sustainable competitive advantage, the characteristics of EMNCs may assign a more important role to explicit knowledge in the international M&A context. This is because EMNCs - as latecomers to the international marketplace - still lack considerable core knowledge and many other resources compared with their counterparts from developed economies, including explicit knowledge such as patents and advanced technologies (Buckley et

al., 2007, 2008; Luo & Tung, 2007). Despite that explicit knowledge can be coded and articulated, which makes it easier to transfer than tacit knowledge, developing it endogenously is time-consuming and ineffective for EMNCs in a contemporary dynamic international market with increasing technological advancements. Therefore, it is possible that EMNCs pay particular attention to the post-acquisition transfer of explicit knowledge in their outward M&A to developed economies.

Secondly, the nature of knowledge transferred is likely to be influenced by the absorptive capacity of acquiring firms from emerging economies. Cohen and Levinthal (1990) define a firm's absorptive capacity as a firm's ability to recognise, value, assimilate and apply new external knowledge to benefit the firm. Absorptive capacity plays a central role in the transfer of different types of knowledge, particularly in literature of a knowledge-based view, as it defines the level to which the firm can obtain external knowledge (Volberda et al., 2010). M&As are amongst the primary vehicles for obtaining external knowledge (Haspeslagh & Jemison, 1991); thus absorptive capacity is an important determinant of firms' post-acquisition knowledge transfer and superior performance (Ahuja & Katila, 2001; Bjorkman et al., 2007; Deng, 2010; Junni & Sarala, 2013).

Previous research suggests that EMNCs' potential to learn and absorb knowledge from acquired firms is restricted by their absorptive capacity (Deng, 2010; Liu & Woywode, 2013). However, these studies did not indicate how the absorptive capacity of EMNCs shapes and affects their post-acquisition transfer of tacit and explicit knowledge respectively. Therefore, in addition to the nature of the transferred

knowledge, we also seek to *explore the underlying rationales for EMNCs' post-acquisition knowledge transfer* conditioned on their absorptive capacity.

Research methods

Multiple-case study method and case selection

To explore the process-oriented and institutionally embedded research questions, we employed an in-depth multiple-case study method (Yin, 2002). The case study method has been broadly utilised for theory building and exploration endeavors (Eisenhardt, 1989; Eisenhardt & Graebner, 2007), especially in the international business research area (Welch et al., 2011). It is a suitable research approach for this study because it is one of the most preferable modes when cross-culture and cross-border issues are involved; when 'how' and 'why' questions are posed; and when the research concentrates on a contemporary phenomenon within a real-life context (Flick, 2009; Ghauri, 2004).

The empirical context of our study is Chinese firms' outward M&A in Europe. As a representative emerging economy, China's total OFDI reached USD 116 billion in 2014, making it the third largest OFDI source country globally (UNCTAD, 2015). Outward M&A is the dominant global market entry mode for Chinese firms (Deng, 2012; Tan & Ai, 2010), comprising half of the total Chinese OFDI (MOFCOM, 2015). Thus, China is deemed to be an interesting setting for exploring the characteristics of the intra-firm knowledge transfer by EMNCs in international M&A. We chose cases from the manufacturing sector in order to reduce any extraneous variation in the

research (Eisenhardt, 1989). Manufacturing has long been at the core of China's economy in terms of its key role in China's GDP and annual growth rate, and underpins the drive of Chinese firms' internationalisation through M&A (Deng, 2009).

The selection of cases for the research project was guided by theoretical sampling logic, which can guide the study in the direction best fitted to further the understanding of the research question (Eisenhardt, 1989; Yin, 2002). Acquisitions were chosen based on the following criteria: first, they had to be firms that considered seeking strategic resources and knowledge as one of the main motivations behind their M&A. Second, all the acquiring firms selected were high-profile and among the leading firms in their respective industries, which can effectively avoid the pitfall of conducting M&A for opportunistic reasons (Rui & Yip, 2008). Third, the acquired firms were from developed countries in the European Union (EU) in order to limit differences in the cultural dimension³ and formal institutional elements. Another rationale for choosing the EU from amongst other developed countries and regions is that it has become the main subject of Chinese MNCs' international M&As in recent years (Clegg & Voss, 2014). Fourth, all three cases completed their M&A deals at least one year before the first interview data collection. This criterion was set to allow sufficient time for the implementation of the post-acquisition knowledge transfer strategies. Potential cases were manually identified, as there is no existing database on Chinese MNCs' outward M&A in developed economies. We finally obtained access to

³For example, M&A to Japanese firms were excluded in this research.

three cases. Table 1 shows the similarities and differences between the cases with regard to their selection criteria.

INSERT TABLE 1 ABOUT HERE

Data collection

We collected the primary data through three rounds of semi-structured interviews from 2012 to 2014. In the first round, sixteen face-to-face interviews were conducted at the acquiring companies' headquarters during two research trips in China. Four in-depth telephone interviews were then conducted with staff of the acquired firms.⁴ After an initial data analysis, we conducted four follow-up telephone interviews with several original interviewees to verify the original data and collect additional information. Additional open-ended communication was also conducted occasionally to contextualize and verify the data from formal interviews. During the interviews, we generally followed a set of prepared interview questions (listed in Appendix 1), which were open-ended, exploratory questions derived from the research questions. Following the emergent nature of qualitative research, the same set of open-ended questions was not used for each interview. For example, the themes discussed with the CEOs and middle managers differed due to their hierarchies within the target companies. Some issues that could not be deeply dissected by middle managers in relation to their positions, such as certain 'why' questions and strategic issues, were

⁴Interviews with the members of staff of the acquired firms, recommended by their counterparts in the headquarters, were conducted by telephone. It would have been very costly in terms of time and money to travel to the various countries to conduct face-to-face interviews within these acquired firms

specifically emphasised in the conversations with the top executives. We also included additional questions to gather background and factual data. Back translation was adopted to ensure the accuracy of the translation of interview questions (Brislin, 1970).

Secondary data was also collected to provide multiple sources of evidence. It includes confidential internal reports and external materials such as historical press releases, annual reports, domestic case studies on acquiring firms and various professional websites. These documents not only provided data with which to reconstruct the organisation and M&A background, but also offered details on specific knowledge transfer strategies and processes.

The top executives and middle managers directly responsible for the acquiring and acquired units were chosen as interviewees in order to ensure internal consistency and increase reliability. Interviewing informants from different organisational and hierarchical backgrounds reduced potential interview bias and allowed more robust understandings of the focal phenomenon. At least two top executives, including the CEO/president of each acquiring firm and the CEOs of two of the acquired firms were interviewed.⁵ They were the main designers of each company's post-acquisition integration and knowledge transfer strategy. While the corporate governance status of the majority of Chinese firms suggests that most strategic decisions are actually made by the top executive only, collecting detailed face-to-face interview data from the CEOs/presidents of Chinese MNCs is very tricky due to their cautiousness and

⁵ Although failing to access the CEO of acquired firm C, we interviewed his secretary and personal interpreter.

eschewal of such interviews. Gaining in-depth access to the top management team poses major challenges, which typically limit the number of cases that can be studied. As all interviewees are Chinese, the interviews were carried out in Chinese. Digital-recording was used when permitted. Each interview lasted approximately one to two hours. The specific information from interviewees is summarised in Table 2.

INSERT TABLE2 ABOUT HERE

Data analysis

In a manner typical to inductive research methodologies, our data analysis started from in-case analysis at the level of individual M&A, then moved to cross-case comparison analysis (Eisenhardt, 1989; Yin, 2002). In order to increase inter-coder reliability, all primary data was collected and initially analysed by the first author, while the second author played the role of second coder so that he could take a more objective stance towards the evidence and not be immersed in case details (Eisenhardt, 1989; Gibbert et al., 2008; Xiao et al., 2013). Disagreements on coding were resolved by extensive discussions between the authors.

The data analysis procedure comprised four main steps. First, we synthesised all the primary and secondary data, and cross-checked data from different sources for triangulation. Triangulation can help to increase the validity and reliability of the research design, as well as to avoid any internal and external bias (Eisenhardt, 1989; Gibbert & Ruigrok, 2010; Yin, 2002). Second, we followed Yin's (2002) data analysis procedure, starting from the transcription of raw data. All primary data was

transcribed and analysed in Chinese because the interview data was originally collected in Chinese. The transcribed data was then content-analysed through summarising, categorising and structuring of meanings using narrative.

Third, we analysed individual cases based on the research questions. We started by analysing each interview per case. Then, a comprehensive understanding of each case was developed through reading and coding of all interviews and documentary data. Both authors conducted this process independently, so as to minimise participant observation biases and increase the validity of the coding. Having completed the initial open coding process (Glaser & Strauss, 1967), we then further specified the codes within the broad categories. Once we analysed all interviews in relation to an acquisition, we proceeded to compare emerging themes across interviews for this acquisition.

Fourth, having completed all three within-case analyses, we moved onto cross-case analysis. Following a replication logic (Yin, 2002), we iteratively sought patterns across cases by a cyclical reading and re-reading of empirical data and came to our findings. We refined and consolidated the first-order constructs and second-order themes by going back and forth between the data and existing theoretical concepts, such as absorptive capacity and resource complementarity. We also drew mind maps to support the analysis process (Teerikangas, 2012). During the writing-up phase, we used representative quotations drawn from the interview data provided to support the analysis and finding. These quotations were translated by the first author before being back-translated by a bilingual native speaker of English to

ensure consistency. A careful review and equivalence check were conducted by the second author (Douglas & Craig, 2007).

Results and discussion

The imbalanced transfer of explicit and tacit knowledge

Our research reveals that there is an imbalance between the transfer of explicit and tacit knowledge in the post-acquisition integration phase of Chinese firms' outward M&A. Although Chinese acquirers intended to learn both 'hard' technologies, in order to catch up - and even leapfrog over - global competitors from developed economies, and 'soft' knowledge, such as managerial skills, corporate culture and organisational capabilities, in order to increase their potential embeddedness when competing in the global market (Luo & Tung, 2007; Liu & Woywode, 2013), they chose to focus more on the former when implementing their post-acquisition integration strategies.

The interview data indicates that the knowledge transferred was mostly in an articulated form, such as in patented technologies. When talking about the transferred knowledge, most interviewees only mentioned the transfer of explicit knowledge initiatives. The codifiability of explicit knowledge facilitated the knowledge transfer.

As an executive of Firm B explained:

‘The (explicit) knowledge transfer is smooth and easy. French subsidiary has a very good habit: they have everything well documented, from patented technology to project development diary. All we need is to get the document we need and study to learn. They (documentations) are easy and clear.’

In addition to its articulated nature, another main reason for emphasising explicit knowledge transfer is that explicit knowledge, such as patents, production and

manufacturing technology, is more straightforward and urgently needed by the Chinese acquirers. All three acquiring firms considered the attainment of technology (especially patented production and manufacturing technology) to be one of their most significant M&A motivations. This is naturally associated with their post-acquisition integration strategies. Accordingly, in the post-acquisition integration phase, the Chinese acquirers tended to emphasise the transfer of the knowledge they wanted most, i.e., the explicit knowledge. For instance, a senior manager of Firm C stated:

‘The Spanish factory has world-class manufacturing techniques, of which we were aware when we decided to make the acquisition.’

The following table shows the ranking of acquisition motivations confirmed by the CEOs and other top executives of all three acquiring firms.

INSERT TABLE 3 ABOUT HERE

In contrast, tacit knowledge transfer was only mentioned when the interviewees were directly prompted with relevant questions. While some CEOs did imply that transferring tacit knowledge had been part of their plan, it had not actually been implemented. For instance, the CTO of acquired Firm A commented:

‘The original business plan before the acquisition confirmed to build “one base and two centres” in France, which included a European manufacturing base, a European R&D centre, and a European regional marketing management centre. The manufacturing base was achieved by the operation of the plant in France subsidiary, while the “two centres” were still concepts on the paper [after two years of the acquisition].’

The building of two centres requires a high level of collaboration, sharing of resources and staff transfer between China and France, all of which are more demanding than

just assimilating and applying patented technology. Although, in some cases, the transfer of explicit knowledge also required the transfer of tacit knowledge to help the recipients, most Chinese acquirers had accumulated ample, related knowledge to successfully accomplish the explicit knowledge transfer.⁶ One executive of Firm B said:

‘We didn’t encounter too many difficulties in the technology transfer. We have almost obtained and assimilated all their core technology just by studying the documentation and blueprints, even without any direct coaching from the Italian engineers.’

Overall, the interview data indicates that there is plenty of evidence on the transfer of explicit knowledge, but very little on tacit knowledge. There is clearly an imbalance between the transfer of explicit and tacit knowledge: the acquiring Chinese firms emphasised the transfer of explicit over tacit knowledge in the post-acquisition integration of the outward M&A. This finding contradicts what is reported in the existing literature. It is widely accepted that most EMNCs invest in developed countries to seek strategic assets (Luo & Tung, 2007; Deng, 2007; Zheng et al., 2016), and that many of those strategic assets are of a tacit nature (Amit & Schoemaker, 1993). Why do Chinese acquirers focus on transferring explicit knowledge from their Western partners while simply neglecting the tacit form? We will address this question in the next section.

Rationales underlying the imbalanced transfer of explicit and tacit knowledge

We argue there are a number of reasons for the imbalance of the knowledge

⁶The overall abilities of the Chinese acquirers were examined by the Chinese government through a number of bureaucratic approval procedures before the acquisition, and by the acquired Western firms (Tan and Ai, 2010). This is also the reason why most Chinese acquirers are industry leaders in their domestic market.

transfer between explicit knowledge and tacit knowledge in these selected case companies. Examples of data supporting each of the following rationales can be found in Table 4.

INSERT TABLE 4 ABOUT HERE

Complementarity in explicit knowledge

The rationale for transferring explicit knowledge first and foremost lies in the substantial explicit knowledge complementarity that exists between the acquiring and the acquired firms. Synergistic knowledge complementarities, such as different patents, market access, and knowhow that fit with and enhance one another, have been found to be critical to M&A success (Larsson & Finkelstein, 1999). Despite being industry leaders in the Chinese domestic market, many Chinese MNCs in the manufacturing sector still lack resources and knowledge assets such as brand, patented technology and advanced manufacturing techniques. This is exactly why most of them consider the pursuit of technology to be one of their main M&A motivations. Acquisition of such knowledge can directly complement their existing assets and improve the competitiveness of their products in both the global and domestic markets. The CEO of Firm A explained:

‘The power-shift transmission system of the French subsidiary meets the prevailing mainstream international standards. Although we have an advanced national laboratory working on this technology and have made huge progress, we are still lagging far behind our competitors in the West. It (The French power-shift transmission system) is a good complement to our existing product line and can significantly improve our competitiveness in

the high power segment when competing with foreign providers in the home market.’

On the other hand, the Chinese firms’ unique knowledge of manufacturing efficiency, cost saving and dealing with institutional barriers in emerging markets can also complement the existing knowledge base of the acquired firms.

Another reflection of knowledge complementarity is demonstrated in the acquisition of expertise by the Chinese firms in penetrating the host market. Compared with setting up factories by means of the green-field entry mode, M&A is a swifter and less risk fraught way to own manufacturing factories and gain access to markets overseas. Given that all three acquired firms in our case study owned established manufacturing factories and market distribution channels in the European Union before M&A deals, this could help the Chinese acquirers break down technical barriers and enhance their European market performance. This was particularly emphasised by the CEO of Firm C, as he even pointed to the geographic position of its acquired firm as being the most important motive for the acquisition.

Therefore, a substantial explicit knowledge complementarity in terms of technology and marketing underpinned the importance of explicit knowledge transfer. The complementarity in explicit knowledge between the Chinese acquirers and their acquired firms offers enormous synergy potential that could be pursued in the post-acquisition integration process. Such complementarity was not only ample, but also crucial for the Chinese acquirers’ future strategies, because it was the key component behind the motivation for their strategic intent M&A. Acquiring complimentary tacit knowledge from the acquired Western firms would have also

been beneficial, but fulfilling the strategic intent was the priority. Therefore, the Chinese acquirers emphasised the transfer of complementary explicit knowledge, which was the key to attaining their objectives in undertaking the M&As. Hence, we propose that:

Proposition 1: The higher the complementarity of explicit knowledge possessed by the acquiring and acquired firms, the more likely that Chinese MNCs emphasise the transfer of explicit knowledge.

Home market advantage

Although only acquiring the easy-to-transfer ‘hard’ technologies, and neglecting the difficult-to-transfer ‘soft’ tacit knowledge transfer, would not allow the Chinese firms to compete in the global marketplace, it could be sufficient to improve the competitiveness of the SOEs in the home market. A home market domination motive also provides the rationale for the imbalance in the Chinese firms’ transfer between explicit and tacit knowledge. We define the “home market advantage” of Chinese acquirers as the positive effects and advantages of being an MNC headquartered in the Chinese market⁷.

In fact, the interview evidence suggests that the Chinese firms’ resources and knowledge-seeking outward M&A are not only motivated by the exploration of overseas markets, but also facilitated by the improvements in their competitiveness

⁷ Unlike Luo and Wang (2012)’s concept of home country effects which focus on the influence of home country environment parameters, home market advantages in this study also emphasise the impact of the huge Chinese market.

with foreign entrants in the home market. For the three studied Chinese acquirers, the attainment of knowledge from the acquired firms in order to enhance their competitiveness in the home market was the most important reason behind their initiation of outward M&A - at least at the initial post-acquisition stage. One senior manager from Firm A commented:

‘Even the overseas R&D centre was not the core of this acquisition. The key was to acquire and assimilate advanced technology and blend it into our existing products to upgrade our production line, so that we can improve our competitiveness in the Chinese market.’

Most Chinese MNCs are still highly dependent on their home market performance in sales volume and reputation, not only due to the difficulties linked to internationalisation, but also because the Chinese market is too big to be neglected (Luo & Tung, 2007). Even the first batch of successfully internationalised Chinese firms, such as Lenovo and Haier, still count more sales in their home market than in both their European and American ones combined. Therefore, their M&As are motivated more by strengthening their domestic position rather than competing in foreign markets. As one senior executive from Firm A stated:

‘Our main aim was to combine their (the acquired firm’s) technology with our products so as to enhance our product lines. To be honest, in terms of sales volume, it is not really vital whether we own this subsidiary or not.’

With complementary explicit technology transferred from the acquired firms, the Chinese firms could improve their competitiveness in the domestic market, where they possess home institutional advantages in terms of the formal institutional environment including governmental support policies and existing distribution channels. These institutional forces can help the Chinese acquirers make the most of the transferred explicit knowledge and transform any synergy achieved into profits. In

other words, without the vast domestic market and formal institutional facilitators, Chinese acquirers would not focus upon the transfer of explicit knowledge while neglecting the tacit form. Given the ample benefits linked to transferring explicit knowledge from the acquired firms (based on complementarity in explicit knowledge and home market advantage), Chinese acquirers are likely to neglect tacit knowledge, which is of a lower strategic importance and harder to transfer. Hence:

Proposition 2: The greater the home market advantage, the more likely that Chinese MNCs emphasise the transfer of explicit knowledge.

Cultural differences

The negligence in transferring tacit knowledge also stems from the huge cultural differences at both the organisational and national levels between the Chinese acquirers and their Western partners. The transfer of explicit knowledge requires less intensive interactions both operationally and socio-culturally. In contrast, the transfer of tacit knowledge should be undertaken based on an intensive interaction between the transferring and receiving units (Buckley et al, 2009). This would require a mutual understanding of values, norms, practices and routines. Achieving such a mutual understanding would call for a high degree of operational integration and for the creation of a combined social community (Bresman et al., 1999), which would also imply the need for a high level of cultural integration. However, such operational and cultural integration could ultimately lead to conflict, loss of autonomy, key employee resignations and the disruption of organisational routines (Gomes et al., 2013). This is

a key dilemma in post-acquisition integration, and it is particularly difficult to handle in the context of EMNCs acquiring firms from developed countries, in which the cultural differences are wider and the acquirers lack sufficient experience and capabilities to handle these problems (Luo & Tung, 2007)⁸.

Our results reveal that Chinese MNCs chose to deal with cultural differences by keeping their distance from their foreign acquired firms. This is because they were aware of the huge cultural differences at both the organisational and national levels when they undertook post-acquisition integration, and of the lack of adequate capabilities to solve such a complex cultural problem⁹. In this case, they followed the ancient Chinese philosophy of ‘taking a step backward to create more space to win’, so as to reduce potential conflicts with the employees of the acquired firms. One senior manager of Firm A said:

‘We respect their culture and habits, including the length of the working day and their attitude to working overtime, which are completely different from what we take for granted in China. Chinese employees, including the management team, work overtime unconditionally and consider work to be their first priority. You cannot expect a similar attitude from the French...’

Another senior executive of Firm B commented:

‘There were many culture clashes during the integration phase. For example, last year, some senior executives from the headquarters went to visit the subsidiary while some of the foreign employees were on holiday. So the senior executives were not greeted properly. In China, we all know that to be unacceptable, but it seems to be fine there!’

Such a conciliatory cultural integration strategy can protect the existing knowledge

⁸ Cultural differences in the paper are on both organisational and national levels. Although organisational culture may include features that are distinctively different from the national cultural characteristics, they are partly embedded in national cultures in international acquisition (Vaara et al., 2012). Therefore, both national and cultural differences are wider in EMNCs’ outward M&A.

⁹ Both national and cultural differences may create problems for transferring knowledge across units by undermining the relevant absorptive capacities (Van Wijk et al. 2008), because commonalities make it easier to identify, acquire, and assimilate knowledge in the other unit (Cohen & Levinthal, 1990). National cultural differences may undermine the absorptive capacity of Chinese acquirers to a greater extent than organisational cultural differences, due to language issues and related communication problems (Ambos & Ambos, 2009).

base of the acquired firms and create a peaceful atmosphere to protect and facilitate the transfer of explicit knowledge between units (Haspeslagh & Jemison, 1991). However, it comes at the expense of sacrificing the tacit knowledge transfer. Therefore, we propose that:

Proposition 3: The greater the cultural differences between the acquiring and acquired firms, the more likely EMNCs from China will be negligent in transferring tacit knowledge.

Talent scarcity

Another important rationale for neglecting the transfer of tacit and socially embedded knowledge was due to a lack of skilled employees in such knowledge transfer. Tacit knowledge is embedded in practices, values and norms (Kogut & Zander, 1993), and can only be transferred by interacting with staff that possesses similar tacit knowledge. The management team and key staff turnover posed a tremendous challenge for the post-acquisition knowledge transfer, especially for the transfer of tacit knowledge to the Chinese acquirers. All three case firms were affected one way or another by this issue. For instance, following the M&A, both Firm A and Firm B experienced attrition between key employees, such as R&D staff and technicians. The CTO of Firm A stated:

‘[Regarding the technology transfer from the French subsidiary,] we don’t actually have many interactions with the French R&D staff. On the one hand, our communication skills are not good. On the other hand, most of their technical experts left [following the M&A].’

Since some key staff had left the firm before the completion of the acquisition, like

Firm A, Firm B also had to source new technical experts from Italy and Germany to strengthen their R&D team. Such employee turnover impaired the collaboration between the R&D and other functional departments. For instance, Firm B's overseas market exploration grounded to a halt because there were not enough marketing talents left in the acquired firm. Accordingly, not much market-related tacit knowledge was transferred to the Chinese acquirer.

Although it successfully retained most of the key employees of its acquired firm, Firm C also faced the thorny issue of sourcing adequate members of staff to handle knowledge transfer and localisation. This is a big challenge confronting EMNCs, which normally lack sufficient numbers of highly skilled and well-educated home country employees. Language issues make the problem even more severe, as communication between the Chinese executives and their foreign counterparts is largely reliant on interpreters.

Although there is an increasing level of international human mobility and many highly skilled talents move back to China from developed countries as returning migrants (Liu et al., 2010; Gao et al., 2013), the number of this talent group is still insufficient to meet the needs of most Chinese MNCs - particularly those located outside top tier cities. Amongst our three cases, not one could recruit sufficient numbers of skilled employees to facilitate knowledge transfer and absorption, with special reference to tacit knowledge transfer. This was largely because they suffer from location disadvantage - locations in second- and third-tier Chinese cities still do not appeal to returning talents from overseas. In addition, most firms in the

manufacturing sector, especially non-SOEs, could not win the favour of these talents in terms of salaries and industry attractiveness when competing with financial institutions or IT firms. Without the support of either the retained key staff from the acquired firms or returning talents at home, the transfer of tacit knowledge from the acquired unit to the headquarters is consequently fraught with difficulties. As a result, we want to add that:

Proposition 4: The greater the scarcity of key member of staff, the more likely EMNCs from China will be negligent in transferring tacit knowledge.

Toward a framework of tacit and explicit knowledge transfer based on absorptive capacity

The above four propositions are developed individually, but there is a clear logic to coherently link them up. In recent studies, the concept of absorptive capacity has been further developed to include both motivation and ability of the receiving party to acquire knowledge from the other party (Bjorkman et al., 2007; Minbaeva et al., 2003; Minbaeva, 2007; Junni & Sarala, 2013). Following this definition, we build a theoretical framework (Figure 1) to explain the rationales underlying the imbalance of explicit and tacit knowledge transfer in Chinese MNCs' outward M&A.

INSERT FIGURE 1 ABOUT HERE

First, Chinese acquirers' emphasis on the transfer of explicit knowledge leads to stronger absorptive capacity (as a result of higher motivation). On one hand, Chinese

MNCs tend to seek complementary, rather than similar, knowledge in similar domains in their outward M&A in developed economies (Zheng et al., 2016). Such complementary knowledge is largely explicit, rather than tacit. On the other hand, home country advantage can help Chinese acquirers make the most of the transferred explicit knowledge and transform any synergy achieved into profits. Accordingly, tacit knowledge, which is of lower strategic importance and harder to transfer, becomes less attractive to Chinese acquirers.

Second, the negligence towards tacit knowledge transfer by the Chinese buyers is derived from their weaker absorptive capacity (as a result of lower ability). The scarcity of key members of staff and a lack of adequate capabilities to solve complex cultural problems force Chinese acquirers to sacrifice the transfer of tacit knowledge. These two factors are in line with other studies on absorptive capacity in M&A knowledge transfer, which suggest employee retention/withdrawal and cultural differences are negatively related to the absorptive capacity of the acquiring firm (Ahammad et al., 2016; Bjorkman et al., 2007; Junni & Sarala, 2013).

In brief, the emphasis on the transfer of explicit knowledge and the negligence of tacit knowledge transfer are functions of the complementarity of explicit knowledge, home market advantage, cultural differences and scarcity of key members of staff. Table 5 shows a summary of the rationales underlying this imbalance between the transfer of tacit and explicit knowledge. Drawing from literature, these four factors can be logically linked as a coherent theoretical framework based on the construct of absorptive capacity, in order to illustrate the rationale underlying the imbalance of

explicit and tacit knowledge transfer in Chinese MNCs' outward M&A.

INSERT TABLE5 ABOUT HERE

Conclusion

This paper examines EMNCs' intra-firm knowledge transfer in their outward M&A to developed economies. We argue that the Chinese MNC's intra-firm knowledge transfer in the post-acquisition integration process is characterised by an imbalance in the transfer of explicit and tacit knowledge from the acquired to the acquiring firms. We contend that this unique characteristic of the Chinese MNC's post-acquisition intra-firm knowledge transfer can be attributed to the substantial complementarity in explicit knowledge, home market advantage, scarcity of key staff and enormous cultural differences.

Theoretical contributions

This paper contributes to international M&A literature by examining the characteristics of the Chinese MNCs' intra-firm knowledge transfer in their outward M&A to developed countries, and by exploring the rationale underlying such characteristics. The findings on the imbalance between explicit and tacit knowledge transfer are different from, and a healthy complement to, those of the conventional wisdom regarding intra-firm knowledge transfer within DMNCs (e.g., Becerra et al., 2008; Nonaka & Takeuchi, 1995). Specifically, while the existing literature emphasises the significance of the tacit knowledge transfer in attaining and sustaining

a firm's competitive advantage (Ranft & Lord, 2002), our results indicate that the EMNCs' choice of neglecting the tacit knowledge transfer in the post-acquisition stage may be rational - considering their predominant demand for complementary explicit knowledge and the huge home market potential benefit stemming from such knowledge complementarity. A lack of talented staff, and a Chinese mindset geared toward avoidance of any potential cultural conflicts, also contributed to the sacrifice of tacit knowledge transfer.

In addition, this study also enriches our understanding of the facilitators and hindrances of the post-acquisition knowledge transfer in EMNCs' outward M&A to developed countries. The findings reveal that the knowledge complementarity and cultural differences between the acquiring and acquired firms, the turnover of key staff and the acquiring firms' home country advantage have an impact on Chinese acquirers' post-acquisition transfer of knowledge from their partners, and hence influence the M&A performance. Specifically, knowledge complementarity and home country advantage have a greater effect on the transfer of explicit knowledge, while key staff turnover and cultural differences are more closely linked to the transfer of tacit knowledge. The findings regarding culture and human resource related issues support the recent trend in mainstream M&A literature, which emphasises the role of socio-cultural factors and human factors in M&As (Weber & Fried, 2011; Teerikangas, 2012; Stahl et al., 2013; Sarala et al., 2014; Ahammad et al., 2016; Xing & Liu, 2015), suggesting that studies on EMNCs' outward M&A should also look at these two important issues in future research.

A third contribution is an emergent theoretical framework that unexpectedly identified absorptive capacity as the central construct to explain the rationale underlying the imbalance of explicit and tacit knowledge transfer in Chinese MNCs' outward M&A. Such an imbalance stems from Chinese firms' high level of absorptive capacity (motivation) for transferring explicit knowledge and low level of absorptive capacity (ability) for transferring tacit knowledge. This contributes to literature on the subject by linking absorptive capacity to the transfer of explicit and tacit knowledge separately (Volberda et al., 2010). It also explored two new antecedents - knowledge complementarity and home country advantage of absorptive capacity - in this important research context. In addition, it extends our current understanding on the role of absorptive capacity in EMNCs' outward M&A (Deng, 2010; Liu & Woywode, 2013) by explaining how the absorptive capacity of EMNCs affects their post-acquisition transfer of different types of knowledge respectively.

Managerial implications

While we focus on providing managerial implications, we wish to emphasise the role played by key staff in influencing firms' knowledge base. On the one hand, in the pre-acquisition phase, the acquirers from emerging economies should properly consider ways in which to improve their reputation and attractiveness before the acquisition and thus minimise any potential key staff turnover in the acquired firms. On the other hand, the executives from EMNCs should be prepared to locate skilled employees to enable the knowledge transfer before opening the 'grey box' of the

post-acquisition integration process (Zander & Zander, 2010). This is particularly difficult because of the information asymmetry to which the executives from the acquiring firms are subjected. We suggest that EMNCs start building personal relationships with the management team of the target firms in the pre-acquisition due diligence and negotiation phase of an M&A. Working with a competent management team before the announcement of the proposed M&A can help build trust within the target firm and ease any communication difficulties that may arise in the post-acquisition integration phase.

Limitations and future research orientation

Despite the fact that the Chinese acquirers in this multiple-case study all benefitted from focusing on the transfer of explicit knowledge, we feel this is only a short-term solution that would prove to be harmful to a firm's competitiveness in the global market should such a focus persist in the long run. This is because whether they can achieve truly sustainable competitive advantage or not is based more on obtaining tacit knowledge via outward M&A (Ranft & Lord, 2002). For example, most Chinese manufacturing firms still lack innovative capabilities, which is considered to be one of the most significant components of a firm's dynamic capability (Wang & Ahamed, 2007). Amongst other measures, this has to be addressed by the transfer of tacit knowledge from the acquired firms. However, it is possible that Chinese firms will seek to acquire tacit knowledge after several years of M&A when they have developed sufficient capabilities to handle such a transfer. A longitudinal study is

therefore required in the future to reveal whether the transfer of tacit knowledge increases over time.

This research does present several limitations, which provide possible directions for future research. First, the characteristics of the EMNCs' intra-firm knowledge transfer and its underlying rationales are developed from an analysis of the Chinese manufacturing sector. Any results drawn from a single sector in a representative emerging economy should not be generalised without caution and restriction. Further comprehensive or disaggregate analysis in the service sector and different emerging economies (such as India and Brazil) should be conducted in order to enrich or modify our findings. Second, all interviewees in this research were Chinese due to their seniority in the post M&A hierarchy. Although it is acceptable to do so in this research (as the knowledge transfer strategies were designed by top executives who were Chinese at both ends of the knowledge transfer process), we suggest that future research on Chinese firms' outward M&A to developed economies should include more local interviewees from the acquired firms in order to provide a more balanced view on socio-cultural issues. Third, the number of cases selected is rather modest. This is due to the difficulty in gaining access to, and collecting detailed face-to-face interview data from, the CEOs/presidents of Chinese MNCs, as a result of their reluctance and even eschewal of accepting in-depth interviews. Similar problems were also faced in previous studies pertaining to Chinese firms' outward M&A (e.g., Deng, 2009; Rui & Yip, 2008; Zheng et al., 2016). Fourth, the limitation of the research on knowledge transfer direction. As EMNCs are motivated to conduct

outward FDI and M&A in developed countries to pursue knowledge and other strategic assets overseas, this study only focuses on the transfer of knowledge from the acquired firms to their Chinese acquirers. However, knowledge transfer is a two-way, reciprocal process. Future research should include the transfer of knowledge from the EMNCs to their partners in developed countries. Finally, the relatively short history of Chinese MNCs' outward M&A to developed countries makes it very difficult to evaluate the consequences of knowledge transfer. Further research may conduct large scale survey and employ quantitative methods to test our findings and propositions once more data is available.

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Appendix 1. Interview questionnaire

Background questions:

1. Please elaborate on your position and role in this company. How long have you been in this position and has it changed before?
2. Can you please list and elaborate on your company's recent major cross-border M&A activities?
3. What are the motivations and aims of this M&A?
4. According to the current situation, have these aims been fulfilled? Or was the company on course to achieving its aims before the M&A?
5. How do you perceive the overall performance in the acquisition as well as in any other dimensions? (You may answer this question from the point of view that you consider to be significant. e.g., sales volumes, market share or profits, knowledge acquisition, strategic objectives)

General questions:

6. What do you think of the importance of the post-acquisition integration phase? Why?
7. How do you perceive the management of the post-acquisition integration? Have you even been involved in it in your daily work? How?
8. What do you think are the key success factors that can influence the management of the post-acquisition integration?

Research question-related questions:

9. What did you get from the acquired firm? What did you want to acquire from the acquired firms? (RQ1)
10. What knowledge do you want to learn from the acquired firm? Why? How did you learn from them? (RQ1 & RQ2)
11. Has the (acquiring) company ever been faced with any problems or difficulties when try to transfer knowledge from the acquired firm? Can our engineers acquire and understand their technologies? (RQ1 & RQ2)
12. Any technological integration? How? (RQ1)
13. What do you think of the importance of prior related knowledge (e.g. knowledge about the related industry/firms, acquired firms, and some of the resources and capabilities within the acquiring firm.) in the management of the post-acquisition integration? Please elaborate and explain why.

Supplementary question:

14. Have you ever been faced with any problems or difficulties after the M&A deals? Please elaborate and explain why.

Tables and Figures

Table 1 Case selection criteria and business profile of the acquiring firms

	Case A	Case B	Case C
<i>Date of M&A</i>	03/2011	03/2011	02/2011
<i>Ownership structure</i>	State owned; Publicly listed.	Non-state owned; Publicly listed.	State owned; Publicly listed.
<i>Core business</i>	Agricultural, construction and power machinery.	Shock absorbers	Heavy industrial equipments, including grinding mills, scrubbers, crushers, compressors, kilns, coolers, etc.
<i>Status of acquiring firm in the industry</i>	First tractor manufacturer in China and No. 1 in market share in 2011.	One of the biggest vehicle shock absorber producers in China, and No. 1 in market share in 2011.	One of the biggest players in the heavy equipment manufacturing industry in China.
<i>Motivation of M&A</i>	Strategic intent. Seeking technology, market, and brand.	Strategic intent. Seeking technology and market.	Strategic intent. Seeking technology, market, and geographical position.
<i>Location of acquired firm</i>	France	Italy	Spain
<i>Status of acquired firms in the industry</i>	Founded in the 1950s; a subsidiary of an Italian giant.	Used to be the biggest European automobile shock absorber manufacturer; the third largest in the world in 2011.	World-class reputation; one of the industry leaders in Spain.
<i>Price of M&A in USD</i>	10.84 million (roughly)	23.22 million (roughly)	Not disclosed

Table 2 Details of interviewees

Firm	Management level	Time and job titles of interviews
<i>Firm A</i>	Top management	General manager (2012); General manager (Acquired firm, 2013) ^a ; Chief technology officer (Acquired firm, 2013 & 2014) ^{ab} ; Anonymous (2012, 2013) ^b .
	Middle management	Director of the General office (2012); Anonymous (A department manager, 2012); Assistant to General manager (2012 & 2013) ^b .
<i>Firm B</i>	Top management	General manager (2012 & 2013) ^b ; Vice general manager (2012); General manager (Acquired firm, 2013) ^a .
	Middle management	Anonymous (2012); Secretary of the general manager (2012); Anonymous (Acquired firm, 2013) ^a .
<i>Firm C</i>	Top management	General manager (2012); Vice general manager (2012); Anonymous (2012).
	Middle management	Director of the General office (2012 & 2013) ^b ; Anonymous (2012); International affairs secretary (2012); The secretary of the general manager of the acquired firm (2012).

Notes: (1) Interviews with superscript “a” were conducted through telephone calls in 2013. (2) Interviews with superscript “b” were conducted again through telephone calls in 2013/2014. (3) All other interviews are face-to-face.

Table 3 Ranking of main acquisition motivations

Cases	Sequence of main acquisition motivations
Case A	First, technology and R&D capability; Second, equipment and production lines; Third, the opportunity to gain access to the European market.
Case B	First, technology (that can update the acquirer’s current products); Second, its bridgehead role in exploring the European market.
Case C	First, geographical strategic layout (a European manufacturing base near a sea port); Second, access to the European market; Third, technology and manufacturing techniques.

Source: Interview data collected from the CEO/Presidents of all cases.

Table 4 Data exemplars for rationales underlying the knowledge transfer imbalance

Rationales	Exemplars from the data
<i>Complementarity in explicit knowledge</i>	<p>“Although there were other firms which could have afforded to acquire the French target, they would have found themselves in trouble afterwards, as they did not possess the capabilities necessary to assimilate the technology and carry on with the R&D.” [Case A]</p> <p>“The level of our products has been highly improved by combining our existing technology with McCormick’s advanced technology on transmissions.”[Case A]</p> <p>“It was a good opportunity to compensate its competitive disadvantage, as they had world class R&D unit and production lines” [Case B]</p> <p>“Its location (near harbour) was an important reason for us wanting to go ahead with the acquisition.” [Case C]</p> <p>“Their technology and manufacturing techniques will be a great complement.” [Case C]</p>
<i>Home market advantage</i>	<p>“The biggest contribution of the acquired firm is to improve the competitiveness of the parent firm in the home market.” [Case A]</p> <p>“Our major competitors in the domestic market are international joint venture companies with partners from Germany, Japan and Korea. Most of them have accumulated over 100 years of experience in the production of vehicles and components, with strong R&D capabilities as well as advanced equipment.” [Case B]</p> <p>“...to beat them (home market competitors)...to achieve a leading position in the Chinese market” [Case B]</p> <p>“Part of production lines (of the acquired firm) was transferred to China. It can provide strong support to our domestic market competition, so as to enlarge our domestic market share.” [Case B]</p> <p>“It (the acquired firm) is becoming one of our European-based manufacturing centre.” [Case C]</p> <p>“We will have a larger (comparative) advantage when competing for high</p>

<p>Cultural differences</p>	<p>quality orders and orders requiring EU standards.” [Case C]</p> <p>“We respect their culture and customs. When we find that they do something outside of our expectations, the first response is to understand whether it’s a cultural issue.” [Case A]</p> <p>“We need to compromise. We need to follow the local regulations and respect their culture.” [Case A]</p> <p>“We need to face up to the differences between the two cultures. There is no need to deliberately require the Italians to accept our culture, and vice versa.” [Case B]</p> <p>“We believe that the first and foremost reasons for the failure of most Chinese MNEs to achieve success in their outward M&As, especially those in developed countries, are cultural differences and integration.” [Case B]</p> <p>“It is the employees at the management level that have the maximum exposure to cultural differences. ” [Case C]</p> <p>“Misunderstandings are inevitable...The most significant asset in solving these problems is a tolerant mentality” [Case C]</p>
<p>Talent scarcity</p>	<p>“Translators could hardly convey all your meanings to them. Therefore, we are now studying primary French to help communication.” [Case A]</p> <p>“When we acquired the firm, there were only few technologists left, which made the transfer of (Tacit) knowledge from previous employees extremely difficult.” [Case A]</p> <p>“We hired new technical experts from Italy and German.” [Case B]</p> <p>“Most employees have left the firm.” [Case B]</p> <p>“The localization of the management team was vitally important.” [Case C]</p> <p>“It would be impossible to find suitable expatriates competent enough.” [Case C]</p>

Table 5 A cross-case comparison of rationales underlying the imbalance in explicit/tacit knowledge transfer

Rationale for imbalanced knowledge transfer	Case A	Case B	Case C
Complementarity in explicit knowledge	Patented technology (e.g.: power-shift transmission system) to upgrade the existing product lines; European based manufacturing line; European distribution	Advanced technology for high-end products; R&D intensity to compensate the existing R&D disadvantage; European based manufacturing line and R&D center; European	Geographic advantage (near a sea port located in Europe); overseas factory and manufacturing lines; overseas distribution channel; overcome technical barriers to enter

	channel; overcome technical barriers to enter the EU market.	distribution channel; overcome technical barriers to enter the EU market	the EU market.
Home market advantage	Industry leader; huge domestic market potential (in terms of high power and high-end tractors); SOE with governmental support.	Industry leader; huge domestic market potential (in terms of high-end shock absorber); non-SOE, regional pillar enterprise with local governmental support.	One of the industry leaders; huge domestic market potential; SOE with governmental support
Cultural differences	Enormous organizational and national cultural differences; lack of adequate capabilities to solve complex cultural problems; high cultural tolerance and ‘stepping backwards’ cultural integration strategy to reduce potential conflicts.	Enormous organizational and national cultural differences; lack of adequate capabilities to solve complex cultural problems; high cultural tolerance and ‘stepping backwards’ cultural integration strategy to reduce potential conflicts.	Enormous organizational and national cultural differences; lack of adequate capabilities to solve complex cultural problems; high cultural tolerance and ‘stepping backwards’ cultural integration strategy to reduce potential conflicts.
Talent scarcity	Resignations of key employees, such as R&D staff and technicians; lack of adequate skilled staff to handle the knowledge transfer; lack of adequate Chinese international managers.	Resignations of key employees, such as R&D staff and technicians; lack of adequate skilled staff to handle the knowledge transfer; lack of adequate Chinese international managers.	Lack of adequate skilled staff to handle the knowledge transfer; lack of adequate Chinese international managers.

Fig. 1: Chinese EMNCs' intra-firm knowledge transfer in the post-M&A integration phase: Characteristics and rationales.

