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Microfoundations of Strategic Agility in Emerging Markets: Empirical Evidence of Italian MNEs in India

Alberto Ferraris [a], William Y. Degbey [b,*], Sanjay Kumar Singh [c], Stefano Bresciani [d], Sylvaine Castellano [e], Fabio Fiano [f], Jerome Couturier [g]

[a] Department of Management, University of Torino, Italy and, Graduate School of Economics and Management, Ural Federal University, Russia and, Faculty of Economics and Business University of Rijeka, Rijeka, Croatia
[b] Department of Marketing & International Business, Turku School of Economics, University of Turku, FI-20014, Turku, Finland
[c] School of Business, Maynooth University, Maynooth, Ireland
[d] Department of Management, University of Torino, Italy
[e] EM Normandie Business School, Metis Lab, France
[f] Link Campus University, Rome, Italy
[g] ESCP Business School and LARGEPA - University of Paris II Panthéon-Assas

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ABSTRACT

We propose the individual-level microfoundations of subsidiary CEOs in emerging markets as antecedents of the strategic agility of multinational enterprises, and subsidiary embeddedness as a key organizational-level moderator of these relationships. Combining quantitative data on subsidiary CEOs operating in India with qualitative interviews with Italian HQ counterparts, our results suggest that subsidiary CEOs' tenure in emerging markets, along with their overall experience, affects MNE strategic agility positively. Similarly, CEOs' cognitive characteristics - problem solving and reasoning, and language and communication skills (individual-level microfoundations) - affected strategic agility positively, while subsidiary embeddedness moderated these relationships in different ways, leaving space for fresh managerial and theoretical considerations.

1. Introduction

Strategic agility has been identified as a key success factor for firms (Doz & Kosonen, 2008a, 2008b; Doz & Kosonen, 2010) and relates to continuous adjustment and readjustment of an enterprise's strategic directions in order to develop innovative methods to create value (Weber & Tarba, 2014) and retain flexibility without losing efficiency (Junni, et al., 2015), through a combination of dynamic capabilities, such as resource fluidity, strategic sensitivity, and collective commitment (Doz & Kosonen, 2010). For strategically agile organizations, being "both stable (resilient, reliable, and efficient) and dynamic (fast, nimble, and adaptive)" (Aghina, et al., 2015, p. 58) is even more important in emerging markets because of the fluid nature of institutional support, along with remarkably fast and unpredictable market changes (e.g., Elg, et al., 2017). MNEs thus need to change fast in ways that are not regular, i.e., by overcoming routine rigidities (Gilbert, 2005; Clauss et al., 2019) and developing agile governance mechanisms (Soundararajan et al., 2021). The extant literature on the strategic agility of MNEs has largely concentrated on qualitative studies [rare exceptions are the studies of Hock et al. (2016), and Kale et al. (2019)], focusing mainly on organizational factors (Lewis et al., 2014), meta capabilities (e.g., Fourné et al., 2014), firm outcomes (e.g., Clauss et al., 2019) and M&A-related aspects (e.g., Junni et al., 2015).

Interestingly, few empirical studies focus on how and under what conditions individual actions (microfoundations) contribute to and/or support the routines that in turn lead to MNEs' strategic agility in managing institutional forces in emerging market contexts (Liu et al., 2021). Its relevance is confirmed – among others – by the recent study of Nyamrunda and Freeman (2021) who conceptually proposed and qualitatively showed how relational dimensions influenced by strategic agility embedded in microfoundational activities develop trust supporting dynamic relational capabilities in SMEs in transitional economies.

In this paper, we focus on emerging market subsidiaries of large

* Corresponding author at: Department of Marketing & International Business, Turku School of Economics, University of Turku, FI-20014, Turku, Finland.
E-mail addresses: alberto.ferraris@unito.it (A. Ferraris), william.degbey@utu.fi (W.Y. Degbey), sanjay.singh@mu.ie (S.K. Singh), stefano.bresciani@unito.it (S. Bresciani), scastellano@em-normandie.fr (S. Castellano), f.fiano@unilink.it (F. Fiano), jcouturier@escp.eu (J. Couturier).

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MNEs where subsidiary managers from developed-economy MNEs face "managing under deep uncertainty" first-hand (the "Unknown Unknowns", as explicitly suggested by Teece et al. (2016)). Challenges in emerging markets are amplified because these contexts are characterized by institutional voids (Gao et al., 2017), market volatility, and limited property-right protection (Luo & Zhao, 2004), along with a high degree of social, political, and economic change (Elg et al., 2017). This contrasts with developed markets and subsidiaries operating in advanced economies, and subsidiary CEOs consequently need to upgrade existing competencies and develop new aptitudes (Keen & Wu, 2011) because strategic agility is needed more than in stable contexts (Boojihawon et al., 2020).

This area of knowledge remains largely unexplored (Xing, et al., 2020) and requires an understanding of its linkages with disciplines such as organizational behavior and psychology to answer a unique set of questions and assumptions (Felin, et al., 2015; Liu, 2020) for MNEs operating in emerging markets. Furthermore, the international business literature requires the unpacking of microfoundational routines and capabilities to advance our knowledge of the drivers of differential behavior and firm performance (Felin, et al., 2012; Liu & Huang, 2018; Nuruzzaman, et al., 2019; Foss & Pedersen, 2019).

Thus, this study explains how subsidiaries' CEOs (i.e., individual-level microfoundations) determine the strategic agility of MNEs (organizational level) in emerging markets. Furthermore, it examines how subsidiary external relational embeddedness moderates the influence of individual-level microfoundations of CEOs on the strategic agility of MNEs in the emerging host market context. We believe that the subsidiary's external networks in the emerging market should be taken into account, also following a recent call to embed more contextual issues in IB research (e.g., Delios, 2017; Liu & Vrontis, 2017), because it may bring (or not) new contextual knowledge that is crucial for the achievement of strategic agility. Surprisingly, there is a dearth of empirical insight into how subsidiary external relational embeddedness in the emerging markets acts on and interacts with individual-level microfoundations to sustain and enhance MNEs' strategic agility. Anderson et al. (2007) showed how MNE headquarters use such knowledge to balance or moderate the influence of strong subsidiaries. Previous studies have also highlighted the role of internal and external embeddedness during innovation development (Dellestrand, 2011) and in turning local innovations into global innovations (Isaac, et al., 2019). Furthermore, O'Brien et al. (2019) revealed the subsidiary's central actor, the subsidiary CEO, as pivotal to subsidiary strategic initiative realization 'horizontally' by enabling embeddedness in the host-country environment. In line with O'Brien et al. (2019), we contend that such enabling embeddedness in the form of subsidiary external relational embeddedness would differentiate the effects of CEOs' managerial attributes (e.g. experience and cognitive capabilities) on strategic initiative realization, such as strategic agility. In fact, how the external relational embeddedness of subsidiaries influences MNEs' strategic agility and specifically moderates the relationships between individual-level microfoundations of subsidiary CEOs and firm strategic agility in the emerging market context remains unclear.

Through a mixed quantitative–qualitative method based on primary data from Italian MNEs operating in India, we provide novel findings showing that interactions between levels of analysis provide a better understanding of how variations in microfoundations influence differences in MNE routines and capabilities, underlying strategic agility in emerging markets (Felin et al., 2015; Liu & Meyer, 2018). Our study therefore advances knowledge in the field of international business (IB) and strategic agility literature (Kostova, et al., 2016; Liu & Almor, 2016; Liu & Meyer, 2018; Ahammad et al., 2021).

More specifically, we contribute on microfoundations by empirically finding positive evidence of the role of subsidiary CEO experience and cognitive capabilities (microfoundations) on strategic agility. These contributions enrich the literature on the microfoundations of strategic agility (Xing et al., 2020), providing fresh empirical insights for IB scholars (e.g. Foss & Pedersen, 2019) to complement studies of complex phenomena associated with strategic agility in IB (Shams et al., 2020). This is consistent with recent comprehensive reviews in IB and provides an answer to the suggestion that subsidiary management is a multilevel phenomenon and would gain from microfoundational research (Meyer, et al., 2020; Christofi et al., 2021). Interestingly, we found that the subsidiary's external relational embeddedness plays different moderating roles depending on the different microfoundations investigated and the measurements reflecting strategic agility. Thus, we found significant interactions between multiple levels of analysis (individual – microfoundations - and organizational – subsidiary). Furthermore, we add original knowledge to IB research focused on emerging markets (Kirca et al., 2016; Gaur et al., 2019; Nuruzzaman et al., 2019; Shams et al., 2020), specifically in India as an important emerging economy that has attracted the attention of several IB studies (e.g., Ahammad et al., 2021; Bhaumik et al., 2019; Buckley et al., 2016; Nair et al., 2015). We study this complex phenomenon from the perspective of foreign subsidiaries' CEOs in emerging markets, where both managerial decision rights and high heterogeneity in organizational outcomes can be observed. Previous studies have adopted this approach to explain other complex organizational outcomes in emerging markets, such as competitive strategy (e.g., Luo & Zhao, 2004) and knowledge sharing (Zhao & Luo, 2005) but neglecting strategic agility.

2. Theory and Hypotheses

2.1. Strategic agility and dynamic capabilities: Is a microfoundational approach required?

Strategic agility represents the firm's ability to adapt constantly to changing and uncertain environments (e.g. Lewis et al., 2014). Other scholars define it as "the capacity for moving quickly, flexibly and decisively in anticipating, initiating and taking advantage of opportunities and avoiding any negative consequences of change" (McCann et al., 2009, p. 45) or as "the ability to capitalize on opportunities and dodge threats with speed and assurance" (Kotter, 2012, p. 46).

This emerging and vibrant research on strategic agility has attracted attention across academic fields of inquiry, such as management (e.g., Arbussa et al., 2017; Junni et al., 2015), strategy (e.g., Doz & Kosonen, 2010), information systems (e.g., Tallon, Queiroz, Coltman, & Sharma, 2019), practitioner outlets (e.g., Lewis et al., 2014; Weber & Tarba, 2014), and more recently, IB research (e.g., Ahammad et al., 2021; Boojihawon et al., 2020; Debellis et al., 2020; Pereira et al., 2020; Shams et al., 2020). The dynamic capabilities perspective (e.g., Degbey et al., 2021; Teece et al., 2016; Teece, 2007, 2014; Helfat et al., 2007; Schneckenberg et al., 2015; for a content-analytic review, see Schilke et al., 2018) underscores how organizations reconfigure their resource base dynamically to generate new capabilities to respond to unpredictable and fast-paced changes in their environment.

Prior studies have widely employed insights from the dynamic capability perspective to shed light on the notion of agility, in terms of the degree and speed with which organizations can perform such resource reconfigurations (e.g., Mathiassen & Pries-Heje, 2006; Teece, 2007). A central insight is that strategic agility is a meta-capability or a combination of different capabilities (Doz & Kosonen, 2010; Fourné et al., 2014; Ivory & Brooks, 2018). Doz and Kosonen (2008a, 2008b, Doz & Kosonen, 2010) have been at the forefront in describing these foundational meta-capabilities of agility as consisting of strategic sensitivity, resource fluidity, and collective commitment.[2]

[2] The terms 'collective commitment' and 'leadership unity' have been used interchangeably (Doz and Kosonen, 2008a, 2008b; Doz & Kosonen, 2010). However, we use 'collective commitment' in our study because it is a broader term. Doz & Kosonen, 2010, p. 381) indicate that leadership unity is just one determinant of a top team's ability to reach collective commitments.

However, the rich subsidiary literature has shown that micro-foundational underpinnings emanating from attributes and behaviors of key subsidiary individuals (i.e., subsidiary CEOs) are not well understood (Contractor et al., 2019; Kano & Verbeke, 2019) because the contributions of these central individuals are "rounded out in the analysis" (Felin & Foss, 2005, p. 443) in favor of aggregated explanations of initiative realization within the MNE, despite their pivotal role for subsidiary-level outcomes (e.g. Cano-Kollmann et al., 2016; Schotter & Beamish, 2011).

Microfoundations represent the 'individual-level and group-level actions that shape strategy, [and] organization' (Eisenhardt et al., 2010, p. 1263). Barney and Felin (2013, p. 145) further emphasized their contemporary importance and the appropriateness that '…organization analysis should be fundamentally concerned with how individual-level factors aggregate to the collective level'. Following the growing microfoundational research movement, we stress that strategic agility (an organizational-level phenomenon) relies on individuals, processes and interactions, and context or structures to operate (cf. Felin et al., 2012). Thus, macro (i.e., organizational level, in our research, strategic agility) phenomena do require an exertion of upward influence from lower-level phenomena (Coleman, 1990; Hodgson, 2012) to develop successfully and evolve.

Despite strategic agility itself embracing a paradox (Ivory & Brooks, 2018) through "contradictions, such as stability-flexibility, commitment-change, and established routines-novel approaches'' (Lewis et al., 2014, p. 58), early management and organization scholars recognized the importance of these strategic agility dilemmas and strove to reconcile them [(e.g. Burns & Stalker,1961) framed the dilemma essentially as an efficiency–adaptability challenge; and past scholars reconciled this dilemma through different lenses and concepts such as "technical core" (Thompson, 1967); exploration-exploitation (March, 1991); ambidexterity (O'Reilly & Tushman, 2008; Raisch et al., 2009), and a paradox management challenge (Andriopoulos and Lewis, 2009, 2010; Lewis et al., 2014)]. Thus, breaking down and scrutinizing the construct of agility beyond a single level could potentially enhance our understanding of its dual features.

In this vein, other researchers have lamented the skewed variations in the levels at which the construct of agility has been considered (see, e.g. McCann et al., 2009), despite its crucial importance for emerging markets where, hitherto, a microfoundational-level understanding has been lacking (Liu & Huang, 2018; Xing et al., 2020). A recent review on agility highlighted the prevalence of organizational-level scrutiny of the construct Tallon et al. (2019). According to Tallon et al. (2019), among others, early studies and theories focused on organizational adaptation to the environment, concluding that organizational results are directly linked to skill at adapting the organization to environmental changes (e.g., Dess & Beard, 1984; Duncan, 1972; Fahey & Narayanan, 1989). The central challenge in prior studies is their predominant focus on the organization as the unit of analysis, while crudely paying less attention to their more granular parts. Doz (2020, p. 2) recently argued that "strategic agility results from consistent and coherent behaviors and skills in the senior management more than from a structure or from a duality". Structural (i.e., organization design) solutions are not enough to address the dilemmas to achieve strategic agility. Taking a microfoundational lens can help disentangle the micro-social mechanisms embedded in such dilemmas to spur strategic agility at the firm level (e.g., McCann et al., 2009). This latter assertion is consistent with a recent comprehensive review that calls for due attention to microfoundations that lead to the emergence of key macro-constructs (Christofi et al., 2021)

2.2. *Strategic agility in emerging markets: Can microfoundational approaches help in the HQ-subsidiary relationship?*

Contemporary MNEs operating in both developed and emerging markets recognize that strategic agility is not just an option in the current hypercompetitive and uncertain business environment; it is oxygen itself. Crucially, however, the necessity of this proverbial oxygen (i.e. strategic agility) is even greater and perhaps most warranted in emerging markets, such as China and India, which are becoming the new regional economic powerhouses, 'key swing factors' in the growth of global trade and financial stability, and also key players among the world's fastest-growing economies. Emerging markets are undergoing tremendously rapid and unpredictable changes (Elg et al., 2017) and thus require consideration of strategic agility, considered a key dynamic capability to illuminate contexts of deep uncertainty (e.g., Teece et al., 2016).

In line with the microfoundational approach, a focus on the role of the experience and cognitive capabilities of MNE subsidiary CEOs can help foster some vibrant interactions between analytic levels to better understand how variations in lower-level activities (i.e., microfoundations) can impact differences in the MNEs' routines and capabilities underlying strategic agility in emerging markets (cf. Felin et al., 2015; Liu & Meyer, 2018). The unique microfoundational capabilities of subsidiaries can not only enhance the focal subsidiary quality of decision-making in a rapidly changing environment to positively influence performance, but can also be tapped by MNE HQs to create, extend, and modify the managerial capability base of other subsidiaries in similar contexts, to impact decision quality for improved performance (cf. Helfat & Martin, 2015). In so doing, how to unpack the complexity of the relationships between the firm and its environment (Nair et al., 2015) beyond some of the existing challenges embedded in major headquarter-subsidiary relationship research themes is uniquely important (see Kostova et al., 2016 for a review on HQ-subsidiary research). One major research theme within the HQ-subsidiary relationship literature takes a clear corporate HQ perspective and emphasizes organizational design and formal control systems for organizing and coordinating MNEs' foreign activities (e.g., Chandler Jr, 1991; Martinez & Jarillo, 1989). This perspective poses a challenge in that organizational structural solutions (driven by corporate HQs) can limit subsidiaries operating in fast-changing and unpredictable market environments where the need to sense and respond rapidly (i.e., strategic agility) is a necessity for survival and enhanced value creation. However, if managerial decision rights (e.g., Foss, 2003) reside within subsidiary CEOs, structural and formal control mechanisms imposed by corporate HQ can be resolved, although this alone may not necessarily be a panacea for strategic agility. Its emergence may require certain conditions of individual action (Coleman, 1990), which normally reside inside the individual (e.g., subsidiary CEO) and can be broken down into those related to individual knowledge, skill, ability, and motivation (Argote et al., 2003). In a similar vein, the central locus of the determinant for strategic agility in MNE subsidiaries is at the level of subsidiary CEOs, because both managerial decision rights and the most heterogeneity can be located here. Thus, the subsidiary CEO is the key individual player in this regard. However, it is important to add that the subsidiary CEO may also require the vital support of both middle and lower level managers in the development of strategic agility, particularly in rapidly evolving markets that demand attributes including creative collaborative processes of individuals (Bouguerra et al., 2021) and cultural underpinnings that serve as microfoundations for ambidextrous functioning (Xing et al., 2020; Zhang et al., 2020).

Research shows that tensions arise within the MNE network due to different objectives and strategic logic (e.g. Ambos et al., 2020), which can make timely dissemination of knowledge problematic, especially among MNE subsidiary managers aiming to capture value locally and meet performance targets, as opposed to HQ managers aiming to stimulate reverse knowledge transfer and avoid erecting silos of expertise that can hamper synergy realization (Fourné et al., 2014; Ferraris et al., 2017). We argue that MNE subsidiary leaders can address such tensions swiftly through attributes of dynamic managerial capabilities (Adner & Helfat, 2003; Helfat & Martin, 2015), which can serve as important microfoundations for heterogeneity in managerial assessments and decisions, and are thus critical for shaping strategic agility within the MNE.

This argument is consistent with recent studies emphasizing the vital role of key human capabilities in attaining strategic agility in MNEs (e.g., Ahammad et al., 2020; Doz, 2020). Similarly, Liu and Meyer (2018) highlighted the potential fruitful role of strategic agility on reverse knowledge transfer by examining the influence of leadership as a core determinant.

2.3. Research gap and our theoretical perspective

While synthesizing prior work before delving into our specific microfoundations of strategic agility theorization, two main observations need theoretical attention to advance strategic agility research in IB. *First* is the unit/level of analysis employed in theorizing. As noted earlier, the overwhelming number of previous studies directly studying strategic agility or attributes of the concept from early management and organization scholars to more contemporary perspectives have largely employed an aggregate organizational level/unit of analysis, thereby crowding out individual contributions to initiate realization in favor of collective-level focus. This traditional lens requires theoretical development that bridges different levels of analysis, given that a complete explanation of organizational-level context ought to begin with the understanding of the individual (Felin & Foss, 2005).

Second is theorizing the nature of relationships with the subsidiary central actor (i.e., subsidiary CEO). The subsidiary management literature emphasizes mainly the vertical relationship: i.e., upward interaction with HQ to meet the agenda set for the MNE, and downward with their own subsidiary unit (Aherne et al., 2014; Wooldridge et al., 2008). The subsidiary CEO must also maintain a horizontal relationship through interaction with the host-country environment, and act as a bridge between the MNE, the local subsidiary firm, and the host-country market (Rugman et al., 2011). This horizontal relationship is significant for building a healthy, strategically agile posture due to the complex and unpredictable nature of emerging market contexts to foster effective boundary-spanning strategic activities (i.e., building relationships with various external parties and embedding the subsidiary in the host institutional environment (Tippmann et al., 2017)). While this horizontal relationship reflects a strong influence of the host country, its interaction with subsidiary CEOs (i.e., individual microfoundations) has yet to be conceptualized adequately in extant studies of subsidiary strategic agility.

In this spirit, we employed the microfoundational view in our theorization and, more specifically, the bathtub framework of Coleman (1990), also used by other related studies (e.g., Linder & Foss, 2018; Mäkelä et al., 2012), to advance research on strategic agility in the emerging market context. The underlining idea is to expand our understanding of strategic agility of firms (macro-level phenomena) with mechanisms that operate at the micro level (individual microfoundations). We adapted Coleman's (1990) framework to investigate the microfoundations of strategic agility in emerging markets. Our framework depicts this as a function of the attributes, actions, and interactions of subsidiary key actors and effects they may have on strategic agility in the context of emerging markets. Coleman (1990) proposed that a macro-level phenomenon (i.e., strategic agility in emerging markets) can be explained via the aggregation (and development) of the actions of individual actors (i.e., subsidiary CEOs in emerging markets). These actions, in turn, are driven by specific underlying *conditions of individual action*, which are characteristically located within the individual (Elster, 1989) and are only partly impacted by macro-level variables.

We argue that these specific conditions of individual action can be broken down into those associated with the ability and motivation of the individual (Argote et al., 2003). We emphasize the ability component, and extend it to include the knowledge and skill (i.e., KSA)[3] of the individual (see, e.g., Aklamanu et al., 2016). The KSA of the individual can be (1) experience-driven (prior experiences of the subsidiary CEO form the basis of knowledge and skills that impact his/her decisions and actions) or (2) cognitive capability-driven (cognitive capabilities of subsidiary CEOs derived from his/her KSA to perform mental activities that influence their decisions and actions). Based on Colman's (1990) bathtub framework, these different conditions of action operate as microfoundational determining factors for firm-level strategic agility in emerging markets. We advance our theorization by considering how the subsidiary local/host context factor, i.e., subsidiary external relational embeddedness, interacts with the experience and cognitive capabilities of the subsidiary CEO to foster subsidiary-level strategic agility; and advance our understanding of how the quality of relationships maintained by subsidiary CEOs engenders strategic agility 'horizontally' by enabling embeddedness. Next, we discuss each type of KSA condition and its interaction with subsidiary external relational embeddedness and propose hypotheses for empirical testing. Figure 1 shows an overview of our proposed hypothesized relationships coupled with detailed discussions.

2.4. Hypothesis development

Scholars have underlined the vital role of specific microfoundational determinants, such as managerial experience (e.g., Mäkelä et al., 2012) and managerial cognitive capabilities (e.g., Helfat & Peteraf, 2015) for foreign subsidiaries. To account for the role of the emerging market context and subsidiary relationships with external stakeholders, we propose the subsidiary's relational embeddedness as a moderating variable in our study. We present here a diagram (i.e. Figure 1) of our hypothesized model.

2.4.1. Subsidiary CEO experience

Recent research suggests that certain actors in the MNE possess superior knowledge due to their unique experience within the MNE network (e.g., Nuruzzaman et al., 2019). Consistent with previous research, the accumulation of prior experience constitutes a central part of capability development, as direct or indirect inferences from history are integrated into behavior via learning (e.g., Zollo & Winter, 2002). For example, international experience, a managerial factor to construct an index, for instance, of top managers' capability, including tenure, has been positively associated with international scope and performance (e.g., Barkema & Shvyrkov, 2007; Ramón-Llorens et al., 2017). Further, strategic agility, described as a key dynamic capability (Junni et al., 2015), comprises a tacit knowledge suggested by scholars to be distributed solely through experienced MNE managers (Fang et al., 2010).

Firm-specific business experience is paramount as it offers subsidiary CEOs a context-specific reference. Greater business experience (explicit and tacit firm-related and industry-related knowledge) accumulated by the subsidiary CEO leads to a deeper and wider relevant reference base to draw upon and establish possible action-outcome connections to inform actual action. Thus, greater experience of subsidiary CEOs enhances the understanding of firm dynamics inside the MNE network and the provision of greater influence on diverse stakeholders, including top managers from MNE HQs (Nuruzzaman et al., 2019). Consequently, subsidiary CEOs are better able to achieve the desired strategic sensitivity, resource fluidity, and collective commitment in the focal emerging market.

Furthermore, firm-specific business experience of subsidiary CEOs obtained over time within focal MNEs helps them to understand their current roles and dynamics inside the MNE network better, as well as the external business context, to match their actions more effectively with the subsidiary's strategy (cf. Mäkelä et al., 2012). Similarly, as emerging markets face rapid and unexpected changes or deep uncertainties, business experience obtained by subsidiary CEOs in such environments is likely to have a positive effect on strategic agility. Because of the

[3] knowledge, skill, and ability.

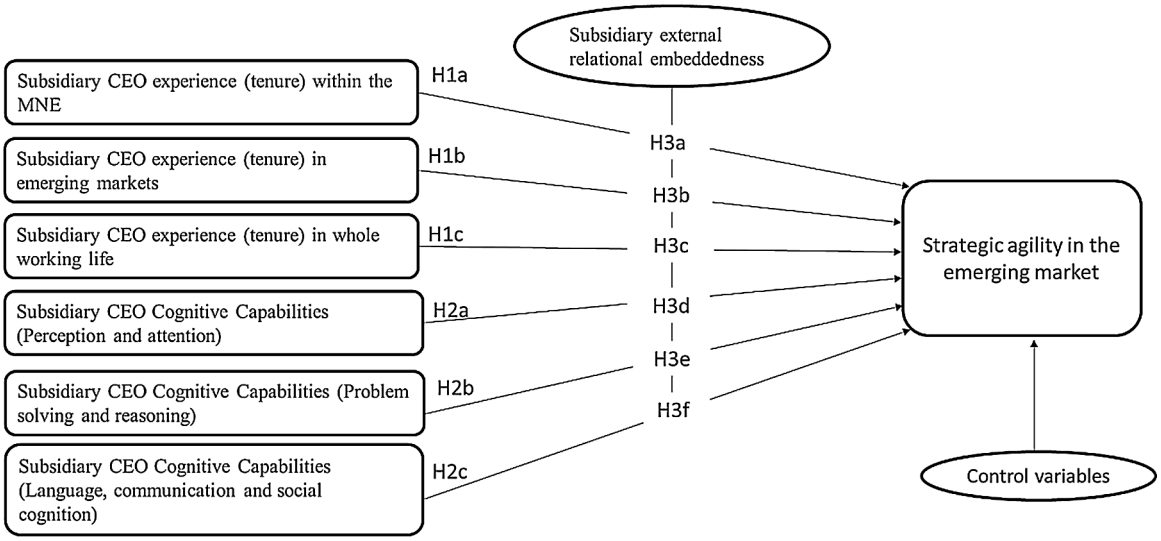

Fig. 1. The hypothesized model.

dynamic nature of emerging markets (Elg et al., 2017), it can be inferred that the experience of subsidiary CEOs accumulated within such environments embeds a dynamic component. This forms a strong foundation for dynamic capabilities necessary for fostering organizational-level agility (cf. Teece et al., 2016). Nevertheless, we do not suggest that experience translates directly into action; instead, we emphasize that experience provides a more informed agency on behalf of the subsidiary CEO. Such positive actions are likely to support additional learning for the key individual actors and those they work with, adding to the emergence of firm-level routines and, further, to the emergence of strategic agility in emerging markets. Relatedly, we argue that experience at the individual level (i.e., subsidiary CEO experience, operationalized as subsidiary CEO tenure in the MNE) facilitates firm-level strategic agility in emerging markets as both managerial decision rights and a substantial amount of heterogeneity exists at that level. Based on the above arguments, we hypothesize the following:

Hypothesis 1a: The longer the subsidiary CEO's experience within the MNE, the higher the level of strategic agility in emerging markets.

Hypothesis 1b: The longer the subsidiary CEO's experience in emerging markets, the higher the level of strategic agility in emerging markets.

Hypothesis 1c: The longer the subsidiary CEO's experience in his/her whole working life, the higher the level of strategic agility in emerging markets.

2.4.2. *Subsidiary CEO managerial cognitive capabilities*

Adner and Helfat (2003) underscored the vital role of microfoundations for organizational adaptation and change. They highlighted dynamic managerial capabilities as core microfoundations providing capacity to direct strategic change (Adner & Helfat, 2003), which are contingent on three core underpinnings, including managerial cognition (see Helfat & Martin, 2015 for a review on the three core underpinnings). Similarly, Teece (2007) employed the microfoundational view of dynamic capabilities to underscore the importance of managerial cognition for enterprise-level sensing and response to change. Several studies have highlighted the importance of managerial cognition and its impact on strategic change efforts—an important dimension of strategic agility (e.g. Helfat et al., 2007).

We built our hypothesized relationships regarding the role of subsidiary CEO cognitive capabilities on strategic agility in emerging markets by focusing on specific mental activities identified by Helfat and Peteraf (2015): perception, attention, problem solving and reasoning, language and communication, and social cognition. We next discuss how these mental activities, constituting the cognitive capabilities of subsidiary CEOs, influence the three meta-capabilities—strategic sensitivity, resource fluidity, and collective commitment—set forth by Doz and Kosonen (2008a,2008b); Doz & Kosonen, 2010, as constituents underpinning the development and evolution of strategic agility in emerging markets.

Because agility encompasses sensing and responding to change (Tallon et al., 2019), its strategic sensitivity component includes alertness and a discovery process (Tang et al., 2012), which is more likely to draw upon the perceptual and attentional cognitive capabilities of the subsidiary CEO to engage in sensing activities to grasp new opportunities (Helfat & Peteraf, 2015). Prior research has argued that the "essence of perception is the construction of useful and meaningful information about a particular environment" (Gazzaniga, Heatherton, & Halpern, 2010, p. 180), suggesting that subsidiary CEOs can combine such perceptual data from the emerging market environment with their prior knowledge, expectations, and beliefs to engage in reasonably informed sensing activities (Baron 2006) and favorably achieve strategic sensitivity. In addition, practice and training programs can enhance top executives' cognitive capabilities for attention (Rueda, Posner, & Rothbart, 2005), indicating a path-dependent nature of perception and attention among subsidiary CEOs, thus contributing to a source of heterogeneity in managerial cognitive capabilities and their consequential effects on sensing capabilities for strategic agility in emerging markets. Because perception and attention reinforce each other, we can infer that subsidiary CEOs with higher cognitive capabilities of perception and attention are more likely to have a higher strategic sensitivity for strategic agility in emerging markets.

Cognitive capabilities of subsidiary CEOs for *problem solving and reasoning* provide another foundation to achieve strategic agility in emerging markets, because these markets are more fluid in terms of institutional support (Elg et al., 2017), and thus require sound problem-solving and reasoning capabilities of subsidiary CEOs to seize emerging opportunities and deflate threats to business activities in such environments. Problem solving is "finding a way around an obstacle to reach a goal" where an obstacle refers to a problem (Gazzaniga et al., 2010). Reasoning denotes "evaluating information, arguments, and beliefs to draw a conclusion" or "using information to determine if a conclusion is valid or reasonable" (Gazzaniga et al., 2010, p. 342).

Under complex and uncertain situations, subsidiary CEOs are expected to employ their problem-solving and reasoning capabilities to make sound strategic investments, to commit to large, mostly irreversible, financial resources or efforts to develop new organizational

capabilities (Sirmon & Hitt, 2009). Because the cognitive capabilities of subsidiary CEOs involve both automatic and controlled mental processing, under conditions of high complexity and uncertainty, characterizing emerging markets, they are more likely to use heuristics, which are automatically invoked, in problem solving and reasoning, so as to achieve collective commitment. Nevertheless, subsidiary CEOs can use controlled mental processing to offset possible biases entailed in the use of heuristics for problem solving and reasoning. Business model designs—which constitute a crucial aspect of firm-level strategic agility in turbulent environments—call for subsidiary CEOs' problem-solving and reasoning capability to enable effective managerial responsiveness (in the form of collective commitment or leadership unity).

Lastly, language and communication and social cognition are vital cognitive capabilities of subsidiary CEOs to ensure reconfiguration and redeployment of resources, such as people, in rapidly changing situations (cf. Doz & Kosonen, 2010). Scholars describe language as "any system for representing and communicating ideas" (Kolb & Whishaw, 2009, p. 526). The strategic agility literature underscores the importance of resource fluidity to undertake activities of reconfiguration and redeployment of resources, particularly *people* (Doz & Kosonen, 2010). With emphasis placed on the human side of resource fluidity in the agility literature, cognitive capabilities of subsidiary CEOs in the use of language and communication and social cognition are crucial for successfully sensing and responding to rapid changes in emerging markets (Tenzer et al., 2021). This reflects Helfat et al. (2007) who underscored the role of top executives in 'asset orchestration' for organization-wide coordination of adaptive changes and in overcoming any resistance to change, including rigid cognitive frames inside the organization (Kaplan & Henderson, 2005). Successful reconfiguration and redeployment of resources in rapidly changing environments (i.e., resource fluidity) depends on the ability of subsidiary CEOs to persuade others in their organization to take on new initiatives. Furthermore, resource reconfiguration and redeployment require social skills of subsidiary CEOs to induce cooperation among organizational members (Teece & Pisano, 1994), allow for rapid response to changing market conditions, and stay ahead of competition (Doz & Kosonen, 2010; Junni et al., 2015). Top executives' social cognitive capabilities can enable resource reconfiguration by fostering cooperation and overcoming resistance to change among organizational members (Halfat & Peteraf, 2015). However, heterogeneity exists mainly in subsidiary CEOs' social cognitive capability and language and communication, thus suggesting heterogeneity in their capacity for resource reconfiguration and redeployment in rapidly changing environments. We therefore argue that subsidiary CEOs with higher capabilities in language and communication and in social cognition undertake superior resource reconfiguration and redeployment under rapidly changing conditions (i.e., resource fluidity) for a higher level of strategic agility in emerging markets. Based on the above arguments, we hypothesize the following:

Hypothesis 2a: The higher the perception and attention of the subsidiary CEO, the higher the level of strategic agility in emerging markets.

Hypothesis 2b: The higher the problem-solving and reasoning capacity of the subsidiary CEO, the higher the level of strategic agility in emerging markets.

Hypothesis 2c: The higher the language, communication, and social cognition of subsidiary CEO, the higher the level of strategic agility in emerging markets.

2.4.3. *Moderating role of subsidiary external relational embeddedness*

Anderson et al. (2007) highlighted a perpetual bargaining process that symbolizes relationships among subsidiaries and HQs, and how HQs leverage the knowledge of local business networks of subsidiaries to balance the influence of their strong subsidiaries. As the extant literature suggests the relevance of the MNE subsidiary's local network embeddedness in knowledge creation processes, Andersson et al. (2005) found how MNEs' emphasis on knowledge development as a performance evaluation criterion impacts subsidiaries' local embeddedness in the host-country context, which in turn positively predicts their knowledge creation. Therefore, the greater the emphasis of the MNE's headquarters on subsidiaries' knowledge development activities, the higher the level of local network embeddedness that subsidiaries will engage in (Andersson et al., 2005), which enhances subsidiaries' strategic agility ability to adapt constantly to changing and uncertain environments (e.g., Lewis et al., 2014) in emerging markets. We argue that the subsidiary's relational embeddedness (Moran, 2005) with external partners is a necessary condition to overcome the liability of outsidership (i.e., a major source of uncertainty) so as "to be able to capitalize on opportunities and dodge threats with speed and assurance" (Kotter, 2012, p. 46) in emerging markets (Vahlne et al., 2012). Furthermore, the vital role of the subsidiaries' relationships with the external local networks helps them procure a seamless high volume of strategic information, knowledge, and heterogeneous resources from amongst the local network actors, which in turn facilitates the advent of local-level innovations in the subsidiaries, as highlighted in the Chinese context (Williams & Du, 2014).

To operate in emerging markets, subsidiaries should be open to adaptation (e.g., Isaac et al., 2019), which is a necessary condition that facilitates dealings with the heterogeneous strategic resources available in local relational networks (Rugman, Verbeke, & Yuan, 2011). Isaac et al. (2019) found that subsidiaries developing and maintaining external relational embeddedness based on trust and adaptation foster local innovation in emerging markets. The external local connection and embeddedness of the subsidiaries facilitates access to huge sets of market competitive information and knowledge; and strategic resources with the partners of external local networks remain relevant and competitive in the markets (Andersson et al., 2002; Ferraris, 2014). Thus, the external relational embeddedness in the host-country context represents a vital strategic asset for enhancing competence and performance in the MNEs' subsidiaries (Andersson et al., 2002) as it overcomes bigger difficulties in the collection, development, and usage of novel information, knowledge, and resources (Cantwell et al., 2010) made accessible in the context of emerging markets.

The abovementioned literature fails to address how the subsidiaries' external relational embeddedness acts on individual-level microfoundations (i.e., the experience and cognitive capabilities) of the subsidiary CEOs to influence the strategic agility of subsidiaries in the context of emerging markets. We previously argued how subsidiary CEOs' experience and managerial cognitive capabilities can foster subsidiaries' strategic agility in these emerging markets. We further advance our arguments that such direct positive relationships are contingent on the specific subsidiary's relational embeddedness in the emerging markets context. We emphasize the role of *subsidiary external relational embeddedness* as a vital moderating variable, critical for strengthening the aforementioned relationship, and propose the following hypotheses:

Hypotheses 3a-f: Subsidiary external relational embeddedness has a positive moderating effect on the direct positive relationship of the subsidiary CEO's (a) experience in working within the MNE and strategic agility; (b) experience in the emerging markets and strategic agility; (c) experience in his/her whole working life and strategic agility; (d) perceptual and attentional capabilities and strategic agility; (e) problem solving and reasoning capabilities and strategic agility; and (f) language, communication, and social cognition and strategic agility in the emerging markets.

3. Method

3.1. *Mixed method analysis*

Mixed methods should be used for theoretical improvements in microfoundation research because empirical research into microfoundations faces unique challenges, as processes take place at different

levels of analysis and these multilevel processes must be considered simultaneously (Aguinis & Molina-Azorín, 2015). Mixed-method designs include at least one quantitative method (designed to examine numbers) and one qualitative method (designed to examine text), explaining how the use of quantitative and qualitative approaches, combined together, provides a better understanding of complex multilevel phenomena than either approach alone (Greene et al., 1989). This method is useful herein to enhance the a) complementarity (elaboration or clarification of the results from one method with the findings from the other method); b) development (when the researcher uses the results from one method to help develop the use of the other method), and; c) expansion (seeking to extend the breadth and range of inquiry using different methods for different inquiry components).

Although calls for mixed methods in leading IB journals are not new (Hurmerinta-Peltomäki & Nummela, 2006; Michailova & Mustaffa, 2012), few papers have used them in the context of microfoundations and MNE subsidiaries, leaving space to increase the validity of the results and create new knowledge through alternative designs (e.g., Trąpczyński & Banalieva, 2016; Foss & Pedersen, 2019). The chosen method is a quantitative-qualitative approach. Quantitative analysis is dominant and qualitative interviews were used as support or integration. A qualitative analysis to the specific context of strategic agility is appropriate, given the nature of the construct and the mainstream studies on the phenomenon, which are usually qualitative or conceptual (e.g., Doz & Kosonen, 2008a).

In line with Ivankova et al. (2006), conducting interviews after the survey (e.g., using a mixed method sequential explanatory approach) allowed us to a) investigate the mechanisms that underline the relationships identified in the quantitative study and b) increase the richness of the justifications about the quantified relationships, while excluding some alternative explanations (Kaplan, 2016; Lorenz et al., 2018). It was not crucial herein to develop interviews first and then the surveys because of the availability of literature on our key themes, from which we could identify the hypothesis in this specific international context (Lorenz et al., 2018). Moreover, we give a complementary view of the same observed phenomenon (HQ counterparts vs. subsidiary CEOs) to validate results and develop new findings. Our research thus provides a solid background and motivation for a mixed method (Venkatesh et al., 2013), regarding the appropriateness of mixed-methods research (when to conduct mixed-methods research), meta-inferences (how to discover and develop integrative findings), and validation (how to assess the quality of meta-inferences).

3.2. Context of the study

As IB research needs to highlight its specific role, we present the context of analysis in our study that is able to influence the theorizing and empirical results (Delios, 2017). In recent years, India and Italy have shared significant bilateral relationships (Nair, 2013), and Italy is a key European player for some large corporations in traditional industries such as fashion, food, and furniture products, as well as high value-added machinery, pharmaceuticals, and other hi-tech sectors.[4] Since 2014, India has been promoted as an investment destination for manufacturing, and Italian MNEs have had direct access to India's domestic market and opportunities to export to neighboring Asian countries. The FDI inflows from Italy to India include the automobile industry (54%), services (6%), and railways (4%). While specific to Italian HQ–Indian subsidiaries, the context is highly generalizable because we can currently identify 600 Italian companies operating in India, and 1,500 German companies, 750 French companies, and other similar MNEs coming from European developed economies (Amadeo, 2020). Our analysis may be extended to developed economies' MNEs in emerging markets, acknowledging that each type of economy has political and institutional differences, but these show a more significant impact on the organizational level (subsidiary) than individual level (microfoundations) outcomes. The Indian context, like similar others, is complex and characterized by dynamic, changing, and uncertain environments (Ahammad et al., 2021; Lewis et al., 2014; Bennett & Lemoine, 2014; Cascio & Boudreau, 2016), as well as competitive turbulence, tumultuous market positions, and high velocity, which make it suitable (and comparable with other similar contexts) for analyzing agility (Lengnick-Hall & Beck, 2016).

3.3. Data collection and measures - quantitative analysis

This research is part of a large project that investigates the key success factors of Italian MNEs in India. We use novel primary data from Indian subsidiaries of Italian MNEs that are included in the India Brand Equity Foundation (IBEF).[5] The IBEF is a trust established by the Department of Commerce in India and works closely with different stakeholders across the government and industry. Within this relevant list of Italian MNEs operating in India, we contacted the 50 largest MNEs (based on total revenues in India) and received positive acceptance from 28. Italian HQs assisted us in the selection of subsidiaries in India (253) that were representative of the HQ's business activities to improve the chance of reaching broad-spectrum conclusions (Perri et al., 2013). The IBEF assisted us with sending the survey (email) to the 253 subsidiaries' CEOs in India, and we received 104 complete questionnaires by email (response rate 41%). The questionnaire instrument was settled using established prior measurements, concepts, and scales and by integrating feedback from several scholars who saw some questions as being vague, ambiguous, or sources of potential bias. The questionnaire was pilot tested on several experienced managers of MNEs who were not approached in the actual study (Perri et al., 2013). As previously highlighted (e.g. Gölgeci et al., 2019), subsidiary CEOs are the most suitable persons to address the critical questions that are useful for our specific context of analysis.

For individual variables, we focused on different conditions of individual action (tenure and managerial cognitive capabilities) that could act as microfoundations for organizational-level strategic agility capabilities, as well as on a key organizational variable—subsidiary external relational embeddedness—as the moderator. Measures used for the quantitative analysis appear in Table 4. The data (except from the years of experience used for tenures) was collected and rated on a seven-point Likert scale (1 = poor to 7 = excellent). The two sets of independent variables (microfoundations) are supported by prior literature. First, the tenure of CEOs used as experience acts generally as a conduit of learning and is associated with capability development (Zollo & Winter, 2002; Mäkelä et al., 2012), which is critical for strategic agility. Second, we draw on the concept developed by Helfat and Peteraf (2015) that aimed at explicitly linking managerial capabilities and mental activities that may influence the development of dynamic capabilities. Indeed, Gavetti (2005) drew on cognitive psychology and called for more attention to managerial cognition as a possible microfoundation of capability thinking. Items for each variable have been included along with key literature (Table 5). Cronbach's alpha values were all between 0.7 and 0.8, making our measures reliable.

Data collection using interviews - qualitative analysis

To gather new information on the microfoundations of strategic agility, we conducted 28 interviews with MNE HQ managers via video-based technology (Skype, as in Lorenz et al., 2018), one for each MNE working closely with surveyed subsidiaries' CEOs in India. The reference

[4] Giustarini, F. (2018), Italy reaches out for Indian investments, India Inc, available at: https://indiaincgroup. com/italy-reaches-out-for-indian-investments/.

[5] https://www.ibef.org/.

person was indicated by subsidiary CEOs. In similar phenomena (i.e., dual embeddedness of subsidiaries), looking at the same concept/construct from the viewpoints of both subsidiary CEOs and internal MNE counterparts (e.g., HQs) improves key knowledge on the topic (e.g., Bresciani & Ferraris, 2016).

During the January–June 2019 period, we carried out unstructured interviews (e.g. Zhang & Wildemuth, 2009). In February and September 2020, we carried out further semi-structured interviews with the same HQ managers to enrich our analysis and control for time differences, thus improving the reliability of our results (Birkinshaw et al., 2011). The format of the semi-structured interviews was built around a set of questions based on the key items of our dependent and independent variables (see Table 4 and 5) and, by dedicating time for open-ended considerations related to the first set of questions (Sun et al., 2010).

Interviews were taped and transcribed, and an open and axial coding process was adopted (Miles & Huberman, 1994). The first author conducted the open coding step, producing a complete list of descriptive codes from the transcribed interviews (10 single-spaced pages with over 4,200 words combined). These initial codes were based on the respondent's standpoint on strategic agility in emerging markets. Next, to increase the significance, these initial concepts were condensed by sorting codes into more analytical categories of microfoundations of strategic agility in emerging markets, which served as underlying themes for the three authors. During the conversation, participants were asked specific questions regarding the skills, abilities, and attitudes necessary to be "agile" in an emerging market, as well as their behaviors related to recognizing opportunities and exploiting them (Lorenz et al., 2018).

This iterative work also explored similarities and differences among the individual factors and strategic agility outcomes, as well as debating and addressing conflicting patterns. Interviews in February 2020 and September 2020[6] permitted us to complement, triangulate, and enrich our findings (e.g. Trąpczyński & Banalieva, 2016). This helped us to draw out complementary longitudinal information on the relevant microfoundational aspects that lead to strategic agility, and to carry out the post hoc analysis in the quantitative portion of the study, thus limiting potential CM biases (see section 4.3). This allowed us to perform an overall qualitative evaluation of all three concepts that form strategic agility (strategic sensitivity, collective commitment, and resource fluidity).

4. Results

4.1. Descriptive statistics

Descriptive statistics of the foreign subsidiaries show that the average age of subsidiaries is 24, whereas the subsidiary relative size compared to the parent MNE is 0.13, meaning that they are quite large and representative (see Table 1).

The companies operate in the following industries: management consulting, financial services, tractors, aviation, automotive, motorcycle, equipment, apparel, accessories, retail, optics, shipping, ceramics, and confectionery.

Table 2 shows the correlations among the main variables. With few values above 0.7, we calculated the variance inflation factors (VIFs) to assess for multicollinearity. Across all our models, the average VIF score for all independent variables was 2.22, ranging from 1.49 to 2.71, which is well below the common criterion of 5.00 (O'Brien, 2007), which confirms the stability of our parameter estimates.

[6] A few CEOs changed after the first contact with the company, but this did not influence our qualitative portion of the research because we aimed to enrich our knowledge on the topic from different perspectives.

Table 1
Descriptive statistics of key variables employed in the study.

	Min	Max	Mean	St. deviat.
Tenure_1	1,00	10,00	4,8365	2,59989
Tenure_2	1,00	11,00	4,1250	2,82735
Tenure_3	1,00	29,00	11,4327	6,71437
MC_1	1,33	6,00	3,5288	1,68924
MC_2	1,66	6,00	3,8077	1,90083
MC_3	1,00	6,33	3,7500	1,68805
SERE	1,00	5,00	4,1058	1,99474
SS	1,00	6,67	4,1250	1,27385
CC	1,00	6,00	3,4744	1,35177
RF	1,00	5,33	3,9487	1,38721

4.2. Quantitative results

We analyzed the data with an ordinary least square (OLS) using three models. The quantitative results from the OLS regression model are highlighted in Table 3. Models 1 a,b,c represent the effect of the independent and the control variables on each dependent variable (reflective measurements of strategic agility). In models 2 a,b,c the moderator is introduced while in models 3 a,b,c the interaction terms are also included.

Model 1a shows all the effects of both individual-level microfoundations on the first reflective measurement (*Strategic Sensitivity*) and the results highlight a positive effect of experience (tenure) in emerging markets (standardized coefficient of 0.199) and experience (tenure) in whole working life (standardized coefficient of 0.209). The results also highlight a positive effect of: a) perception and attention of subsidiary CEO (standardized coefficient of 0.350); b) problem solving and reasoning (standardized coefficient of 0.174) and, c) language, communication and social cognition (standardized coefficient of 0.376). In Model 1b, results show positive effects of all microfoundation variables on the second reflective measurement (*Collective Commitment*). However, in this model, we did not find any effect of perception and attention of subsidiary CEO. In Model 1c, experience (tenure) in emerging markets (standardized coefficient of 0.313) and two out of three managerial cognitive capabilities (we did not find significant effect for language, communication and social cognition) show positive and significant effects on the third reflective measurement (*Resource Fluidity*).

Overall, the results show that subsidiary CEO overall experience (within the MNE, in emerging markets as well as in their whole working life) positively affects the achievement of strategic agility in an emerging host country context, thus confirming H 1 a,b,c, with different effects on the three reflective measurements of strategic agility. Also, we found that subsidiary CEO managerial cognitive capabilities affect the achievement of strategic agility positively and differently in an emerging host country context, thus confirming H 2 a,b,c.

After having tested the direct relationships, in model 2 (a,b,c) we introduced the moderator (subsidiary external relational embeddedness) and found it to have a positive and significant effect on 2 out of the 3 reflective measures of strategic agility (models 2 a,c), indicating that it plays a significant role in strategic agility. In model 3, we introduced the interaction terms with all our independent variables, finding various interesting results. First, the interaction between subsidiary external relational embeddedness and: a) experience (tenure) within the MNE and, b) experience (tenure) in emerging markets showed positive and significant effects on 2 out of the 3 reflective measures of strategic agility (Strategic Sensitivity and Resource Fluidity). Second, and counterintuitively, the interaction term with experience (tenure) in whole working life of CEOs was negative and significant if we look at Resource Fluidity (Model 3c). Third, the interaction term with language, communication and social cognition on Strategic Sensitivity showed a positive and significant effect, while the one with perception and attention of subsidiary CEO was negative (Model 3a). Differently, the interaction term with problem solving and reasoning showed positive and significant effects

Table 2
Correlations among all variables.

	1	2	3	4	5	6	7	8	9	10
1. SS	1	,421**	,631**	0,131	0,189	,352**	0,530**	0,083	,442**	**,711****
2. CC		1	,323**	,683**	-0,050	,540**	0,128	,243*	-0,008	0,076
3. RF			1	0,073	0,276**	,228*	,501**	,233*	,424**	,599**
4. Tenure_1				1	-,522**	,398**	-0,004	,229*	-0,186	-0,115
5. Tenure_2					1	0,000	0,143	-0,006	0,092	,230*
6. Tenure_3						1	0,173	-0,108	0,093	,202*
7. MC_1							1	-0,080	0,289**	,652**
8. MC_2								1	-0,182	-0,082
9. MC_3									1	,616**
10. SERE										1

Note: ** significant at 0.01; * significant at 0.05

on Collective Commitment (Model 3b, standardized coefficient of 0.300).

Thus, our results show that the moderating effects of an organizational-level variable (subsidiary external relational embeddedness) may amplify the effect of the micro-level antecedents of strategic agility, mainly with respect to Strategic Sensitivity and Resource Fluidity, thus confirming H 3a,b. However, with regard to the latter, the combination of a high level of subsidiary CEO experience (tenure) over their whole working life and subsidiary external relational embeddedness is conducive to negative Resource Fluidity outcomes, thus partially confirming H 3c. This may be due to a double-edge influence of tenure overall (not in emerging markets). It might be a stand-alone condition, and it might receive some negative interference when external embeddedness appears. The latter hampers the positive outcome of tenure and negatively influences the capability to react rapidly in turbulent environments.

Moreover, we found that subsidiary CEOs' problem solving and reasoning in the case of a subsidiary with high levels of external embeddedness may lead to higher Collective Commitment and Resource Fluidity, and the interplay between subsidiaries' external embeddedness and CEOs' language, communication and social cognition capabilities of the CEO may lead to higher Strategic Sensitivity, even if our results do suggest that perception and attention of subsidiary CEO may decrease it. Thus, we partially support H 3 arguing that the moderator effects of an organizational-level variable (subsidiary external relational embeddedness) may amplify the effect of the micro-level antecedents on strategic agility under some specific circumstances. This may be due particularly to the level of semiotic fit that exists between subsidiary CEOs and host country environment actors. For example, from the viewpoint of semiotics, the study of language generates meaning in a situated context, such as behaviors, practices and symbols. This can be vital to rapid sensing and responding to strategy-altering changes in the subsidiaries. In regard, the role of language in the transnational transfer of MNEs assets may be highly impacted by the social semiotic context, not only on the fitness of strategy but also on foreignness.

Among the control variables, only the entry choice and industry dummy were found significant in some models, meaning that: a) a wholly-owned subsidiary as entry mode affects the achievement of strategic agility positively; b) manufacturing subsidiaries have higher possibilities of achieving strategic agility.

4.3. Ex ante and ex post precautions

We compared early (Q1-2018) and late respondents (Q4-2018) to investigate non-response bias (Armstrong and Overton (1977). Responses between late respondents (33%) and early respondents (67%) were virtually identical, limiting any such biases.

To address potential common-method bias problems in data obtained from a single respondent, i.e. MNE subsidiary CEOs, we took various ex-ante and ex-post precautions (Podsakoff et al., 2003; Chang et al., 2010, specifically on IB research; Guide Jr and Ketokivi, 2015). We first adopted complex constructs based on numerous items and our models included interaction effects, reducing the possibility of common-method variance (CMV) (Siemsen et al., 2009). Our conceptual framework was considerably complex, and respondents were unlikely to be guided within it (Podsakoff et al., 2003). In fact, this is less likely the more complicated the model (Chang et al., 2010); additionally, all questions were mixed and spread across the questionnaire (Bresciani & Ferraris, 2016), and we employed a Harman's One-factor test (Harman, 1967). We found five factors with an eigenvalue greater than 1 explaining a total variance of 67%, which limited the problems in our dataset. Further, when we designed and administered the questionnaire, we explicitly chose to mix the items of each variable with the aim of not allowing the respondents to understand the underlining construct and answer in a socially desirable manner (Podsakoff et al., 2003).

We also ran a post hoc analysis. We estimated the paths between all the individual-level antecedents and the three dependent variables of strategic agility. To eliminate potential problems of CMV, we collected new quantitative data from a different source (e.g. HQ managers) on strategic agility with all HQ managers interviewed (contacted for the qualitative portion of the study). The analysis confirmed almost all the quantitative findings of Models 1, 3, and 5, in which the direct effects of experience and managerial cognitive capabilities on strategic agility were positive and significant. The most interesting results (and most different from the main analysis) were with regard to "Experience (tenure) in whole working life" and "Language, communication, and social cognition." In fact, we found that subsidiary CEO tenure in their whole working life was positively associated (β= 0.186, t= 1.814, p<10%) with resource fluidity and not with strategic sensitivity (as in Table 3). Regarding the second, we found that subsidiary CEO language, communication, and social cognition capabilities were positively associated (β= 0.259, t= 2.729, p<1%) with resource fluidity and not with strategic sensitivity (as in Table 3). In our view, this is given by the fact that subsidiary CEOs tend to have more biases than HQ managers when they have to assess their capability in taking more strategic actions for the management of subsidiaries (strategic sensitivity), rather than when they answer specific questions regarding how to manage local resources, such as people and capital (resource fluidity).

4.4. Qualitative results

After coding and analyzing the interviews, we summarized the specific results for each reflective measure, and performed an overall evaluation of the strategic agility concept in emerging markets, from the perspective of HQ managers. Qualitative results confirmed some of the quantitative results by adding more explanations regarding the underlying mechanisms, while others revealed some intriguing new evidence and implications, giving us a much finer-grained picture of the strategic agility phenomenon in the emerging market analysis context.

To assess the credibility of inferences obtained from the quantitative approach (Vankatesh et al., 2013), the qualitative findings are organized into themes. We first unveil the role of tenure and cognitive capabilities on the different dimensions of strategic agility. Second, we reveal the combined influence of these factors. Third, we analyze the specific role

Table 3
Results of the study.

	DEPENDENT VARIABLES - Reflective measurements of strategic agility in emerging markets																							
	Model 1a			Model 2a			Model 3a			Model 1b			Model 2b			Model 3b			Model 1c			Model 2c			Model 3c		
	Strategic Sensitivity (SS)			Strategic Sensitivity (SS)			Strategic Sensitivity (SS)			Collective Commitment (CC)			Collective Commitment (CC)			Collective Commitment (CC)			Resource Fluidity (RF)			Resource Fluidity (RF)			Resource Fluidity (RF)		
	Beta	S. E.	P-value	Beta	S. E.	P-value	Beta	S. E.	P-value	Beta	S. E.	P-value	Beta	S. E.	P-value	Beta	S. E.	P-value	Beta	S. E.	P-value	Beta	S. E.	P-value	Beta	S. E.	P-value
INDEP. VARIABLES - EXPERIENCE																											
Experience (tenure) within the MNE	.174	.05	.090	.184	.04	.044	.167	.04	.081	.724	.04	.000	.723	.04	.000	.712	.04	.000	.200	.05	.054	.205	.05	.044	.188	.04	.057
Experience (tenure) in emerging markets	.199	.04	.027	.138	.03	.085	.222	.03	.037	.337	.03	.000	.344	.03	.000	.316	.03	.000	.313	.04	.001	.283	.04	.002	.279	.04	.002
Experience (tenure) in whole working life	.209	.01	.015	.157	.01	.040	.181	.01	.026	.257	.01	.000	.264	.01	.000	.316	.01	.000	.100	.01	.242	.075	.01	.376	.070	.01	.395
INDEP. VARIABLES – MANAGERIAL COGNITIVE CAPABILITIES																											
Perception and attention of subsidiary CEO	.350	.05	.000	.084	.06	.053	.181	.07	.083	-.017	.04	.776	.014	.06	.848	-.004	.07	.753	.347	.05	.000	.216	.06	.024	.171	.08	.151
Problem solving and reasoning	.174	.05	.025	.148	.04	.031	.128	.04	.035	.155	.04	.011	.158	.04	.010	.248	.07	.063	.297	.05	.000	.284	.05	.000	.229	.05	.002
Language, communication and social cognition	.376	.05	.000	.130	.06	.124	.113	.06	.218	.137	.04	.026	.166	.05	.027	.093	.07	.490	.371	.05	.108	.250	.05	.109	.205	.07	.132
MODERATOR	-	-	-	.543	.06	.000	.455	.06	.000	-	-	-	-.064	.06	.494	-.077	.06	.431	-	-	-	.266	.07	.015	.264	.08	.017
Subsidiary external relational embeddedness																											
MODERATOR EFFECTS (Subsidiary external relational embeddedness)																											
Experience (tenure) within the MNE x Subsidiary external relational embeddedness	-	-	-	-	-	-	.213	.05	.046	-	-	-	-	-	-	-.071	.09	.420	-	-	-	-	-	-	.462	.09	.004
Experience (tenure) in emerging markets x Subsidiary external relational embeddedness	-	-	-	-	-	-	.138	.04	.083	-	-	-	-	-	-	.021	.04	.557	-	-	-	-	-	-	.237	.08	.009
Experience (tenure) in whole working life x Subsidiary external relational embeddedness	-	-	-	-	-	-	-.061	.08	.362	-	-	-	-	-	-	-.067	.08	.313	-	-	-	-	-	-	-.210	.08	.015
Perception and attention of subsidiary CEO x Subsidiary external relational embeddedness	-	-	-	-	-	-	-.195	.05	.006	-	-	-	-	-	-	-.293	.02	.105	-	-	-	-	-	-	.210	.08	.764
Problem solving and reasoning x Subsidiary external relational embeddedness	-	-	-	-	-	-	.003	.09	.983	-	-	-	-	-	-	.300	.01	.007	-	-	-	-	-	-	.130	.07	.097
Language, communication and social cognition x Subsidiary external relational embeddedness	-	-	-	-	-	-	.216	.05	.004	-	-	-	-	-	-	.123	.02	.389	-	-	-	-	-	-	-.027	.08	.706
CONTROL VARIABLES																											
Subsidiary's size	-.034	.33	.249	-.046	.31	.317	-.067	.35	.322	.060	.36	.282	.058	.34	.303	.032	.38	.579	.035	.37	.628	.045	.37	.530	.101	.36	.150
Subsidiary's age	-.015	.01	.918	-.009	.01	.516	.030	.01	.654	.035	.01	.535	.031	.01	.586	.034	.01	.550	-.046	.01	.525	-.029	.01	.681	-.007	.04	.918
Industry (0: manufacturing, 1: services)	-.009	.14	.260	-.023	.21	.157	-.123	.21	.097	-.176	.19	.007	-.174	.19	.007	-.158	.19	.014	.043	.18	.604	.037	.19	.640	.018	.18	.814
Entry Mode (0:JV, 1:WOS)	.122	.13	.083	.115	.19	.092	.095	.18	0.624	.134	.19	.033	.135	.19	.032	.082	.21	0.231	.130	.19	.084	.126	.19	.094	.161	.18	.043
Model R squared	0.39			0.46			0.51			0.49			0.50			0.53			0.49			0.51			0.56		

of external relational embeddedness. Finally, we uncover the combination of all dimensions as drivers of strategic agility.

First, we observed that **CEO tenure in emerging markets and in their whole working life**, as well as their problem solving and reasoning capacities, are key individual-level factors that positively influence the achievement of both ***strategic sensitivity and collective commitment*** at the subsidiary organizational level in emerging markets as. Some quotes from the HQ managers are as follows: "Our company is growing a lot in India thanks to the experience and ability of our subsidiary CEO. …..He is a guy that joined our companies only a few years ago, but he worked for a competitor for many years (19) in the Indian market". Therefore, "Our subsidiary manager knows very well which are the key customers and key competitors (and their business behavior) and he is able to anticipate trends and changes in customer demand". Another manager suggested the following: "We entered this market 5 years ago and chose a manager with experience in emerging markets. … She worked for many years (more than 15) in different companies in Asia, i.e. in Malaysia, South Korea, Taiwan, and Thailand. She knows how to solve typical problems that arise in Asian work contexts and she helped the company to avoid cultural clash when we have communicated quick and relevant decisions [related to digital transformation] in terms of strategic changes as well as reallocation of resources.".

Two other managers emphasized that **experience in other markets** or MNEs was also valuable if related to development of scenario planning and real options. This helped them significantly in making fast strategic decisions with the consensus of both top managers at HQ and the board of directors of the subsidiary. Moreover, "He is very good at using all available data to identify coherent and multiple growth patterns". Most respondents explained that their subsidiary managers in India had a tendency to go beyond applying known rules, a winning approach in emerging markets. "After three months from his engagement (and many analyses), he [our subsidiary manager] smartly proposed that we change strategically through a combination of outsourcing strategy and flexible contracts", showing how the subsidiary became more agile in the emerging market.

Another stated that "Our subsidiary manager is a **problem solver** who is able to guide the team achieving strong consensus in host-country employees (both local and expatriates), making fast strategic decisions… His expertise in the market as well as his seniority and capacities make him the perfect guy to lead our middle managers and employees." Some other managers explicitly referred to tenure within MNE as a key factor in achieving high consensus to make strategic decisions. "He knows the Indian language very well because he lived there for many years (more than 10) and he loves Indian culture and lifestyle." Other managers confirmed that language (and culture) is a critical factor in avoiding problems related to politics and fast decision-making. "We need smart guys there, and the subsidiary CEO is critical in guiding all the workforce … He has to be open-minded and ready to innovate making sound strategic investments. We chose a manager that showed us the capability to underpin business model innovation in another foreign market." **Problem solving and reasoning** are likely to underpin business model design and strategic thinking of alternative options for investments. These cognitive capabilities were also critical in the allocation and fast re-allocation of tangible and intangible resources (***resource fluidity***), and the experience of subsidiary CEOs in emerging markets. This "influences the capacity of our manager to know which resources are more needed in each specific case or change in external demands."

Additionally, the ***attention and perception*** of the subsidiary CEOs affect all three dimensions of strategic agility. Some representative quotes are "the lack of predictability in the emerging markets push us to choose an entrepreneurial manager to face deep uncertainty" and "this is crucial to quickly redeploy expertise and leverage knowledge in the subsidiary orchestrating and coordinating internal and external resources." This also leads to learning opportunities mixed with experience. "Her level of perception in the changes of this market is much higher than ours, she lived there for many years, and she worked with our employees, leading them across difficult business situations." One argued that "I need a man there [in the emerging market] that is able to understand how they [local people] work and how the market will change there [India]". These changes are not easy to understand, but what it is vital is "to integrate all these pieces together". "He is flexible and has to guide the employees through these changes and new uncertainties and problems."

Second, as stated by one participant, "we have to be agile there (India) and we need to embed our key people (e.g. subsidiary CEOs) in the foreign country." However, **being agile in response to the external changes in an emerging market is not sufficient**, and "they should be able to perform many mental activities, mainly related to unknown tasks and new problems". Furthermore, experience in a particular domain of application may be even more important as it participates in developing managerial cognitive capabilities. As one respondent explained, "this kind of ability develops through a lot through practice and time, improving through gaining experience both in individual and organizational life." In addition, mental activities are associated with and interrelated, although they can be separable.

Third, results confirmed the **positive effect of "subsidiary external relational embeddedness" on both strategic sensitivity and resource fluidity**. In fact, different managers argued that it was crucial for managers chosen for Indian subsidiaries to possess "cognitive shared paradigms, mental codes of conduct, and knowledge and use of similar words" and relational strategies in the local context. This is fundamental both to sense external market changes (as mentioned by most interviewees) and to rapidly achieve consensus among internal and external employees and key local suppliers to structure a flexible organization and react quickly and strategically (also mentioned in some interviews). Finally, ***subsidiaries' external relational embeddedness*** **with external counterparts, combined with subsidiary CEO experience and managerial cognitive capabilities, is important for the achievement of strategic sensitivity**. One respondent highlighted that "our subsidiary manager knows the customers very well and she has developed connections within the local institutions and other relevant stakeholders since 2004. This helped us in having privileged knowledge [compared to our competitors] and being successful in some critical circumstances." Additionally, "…It is important that our Indian subsidiaries develop not only quality relationships with all the key stakeholders, but also a strong reputation and position (built in many years) in the local network. This has been achieved also through the excellent reputation and experience of our CEO". This is mainly useful for sensing the external markets. Another respondent argue: "Sometimes experience and capabilities of our CEOs is not enough. We have to draw on new knowledge from our key stakeholders in India if we want to be agile. This helped a lot our subsidiary's top management team in taking fast strategic decisions with regard to digital transformation and, consequently to allocate effectively our capital resources". Overall, given the difficulties in being agile, we show how important it is for subsidiary managers to have a mix of microfoundations, including previous experience, managerial cognitive capabilities, and some knowledge accessed through external relations (e.g. thanks to the firm's embeddedness).

5. Discussion, Implications, and Future Research

5.1. Discussion

The objective of this study was to empirically investigate two individual-level *conditions of action* (Coleman, 1990) as possible antecedents of strategic agility within MNE subsidiaries in emerging markets: subsidiary CEO experience and cognitive capabilities. We argued that the CEOs of the Indian subsidiaries are key players in this environment, as both managerial decision rights and most heterogeneity in organizational outcomes reside with them. Moreover, their conditions of action can be broken down into those relating to knowledge, skill, ability, and motivation (consistent with Argote et al., 2003). We thus

Table 4
Measurement and Coding*.

Independent Variables - Individual level (Microfoundations)		
Tenure of subsidiary CEOs	Within the MNE	Tenure_1
	In emerging markets	Tenure_2
	In their whole working life	Tenure_3
Subsidiary CEO managerial cognitive capabilities	Perception and attention	MCC_1 MCC_2
	Problem solving and reasoning	MCC_3
	Language, communication and social cognition	
Moderator Variable – SERE		
Subsidiary external relational embeddedness	Long-term orientation and stability	SERE_1
	Level of interdependence	SERE_2
	Level of mutual trust	SERE_3
Dependent Variable – Strategic agility		
Strategic sensitivity	We are very sensitive to external changes in the host market (regarding customers, competitors, technologies, etc.) and integrate these into strategic planning of our company	SS1
		SS2
	We utilize different mechanisms to become aware of strategic developments early Requirements for strategic adaptations are communicated fast and comprehensively through the organization	SS3
Collective commitment	Our top management team can make bold and rapid strategic decisions	CC1
	Our management board collaborates for strategic decisions	CC2
	Strategic questions are collectively solved by our management without being bogged down in top-level 'win-lose' politics	CC3
Resource fluidity	We can reallocate and utilize capital resources fluidly	RF1
	Our people and their competencies are highly mobile within our organization	RF2
	Our organizational structure allows for flexible redeployment of our resources	RF3
Control Variables		
Industry type	Manufacturing	Manuf = O
	Services	Services = 1
FDI entry mode	Joint venture	JV = 0
	Wholly owned subsidiary	WOS = 1
Subsidiary size	*Subsidiary relative size*, measured as the number of subsidiary's employees compared to the whole MNE total numbers	Subsidiary's size
Subsidiary age	Number of years from the establishment of the subsidiary in the emerging market	Subsidiary's age

*All the data (except from the years of the experience used for tenures and for control variables) are collected and rated on a seven-point Likert scale ranging from 1 = 'poor' to 7 = 'excellent"
** All data on strategic agility reflect subsidiary CEOs answers with regard to Indian market (host-country context).

focused on the KSA component, arguing that it can be experience or cognitive capabilities (Aklamanu et al., 2016). We also proposed and found empirical evidence of the role of the subsidiary's relational embeddedness in positively or negatively moderating some of the aforementioned relationships. In line with recent key IB trends (Delios et al., 2017), this helps us in considering the role of the context (subsidiary's relationships with Indian local stakeholders) and the interactions across multiple levels of analysis (individual and organizational).

Consistently, microfoundations have been applied to many important constructs, especially in the context of theory in IB, international management, and global strategy. Nevertheless, scholars have noted how these overlapping fields are still inadequately influenced by the bottom-up microfoundations view (Contractor et al., 2019; Foss & Pedersen, 2019), which can allow for explicit delineation of the implied micro level assumptions for improved theoretical predictions and managerial implications (Kano & Verbeke, 2019). This equally suggests that the shortcomings of explicit articulations of embedded microfoundations in the international/global business fields are likely to blur the vital, micro level proximate causes driving strategic agility, the capacity of organizations operating in emerging markets to combine both stability and dynamism, and exploration and exploitation activities. Strategically agile organizations are known to create dynamic assortments of products and services or business models to stay ahead of competition (Lewis et al., 2014). In addition, and more importantly, agile organizations emphasize the primacy of transformative mindsets and capabilities of leaders and top managers and their network of teams in building and sustaining 21st-century global organizations (De Smet et al., 2018). This links strategically agile organizations closely to the microfoundational view.

We herein analyzed the micro- and subsidiary-level mechanisms of strategic agility through the microfoundational lens. As the elements of strategic agility differ based on the characteristics of the environment, organizations develop a portfolio of agility approaches (Lengnick-Hall & Beck, 2016). The present study's focus on India as an emerging market represents a valuable setting as it accommodates the complexity of the relationships between the firm and its environment (Nair et al., 2015). Previous studies analyzed strategic agility in different particular settings, often neglecting the relevance of agility in emerging markets (e.g. India), as well as of its microfoundation antecedents and interaction across different levels of analysis.

5.2. Theoretical contributions

We contribute mainly to strategic agility literature (Xing et al., 2020) and add knowledge to the existing literature on agility in an IB domain (Christofi et al., 2021; Shams et al., 2020). While previous IB research has paid more attention to organizational antecedents of agility, we suggest that: a) subsidiary CEOs' and their individual microfoundations are central to developing and managing strategic agility and, b) the interplay between microfoundations and subsidiary external relational embeddedness (organizational level variable) affects strategic agility to address the diverse conditions in host-country emerging markets.

Overall, this study offers three major contributions. First, we contribute to the literature on microfoundation of strategic agility by testing empirically that different CEO subsidiary tenures influence the development of strategic agility of subsidiaries in host-country emerging markets (Nuruzzaman et al., 2019). We also contribute to the cognitive capabilities stream of the literature (Kang et al., 2007; Mäkelä et al., 2012; Mäkelä et al., 2019), extending it and arguing that MNE subsidiary CEOs' cognitive capabilities in terms of their perception, attention, problem solving, reasoning, language, communication, and social cognition affect the strategic agility of MNEs differently in the context of emerging markets. This is coherent with the extant literature which has highlighted dynamic managerial capabilities as core microfoundations for organizational agility (Helfat & Martin, 2015) and the upper echelon

Table 5
Independent and moderator variables used in this article.[1]

Variables		Items	Sources
CEO Experience	Tenure_1	Tenure of subsidiary CEOs within the MNE	Mäkelä et al., 2012; Zollo & Winter (2002)
	Tenure_2	Tenure of subsidiary CEOs in emerging markets	Mäkelä et al., 2012; Zollo & Winter (2002)
	Tenure_3	Tenure of subsidiary CEOs in their whole working life	Mäkelä et al., 2012; Zollo & Winter (2002)
CEO Managerial cognitive capabilities	MCC1 – perception and attention	I usually spend time looking for new information in what happened around me	Helfat and Peteraf (2015), Gazzaniga et al. (2010)
		I usually spend time combining perceptual data from the environment with my knowledge to make reasonably informed guesses	Helfat and Peteraf (2015), Gazzaniga et al. (2010)
		I usually concentrate for long periods on internal trains of thought	Helfat and Peteraf (2015), Colman (2006)
CEO Managerial cognitive capabilities	MCC2 - problem solving and reasoning	I usually spend time to find a way around an obstacle to reach a goal	Helfat and Peteraf (2015), Gazzaniga et al. (2010)
		I usually spend time to evaluate and use information, arguments, and beliefs to draw a conclusion	Helfat and Peteraf (2015), Gazzaniga et al. (2010)
		I usually spend time directed at finding solutions to problems by applying formal rules of logic or some other rational procedures	Helfat and Peteraf (2015), Colman (2006)
CEO Managerial cognitive capabilities	MCC3 - language, communication and social cognition	I usually like to communicate my vision passionately using storytelling as a means of motivating and mobilizing my subordinates toward a new strategic plan	Helfat and Peteraf (2015), Gazzaniga et al. (2010)
		I usually use emotions and affective connections with my subordinates	Helfat and Peteraf (2015), Gazzaniga et al. (2010)
		I usually tend to understand the point of view of others	Helfat and Peteraf (2015), Colman (2006)
CEO Subsidiary external relational embeddedness	SERE	Describe the relationships among actors in the subsidiary's external business network with regard to (i) the long-term orientation and stability of the relationships, and the level of (ii) interdependence and of (iii) mutual trust	Hallin et al. (2011) Bresciani and Ferraris (2016)

theory that calls for empirical investigation of individual characteristics of top managers in predicting strategic actions (Hambrick, 2007). We thus show that managerial cognition is context specific (Helfat & Peteraf, 2015) and shapes agility. Jointly, we have demonstrated empirically how variations in microfoundations influence differences in MNE routines and capabilities development. Indeed, the two individual microfoundational antecedents of subsidiary CEOs - experience and cognitive capabilities - produce differing effects on strategic agility.

Second, we show how strategic agility should be analyzed using multiple levels of analysis (scarcely addressed by prior studies), theoretically proposing and empirically finding evidence of interaction effects. Indeed, differing microfoundational effects are moderated when they intermingle with subsidiary-level external relational embeddedness, thus demonstrating a nuanced view of how microfoundations may interact with subsidiary and its heterogeneous stakeholders within an emerging host-country environment to foster strategic agility. This also sheds light on the multilevel explanatory power of microfoundations (Linder & Foss, 2018) and answers recent calls for its applications at MNE subsidiary level (Meyer et al., 2020). Our findings thus offer new insights into microfoundations for the IB research community (Foss & Pedersen, 2019; Liu, et al., 2021) and enrich past studies on the multiple organizational levels of MNEs (HQs and subsidiaries) (Shams et al., 2020).

Third, previous studies analyzed agility in different contexts, such as SMEs in transitional economies (Nyamrunda & Freeman, 2021) and international settings, Demir et al., 2021, (Fourné et al., 2014; Li et al., 2019). Shifting the context of analysis, we add new knowledge to IB research by focusing on emerging markets (Kirca et al., 2016; Gaur et al., 2019; Nuruzzaman et al., 2019; Shams et al., 2020) and on the operations of developed economy MNEs in these fast-growing markets. As strategic agility requires the ability to stay at a distance from daily operations, past research has shown that it is less obvious in specific contexts, such as the case of SMEs (Arbussa et al., 2017; Del Giudice et al., 2021). We show herein that it depends on the characteristics of the subsidiary CEO, such as international experience/training and tenure in the same industry/market, as well as their cognitive capabilities, and it therefore plays a role in other contexts. Also, we show empirically that the success of MNEs in emerging markets depends on the interplay between microfoundations and the firm's capabilities (Liu et al., 2021) for managing regulative, normative, and cultural-cognitive pressures (Elg et al., 2017).

Moreover, in this specific context of analysis (HQ in developed country and subsidiary in emerging market), while vertical relationships of subsidiary CEOs in terms of their interactions both upward and downward through integrative and divergent actions and activities to explain organizational phenomena are well established (Aherne et al., 2014; Wooldrige et al., 2008), studies on the horizontal relationship (i.e., subsidiary CEOs' interactions with the host local environment) (O'Brien et al. 2019) are still emerging in the microfoundation domain. We therefore advance MNE subsidiary literature by demonstrating that subsidiary external relational embeddedness is a vital interaction point with individual microfoundations to generate subsidiary-level strategic agility in emerging markets. This interaction point for a microfoundational explanation of strategic agility opens doors for cross-fertilization opportunities (cf. Meyer et al., 2020) to foster a further theoretical understanding of MNE subsidiaries' strategic agility in emerging markets.

5.3. Managerial implications

The strategic agility framework applies to MNEs from developed countries operating in emerging markets. The local conditions push MNEs and local CEOs to implement effective practices to improve their strategic agility, and our study offers several managerial implications. First, agility is experience-driven and is thus strongly based on prior experience. Given the complexities and nuances of the Indian market, Indian executives with global leadership training are preferred (Berndtson, 2018), which explains the significance of international tenure. Still, having local leadership is also critical for MNEs to succeed in India. Experience in India leads to a strong understanding of the local

[1] The studies used to support the variable "relational social capital" are in the context of subsidiary innovation. Thus, we decided to not use in this analysis the item "Degree of specific adaptations in technology among network counterparts" due to its specific connection to innovation, which is not the primary focus of this paper.

market dynamics and cultural landscape, and the subsidiary CEO translates the HQ's vision into a local strategy. Overall, local knowledge is critical, and international management experience is important as well.

Second, agility is cognitive capability-driven, where these core microfoundations play different roles (Adner & Helfat, 2003). Counterintuitively, the CEO cognitive capabilities of perception and attention have no significant influence on grasping new opportunities. Problem-solving and reasoning capabilities are instead necessary to develop strategic sensitivity and collective commitment. However, these skills do not bring resource fluidity, i.e. the ability to reconfigure and redeploy resources rapidly, which is crucial in the context of changing market conditions like those in emerging markets. One explanation might be that such activities reach a 'taken-for-granted' dimension (Castellano & Khelladi, 2016). Consequently, managers might not search for information to initiate such cognitive mechanisms. Another plausible justification is that institutional voids in emerging countries offer opportunity spaces to be filled, and due to such institutional instability (Gao et al., 2017), CEOs do not rely on the perceptual data derived from the emerging market environment. Language, communication, and social cognition are found to be antecedents of strategic agility, except strategic sensitivity. The "Indian paradox" is that even if one main specificity is English communication skills, language and cultural awareness are key to achieving success in this high-potential market. The country possesses more than 16 official languages, hundreds of dialects, and strong regional cultures and identities. This challenge is highlighted by the size and diversity of the Indian market and can potentially create misunderstanding between the HQ and the subsidiary, as language represents evident and hidden barriers in multinational settings (Uzzi & Lancaster, 2003; Tenzer et al., 2021).

Third, relational embeddedness is paramount for the success of the subsidiaries in general, and in emerging markets, in particular, is based on the quality of the subsidiary CEO's relationships with suppliers, customers, and distributors, as well as on the continuity of such exchanges and on access to useful information. Because relations in India are complex, the subsidiary CEOs play a major role in getting the subsidiary embedded in the local external networks (Vahlne et al., 2012) and in developing relational embeddedness over time (Williams & Du, 2014). Indeed, success in India is based on (1) reliable local lawyers, chartered accountants, and recommendations that are heavily relied upon and (2) strong trade communities that handle all logistics and methods that have existed for a long time. Moreover, while many MNEs underestimate the diversity of Indian consumers, the "agile subsidiary CEO" should not treat Indian consumers as one homogenous customer in a diverse territory, thus further highlighting the role of external relational embeddedness.

These implications can be highly beneficial for HQ top managers who need to select the right subsidiary CEOs in emerging markets. Successful MNEs face increased complexity in balancing simultaneously between a) organizational/individual levels and b) HQ/subsidiary considerations under evolving turbulent contexts. Agility is critical especially for multinational enterprises (MNEs) that operate in many different, culturally varied host countries (Fourné, et al., 2014) in the "VUCA" world (Bennett & Lemoine, 2014; Cascio & Boudreau, 2016). When adopting the microfoundations' perspective, some nuance can be brought as CEO experience and cognitive capacities do not necessarily lead to strategic agility in India when subsidiary external relational embeddedness is considered.

5.4. Limitations and future research

This research also has some limitations that can be addressed in future study. First, the microlevel of analysis requires further understanding (Barney & Felin, 2013). This concept has not yet been examined under multiple contexts, comparing the impacts on different sub-dimensions of strategic agility and allowing for the generalization of results. For instance, in addition to mixed methods, comparative studies could help understand the microfoundations of IB and dynamic capability better. Although our sample is limited to 104 units of analysis, these are the most relevant subsidiaries (selected from the HQ side) of half of the largest Italian MNEs in India. Our context is unique but can be generalized to a) most traditional MNEs from developed countries that have established a wide range of subsidiaries in India in the past few decades because they face the same problems and have similar characteristics and b) all subsidiaries of traditional MNEs coming from developed countries in other emerging markets. This is because, considering our key constructs, the microfoundations of agility reside at the individual level of the subsidiary CEO, which can be pursued in each kind of emerging market characterized by much greater instability and unknown problems compared to other markets. Future studies may thus expand and compare our results, drawing data from different MNEs from the EU or US operating in different emerging markets (e.g. China). This may affect the agility of subsidiaries in each type of emerging market characterized by much more instability and unknown problems compared to other markets (Teece et al., 2016). Also, future research may explore how microfoundational perspective may inform and advance the Upper Echelons theoretical perspective, given that the latter focuses largely on the team and firm levels of analysis, while also relatively detached from the moderating impact of institutional environment (Yamak et al., 2014).

Second, for additional insights, future research could investigate new settings, in particular specific contexts such as high technology and knowledge-intensive industries (Brueller et al., 2014; Degbey, 2015; Degbey & Pelto, 2021), information and communication technology industries (Doz & Kosonen, 2010), regional economic development and sustainability (Kraus et al., 2020), and the related effects of different roles of subsidiaries (e.g. competence creating vs. competence exploiting) or power-related issues. In addition, other markets could be analyzed and could confirm the present study in alternative and complementary VUCA environments, such as transitional economies (Aghina et al., 2015). Finally, we used the concept of subsidiary CEO cognitive capabilities, described herein as the subsidiary CEO's knowledge, skill, and ability to perform mental activities that influence their decisions and actions. In this context, it is important to note that several studies have highlighted the existence of interrelationships (and different effects) among these mental activities. However, cognitive psychological research has indicated that they are distinct in terms of their functional performance (Smith & Kosslyn, 2008). Future research could test different aspects of mental activities on each sub-dimension of strategic agility in different emerging markets. Further, future studies may develop a finer-grained picture through a longitudinal study focusing on the interrelationship between other microfoundations, such as those recently investigated by Pereira et al. (2021) (e.g. managerial decision-making, emotional intelligence, transformational leadership behaviors, intellectual capital, motivation) and the specific subsidiary's embeddedness with specific key actors in the emerging markets. This may overcome one of the limitations of our study where the time-orientation, stability of relationship, level of interdependence and trust may vary with different actors in the external business network.

Finally, strategic agility can also be associated with the concept of *affordance*, initially developed by American psychologist Gibson, whereby strategic agility also draws on the perception by managers of what they can afford. Gibson introduces the idea of a mutual relationship between the actor (the manager) and their environment. An affordance is gradually built because of a subtle and complex interaction between the actor and an object (real or virtual), through the identification of a possibility linked to the object, an intentionality, and finally a call for action. The object could be a potential target for acquisition, with the possibility being promising growth, and the action being the acquisition. Following Gibson's early insights, the field of affordance has been widely explored, but not from the perspective of strategic agility and microfoundations of dynamic capabilities. The dimension of

perception has been especially discussed (Norman, 1988), where the perception of what can be afforded is closely associated with the culture of the organization and the capabilities of thinking in action. Connecting the results of our work to the concept of affordance could therefore be the focus of further innovative research.

References

Adner, R., & Helfat, C. E. (2003). Corporate effects and dynamic managerial capabilities. *Strategic Management Journal, 24*(10), 1011–1025.

Aghina, W., De Smet, A., & Weerda, K. (2015). Agility: It rhymes with stability. *McKinsey Quarterly, 51*(4), 2–9.

Aguinis, H., & Molina-Azorín, J. F. (2015). Using multilevel modeling and mixed methods to make theoretical progress in microfoundations for strategy research. *Strategic Organization, 13*(4), 353–364.

Ahammad, M. F., Glaister, K. W., & Gomes, E. (2020). Strategic agility and human resource management. *Human Resource Management Review, 30*(1), 1–3.

Ahammad, M. F., Basu, S., Munjal, S., Clegg, J., & Shoham, O. B. (2021). Strategic agility, environmental uncertainties and international performance: The perspective of Indian firms. *Journal of World Business, 56*(4), Article 101218.

Aherne, M., Lam, S. K., & Kraus, F. (2014). Performance impact of middle managers' adaptive strategy implementation: The role of social capital. *Strategic Management Journal, 35*(1), 68–87.

Aklamanu, A., Degbey, W. Y., & Tarba, S. Y. (2016). The role of HRM and social capital configuration for knowledge sharing in post-M&A integration: a framework for future empirical investigation. *The International Journal of Human Resource Management, 27*(22), 2790–2822.

Amadeo, K. (2020). *India's Economy, Its Challenges, Opportunities, and Impact, The Balance*. https://www.thebalance.com/india-s-economy-3306348.

Ambos, T. C., Fuchs, S. H., & Zimmermann, A. (2020). Managing interrelated tensions in headquarters–subsidiary relationships: The case of a multinational hybrid organization. *Journal of International Business Studies*, 1–27.

Andersson, U., Björkman, I., & Forsgren, M. (2005). Managing subsidiary knowledge creation: The effect of control mechanisms on subsidiary local embeddedness. *International Business Review, 14*(5), 521–538.

Andersson, U., Forsgren, M., & Holm, U. (2007). Balancing subsidiary influence in the federative MNC: a business network view. *Journal of International Business Studies, 38*, 802–818.

Andersson, U., Forsgren, M., & Holm, U. (2002). The strategic impact of external networks: subsidiary performance and competence development in the multinational corporation. *Strategic Management Journal, 23*(11), 979–996.

Andriopoulos, C., & Lewis, M. W. (2009). Exploitation-exploration tensions and organizational ambidexterity: Managing paradoxes of innovation. *Organization Science, 20*(4), 696–717.

Andriopoulos, C., & Lewis, M. W. (2010). Managing innovation paradoxes: Ambidexterity lessons from leading product design companies. *Long Range Planning, 43*(1), 104–122.

Arbussa, A., Bikfalvi, A., & Marquès, P. (2017). Strategic agility-driven business model renewal: the case of an SME. *Management Decision, 55*(2), 271–293.

Argote, L., McEvily, B., & Reagans, R. (2003). Managing knowledge in organizations: An integrative framework and review of emerging themes. *Management science, 49*(4), 571–582.

Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys. *Journal of Marketing Research, 14*(3), 396–402.

Barkema, H. G., & Shvyrkov, O. (2007). Does top management team diversity promote or hamper foreign expansion? *Strategic Management Journal, 28*(7), 663–680.

Barney, J. A. Y., & Felin, T. (2013). What are microfoundations? *Academy of Management Perspectives, 27*(2), 138–155.

Baron, R. A. (2006). Opportunity recognition as pattern recognition: how entrepreneurs "connect the dots" to identity. *Academy of Management Perspectives, 20*(1), 104–119.

Bennett, N., & Lemoine, G. J. (2014). What a difference a word makes: Understanding threats to performance in a VUCA world. *Business Horizons, 57*(3), 311–317.

Bhaumik, S., Driffield, N., Gaur, A. S., Mickiewicz, T., & Vaaler, P. (2019). Corporate governance and MNE strategies in emerging markets. *Journal of World Business, 54*(4), 234–243.

Birkinshaw, J., Brannen, M. Y., & Tung, R. L. (2011). *From a distance and generalizable to up close and grounded: Reclaiming a place for qualitative methods in international business research*.

Boojihawon, D. K., Richeri, A., Liu, Y., & Chicksand, D. (2020). Agile route-to-market distribution strategies in emerging markets: The case of Paraguay. *Journal of International Management*. https://doi.org/10.1016/j.intman.2020.100740

Bouguerra, A., Gölgeci, İ., Gligor, D. M., & Tatoglu, E. (2021). How do agile organizations contribute to environmental collaboration? Evidence from MNEs in Turkey. *Journal of International Management, 27*(1), Article 100711.

Bresciani, S., & Ferraris, A. (2016). Innovation-receiving subsidiaries and dual embeddedness: impact on business performance. *Baltic Journal of Management, 11*(1), 108–130.

Brueller, N. N., Carmeli, A., & Drori, I. (2014). How do different types of mergers and acquisitions facilitate strategic agility? *California Management Review, 56*(3), 39–57.

Buckley, P. J., Chen, L., Clegg, L. J., & Voss, H. (2016). Experience and FDI risk-taking: A microfoundational reconceptualization. *Journal of International Management, 22*(2), 131–146.

Cano-Kollmann, M., Cantwell, J., Hannigan, T., Mudambi, R., & Song, J. (2016). Knowledge connectivity: An agenda for innovation research in international business. *Journal of International Business Studies, 47*, 255–262.

Cantwell, J., Dunning, J. H., & Lundan, S. M. (2010). An evolutionary approach to understanding international business activity: The co-evolution of MNEs and the institutional environment. *Journal of International Business Studies, 41*(4), 567–586.

Cascio, W. F., & Boudreau, J. W. (2016). The search for global competence: From international HR to talent management. *Journal of World Business, 51*(1), 103–114.

Castellano, S., & Khelladi, I. (2016). How French wine producers use open innovation to gain and manage their legitimacy. *Journal of the Knowledge Economy, 7*(1), 155–171.

Chandler Jr, A. D. (1991). The functions of the HQ unit in the multibusiness firm. *Strategic Management Journal, 12*(S2), 31–50.

Chang, SJ., van Witteloostuijn, A., & Eden, L. (2010). From the Editors: Common method variance in international business research. *Journal of International Business Studies, 41*, 178–184.

Christofi, M., Pereira, V., Vrontis, D., Tarba, S., & Thrassou, A. (2021). Agility and flexibility in international business research: A comprehensive review and future research directions. *Journal of World Business, 56*(3), Article 101194.

Clauss, T., Abebe, M., Tangpong, C., & Hock, M. (2019). Strategic Agility, Business Model Innovation, and Firm Performance: An Empirical Investigation. *IEEE Transactions on Engineering Management*, 1–18. https://doi.org/10.1109/TEM.2019.2910381

Coleman, J. S. (1990). *Foundations of social theory*. Cambridge, MA: Belknap Press of Harvard University.

Colman, AM. (2006). *A Dictionary of Psychology* (2nd edn). Oxford, UK: Oxford University Press.

Contractor, F., Foss, N. J., Kundu, S., & Lahiri, S. (2019). Viewing global strategy through a microfoundations lens. *Global Strategy Journal, 9*(1), 3–18.

Degbey, W. Y. (2015). Customer retention: A source of value for serial acquirers. *Industrial Marketing Management, 46*, 11–23.

Degbey, W. Y., Eriksson, T., Rodgers, P., & Oguji, N. (2021). Understanding cross-border mergers and acquisitions of African firms: The role of dynamic capabilities in enabling competitiveness amidst contextual constraints. *Thunderbird International Business Review, 63*(1), 77–93.

Degbey, W. Y., & Pelto, E. (2021). Customer knowledge sharing in cross-border mergers and acquisitions: The role of customer motivation and promise management. *Journal of International Management, 27*(4), Article 100858.

Del Giudice, M., Scuotto, V., Papa, A., Tarba, S. Y., Bresciani, S., & Warkentin, M. (2021). A Self-Tuning Model for Smart Manufacturing SMEs: Effects on Digital Innovation. *Journal of Product Innovation Management, 38*(1), 68–89.

Demir, R., Campopiano, G., Kruckenhauser, C., & Bauer, F. (2021). Strategic agility, internationalisation speed and international success—The role of coordination mechanisms and growth modes. *Journal of International Management, 27*(1). https://doi.org/10.1016/j.intman.2021.100838

De Smet, A., Lurie, M., & St George, A. (2018). *Leading agile transformation: The new capabilities leaders need to build 21st-century organizations*. New York: McKinsey & Company.

Debellis, F., De Massis, A., Petruzzelli, A. M., Frattini, F., & Del Giudice, M. (2020). Strategic agility and international joint ventures: The willingness-ability paradox of family firms. *Journal of International Management, DOI*. https://doi.org/10.1016/j.intman.2020.100739

Delios, A. (2017). The death and rebirth (?) of international business research. *Journal of Management Studies, 54*(3), 391–397.

Dellestrand, H. (2011). Subsidiary embeddedness as a determinant of divisional headquarters involvement in innovation transfer processes. *Journal of International Management, 17*(3), 229–242.

Dess, G. G., & Beard, D. W. (1984). Dimensions of organizational task environments. *Administrative Science Quarterly, 29*(1), 52–73.

Doz, Y. (2020). Fostering strategic agility: How individual executives and human resource practices contribute. *Human Resource Management Review, 30*(1), 1–14. https://doi.org/10.1016/j.hrmr.2019.100693

Doz, Y. L., & Kosonen, M. (2008a). *Fast Strategy: How Strategic Agility Will Help You Stay Ahead of the Game*. Harlow: Pearson Education.

Doz, Y. L., & Kosonen, M. (2008b). The dynamics of strategic agility: Nokia's rollercoaster experience. *California Management Review, 50*, 95–118.

Doz, Y. L., & Kosonen, M. (2010). Embedding strategic agility: A leadership agenda for accelerating business model renewal. *Long Range Planning, 43*(2–3), 370–382.

Duncan, R. B. (1972). Characteristics of organizational environments and perceived environmental uncertainty. *Administrative Science Quarterly, 17*, 313–327.

Eisenhardt, K. M., Furr, N. R., & Bingham, C. B. (2010). CROSSROADS-Microfoundations of performance: Balancing efficiency and flexibility in dynamic environments. *Organization Science, 21*(6), 1263–1273.

Elg, U., Ghauri, P. N., Child, J., & Collinson, S. (2017). MNE microfoundations and routines for building a legitimate and sustainable position in emerging markets. *Journal of Organizational Behavior, 38*(9), 1320–1337.

Elster, J. (1989). *Nuts and Bolts for the Social Sciences*. Cambridge, UK: Cambridge University Press.

Fahey, L., & Narayanan, V. K. (1989). Linking changes in revealed causal maps and environmental change: An empirical study. *Journal of Management Studies, 26*(4), 361–378.

Fang, Y., Jiang, G. L. F., Makino, S., & Beamish, P. W. (2010). Multinational firm knowledge, use of expatriates, and foreign subsidiary performance. *Journal of Management Studies, 47*(1), 27–54.

Felin, T., Foss, N. J., & Ployhart, R. E. (2015). The microfoundations movement in strategy and organization theory. *The Academy of Management Annals, 9*(1), 575–632.

Felin, T., Foss, N. J., Heimeriks, K. H., & Madsen, T. L. (2012). Microfoundations of routines and capabilities: Individuals, processes, and structure. *Journal of Management Studies, 49*(8), 1351–1374.
Felin, T., & Foss, N. J. (2005). *Strategic organization: A field in search of micro-foundations, 3* pp. 441–455). Strategic Organization.
Ferraris, A. (2014). Rethinking the literature on "multiple embeddedness" and subsidiary-specific advantages. *Multinational Business Review, 22*(1), 15–33.
Ferraris, A., Santoro, G., & Dezi, L. (2017). How MNC's subsidiaries may improve their innovative performance? The role of external sources and knowledge management capabilities. *Journal of Knowledge Management, 21*(3), 540–552.
Foss, N. J. (2003). Selective intervention and internal hybrids: Interpreting and learning from the rise and decline of the Oticon spaghetti organization. *Organization Science, 14*(3), 331–349.
Foss, N. J., & Pedersen, T. (2019). Microfoundations in international management research: The case of knowledge sharing in multinational corporations. *Journal of International Business Studies, 50*(9), 1594–1621.
Fourné, S. P., Jansen, J. J., & Mom, T. J. (2014). Strategic agility in MNEs: Managing tensions to capture opportunities across emerging and established markets. *California Management Review, 56*(3), 13–38.
Gao, C., Zuzul, T., Jones, G., & Khanna, T. (2017). Overcoming institutional voids: A reputation-based view of long-run survival. *Strategic Management Journal, 38*(11), 2147–2167.
Gaur, A. S., Pattnaik, C., Singh, D., & Lee, J. Y. (2019). Internalization advantage and subsidiary performance: the role of business group affiliation and host country characteristics. *Journal of International Business Studies, 50*(8), 1253–1282.
Gavetti, G. (2005). Cognition and hierarchy: rethinking the microfoundations of capabilities development. *Organization Science, 16*, 599–617.
Gazzaniga, M., Heatherton, T., & Halpern, D. (2010). *Psychological Science*. New York: Norton.
Gilbert, C. G. (2005). Unbundling the structure of inertia: Resource versus routine rigidity. *Academy of Management Journal, 48*(5), 741–763.
Gölgeci, I., Ferraris, A., Arslan, A., & Tarba, S. Y. (2019). European MNE subsidiaries' embeddedness and innovation performance: Moderating role of external search depth and breadth. *Journal of Business Research, 102*, 97–108.
Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational evaluation and policy analysis, 11*(3), 255–274.
Guide Jr, V. D. R., & Ketokivi, M (2015). Notes from the Editors: Redefining some methodological criteria for the journal. *Journal of Operations Management, 37*(1), v–viii.
Hallin, C., Holm, U., & Sharma, D. D. (2011). Embeddedness of innovation receivers in the multinational corporation: Effects on business performance. *International Business Review, 20*(3), 362–373.
Hambrick, D. C. (2007). The field of management's devotion to theory: Too much of a good thing? *Academy of Management Journal, 50*(6), 1346–1352.
Harman, H. H. (1967). *Modern factor analysis* (3rd ed.). Chicago: University of Chicago Press.
Helfat, C. E., & Martin, J. A. (2015). Dynamic managerial capabilities: Review and assessment of managerial impact on strategic change. *Journal of Management, 41*(5), 1281–1312.
Helfat, C. E., & Peteraf, M. A. (2015). Managerial cognitive capabilities and the microfoundations of dynamic capabilities. *Strategic Management Journal, 36*(6), 831–850.
Helfat, C. E., Finkelstein, S., Mitchell, W., Peteraf, M. A., Singh, H., Teece, D. J., & Winter, S. G. (2007). *Dynamic Capabilities: Understanding Strategic Change in Organizations*. Malden, MA: Blackwell Publishing.
Hock, M., Clauss, T., & Schulz, E. (2016). The impact of organizational culture on a firm's capability to innovate the business model. *R&D Management, 46*(3), 433–450.
Hodgson, G. M. (2012). The mirage of micro-foundations. *Journal of Management Studies, 49*(8), 1389–1394.
Hurmerinta-Peltomäki, L., & Nummela, N. (2006). Mixed methods in international business research: A value-added perspective. *Management International Review, 46*(4), 439–459.
Isaac, V. R., Borini, F. M., Raziq, M. M., & Benito, G. R. (2019). From local to global innovation: The role of subsidiaries' external relational embeddedness in an emerging market. *International Business Review, 28*(4), 638–646.
Ivankova, N. V., Creswell, J. W., & Stick, S. L. (2006). Using mixed-methods sequential explanatory design: From theory to practice. *Field Methods, 18*(1), 3–20.
Ivory, S. B., & Brooks, S. B. (2018). Managing corporate sustainability with a paradoxical lens: Lessons from strategic agility. *Journal of Business Ethics, 148*(2), 347–361.
Junni, P., Sarala, R. M., Tarba, S. Y., & Weber, Y. (2015). The role of strategic agility in acquisitions. *British Journal of Management, 26*(4), 596–616.
Kale, E., Aknar, A., & Başar, Ö. (2019). Absorptive capacity and firm performance: The mediating role of strategic agility. *International Journal of Hospitality Management, 78*, 276–283.
Kang, S. C., Morris, S. S., & Snell, S. A. (2007). Relational archetypes, organizational learning, and value creation: Extending the human resource architecture. *Academy of Management Review, 32*(1), 236–256.
Kano, L., & Verbeke, A. (2019). Theories of the multinational firm: A microfoundational perspective. *Global Strategy Journal, 9*(1), 117–147.
Kaplan, S. (2016). Mixing quantitative and qualitative research. In K. Elsbach, & R. Kramer (Eds.), *Handbook of innovative qualitative research methods: Innovative pathways and methods* (pp. 423–433). New York, NY: Routledge.
Kaplan, S., & Henderson, R. (2005). Inertia and incentives: Bridging organizational economics and organizational theory. *Organization Science, 16*(5), 509–521.
Keen, C., & Wu, Y. (2011). An ambidextrous learning model for the internationalization of firms from emerging economies. *Journal of International Entrepreneurship, 9*(4), 316–339.
Kirca, A. H., Fernandez, W. D., & Kundu, S. K. (2016). An empirical analysis and extension of internalization theory in emerging markets: The role of firm-specific assets and asset dispersion in the multinationality-performance relationship. *Journal of World Business, 51*(4), 628–640.
Kolb, B., & Whishaw, I. Q. (2009). *Fundamentals of human neuropsychology*. Macmillan.
Kostova, T., Marano, V., & Tallman, S. (2016). Headquarters–subsidiary relationships in MNCs: Fifty years of evolving research. *Journal of World Business, 51*(1), 176–184.
Kotter, J. (2012). How the most innovative companies capitalize on today's rapid-fire strategic challenges-and still make their numbers. *Harvard Business Review, 90*(11), 43–58.
Kraus, P., Stokes, P., Cooper, S. C., Liu, Y., Moore, N., Britzelmaier, B., & Tarba, S. (2020). Cultural antecedents of sustainability and regional economic development-a study of SME 'Mittelstand'firms in Baden-Württemberg (Germany). *Entrepreneurship & Regional Development, 32*(7-8), 629–653.
Lengnick-Hall, C. A., & Beck, T. E. (2016). Resilience capacity and strategic agility: Prerequisites for thriving in a dynamic environment. *Resilience Engineering Perspectives, Volume 2* (pp. 61–92). CRC Press.
Lewis, M. W., Andriopoulos, C., & Smith, W. K. (2014). Paradoxical leadership to enable strategic agility. *California Management Review, 56*(3), 58–77.
Li, R., Liu, Y., & Bustinza, O. F. (2019). FDI, service intensity, and international marketing agility: The case of export quality of Chinese enterprises. *International Marketing Review, 36*(2), 213–238.
Linder, S., & Foss, N. J. (2018). Microfoundations of organizational goals: a review and new directions for future research. *International Journal of Management Reviews, 20*, S39–S62.
Liu, Y., Collinson, S., Cooper, C., & Baglieri, D. (2021). International business, innovation and ambidexterity: A micro-foundational perspective. *International Business Review*. , Article 101852. https://doi.org/10.1016/j.ibusrev.2021.101852
Liu, Y., & Vrontis, D. (2017). Emerging-market firms venturing into advanced economies: The role of context. *Thunderbird International Business Review, 59*(3), 255–261.
Liu, Y., & Huang, Q. (2018). University capability as a micro-foundation for the Triple Helix model: the case of China. *Technovation., 76–77*, 40–50. August–September.
Liu, Y., & Almor, T. (2016). How culture influences the way entrepreneurs deal with uncertainty in inter-organizational relationships: The case of returnee versus local entrepreneurs in China. *International Business Review, 25*(1), 4–14.
Liu, Y., & Meyer, K. E. (2018). Boundary spanners, HRM practices, and reverse knowledge transfer: The case of Chinese cross-border acquisitions. *Journal of World Business*. https://doi.org/10.1016/j.jwb.2018.07.007
Lorenz, M. P., Ramsey, J. R., & Richey Jr, G. R. (2018). Expatriates' international opportunity recognition and innovativeness: The role of metacognitive and cognitive cultural intelligence. *Journal of World Business, 53*(2), 222–236.
Luo, Y., & Zhao, H. (2004). Corporate link and competitive strategy in multinational enterprises: a perspective from subsidiaries seeking host market penetration. *Journal of International Management, 10*(1), 77–105.
Mäkelä, K., Sumelius, J., Höglund, M., & Ahlvik, C. (2012). Determinants of strategic HR capabilities in MNC subsidiaries. *Journal of Management Studies, 49*(8), 1459–1483.
March, J. G. (1991). Exploration and exploitation in organizational learning. *Organization Science, 2*(1), 71–87.
Martinez, J., & Jarillo, J. (1989). The evolution of research on coordination mechanisms in multinational corporations. *Journal of International Business Studies, 20*(3), 489–514.
Mathiassen, L., & Pries-Heje, J. (2006). Business agility and diffusion of information technology. *European Journal of Information Systems, 15*(2), 116–119.
McCann, J., Selsky, J., & Lee, J. (2009). Building agility, resilience and performance in turbulent environments. *People & Strategy, 32*(3), 44–51.
Meyer, K. E., Li, C., & Schotter, A. P. (2020). Managing the MNE subsidiary: Advancing a multi-level and dynamic research agenda. *Journal of International Business Studies, 51*, 538–576.
Michailova, S., & Mustaffa, Z. (2012). Subsidiary knowledge flows in multinational corporations: Research accomplishments, gaps, and opportunities. *Journal of World Business, 47*(3), 383–396.
Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage.
Moran, P. (2005). Structural vs. relational embeddedness: Social capital and managerial performance. *Strategic Management Journal, 26*(12), 1129–1151.
Nair, A., Guldiken, O., Fainshmidt, S., & Pezeshkan, A. (2015). Innovation in India: A review of past research and future directions. *Asia Pacific Journal of Management, 32*(4), 925–958.
Nair, N. (2013). *Top Ten Italian Companies in India: Ferrari, Fiat, Gucci and More. International Business Times*. https://www.ibtimes.co.in/top-ten-italian-companies-in-india-ferrari-fiat-gucci-and-more-447845.
Nyamrunda, F. C., & Freeman, S. (2021). Strategic agility, dynamic relational capability and trust among SMEs in transitional economies. *Journal of World Business, 56*(3), Article 101175.
Norman, D. A. (1988). *The Psychology of Everyday Things*. New-York: Basic Books.
Nuruzzaman, N., Gaur, A. S., & Sambharya, R. B. (2019). A microfoundations approach to studying innovation in multinational subsidiaries. *Global Strategy Journal, 9*(1), 92–116.
O'Brien, D., Sharkey Scott, P., Andersson, U., Ambos, T., & Fu, N. (2019). The microfoundations of subsidiary initiatives: How subsidiary manager activities unlock entrepreneurship. *Global Strategy Journal, 9*(1), 66–91.
O'Brien, R. M. (2007). A caution regarding rules of thumb for variance inflation factors. *Quality & quantity, 41*(5), 673–690.

Pereira, V., Budhwar, P., Temouri, Y., Malik, A., & Tarba, S. (2020). Investigating Investments in agility strategies in overcoming the global financial crisis-The case of Indian IT/BPO offshoring firms. *Journal of International Management*. https://doi.org/10.1016/j.intman.2020.100738

Pereira, V., Patnaik, S., Temouri, Y., Tarba, S., Malik, A., & Bustinza, O. (2021). A longitudinal micro-foundational investigation into ambidextrous practices in an international alliance context–A case of a biopharma EMNE. *International Business Review, 30*(1), Article 101770.

Perri, A., Andersson, U., Nell, P. C., & Santangelo, G. D. (2013). Balancing the trade-off between learning prospects and spillover risks: MNC subsidiaries' vertical linkage patterns in developed countries. *Journal of World Business, 48*(4), 503–514.

Podsakoff, P., MacKenzie, Scott, Lee, J.-Y, & Podsakoff, N (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology, 88*, 879–903, 10.1037/0021-9101.88.5.879.

Raisch, S., Birkinshaw, J., Probst, G., & Tushman, M. L. (2009). Organizational ambidexterity: Balancing exploitation and exploration for sustained performance. *Organization Science, 20*(4), 685–695.

Ramón-Llorens, M. C., García-Meca, E., & Duréndez, A. (2017). Influence of CEO characteristics in family firms internationalization. *International Business Review, 26*(4), 786–799.

Rueda, M. R., Posner, M. I., & Rothbart, M. K. (2005). The development of executive attention: Contributions to the emergence of self-regulation. *Developmental Neuropsychology, 28*(2), 573–594.

Rugman, A., Verbeke, A., & Yuan, W. (2011). Re-conceptualizing Bartlett and Ghoshal's classification of national subsidiary roles in the multinational enterprise. *Journal of Management studies, 48*(2), 253–277.

Schilke, O., Hu, S., & Helfat, C. E. (2018). Quo vadis, dynamic capabilities? A content-analytic review of the current state of knowledge and recommendations for future research. *Academy of Management Annals, 12*(1), 390–439. https://doi.org/10.5465/annals.2016.0014

Schneckenberg, D., Truong, y., & Mazloomi, H. (2015). Microfoundations of innovative capabilities: The leverage of collaborative technologies on organizational learning and knowledge management in a multinational corporation. *Technological Forecasting and Social Change*, 100, 10.1016/j.techfore.2015.08.008.

Schotter, A., & Beamish, P. W. (2011). Performance effects of MNC headquarters-subsidiary conflict and the role of boundary spanners: The case of headquarter initiative rejection. *Journal of International Management, 17*(3), 243–259.

Shams, R., Vrontis, D., Belyaeva, Z., Ferraris, A., & Czinkota, M. (2020). Strategic agility in international business: A conceptual framework for "agile" multinationals. *Journal of International Management, DOI*. https://doi.org/10.1016/j.intman.2020.100737

Siemsen, E., Roth, A., & Oliveira, P. (2009). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods*, 1–21.

Sirmon, D. G., & Hitt, M. A. (2009). Contingencies within dynamic managerial capabilities: Interdependent effects of resource investment and deployment on firm performance. *Strategic Management Journal, 30*(13), 1375–1394.

Smith, E. E., & Kosslyn, S. M. (2008). *Cognitive Psychology: Mind and Brain*. Upper Saddle River, NJ: Pearson.

Soundararajan, V., Sahasranamam, S., Khan, Z., & Jain, T. (2021). Multinational enterprises and the governance of sustainability practices in emerging market supply chains: An agile governance perspective. *Journal of World Business, 56*(2), Article 101149.

Sun, P., Mellahi, K., & Thun, E. (2010). The dynamic value of MNE political embeddedness: The case of the Chinese automobile industry. *Journal of International Business Studies, 41*(7), 1161–1182.

Tallon, P. P., Queiroz, M., Coltman, T., & Sharma, R. (2019). Information technology and the search for organizational agility: A systematic review with future research possibilities. *The Journal of Strategic Information Systems, 28*(2), 218–237.

Tang, J., Kacmar, K. M. M., & Busenitz, L. (2012). Entrepreneurial alertness in the pursuit of new opportunities. *Journal of Business Venturing, 27*(1), 77–94.

Teece, D., & Pisano, G. (1994). The dynamic capabilities of firms: an introduction. *Industrial and Corporate Change, 3*, 547–556.

Teece, D. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal, 28*(13), 1319–1350.

Teece, D. J. (2014). The foundations of enterprise performance: Dynamic and ordinary capabilities in an (economic) theory of firms. *Academy of Management Perspectives, 28*(4), 328–352.

Teece, D., Peteraf, M., & Leih, S. (2016). Dynamic capabilities and organizational agility: Risk, uncertainty, and strategy in the innovation economy. *California Management Review, 58*(4), 13–35.

Tenzer, H., Pudelko, M., & Zellmer-Bruhn, M. (2021). The impact of language barriers on knowledge processing in multinational teams. *Journal of World Business, 56*(2), Article 101184.

Tippmann, E., Sharkey Scott, P., & Parker, A. (2017). Boundary capabilities in MNCs: Knowledge transformation for creative solution development. *Journal of Management Studies, 54*, 455–482.

Thompson, J. D. (1967). *Organizations in action*. New York: McGraw-Hill.

Trapczyński, P., & Banalieva, E. R. (2016). Institutional difference, organizational experience, and foreign affiliate performance: Evidence from Polish firms. *Journal of World Business, 51*(5), 826–842.

Uzzi, B., & Lancaster, R. (2003). Relational embeddedness and learning: the case of bank loan managers and their clients. *Management Science, 49*, 383–399.

Vahlne, J. E., Schweizer, R., & Johanson, J. (2012). Overcoming the liability of outsidership—the challenge of HQ of the global firm. *Journal of International Management, 18*(3), 224–232.

Venkatesh, V., Brown, S. A., & Bala, H. (2013). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS quarterly*, 21–54.

Weber, Y., & Tarba, S. Y. (2014). Strategic agility: A state of the art introduction to the special section on strategic agility. *California Management Review, 56*(3), 5–12.

Williams, C., & Du, J. (2014). The impact of trust and local learning on the innovative performance of MNE subsidiaries in China. *Asia Pacific Journal of Management, 31*(4), 973–996.

Wooldridge, B., Schmid, T., & Floyd, S. W. (2008). The middle management perspective on strategy process: Contributions, synthesis, and future research. *Journal of Management, 34*(6), 1190–1221.

Xing, Y., Liu, Y., Boojihawon, D. K., & Tarba, S. Y. (2020). Entrepreneurial team and strategic agility: A conceptual framework and research agenda. *Human Resource Management Review, 30*(1), Article 100696. https://doi.org/10.1016/j.hrmr.2019.100696

Yamak, S., Nielsen, S., & Escribá-Esteve, A. (2014). The role of external environment in upper echelons theory: A review of existing literature and future research directions. *Group & Organization Management, 39*(1), 69–109.

Zhang, X., Liu, Y., Tarba, S. Y., & Del Giudice, M. (2020). The micro-foundations of strategic ambidexterity: Chinese cross-border M&As, Mid-View thinking and integration management. *International Business Review, 29*(6), Article 101710.

Zhang, Y., & Wildemuth, B. M. (2009). Unstructured interviews. *Applications of social research methods to questions in information and library science*, 222–231.

Zhao, H., & Luo, Y. (2005). Antecedents of knowledge sharing with peer subsidiaries in other countries: A perspective from subsidiary managers in a foreign emerging market. *MIR: Management International Review*, 71–97.

Zollo, M., & Winter, S. G. (2002). Deliberate learning and the evolution of dynamic capabilities. *Organization science, 13*(3), 339–351.