Toward a learning-based view of internationalization: The accelerated trajectories of cross-border learning for latecomers

Peter Ping Li *

Copenhagen Business School, Denmark
Southwest University of Political Science and Law, China

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A B S T R A C T

Integrating the conventional models with the emerging models, we propose a learning-based view of internationalization for multinational enterprise (MNE), especially for MNE latecomers as the new species of MNE from the emerging economies. Built upon the duality lens and transaction value perspective, this learning-based view frames the pattern of cross-border learning in terms of both learning motive and learning capability as a learning trajectory, with distinctive entry strategies as the primary applications of such learning trajectories. The learning trajectories on the dimensions of exploitative and exploratory learning as well as unilateral and bilateral leaning jointly constitute an overall framework of MNE evolution with cross-border learning as its central theme, especially in the process of an accelerated internationalization. In particular, we frame cross-border alliance as a special form for bilateral learning in terms of co-exploitation and co-exploration, which motivates and enables the accelerated internationalization of MNE latecomers. Finally, we identify four major learning-based issues as new “big questions” to reflect the emerging paradigm shift from hierarchy-based unilateral exploitation to network-based bilateral exploration with the theme that hierarchy is best for exploiting the extant core competence, while strategic alliance is best for exploring a novel core competence.

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Despite the consensus that multinational enterprises (MNE) have been the primary driver behind the trend toward globalization (Dicken, 2007), the new species of MNE, including MNE from the emerging economies (BCG, 2007; UNCTAD, 2006) and “born-global” MNE (Oviatt and McDougall, 1994) have not been adequately studied (Knight and Cavusgil, 2004; Li, 2007; Luo and Tung, 2007; Zahra, 2005). While MNE early-mover refers to the traditional large firms from the developed economies that have internationalized for a long time and have well established in the global market, MNE latecomer refers to those firms from the developing economies that have started internationalization very late and suffer from competitive disadvantages relative to MNE early-movers (Luo and Tung, 2007); MNE newcomer refers to those “born-global” firms from the developed economies that engage in export and foreign direct investment (FDI) upon or shortly after birth (Knight and Cavusgil, 2004). Both MNE latecomers and newcomers are new species sharing the character of accelerated internationalization (Li, 2007; Mathews and Zander, 2007).

There are ongoing debates over the relevance of the conventional models, including the Ownership–Location–Internalization (OLI) model (Dunning, 1995, 2001) and Internationalization Process (IP) model (Johanson and Vahlne, 1990, 2003, 2006), for MNE latecomers (e.g., Dunning, 2006a; Li, 2003, 2007; Mathews, 2002, 2006) and MNE newcomers (e.g., Autio et al., 2000; Mathews and Zander, 2007). The conventional models are even challenged by those who study the emerging strategies of MNE early-movers (e.g., Buckley and Casson, 1998; Forsgren, 2002; Hutzschenreuter et al., 2007). Hence, the originators of the IP model (Johanson and Vahlne, 2003, 2006) have revised the model as a theory about opportunity development rather than risk avoidance,
while the builder of the OLI model (Dunning, 2001, 2006b) has modified the model by incorporating the factors of asset-seeking motive, alliance mode, institutional context, and relational asset. Such revisions, however, remain tentative and piecemeal as path-dependent rather than path-breaking (Barkema and Drogendijk, 2007; Forsgren, 2002; Li, 2007; Mathews, 2006). To a large extent, the above problems are also shared by the model of global integration and local responsiveness or IR (Bartlett and Ghoshal, 1998; Prahalad and Doz, 1987). Just as Tsui (2007: 1358) pointed out, “the desire to publish in esteemed journals such as AMJ has inevitably led to an overabundance of exploitative research (i.e., application or extension of existing ideas) and underdevelopment of exploration research (i.e., creation of new theories or innovation in methods).” This is echoed by Griffith et al. (2008: 1230) that “extant research does not really represent path-breaking or original work addressing major question,” so “considerable work in international business is best classified as extension, if not replication, of previous research” (see Jack et al., 2008 for another critical review). This problem runs deep and wide across the entire field of management research (Daft and Lewin, 2008; March, 2005; Pfeffer, 2005). We posit that, while the conventional models can remain valid, they are more relevant for MNE early-movers than MNE latecomers or newcomers, especially more valid for the “old” issues of minimizing risk and cost than the “new” issues of maximizing opportunity and value. Hence, it is imperative to adopt a path-breaking approach to exploring the new species of MNE. This approach is especially critical for an interdisciplinary field with few shared roots, including international business (Acedo and Casillas, 2005; Buckley and Lessard, 2005) and general management (Agarwal and Hoetker, 2007; McGrath, 2007).

Focusing exclusively on the new species of MNE, two new models have been proposed: (1) the Linkage–Leverage–Learning (LLL) model for MNE latecomers (Mathews, 2002, 2006), and (2) the International New Venture (INV) model for MNE newcomers (Autio, 2005; Jones and Coviello, 2005; Oviatt and McDougall, 1994; Zahra, 2005). As path-breaking emerging models, LLL and INV models highlight the uniqueness of MNE latecomers and newcomers, so they challenge the core tenets of the OLI and IP models for MNE early-movers (Knight and Cavusgil, 2004; Li, 2007). However, the path-breaking approach contains the danger of throwing the baby with the bathwater (Foss and Pedersen, 2004), a balanced integration of these two approaches is imperative (Li, 2007). Such integration is also feasible. Despite the distinctive focuses between the conventional and emerging models, they share a central theme: cross-border learning as both the motive and capability of internationalization (Li, 2007; cf. Casillas et al., 2008; Forsgren, 2002; Petelis, 2007). We posit that the central theme of cross-border learning should serve as a shared platform to integrate all MNE models toward a learning-based view. This view stresses the trajectory of accelerated internationalization in MNE evolution, with the pre-MNE and MNE stages as two primary phases of MNE evolution (Li, 2003, 2007).

For the purpose of integrating the conventional models with the emerging models, we frame a learning-based view of internationalization or cross-border expansion, especially from the perspective of MNE latecomers (MNE newcomers to a less extent, but they are not the focus here). In particular, we propose a typology of learning trajectories to integrate the motive and capability of cross-border learning with cross-border entry strategies (i.e., entry options in terms of entry point, entry mode, and entry timing as strategic components). As a building block of an overarching framework, the typology of learning trajectories is the core of learning-based view. As the link between the root theories and specific issues, the learning-based view does not only integrate MNE models, but also highlights the transaction value perspective (TVP) in a sharp contrast to the transaction cost economics (TCE) and resource-based view (RBV). By evoking TVP, the learning-based view reframes alliance as a unique organizational form for bilateral learning, i.e., co-exploration and co-exploitation, both being central to the new species of MNE for an accelerated internationalization. Our primary contribution lies in framing cross-border learning as the focal answer to the “biggest question” in the field of international business: What are the unique values and costs of cross-border expansion (cf. Buckley and Lessard, 2005; Peng, 2004)? In other words, we propose a learning-based view of internationalization in general and MNE latecomers in particular as an initial attempt to integrate all MNE models.

The rest of this paper is organized as four sections. First, we frame learning as the central theme of MNE models by evoking the duality of exploitation and exploration, with exploitation as the focus of conventional models, and exploration as the focus of emerging models. Second, we develop the notion of transaction value into a theoretical perspective by applying it to alliance learning, with a duality of unilateral learning at the firm level as the focus of TCE and RBV as well as bilateral learning at the alliance level as the focus of TVP. Third, we propose a duality typology of learning trajectories delineated by the dimensions of exploitative-exploratory and unilateral-bilateral learning, and then apply them to entry strategy. Finally, we conclude with the primary implications of the learning-based view as “big questions” for future research.

1. Cross-border learning as the central theme

1.1. Exploratory learning as a path-breaking extension of conventional models

The conventional models have traditionally focused on MNE early-movers (e.g., Caves, 1996). Because MNE latecomers may differ in kind from MNE early-movers, some scholars have studied MNE latecomers to verify the assumed universality of extant MNE models (e.g., Lecraw, 1993; Li, 2003, 2007; Mathews, 2002, 2006; Tolentino, 1993; Wells, 1983; Yeung, 1994). Further, a growing number of scholars question the relevance of the conventional models for MNE newcomers, given the increasing importance of cross-border asset exploration for an accelerated internationalization (e.g., Andersen, 1993, 1997; Forsgren, 2002; Hutzscheneuter et al., 2007; Madhok, 1997; Oviatt and McDougall, 1994; Zahra, 2005). The shared theme of the above two research streams lies in the centrality of accelerated internationalization, largely facilitated by exploratory learning. Though shared by both MNE latecomers and newcomers, exploratory learning is more salient to the former given their greater need for asset exploration (Child and Rodrigues, 2005; Hitt et al., 2005; Li, 2003, 2007; Makino et al., 2002; Pananond and Zeithaml, 1998; Young et al., 1996). Further, accelerated process is also more challenging to MNE latecomers than to MNE newcomers (Li, 2003, 2007).
licensing, joint venture or JV, and M&A). In this sense, the extant MNE models will have different motives and capabilities to engage in various cross-border activities with various entry modes (e.g., export, into a single framework based on the central theme of cross-border learning. For instance, the OLI and IR models are inherently and dynamic nature of their subject matters, we argue that it is both imperative and feasible to integrate all the extant MNE models and stages as two basic phases (Li, 2003, 2007). It is also logical to assume that MNE and MNE stages as two basic phases (Li, 2003; Mathews, 2006; Tsang and Yip, 2007). Hence, it is imperative to integrate the conventional models with the emerging models can be more effective in explaining exploitative learning in terms of utilizing the ex ante knowledge stock, while the emerging models can be more effective in explaining exploratory learning in terms of seeking the ex post knowledge stock of knowledge, at the expense of the path-breaking exploration of an ex post (after cross-border expansion) stock of knowledge, thus largely neglecting the strategic choice by proactive managers and/or risk-taking entrepreneurs who take cross-border expansion as a unique opportunity to explore novel knowledge (see Al-Laham and Cavusgil, 2004). For instance, the ex ante stock of ownership knowledge (also location knowledge) is not a prerequisite for MNE latecomers to have foreign direct investment (FDI); instead, seeking the ex post flow of ownership knowledge (also location knowledge) is their strategic goal for FDI; it is the motive and capability of exploratory learning that push and pull MNE latecomers toward their FDI in the developed economies, often via the aggressive entry mode of merger and acquisition (M&A) (Child and Rodrigues, 2005; Lecraw, 1993; Li, 2003, 2007; Rui and Yip, 2008; Sim, 2006; Young et al., 1996).

We posit that, while exploiting the ex ante stock of knowledge is salient to MNE early-movers, exploring the ex post flow of knowledge is central to MNE latecomers given their goals of accelerated internationalization. Given the motive of MNE latecomers to explore the ex post flow of knowledge, the cross-border distance (diversity) between the host and home countries in terms of economic, technological, cultural, and political contexts should be regarded not only as negative uncertainties and liabilities, but also as positive opportunities and benefits (Li, 2003, 2007; Mathews, 2006; Tsang and Yip, 2007). In this sense, the conventional models can be more effective in explaining exploitative learning in terms of utilizing the ex ante knowledge stock, while the emerging models can be more effective in explaining exploratory learning in terms of seeking the ex post knowledge flow (Li, 2007; Mathews, 2006; cf. Casillas et al., 2008). Hence, it is imperative to integrate the conventional models with the emerging models so as to explain the roles of both exploitative and exploratory learning in the process of internationalization in general and its accelerated version in particular.

1.2. The imperative and feasibility of integrating MNE models

It is given that the entire process of internationalization and MNE evolution involves multiple temporal stages, at least the pre-MNE and MNE stages as two basic phases (Li, 2003, 2007). It is also logical to assume that firms at different stages of this process will have different motives and capabilities to engage in various cross-border activities with various entry modes (e.g., export, licensing, joint venture or JV, and M&A). In this sense, the extant MNE models are inherently partial because none covers the entire process of internationalization; further, none of them cover the entire scope of international business activities. Given the holistic and dynamic nature of their subject matters, we argue that it is both imperative and feasible to integrate all the extant MNE models into a single framework based on the central theme of cross-border learning. For instance, the OLI and IR models are inherently static in nature and both seem more effective in explaining ownership-based advantages at the later stage of MNE evolution (e.g., the MNE phase) (Li, 2003; Mathews, 2006), and the IP model seems more effective in explaining ownership-based advantages at the earlier stage (e.g., the pre-MNE phase) (Andersen, 1993). Also, the LLI and INV models are more adequate for MNE latecomers or newcomers at the early stage rather than the later one (Jones and Coviello, 2005; Li, 2007; Mathews, 2006; Zahra, 2005). Hence, none of these models is sufficient to explain the entire process of MNE evolution for all species of MNE. For a more complete picture of MNE in terms of process and species, an integrative perspective is required.

We posit that it is not only imperative but also feasible to integrate all MNE models due to two major reasons. First, integration is feasible because the extant MNE models are potentially complementary, as suggested in the above analysis. The root of potential complementarities lies in the central theme of cross-border learning shared by all the extant MNE models. Second, such complementarity potentials can be realized by reframing the critical issues via the duality lens. For instance, if we reframe ownership advantages as related to knowledge, utilizing the extant and explicit knowledge (exploitative learning) and seeking novel and tacit knowledge (exploratory learning) will be the strategic goals or motives for cross-border expansion, while learning alone or with passive partner (unilateral learning) and learning jointly with active partners (bilateral learning) will be the strategic mechanisms or capabilities for cross-border expansion.

1.3. The duality nature of cross-border learning

Duality refers to a holistic, dynamic and dialectical balance between two elements that are inherently contrary (relatively contradictory) yet interdependent (relatively compatible) as the opposites-in-unity (Li, 2008). The construct of duality extends the trend to examine all complex phenomena as paradoxes (Farjoun, 2002; Lado et al., 2008; Lewis, 2000; Poole and Van de Ven, 2007; Luo and Tung, 2007; cf. Mathews and Zander, 2007; Shrader et al., 2000). Hence, we will focus on MNE latecomers here (with only a passing reference to MNE newcomers).
1989; Seo and Creed, 2002). The duality lens posits that any complex phenomenon is holistic with multiple dimensions; all diverse dimensions always interact with each other and affect each other dynamically over time; each dimension consists of two elements that mutually affirm and mutually negate as opposites-in-unity, i.e., duality (Li, 1998, 2008). Reframed as the two opposites in a duality, the conventional and emerging models can be integrated. For instance, while the conventional models emphasize the exploitative learning by MNE early-movers, the emerging models highlight the exploratory learning by MNE latecomers (Li, 2007). However, exploration and exploitation as well as early and later stages are both required for all firms, so their balances as dualities are both challenges and opportunities (Gupta et al., 2006; Levinthal and March, 1993; Puranam et al., 2006). The same logic also applies to the distinction and balance between unilateral and bilateral learning as another duality (e.g., Gerwin and Ferris, 2004; Huber, 1991; Inkpen, 2002; Kedia and Lahiri, 2007; Khanna et al., 1998; Larsson et al., 1998). The duality of unilateral and bilateral learning can shed light on the research on alliance, especially the role of active partnership in the bilateral and exploratory types of learning in contrast to that of passive partnership in the unilateral and exploitative types of learning (Li, 1998, 2008; Lubatkin et al., 2001).

Further, the duality lens can be applied to the distinction and balance between ownership knowledge and location knowledge, with both residing at the firm (inter-firm) level but deriving from the country (region) level. Each type of knowledge contributes uniquely and also jointly to the cross-border expansion, so a leverage of both types of knowledge is required for international business. If a firm has ownership knowledge without location knowledge, its operation cannot be international; if vice versa, its operation cannot be business-related. The two types of knowledge reside at the firm (inter-firm) level as special forms of FSA in knowledge terms, while the other types of FSA (e.g., brand or capital) are the sources and outcomes of such knowledge. In contrast, even as the potential source and outcome of the micro-level FSA, CSA only resides at the macro level. For international business, the leverages of FSA with CSA as well as home CSA with host CSA are both required, rather than one only (cf. Rugman and Verbeke, 2003). Hence, the ultimate goal of cross-border expansion is to leverage diverse CSA for exploring and exploiting FSA by a single firm unilaterally or by an alliance bilaterally (even by a network multilaterally).

1.4. The duality of exploitative and exploratory learning

Based on the above analysis, we identify the first dimension of learning toward a duality typology of learning trajectories, i.e., exploitative and exploratory learning. Learning trajectory refers to a pattern or path of learning delineated by both learning motive and learning capability. Exploatory learning is a path-breaking learning trajectory in terms of acquiring new knowledge from external sources or creating novel knowledge by oneself or joint effort, while exploitative learning is a path-dependent learning trajectory in terms of deepening or applying one’s own or joint extant knowledge (Levinthal and March, 1993; March, 1991). On the surface, there is simply one criterion, i.e., the novelty of knowledge, to distinguish exploration from exploitation, as most assume (see Gupta et al., 2006 for a review). However, this criterion is insufficient. Based on the argument that “the certainty, speed, proximity, and clarity of feedback ties exploitation to its consequences more quickly and more precisely than is the case with exploration” (March, 1991: 73), we add the other criterion, i.e., the tacitness of knowledge, which refers to the uncertainty and difficulty in discovering and transferring knowledge. The concept of tacitness is central to many research streams, including knowledge creation (see Nonaka et al., 2006 for a review); absorptive capacity (see Lane et al., 2006 for a review); RBV (see King, 2007 for a review); organizational form (see Li, 1998 for a review), and entry mode (see Martin and Salomon, 2003 for a review). Further, this criterion is critical to the research on exploitative and exploratory alliances for co-exploitation and co-exploration (Gerwin and Ferris, 2004; Koza and Lewin, 1998; Lubatkin et al., 2001). Finally, the new criterion can shed light on how to properly conceptualize and operationalize exploitation and exploration (cf. Gupta et al., 2006; Hoffmann, 2007; Holmqvist, 2003; Lavie and Rosenkopf, 2006; Miller et al., 2006; Rothaermel and Deeds, 2004). For instance, if knowledge is novel but not tacit, it will be easy and fast to learn, thus hardly an exploration; if knowledge is tacit but not novel, there will be no need to learn, thus not an exploration either. In sum, the criteria of novelty and tacitness are necessary and sufficient to differentiate between exploitation and exploration.

Based on the central theme of cross-border learning, we reframe the specific patterns of international evolution among different species of MNE as their unique learning trajectories. For instance, the learning trajectory of MNE early-movers reflects a path-dependent exploitation of ex ante advantages, while the learning trajectory of MNE latecomers (MNE newcomers to a less extent) often takes the form of a path-breaking exploitation of ex post advantages. Further, even though a balance between exploitation and exploration is required (March, 1991), this balance is a challenge since the two types of learning constitute a duality that mutually affirm and mutually negate (Levinthal and March, 1993; Puranam et al., 2006). In particular, exploitative learning can squeeze out exploratory learning, or vice versa, because the former aims at short-term gains from unity or homogeneity, but the latter seeks long-term gains from diversity or heterogeneity (Lazer and Friedman, 2007; Levinthal and March, 1993; March, 1991; Sakakibara, 1997). To pursue both exploitation and exploration is especially challenging for MNE latecomers because they lack the slack resources (Li, 2003, 2007; Mathews, 2002; Sim, 2006), similar to small startups relative to big incumbents (Baum et al., 2000; Lin et al., 2007).

The relevance of exploration–exploitation duality for MNE is reflected in the growing attention to the distinction between asset exploration and asset exploitation in the research on MNE in general (e.g., Barkema and Drogendijk, 2007; Buckley and Casson, 1998; Dunning, 2001, 2006b; Forsgren, 2002; Hutzschenreuter et al., 2007; Johanson and Vahlne, 2003, 2006), and MNE latecomers (e.g., Child and Rodrigues, 2005; Hitt et al., 2005; Li, 2003, 2007; Makino et al., 2002; Pananond and Zeithaml, 1998; Young et al., 1996) as well as MNE newcomers (e.g., Autio, 2005; Autio et al., 2000; Oviatt and McDougall, 1994; Sapienza et al., 2006; Zahra, 2005; Zahra et al., 2000) in particular. In sum, the duality of exploitative and exploratory learning can be a base for a
systematic integration of MNE models as the first dimension of a learning-based view. The other dimension is concerned with the duality of unilateral and bilateral learning trajectories tied to the role of strategic alliance in co-exploration and that of tactical alliance in co-exploitation.

2. The transaction value of alliance learning

Despite the increasing importance of alliance to global competition, there is no consensus on how to conceptualize and explain alliance, so we do not have an established theory devoted to alliance (Parkhe, 1993; Parkhe et al., 2006). The extant theories somewhat tied to alliance tend to be narrow, static and biased. For instance, the most prominent theory related to alliance is TCE (Williamson, 1985, 1999), which explains alliance as a hybrid form and also dismisses the role of trust for alliance. Another prominent theory, which is only indirectly related to alliance, is RBV (Barney, 1991, 2001). This theory is silent on the questions about alliance as a hybrid or unique form and alliance as a network or firm. Besides their narrow and biased focus, neither of the theories can explain the dynamic process with specific mechanisms to build and manage different forms of alliance, including exploitative and exploratory ones. Hence, we need a compelling theory to explain alliance as a unique organizational form rather than a hybrid of market and hierarchy forms (Li, 1998, 2008; Penrose, 2008; Powell, 1990; cf. Dunning, 1995).

2.1. The transaction value perspective

Extending the notion of transaction value (Zajac and Olsen, 1993), which is the synergy of joint value creation via an inter-firm alliance, we frame TVP as a novel perspective to shed light on a new theory of the firm (Li, 1998, 2008). TVP differs from the extant theories of the firm in three major aspects. First, TVP posits that any transaction involves not only cost but also value, so the core raison d’etre of the firm is not only to minimize transaction cost, but also to maximize transaction value. Second, TVP also posits that transaction involves not only asset configuration but also task coordination, so the core raison d’etre of forming a firm is not only to bundle assets, but also to govern tasks. Third, TVP finally posits that the scope of the firm does not exist only at the single-firm level, but also at the network level with the firm’s interaction with other firms as well as with the external context. According to the above three principles, TVP makes three contributions to a new theory of the firm. First, it is the diverse co-specialization that defines the transaction value on the dimension of asset configuration from diverse yet complementary asset pooling and resource bundling. Second, it is the relationship-specific shared-trust that defines the transaction value on the dimension of task coordination from trust-based commitment to conflict resolution and harmony enhancement. Third, it is the above two core features that make alliance a unique network form, rather than a hybrid of market and hierarchy forms (Dyer and Chu, 2003; Li, 1998, 2008; Madhok, 1997; Uzzi, 1997). Hence, with bilateral synergy as its core, transaction value derives from the leverage of complementary assets from diverse co-specialized partners as well as the leverage of relationship commitments from the partners based on the shared-trust (Li, 1998, 2008; Uzzi, 1997), especially for co-exploration to avoid core rigidity. Core rigidity refers to the inherent inertia of hierarchy form as hierarchy cost that turns core competence into core rigidity, which is ignored by TCE and RBV (Christensen, 1997; Leonard-Barton, 1995; Penrose, 2008; Rothaermel and Boeker, 2008; Tripsas, 1997). This is consistent with the argument about the myopia of learning within a single firm (Levinthal and March, 1993).

We further extend the notion of transaction value in another aspect so as to frame it as a theoretical view. Specifically, we apply transaction value to the trajectories of bilateral learning based on co-specialization and shared-trust for co-exploitation and co-exploration. We explicitly differentiate exploitative transaction value from exploratory one because the emerging research on transaction value is unclear about this issue (e.g., Dyer and Chu, 2003; Li, 1998; Madhok, 1997; Uzzi, 1997; Zajac and Olsen, 1993), so is the emerging research on exploitative and exploratory alliances (e.g., Holmqvist, 2003; Hoffmann, 2007; Koza and Lewin, 1998; Lubatkin et al., 2001; Rothaermel and Deeds, 2004). In this sense, TVP has two learning implications, one for largely short-term and cost-saving exploitative value, and one for primarily long-term and value-creating exploratory value (cf. Kedia and Lahiri, 2007; Sakakibara, 1997). As the result, TVP does not only complement, but also transform, other theories of the firm by offering the underlying logic for explaining network form beyond market and hierarchy forms (Li, 1998, 2008). For instance, we may take M&A (for unilateral exploration) and R&D alliance (for bilateral exploration) as two entry modes related to cross-border exploitation, while greenfield FDI (for unilateral exploitation) and the alliance of original equipment manufacturing (OEM) (for bilateral exploitation) as two entry modes related to cross-border exploitation. While both TCE and RBV emphasize unilateral learning, TVP highlights bilateral learning; while TCE emphasizes task coordination, and RBV focuses on resource configuration (with both being at the single-firm or single-unit level), TVP integrates task coordination with resource configuration as the two dimensions of organizational form at both inter-firm and inter-unit levels (Li, 1998, 2008; cf. Dyer and Hatch, 2006; Kim and Huang, 1992; Lubatkin et al., 2001; Martin and Salomon, 2003).

2.2. The duality of unilateral and bilateral learning

Based on the above analysis, we identify the second dimension of learning toward our duality typology of learning trajectories, i.e., unilateral and bilateral learning. Unilateral learning refers to a trajectory of learning by a single firm, either internally alone or externally from other passive parties. The external unilateral learning often takes the form of learning race (Hamel, 1991) or other modes of knowledge transfer, such as licensing, M&A, and majority-equity JV (Das and Teng, 2000; Martin and Salomon, 2003), where only one party (the “student”) is active in knowledge transfer, so it is an asymmetrical and imbalanced learning with a passive partnership. In the case of JV, it can be used as a real option, which entails an initial investment so as to keep open the
trust as a psychological expectation and willingness (see Li, 2008 for a review). Trust-as-choice refers to one's own voluntary explorative alliance requires a much less active and shorter-term cooperation (thus tactical in nature). Active and longer-term cooperation between partners to jointly create novel and tacit knowledge (thus strategic in nature), while the rationale for the criteria is rooted in the two sources of synergy in terms of exploitative transaction value and exploratory one. In management, rather than the ex ante formation, are not strategic (Dyer and Hatch, 2006; Li, 2008; cf. Koza and Lewin, 1998). The long-term commitment (Li, 1998, 2008). For tactical alliance, a partnership only needs to meet the minimum requirement of the two criteria, such as the co-specialization in explicit knowledge and moderate shared-trust or even a mix of trust and the control-related measures of equity and contract (Uzzi, 1997). Despite its unique role in creating novel knowledge, co-exploration has been largely neglected in the literature (see Lubatkin et al., 2001 for a review). This neglect is surprising given the growing realization of the inevitable tendency of unilateral learning toward core rigidity as an imbalance between exploitation and exploration (Christensen, 1997; Leonard-Barton, 1995; Levinthal and March, 1993). Hence, co-exploration in an open alliance network is required (Lazer and Friedman, 2007; Li, 1998; Rothaermel and Boeker, 2008; Tripsas, 1997; Uzzi, 1997). Despite the argument for adopting an ambidextrous structure to pursue both exploitation and exploration by a single firm (see Gupta et al., 2006 for a review), we posit that a single firm is best for exploiting the extant core competence, while alliance is best for exploring a new core competence. If there is a historical shift or metamorphosis from market form to hierarchy form (Chandler and Daems, 1980), there seems to emerge a paradigm shift from hierarchy form to network form (Dunning, 1995; Li, 1998, 2008; Penrose, 2008).

2.3. Alliance as a unique form for cross-border learning

The distinctions between unilateral and bilateral learning do not only lie in whether or not learning is pursued alone or jointly, but also whether all partners are active in joint learning. For instance, private learning (i.e., learning race) or learning with passive partners (i.e., exploitation with incidental knowledge transfer as an unintended spillover effect) is unilateral, while active reciprocal learning (i.e., co-exploration for joint problem-solving) or learning actively facilitated by partners (i.e., deliberate knowledge transfer) is bilateral. Central to the differentiation between passive and active partnerships is the source and strength of inter-firm synergy as the prime goal of each partnership. This distinction has the potential to extend the prior research on alliance by providing the necessary criterion to differentiate between alliance and non-alliance partnership as well as between strategic and tactical alliances. This criterion is vital given the lack of consensus concerning the very definition of alliance. For instance, Yoshino and Rangan (1995) regard non-equity and equal-equity JVs as alliances, but Doz and Hamel (1998) rule out licensing and equity JV as alliances; Barringer and Harrison (2000) only consider informal (without equity or contract) partnerships as alliances. However, none of these definitions provide a compelling rationale for differentiating between alliance and non-alliance partnerships as well as between strategic and tactical alliances. Hence, the new criterion has the potential to contribute in this critical area.

First, we differentiate between alliance and non-alliance partnerships based on the source or presence of inter-firm synergy. We posit that passive partnership is not an alliance because it does not generate any inter-firm synergy; rather, it is only an aggregation of separate values from each party without any creation of new values. Second, we differentiate between strategic and tactical alliances based on the strength or type of inter-firm synergy. We posit that exploratory alliance requires highly interactive cooperation between all parties due to the need to discover novel and tacit knowledge jointly; in contrast, exploitative alliance requires a moderate level of interaction between all parties due to the need only to utilize available and explicit knowledge. Hence, we regard a highly active partnership as a strategic alliance in contrast to a moderately active partnership as a tactical one (cf. Kedia and Lahiri, 2007).

Further, the above criterion can be readily explained by TVP so as to shed light on how to explain alliance, especially strategic alliance for co-exploration, as a unique organizational form in contrast to the prevailing approach to explaining alliance as a hybrid of market and hierarchy forms (e.g., Williamson, 1999). Framed from TVP (Li, 1998, 2008; cf. Lubatkin et al., 2001), we explain an alliance as a special type of inter-firm partnership that meets the two necessary and sufficient criteria of network form: (1) it configures complementary assets from co-specialized partners, and (2) it coordinates interdependent tasks among partners via shared-trust. If any partnership fails to meet the above criteria, it is not an alliance. By taking alliance as a unique organizational form (i.e., network form), we reject the claim that alliance is a hybrid of market and hierarchy forms. If alliance is automatically a hybrid, it should have a mix of both pros and cons of hierarchy and market forms, but an alliance can have only the pros (e.g., high flexibility and low risk), but not the cons (e.g., high rigidity and high risk), of hierarchy and market forms (Li, 1998, 2008). Hence, these two criteria make alliance categorically distinctive from hierarchy and market forms because the latter two forms cannot meet the criteria (cf. Williamson, 1999). Only those non-alliance partnerships can be explained as a hybrid of hierarchy and market forms because they, even as inter-firm partnerships, also fail to meet the criteria for alliance.

As for the distinction between strategic and tactical alliances, we can also apply the two criteria. To qualify as strategic alliance, a partnership has to meet the criteria at a high level, such as the co-specialization in tacit knowledge and strong shared-trust for long-term commitment (Li, 1998, 2008). For tactical alliance, a partnership only needs to meet the minimum requirement of the two criteria, such as the co-specialization in explicit knowledge and moderate shared-trust or even a mix of trust and the control-related measures of equity and contract (Uzzi, 1997). For instance, while complementary alliances may be strategic, pooling alliances with similar assets cannot be strategic (cf. Lavie, 2006). Further, those alliances that rely on control in the ex post management, rather than the ex ante formation, are not strategic (Dyer and Hatch, 2006; Li, 2008; cf. Koza and Lewin, 1998). The rationale for the criteria is rooted in the two sources of synergy in terms of exploitative transaction value and exploratory one. In this sense, exploratory alliance is a strategic one, while exploitative alliance is a tactical one. Exploratory alliance requires a much active and longer-term cooperation between partners to jointly create novel and tacit knowledge (thus strategic in nature), while exploitative alliance requires a much less active and shorter-term cooperation (thus tactical in nature).

Finally, it is worth noting that we refer trust as a decision to choose risk-taking behaviors rather than the prevailing notion of trust as a psychological expectation and willingness (see Li, 2008 for a review). Trust-as-choice refers to one's own voluntary option to either back out or increase commitment in the future (Kogut, 1991; Vassolo et al., 2004). Bilateral learning refers to a trajectory of interactive learning with all the partners being actively involved, either to jointly utilize the complementary resources from co-specialized partners (Das and Teng, 2000; Grant and Baden-Fuller, 2004), or to jointly create novel assets (Inkpen, 2002; Lubatkin et al., 2001; Uzzi, 1997).
trustworthiness as an endogenous governance mode in terms of self-initiated and self-regulated commitment in contrast to control as an exogenous governance mode (e.g., equity and price). Also, as a psychological expectation of other’s trustworthiness, trust-as-attitude is not a governance mode. Hence, our notion of trust is a choice of proactive behavior to initiate and reinforce a trust-building process, motivated by and enabled by the shared-interest, shared-value, and shared-affect as the three key dimensions of trust-as-choice. Trust is a unique governance mode for alliance to be a unique network form. In sum, the duality of unilateral and bilateral learning is another base for a systematic integration of MNE models as the second dimension of the learning-based view of internationalization.

3. Duality typology of learning trajectories

3.1. The assumptions for learning trajectories

Built on the central theme of cross-border learning in the process of internationalization and framed from TVP, a typology of learning trajectories along the dimensions of exploitative-exploratory learning and unilateral–bilateral learning (both framed as dualities) can be presented as the core of a learning-based view of internationalization (cf. Hitt et al., 2005; Holmqvist, 2003; Lubatkin et al., 2001). This duality typology is developed upon four key assumptions. First, the central theme of cross-border learning highlights the learning motives of cross-border expansion (i.e., the ends of exploitative and exploratory learning), while TVP highlights both the learning motives and learning capability of cross-border expansion (i.e., the means of unilateral and bilateral learning). Hence, the dimensions of learning motive and capability jointly delineate a specific pattern of learning as a learning trajectory. Second, learning trajectory is closely related to organizational form (Li, 1998) in the sense that resource configuration and task coordination can both motivate and enable cross-border learning (cf. Hoffmann, 2007; Jacobides, 2005). In this sense, learning trajectory can be linked to the choice of entry strategy, which refers to a multi-dimensional strategic choice in terms of entry mode, entry point, and entry timing across national borders (Jones and Coviello, 2005), all embedded in the motive and capability of learning as the specific components of each learning trajectory in a cross-border setting.

Third, reframed through bilateral learning, we extend the notion of absorptive capacity by adding two new elements to the original concept (cf. Cohen and Levinthal, 1990; Lane et al., 2006). It is obvious that bilateral learning cannot occur at the single-firm level, but at the alliance level, which requires not only the capability and motive of one partner but those of both parties. In this sense, the absorptive capacity of one partner will depend on the motive and capability of the other partner to disseminate the available knowledge, referred to as disseminative capacity to delineate the effectiveness of teaching (Minbaeva and Michaelova,

| Table 1 |
The typology of learning trajectories. |  |
| Two basic dimensions | Exploitative learning | Exploratory learning |
| Learning motive | Learning motive |
| Unilateral learning | Unilateral exploitation | Unilateral exploration |
| Learning capability at the single-firm level | Improving/applying internal knowledge | Seeking external knowledge |
| Core features: | | |
| 1. Moderate ownership knowledge | Core features: | |
| 2. Host location knowledge as irrelevant | 1. Moderate ownership knowledge | |
| 3. Less salient to MNE latecomer | 2. Host location knowledge as relevant | |
| 4. Less salient to accelerated FDI | 3. More salient to MNE Latecomer | |
| 5. More salient in less developed markets | 4. More salient to accelerated FDI | |
| 6. More salient at the intermediate stage | 5. More salient in more developed markets | |
| 7. Absorptive capacity as irrelevant | 6. More salient at the intermediate stage | |
| 8. Disseminative capacity as irrelevant | 7. Absorptive capacity as critical | |

Bilateral learning
Learning capability at the inter-firm level

| Core features: | core features: |
| Weak ownership knowledge | 1. Strong ownership knowledge |
| Host location knowledge as relevant | 2. All location knowledge as relevant |
| More salient to MNE latecomer | 3. Salient to all species of MNE |
| More salient to accelerated export | 4. Salient to all accelerated entry types |
| More salient to developed markets | 5. Salient to all markets as a network |
| More salient at the earlier stages | 6. More salient at the later stages |
| Absorptive capacity as relevant | 7. Absorptive capacity as critical |
| Disseminative capacity as relevant | 8. Disseminative capacity as critical |

Notes:
1. The perspective is from MNE latecomers relative to other MNE species.
2. With cross-border expansion as a learning opportunity rather than a threat, the horizontal dimension of exploration–exploitation covers learning motive, while the vertical dimension of unilateral–bilateral learning covers learning capability.
3. The term “salient” refers to a measure of effectiveness or importance of various features.
4. Each cell covers a set of initial conditions salient to each learning trajectory (Items 1–3).
5. The salience of each learning trajectory depends on the contingencies of entry strategy with the components of entry mode, entry point, and entry timing (Items 4–6).
6. TVP treats alliance as a unique form involving both absorptive and disseminative capacities for cross-border bilateral learning (Items 7–8).
exploitation, (2) the unilateral exploration, and (4) the four ideal-typical entry strategies identify the presence of FSA in terms of ownership and location knowledge as well as CSA in terms of institutional and economic contexts, are distinctive only in relative terms. Out that these entry strategies (including entry modes) are not mutually exclusive in absolute terms; they (even as ideal-types) and entry strategies are ideal-types, so one can strategy, while taking the generic one as the overarching framework of the specific propositions and a set of specific propositions about the potential links between learning trajectories and entry strategies by highlighting the motive and capability of cross-border learning as the primary drivers of strategic choice. We regard specific learning trajectories and entry strategies as the concrete components of one generic learning trajectory and one generic entry strategy, while taking the generic one as the overarching framework of the specific ones. We admit that all learning trajectories and entry strategies are ideal-types, so one can find possible exceptions to the general rules. However, this imperfection does not negate the value of general rules for the likely connections between learning trajectories and entry strategies. Specifically, we identify four ideal-typical entry strategies as the applications of four learning trajectories: (1) the initial entry strategy for bilateral exploitation; (2) the first intermediate entry strategy for unilateral exploitation; (3) the second intermediate entry strategy for unilateral exploration, and (4) the mature entry strategy for bilateral exploration (see Table 2 for details). Again, we need to point out that these entry strategies (including entry modes) are not mutually exclusive in absolute terms; they (even as ideal-types) are distinctive only in relative terms.

The generic pattern of learning trajectories involves several dualities. One of them is that exploitation requires the ex ante learning motive stronger, especially for MNE latecomers and newcomers, thus the strength of newness (Autio et al., 2000; Li, 2007). These two additional elements can also enrich the notion of relative absorptive capacity at the alliance level (Lubatkin et al., 2001). Fourth, the salience of learning trajectory is contingent upon the species of MNE involved and the type of knowledge targeted. In an accelerated process, the bilateral exploitation of location knowledge as well as the unilateral exploration of ownership knowledge can be salient to MNE latecomers at their early and intermediate stages; the unilateral exploration of ownership knowledge is salient to MNE early-movers, while bilateral exploration of ownership and location knowledge is most likely to be salient to all mature MNE. In sum, the above four assumptions jointly delineate the typology of cross-border learning trajectories, which are summarized in Table 1. It is worth noting, as advocated by the duality lens, that the learning trajectories are never mutually exclusive in absolute terms; they are distinctive only in relative terms (e.g., to different degrees in different aspects or at different times). The same logic applies to their links with various entry strategies.

3.2. The generic links between learning trajectories and entry strategies

Applying the above typology of learning trajectories to cross-border entry strategies, we can develop a set of generic propositions and a set of specific propositions about the potential links between learning trajectories and entry strategies by highlighting the motive and capability of cross-border learning as the primary drivers of strategic choice. We regard specific learning trajectories and entry strategies as the concrete components of one generic learning trajectory and one generic entry strategy, while taking the generic one as the overarching framework of the specific ones. We admit that all learning trajectories and entry strategies are ideal-types, so one can find possible exceptions to the general rules. However, this imperfection does not negate the value of general rules for the likely connections between learning trajectories and entry strategies. Specifically, we identify four ideal-typical entry strategies as the applications of four learning trajectories: (1) the initial entry strategy for bilateral exploitation; (2) the first intermediate entry strategy for unilateral exploitation; (3) the second intermediate entry strategy for unilateral exploration, and (4) the mature entry strategy for bilateral exploration (see Table 2 for details). Again, we need to point out that these entry strategies (including entry modes) are not mutually exclusive in absolute terms; they (even as ideal-types) are distinctive only in relative terms.

The generic pattern of learning trajectories involves several dualities. One of them is that exploitation requires the ex ante presence of FSA in terms of ownership and location knowledge as well as CSA in terms of institutional and economic contexts,
while exploration requires the ex ante presence of absorptive capacity. In other words, the two are the prerequisites for each other, so the puzzle is which starts first. Further, although a dynamic balance between exploitation and exploration is imperative, the two compete for limited resources (Gupta et al., 2006; Levinthal and March, 1993; Puranam et al., 2006), which is especially acute for MNE latecomers because they lack slack resources (Li, 2003, 2007). We posit that bilateral learning is more salient to MNE latecomers than to MNE early-movers because the former lacks the strong FSA so that they have to rely more on their alliance partners from the developed economies rather than the vice versa (Li, 2003; Mathews, 2002), similar to the sharp contrast between startups and incumbents (Baum et al., 2000; Lin et al., 2007). Hence, we develop five generic propositions concerning the overall learning trajectory of MNE latecomers, especially their more ambitious sub-species, because we expect each MNE species to have its own distinctive overall learning trajectory (cf. Li, 2003, 2007; Galan et al., 2007; Lin et al., 2007; Zahra et al., 2000). In particular, we highlight the possible interactions between the four learning trajectories, including their overall pattern of interactions as well as the specific shifts between the four trajectories.

The ideal-typical overall trajectory for MNE latecomers is from bilateral exploitation at the early stage to unilateral exploitation or unilateral exploitation at the middle stage, and then to bilateral exploitation or a portfolio of entry strategies at the late stage. For MNE latecomers at the early stages, bilateral learning in general and bilateral exploitation in particular is imperative due to the goal of accelerated internationalization. As for MNE latecomers at the late stage in terms of achieving an established status of mature MNE (Li, 2003, 2007), they will enjoy the freedom of combining learning trajectories as a portfolio as long as they maintain the balances between exploitation and exploration as well as between unilateral and bilateral learning. The last point is consistent with the call for more attention to proactive strategic choice in the research on MNE (Child and Rodrigues, 2005; Forsgren, 2002; Hutzschenreuter et al., 2007; Li, 2003, 2007). The rationale for this overall pattern is the sequentially changing needs of MNE latecomers as they become more mature with the accumulated past learning and the resulted shifting requirements for future learning. Other MNE species are expected to have their distinctive overall patterns.

Given the inherent conflict between exploration and exploitation as well as unilateral and bilateral learning, it is difficult to shift between learning trajectories (Hoffmann, 2007; Levinthal and March, 1993), especially for MNE latecomers due to their lack of FSA and their need for fast expansion (cf. Horng and Chen, 2009; Zahra et al., 2000). It is evident that early success tends to have a lock-in effect (inertia) so as to generate a pattern of spiral progression in terms of boom-and-bust cycles (Li, 2003, 2007). This is consistent with the prime tendency for core competency to turn into core rigidity (Christensen, 1997; Leonard-Barton, 1995; Levinthal and March, 1993; Tripsas, 1997). In this sense, while it is natural and easy to shift from exploration to exploitation, it will be hard to switch back from exploitation to exploration due to the inherent inertia. Finally, the term “salience” is a composite measure of both effectiveness and importance of each learning trajectory to different MNE species, including early-movers, newcomers, latecomers (with more ambitious and less ambitious sub-species), and even slow-movers from the developed countries who delay their cross-border expansions until much later at their organizational life cycles.

**Proposition 1.** For MNE latecomers, the generic pattern of learning trajectories (the applied pattern of entry strategies) tends to start from bilateral exploitation (the initial entry strategy) to unilateral exploitation (the first intermediate strategy) or unilateral exploration (the second intermediate entry strategies), and then to bilateral exploration (the mature entry strategy); this generic pattern is more salient to the more ambitious MNE latecomers than to other MNE species (including the less ambitious latecomers).

**Proposition 2.** Exploratory learning trajectories (and the related entry strategies) are more salient to MNE latecomers than to other MNE species.

**Proposition 3.** Bilateral learning trajectories (and the related entry strategies) are more salient to MNE latecomers than to other MNE species.

**Proposition 4.** The shift between learning trajectories (and the related entry strategies) tends to be harder for MNE latecomers than for other MNE species, especially the switch from unilateral exploitation to bilateral exploration.

**Proposition 5.** MNE latecomers at the later stages tend to have greater freedom in combining learning trajectories because maturing MNE latecomers tend to converge toward MNE early-movers.

### 3.3. The specific links between learning trajectories and entry strategies

In addition to the five generic propositions, we propose four sets of specific propositions that associate the four ideal-types of learning trajectories with four ideal-typical entry strategies consisting of entry mode, entry point and entry time. In particular, we differentiate between the primary (e.g., OEM, greenfield FDI, M&A, and non-equity alliance) and the secondary entry modes (e.g., original design manufacturer or ODM, original brand manufacturer or OBM, majority-equity JV, and equal-equity JV). The distinction between the two sets of entry mode lies in their different levels of learning salience, with the primary modes as more salient than the secondary ones. Further, we incorporate other elements of entry strategies, such as entry point and entry timing, into the specific propositions. Finally, we integrate the choice of control and trust as two governance modes into the specific propositions. It is worth noting that the general roles of entry strategies, and their specific learning effects, on the part of MNE latecomers have been ignored until recently (e.g., Chen, 2005; Child and Rodrigues, 2005; Duanmu and Fai, 2007; Li, 2003, 2007; Rui and Yip, 2008; Sim, 2006), and an integrative view is still missing.

The first set of specific propositions covers the link between the trajectory of bilateral exploitation and the initial entry strategy (with OEM as the primary, and ODM as the secondary, entry modes in terms of special forms of indirect export via the partners’
marketing) for MNE latecomers. Given the weak home-based CSA in high-value R&D and marketing and the typical strong home-based CSA in low-cost manufacturing, MNE latecomers tend to explore their initial FSA in manufacturing by importing foreign technologies. In this aspect, OEM can be especially effective for MNE latecomers. OEM can be adopted as an effective entry mode to learn about how to upgrade the initial FSA in manufacturing just because foreign buyers from the developed economies typically offer the necessary technological assistance for MNE latecomers to build the required manufacturing capabilities so as to supply quality products acceptable to foreign buyers (Chen, 2005; Li, 2007). It is important to note that the dependence between foreign buyers and local suppliers in OEM alliances tends to be asymmetrical because local suppliers rely on foreign buyers for the access to technology and market (Duanmu and Fai, 2007; Li et al., 2009).

It is also worth noting that OEM differs from ODM in one key area. While OEM is often involved in a transfer of required technological know-how from foreign buyers to local suppliers, there is no such a need in the case of ODM, where local suppliers will only rely on the marketing expertise of foreign buyers (Chen, 2005; cf. Yeung, 2007). Due to this distinction, it is logical for MNE latecomers to adopt OEM initially; then ODM after acquiring the necessary manufacturing capabilities, and finally OBM after gaining the major marketing capabilities (Child and Rodrigues, 2005; Horng and Chen, 2009; Li, 2003, 2007). In this sense, OEM appears more geared toward exploratory learning than ODM and OBM, but we still regard OEM as exploitative because it is primarily an application or extension of extant manufacturing capabilities (Duanmu and Fai, 2007). Further, we regard OEM (ODM to a less extent) as bilateral, in contrast to OBM as unilateral (Horng and Chen, 2009), because the learning via OEM (ODM) requires both buyers and suppliers to cooperate beyond arm’s-length market transaction (Duanmu and Fai, 2007; Li et al., 2009).

Our position is consistent with the research on vertical supply-chain alliance for bilateral exploitation (e.g., Arend, 2006; Dyer and Chu, 2003; Hoffmann, 2007; Jacobides, 2005; Lorenzoni and Lipparini, 1999), in contrast to horizontal R&D or marketing alliances for bilateral exploitation. In sum, we regard OEM (ODM to a less extent) as related to bilateral exploitation.

For entry point, OEM is more likely to be adopted if the targeted markets are the more developed economies, rather than the less developed ones. This is because MNE latecomers at the early stage do not have enough FSA to adopt the mode of ODM (ODM to a less extent), so they have to rely on the CSA-based OEM (Li, 2003, 2007; cf. Horng and Chen, 2009). As for the targeted market of less developed economies, it is more likely for MNE latecomers to adopt the mode of OBM because they enjoy competitive advantages over the local firms there. Hence, the targeted market is a major spatial moderator for OEM and ODM as the applications of bilateral exploitation by MNE latecomers. As for the issue of entry time, OEM tends to be adopted more often at the earlier stages than the later stages. This is because MNE latecomers have to rely on OEM for acquiring their initial FSA (Chen, 2005; Child and Rodrigues, 2005; Li, 2003, 2007). This also applies to ODM to a less extent (Yeung, 2007). The mode of OEM is especially critical for MNE latecomers to accelerate at the earlier stages because they do not wish to stay in those stages for long (Li, 2003, 2007; cf. Ge and Ding, 2008). In this sense, evolutionary stage is a major temporal moderator for OEM and ODM as the applications of bilateral exploitation by MNE latecomers. Finally, the role of governance mode (i.e., control versus trust) should be considered. In general, trust is more effective for bilateral learning than control, especially for tacit learning (Li, 1998, 2008; Li et al., 2009; cf. Duanmu and Fai, 2007). In sum, OEM is expected to be more salient to bilateral exploitation than ODM for MNE latecomers; this salient link is likely to be moderated by the three contingent factors.

**Proposition 6a.** Ceteris paribus, the role of the initial entry strategy in the trajectory of bilateral exploitation is more salient to MNE latecomers than to other MNE species.

**Proposition 6b.** Ceteris paribus, the role of OEM (ODM to a less extent) in the bilateral exploitation of MNE latecomers tends to be moderated by (1) targeted market (more salient in the more developed markets); (2) evolutionary stage (more salient at the earlier stages), and (3) governance mode (more salient via trust).

The second set of specific propositions covers the link between the trajectory of unilateral exploitation and the first intermediate entry strategy (with greenfield FDI as the primary, and OBM as the secondary, entry modes) for MNE latecomers. Given the lack of home-based CSA and the lower learning salience of greenfield FDI and OBM, it is less likely for MNE latecomers to adopt them in the more developed markets and at the earlier stages (Brothers and Brothers, 2000; Horng and Chen, 2009). In contrast to the cases with OEM and ODM, both of which have been ignored by the conventional models, greenfield FDI and OBM have been the primary focus of the conventional models. With greenfield FDI and OBM (as a form of direct export via one’s own marketing) as two most common entry modes, they have been covered well in the literature, so we do not need to elaborate any further here.

Though still possible for ambitious MNE latecomers to launch ambitious greenfield FDI or OBM in the developed markets and at the earlier stages with the goal of internally building up competitive advantages in terms of advanced technologies and global brands, such modes are not highly likely to be effective for the exploratory learning by MNE latecomers at the earlier stages. Besides the targeted market as the spatial moderator and the evolutionary stage as the temporal moderator, the role of governance mode is critical. In contrast to the role for bilateral learning, the role of trust is less effective than that of control for unilateral learning. It is worth noting that the above analysis on the key link between unilateral exploitation and the first intermediate entry strategy reveals the weakness of the conventional models that focus too much on the entry modes of greenfield FDI and OBM with weak learning potentials, especially for MNE latecomers.

**Proposition 7a.** Ceteris paribus, the role of the first intermediate entry strategy in the trajectory of unilateral exploitation is less salient to MNE latecomers than to other MNE species.
Proposition 7b. Ceteris paribus, the role of greenfield FDI (OBM to a less extent) in the unilateral exploitation of MNE latecomers tends to be moderated by (1) targeted market (more salient in the less developed economies); (2) evolutionary stage (more salient in the later stages), and (3) governance mode (more salient via control).

The third set of specific propositions covers the link between the trajectory of unilateral exploitation and the second intermediate entry strategy (with M&A as the primary, and majority-equity JV as the secondary, entry modes) for MNE latecomers. Given the acute lack of home-based CSA as well as the stronger learning potentials of M&A (Shimizu et al., 2004) and equity JV (Nippa et al., 2007) than greenfield FDI (Slangen and Hennart, 2007), it is more likely for MNE latecomers to adopt M&A or majority-equity JV in the more developed markets (due to the strong host-based CSA) at the intermediate stages (Li, 2003, 2007; Rui and Yip, 2008). Our position is inconsistent with the conventional models, which expect more M&A deals in the less developed markets at the earlier stages and in the more developed economies at the later stages. However, the evidence suggests that, despite the challenges, MNE latecomers can engage in successful M&A deals in the more developed markets at the intermediate stages for the goal of acquiring tacit technological and marketing FSA (Li, 2007; Sim, 2006). This is similar to the approach of grafted learning via M&A (Lubatkin et al., 2001), which refers to the access to external knowledge by acquiring other firms or employing new people (Huber, 1991). It is evident that even cultural diversity has a positive effect on cross-border M&A (Chakrabarti et al., 2009), perhaps due to the exploratory learning through the cultural interaction. Despite the strategic importance, the entry mode of M&A for MNE latecomers has rarely been studied until recently (e.g., Child and Rodrigues, 2005; Li, 2007; Rui and Yip, 2008; Sim, 2006; cf. Shimizu et al., 2004; Slangen and Hennart, 2007).

M&A or majority-equity JV may not be the best mode for exploration when compared to the mode of alliance (Kapoor and Lim, 2007; Lundan and Hagedoorn, 2001; Puranam and Srikanth, 2007; Wang and Zajac, 2007), especially given the double-edged effect of equity JV on learning (Li and Zhou, 2008), but it is still effective for MNE latecomers to gain FSA quickly from the more developed markets as unilateral learning without the commitment from foreign partners (Anand and Delios, 2002; Brouthers and Brouthers, 2000; Ruckman, 2005; Tsang and Yip, 2007). Again, the three contingent factors of targeted market, evolutionary stage, and governance mode serve as the “temporal,” temporal, and governance moderators for the basic link between unilateral exploration and the mode of M&A (majority-equity JV to a less extent) for MNE latecomers. It is worth noting that there is no consensus on how to specify the distinction between majority-equity JV and equal-equity JV as well as between majority-equity JV and M&A (Hagedoorn and Sadowski, 1999; Inkpen, 2000; Lui and Ngo, 2004), and no consensus about if M&A is related more to exploration (e.g., Child and Rodrigues, 2005; Li, 2007; Sim, 2006; Slangen and Hennart, 2007) or exploitation (e.g., Lundan and Hagedoorn, 2001; Wang and Zajac, 2007), especially when compared to greenfield FDI or strategic alliance. Given the special need of more ambitious MNE latecomers, we regard M&A and majority-equity JV as potentially exploratory.

Framed from TVP, we posit that the M&A by more ambitious MNE latecomers in the more developed markets at the intermediate stages are largely exploratory in nature, while the M&A by less ambitious MNE latecomers in the less developed markets at the later stages are primarily exploitative in nature. We also posit that majority-equity JV is similar to M&A in the effect on learning because both are effective for unilateral exploration. However, we want to differentiate majority-equity JV from equal-equity JV because it is possible for the latter to be a strategic alliance. Consistent with Yoshino and Rangan (1995), we posit that equal-equity JV has the potential to be strategic alliance because the partners with equal rights are more likely to built shared-trust than in the mode of majority-equity JV. Finally, the mode of control, relative to trust, is more critical to M&A and majority-equity JV than to equal-equity JV and other alliances.

Proposition 8a. Ceteris paribus, the role of the second intermediate entry strategy in the trajectory of unilateral exploration is more salient to MNE latecomers than to other MNE species.

Proposition 8b. Ceteris paribus, the role of M&A (majority-equity JV to a less extent) in the unilateral exploration of MNE latecomers tends to be moderated by (1) targeted market (more salient in the more developed economies); (2) evolutionary stage (more salient at the intermediate stage), and (3) governance mode (more salient via control).

The fourth set of specific propositions cover the link between bilateral exploration and the mature (last) entry strategy (with non-equity R&D/marketing alliances as the primary, and equal-equity R&D/marketing JVs as the secondary, entry modes) for MNE latecomers. Given the limitation of home- or host-based CSA alone as well as the strongest potential of exploratory alliance for bilateral exploration (Koza and Lewin, 1998; Lubatkin et al., 2001), it is more likely for MNE latecomers to adopt non-equity or equal-equity R&D and marketing alliances in the more developed markets at the later stages (cf. Hagedoorn and Sadowski, 1999; Inkpen, 2000; Nippa et al., 2007). Distinctive from the leverage of, and the access to, the co-specialized diverse assets for bilateral exploitation (Grant and Baden-Fuller, 2004), bilateral exploration focuses on the joint creation of novel assets not yet available (Li, 1998; Lubatkin et al., 2001; Uzzi, 1997). This position can be best reflected by the distinction between exploitative transaction value and exploratory transaction value. Further, the revised conventional models and the emerging models are consistent with the tactical alliance for bilateral exploitation, but none of them can explain bilateral exploration because they fail to specify what distinguishes bilateral exploration from unilateral exploration (Lubatkin et al., 2001; cf. Koza and Lewin, 1998). It is TVP that provides the criterion and explanations for the distinction and balance between alliance and non-alliance partnership; between strategic and tactical alliances, and between exploitative and exploratory alliances, including the criterion of active and passive partnership as well as the explanations of co-specialization and shared-trust. Framed from TVP, we posit that non-equity alliance (equal-equity to a less extent) is more flexible and more likely to build up and rely on shared-trust than majority-equity JV, thus much more effective for exploration in terms of creating novel and tacit knowledge (cf. Barringer and Harrison, 2000; Doz and
Hamel, 1998; Li, 1998, 2008; Lui and Ngo, 2004; Yoshino and Rangan, 1995). Given its strongest learning potential, an exploratory alliance is automatically a strategic alliance in contrast to an exploitative alliance as a tactical one.

Due to the tacit nature of R&D and marketing alliances, these horizontal types of alliance are more likely to be exploratory relative to the vertical type of alliances such as OEM and ODM (cf. Lavie and Rosenkopf, 2006; Rothaermel and Deeds, 2004). Despite the bigger learning potential, it is not likely for MNE latecomers to establish horizontal alliances in the developed markets at the early stages because it takes time for MNE latecomers to attract MNE early-movers as more or less symmetrical partners with matched FSA. In this sense, R&D and marketing alliances are not highly feasible for MNE latecomers at the early stages (Wright et al., 2005). In contrast to OEM and ODM as exploitative alliances in the much more explicit functional area of manufacturing, R&D and marketing alliances are exploratory in the much more tacit functional areas. Consequently, it is more likely for MNE latecomers to adopt the latter modes after acquiring enough FSA in the areas of technology and marketing. Given the growing importance of strategic alliance in global competition, the mature entry strategy for bilateral exploration is equally imperative to all MNE species. In sum, the factors of targeted market, evolutionary stage, and governance mode are the major moderators for the link between exploratory alliance and bilateral exploration. In particular, it is the governance mode of shared-trust that holds the key to the uniqueness of strategic alliance for bilateral exploration.

**Proposition 9a.** Ceteris paribus, the role of mature entry strategy in the trajectory of bilateral exploration is equally salient to MNE latecomers and other MNE species.

**Proposition 9b.** Ceteris paribus, the role of non-equity R&O/marketing alliances (equal-equity R&O/marketing JV to a lesser extent) in the bilateral exploration of MNE latecomers tends to be moderated by (1) targeted market (more salient in the more developed markets); (2) evolutionary stage (more salient in the later stages), and (3) governance mode (more salient via trust).

### 4. Implications and conclusion

#### 4.1. Four major implications for future research

For the major implications of the proposed learning-based view of internationalization in general and MNE in particular for future research, we emphasize four issues. First, the issue of **home-host diversity** as the multi-dimensional location moderator should be a rich area for future research (Dunning, 2006b; Li, 1993; Ricart et al., 2004). The location-specific context should be expanded beyond the prevailing narrow focus on only cultural distance (e.g., Tihanyi et al., 2005) or economic distance (e.g., Ghemawat, 2001; Tsang and Yip, 2007) toward a much broader coverage of both institutional (e.g., history, Galan et al., 2007; policies, UNCTAD, 2006) and market contextual factors (e.g., resource market, Porter, 1990; technology, Tolentino, 1993). Further, the home-host distance at the dyadic level can be augmented by the home-host diversity at the network level (Li, 2003). The concept of home-host diversity with multi-faceted elements of external context extends beyond the single-country notion of CSA.

It is the concept of home-host diversity that single-handedly defines the uniqueness of the research on international business in general and MNE in particular (Dunning, 2006b; Galan et al., 2007; Li, 2003; Ricart et al., 2004; Wright et al., 2005; Zaheer and Zaheer, 2005; cf. Buckley and Lessard, 2005). It is imperative and feasible to build a general model of home-host diversity on the dimensions of institutional diversity and market diversity, with the former for the macro-level role of game rule related to the micro-level function of task coordination (e.g., the interplay between formal and informal governance modes, Li, 2003, 2008; Meyer and Peng, 2005), and the latter for the macro-level role of resource pool related to the micro-level function of resource configuration (e.g., the interplay between internal and external assets, Li, 1998, 2008; Lorenzoni and Lipparini, 1999). Further, the above two dimensions constitute a duality, with the former tied to CSA and FSA, and the latter tied to entry mode (all related to learning trajectories). Hence, we should regard foreignness as a duality of liability and opportunity. As the core context for cross-border learning trajectories, the home-host diversity renders exploratory and bilateral learning more salient for MNE latecomers (exploitative and unilateral learning more salient for MNE early-movers). In sum, the issue of home-host diversity at the network level is the first primary raison d'être for being MNE, and also the first “big question” for future research.

Second, related to the above issue and concerned with the leverage of FSA and CSA, the dynamic process of firm-context co-evolution is another rich area for future research (Flier et al., 2003; Giddens, 1984; Hodgson, 2007; Volberda and Lewin, 2003). For instance, the duality of MNE’s reactive adaptation to the context and MNE’s proactive choice extends beyond the prevailing biased focus on the downward impact of macro-level context on micro-level firm (e.g., Tihanyi et al., 2005; Tsang and Yip, 2007) toward a balanced approach to MNE as both reactive and proactive (including the upward impact of micro-level firm on macro-level context, Kostova et al., 2008). Further, the reactive–proactive duality also extends beyond the prevailing bias in favor of exploitative learning toward a balanced approach to MNE with the motive and capability for both path-dependent exploitation for adaptive compliance and path-breaking exploration for creative destruction as possible learning trajectories. It is evident that MNE can be more proactive than we realized (e.g., Lamberg and Laurila, 2005; Morgan and Quack, 2005). The application of reactive–proactive duality to the firm-context link can shed new light on the unique proactive role of MNE in choosing a firm-specific context with multi-country CSA (Kostova et al., 2008), thus globalizing the formerly country-specific institutional context.

Applying the reactive–proactive duality, we can build a learning-based model of MNE-context co-evolution on the dimension of path-dependent approach for exploitative transaction value as well as the dimension of path-breaking approach for exploratory transaction value. In this sense, we can reframe cross-border entrepreneurship (Jones and Coviello, 2005) as a duality of exploitation and exploration. The extant research on cross-border entrepreneurship should extend beyond the prevailing focus on...
MNE newcomers (e.g., Autio, 2005; Knight and Cavusgil, 2004) to MNE latecomers who can be more entrepreneurial (Li, 2007; Mathews, 2006; Rui and Yip, 2008), especially as institutional entrepreneurs to reshape their institutional context at home (Li, 2009). In this sense, the species of MNE slow-movers from the developed countries who choose not to leverage their strong FSA with the host CSA early on as the least entrepreneurial. In this sense, the issue of MNE-context link can be reframed as an issue of entrepreneurship. In this sense, we need a paradigm shift in the research focus from reactive exploitation to proactive exploration. In this regard, the emerging research stream on institutional entrepreneurship (see Leca et al., 2008 for a review) has a great potential to contribute here, especially for the cross-fertilization between the fields of International Business and Institutional Research (see Li, 2009 for a review). In sum, due to the duality of exploitation and exploration in a cross-border setting, MNE-context co-evolution is the second primary raison d’être for being MNE, and also the second “big question” for future research.

Third, the issue of spiral progression in terms of boom-and-bust cycles in tandem with a shifting effectiveness of various learning trajectories at different stages of MNE evolution (Li, 2003, 2007), especially the difficult switch from exploitation to exploration, begs a theoretical analysis. This is related to the issue of core rigidity or inertia in terms of inability to shift from exploitation to exploration (Hoffmann, 2007; cf. Zahra et al., 2000), especially for early-movers (Rothaermel and Boeker, 2008; Tripsas, 1997). It is useful to distinguish the motive and capability of exploration from those of exploitation as a duality in the sense that the former (especially the motive) often diminish with success due to complacency or myopia (but enhance with failure due to the sense of crisis), but the latter (especially the capability) can improve with success due to accumulated experiences as core competence (diminish with failure due to the lack of expertise). The net effect is a boom-and-bust spiral cycle in MNE evolution, especially for immature MNE latecomers at the earlier stages (Li, 2003, 2007). This is tied to the challenge of ambidextrously balancing exploration and exploitation within hierarchy boundaries (Gupta et al., 2006; Levinthal and March, 1993; Puranam et al., 2006). Given the inherent inertia of core rigidity (Christensen, 1997; Leonard-Barton, 1995) and the acute need for complementary assets from external sources (Tripsas, 1997), alliance is imperative for balancing exploration and exploitation (Li, 1998, 2008; Penrose, 2008; Rothaermel and Boeker, 2008). While it may be possible for hierarchy or alliance to pursue both exploration and exploitation alone (Gupta et al., 2006; Hoffmann, 2007; Lavin and Rosenkopf, 2006), hierarchy is better at exploitation, and alliance better at exploration (Li, 1998, 2008; cf. Holmqvist, 2003). Hence, it is best to combine the two in a unique ambidextrous design with hierarchy exploiting the extant core competence and alliance exploring a new core, such as large incumbents forming non-equity R&D and marketing alliances with innovative startups (cf. Rothaermel and Boeker, 2008; Tripsas, 1997). This unique ambidextrous design is able to solve the inherent problem of learning spiral within a single firm.

Applying the above analysis to cross-border expansion in general and MNE in particular, we posit that the key to the unique role of MNE lies in the special motive and capability of MNE to leverage the home-based CSA with the host-based CSA as well as leverage CSA with FSA. In this sense, MNE has the extra source of inspirations to innovate due to the home-host diversity beyond the constraint of home-bound imprint (Li, 2007). Hence, cross-border entrepreneurship and creative destruction are more effective than the domestic ones (Kostova et al., 2008; Jones and Coviello, 2005). We should reframe the research on entrepreneurship in general and the creative destruction in particular from a domestic focus to a cross-border one (cf. McMullen and Shepherd, 2006; Schumpeter, 1942). This is especially true when MNE builds a global network of diverse players in terms of either internal units or external alliances for bilateral exploitation and bilateral exploration across borders. This adds a new host-home dimension to the issue of ambidexterity so as to extend the IR model (Bartlett and Ghoshal, 1998). MNE and its partners can be locally responsive by pooling the co-specialized resources for their exploitative transaction value; MNE and its partners can be globally integrative by creating novel solutions to disrupt and destroy the contextual status quo for their exploratory transaction value. In sum, closely related to the first and second “big questions”, an ambidextrous design to solve the inevitable learning spiral in a cross-border context is the third primary raison d’être for being MNE, and also the third “big question” for future research.

Fourth, the issue of strategic alliance in general and cross-border one in particular entails much more attention in future research. In particular, the basic distinctions between strategic and tactical alliances as well as between exploratory and exploitative alliances require more research. The proposed learning-based view makes the distinction explicit by evoking one central criterion: the source and strength of active involvement of partners in a partnership. If only one partner is active in a partnership, the partnership is not an alliance; if not all partners are equally active in an alliance, the alliance is a tactical one; only when all partners are equally highly active in an alliance, the alliance is a strategic one, which is the requirement for bilateral exploration. The highly active partnership is made possible by two prime conditions as the two dimensions of organizational form: (1) the configuration of complementary assets from diverse co-specialized partners, and (2) the coordination of interdependent tasks among the partners via a long-term relationship commitment based on shared-trust. The levels of co-specialization and shared-trust differentiate exploratory alliance from exploitative one, with more diverse co-specialization and stronger shared-trust for the former and less diverse co-specialization and weaker shared-trust for the latter. The distinction between exploitation and exploration can help differentiate vertical alliance from horizontal one, with vertical supply-chain alliance more likely for exploitation, and alliance better at exploration (Li, 1998, 2008; cf. Holmqvist, 2003). Hence, it is best to combine the two in a unique ambidextrous design with hierarchy exploiting the extant core competence and alliance exploring a new core, such as large incumbents forming non-equity R&D and marketing alliances with innovative startups (cf. Rothaermel and Boeker, 2008; Tripsas, 1997). This unique ambidextrous design is able to solve the inherent problem of learning spiral within a single firm.
shared-trust with strong commitment is the core of TVP (Li, 1998, 2008; cf. Lui and Ngo, 2004). Shared-trust enables firms to have the “ownership” of FSA without formally owning the assets underlying FSA, especially when the FSA and underlying assets are tacit and novel as well as dynamic and paradoxical (Li, 1998, 2008). Also, trust remains critical even in vertical exploitative alliance (Arend, 2006; Dyer and Chu, 2003; Lorenzoni and Lipparini, 1999; Srinivasan and Brush, 2006; Uzzi, 1997). Hence, it is trust that differentiates alliance from non-alliance partnership (Dyer and Hatch, 2006); it is again trust that differentiates strategic alliance for exploration from tactical alliance for exploitation (cf. Jansen et al., 2006; Makhija and Ganesh, 1997). In this sense, shared-trust is central to enhancing both absorptive and disseminative capacities (Dyer and Hatch, 2006). If we add the cross-border dimension to the issue of alliance, cross-border alliance has a unique source of transaction value, i.e., the cross-border transaction value (cf. Ricart et al., 2004). This will also enhance both absorptive and disseminative capacities of cross-border alliances relative to those of domestic ones. In sum, related to the above three “big-questions” to reflect the paradigm shift from hierarchy form to network form, the duality of strategic and tactical alliances is the fourth primary raison d’etre for being MNE, and also the fourth “big question” for future research. In total, the four “big questions” delineate an emerging paradigm shift in the research on MNE.

5. Conclusion

In conclusion, from the perspective of MNE latecomers, especially those more ambitious ones, in contrast to MNE early-movers and other MNE species, we have built a learning-based view of internationalization in general and MNE latecomers in particular as the core or theme of an overarching framework of MNE evolution. This learning-based view consists of one overall learning trajectory as well as four specific learning trajectories on the dimension of exploitative and exploratory learning for learning motive as well as the dimension of unilateral and bilateral learning for learning capability. Rooted in TVP, learning motive is related to shared-trust, while learning capability is related to co-specialization, with both being the most salient for bilateral exploration in a cross-border setting. Our contributions lie in the learning-based view.

This proposed learning-based view calls for a greater attention to MNE latecomers as an emerging research issue, especially its accelerated learning trajectories. This view also calls for a greater attention to TVP so as to explain strategic alliance as a unique organizational form built on co-specialization and shared-trust. This view further calls for a more attention to four dualities (i.e., home-host diversity, firm-context co-evolution, ambidextrous design, and strategic-tactical alliances) as four “big questions,” with the first two more related to the motive of cross-border learning and the last two more related to the capability of cross-border learning. These questions directly address the concerns about the “mix and match” approaches to outside theories and the “missing middle” of MNE theories (Buckley and Lessard, 2005; cf. Peng, 2004). The proposed learning-based view has the potential to serve as the “missing middle” between the root theories and the emerging issues to reflect the paradigm shift in the research on MNE.

Finally, to push for a paradigm shift in the theory of the firm, this new view calls for a greater attention to TVP so as to explain alliance as a unique organizational form built on co-specialization and shared-trust, thus better at exploration in contrast to the traditional forms of hierarchy and market being better at exploitation. By integrating TCE and RBV with TVP, the emerging new theory of the firm moves from a fragmented, static and linear analysis to a holistic, dynamic and dialectical one. Further work is required to refine the proposed learning-based view and extend it beyond MNE to all firms.

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