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**Where to Seek Strategic Assets for Competitive Catch-up? A Configurational Study of
Emerging Multinational Enterprises Expanding into Foreign Strategic-factor Markets**

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Running Title: Explicating strategic-asset-seeking FDI

Where to Seek Strategic Assets for Competitive Catch-up? A Configurational Study of Emerging Multinational Enterprises Expanding into Foreign Strategic Factor Markets

Abstract

Emerging multinational enterprises (EMNEs) often engage in strategic-asset-seeking foreign direct investment (FDI) for competitive catch-up. This study explores the linkages between an EMNE's competitive scenario consisting of a configuration of its awareness-motivation-capability (AMC) conditions and the comparative institutional advantages of its strategic-asset-seeking destination. Our configurational analyses of Chinese FDIs in the technology-intensive industries of OECD countries reveal a taxonomy of four distinct asset-seeking strategies of EMNEs. Our findings shed novel insights into the strategic variations within EMNEs based on a theoretically and methodologically extended AMC framework. This study also extends the varieties of capitalism literature by addressing the implications of comparative institutional advantages for foreign entrants, rather than domestic incumbent firms.

Keywords: emerging multinational enterprise, foreign direct investment, fuzzy set methods, strategic asset seeking, competitive catch-up, awareness-motivation-capability framework

Running head: Unpacking Strategic-asset-seeking FDI

Introduction

Emerging economy multinational enterprises (EMNEs) actively expand into foreign strategic factor markets, particularly in advanced economies, to seek assets that are unavailable in their home countries (Cuervo-Cazurra, 2012; Madhok & Keyhani, 2012). The literature on EMNEs has contrasted the exploratory nature of asset-seeking foreign direct investment (FDI) with the conventional asset-exploitation strategies (Luo & Tung, 2007; Mathews, 2006). However, the variations within the asset-seeking strategies remain underexplored. While research suggests that the asset-seeking strategy of EMNEs is driven by their competitive needs to catch-up with global market leaders (Awate, Larsen, & Mudambi, 2015; Cui, Meyer, & Hu, 2014), we do not know how EMNEs under different competitive scenarios will choose their asset-seeking locations that best fit with their various competitive needs.

Host country institutional environment is central to FDI location choice (Kim & Aguilera, 2015). Prior studies primarily draw on the economics (North, 1990) and sociological institutional perspectives (Scott, 2005). Focusing on institutional *costs* and legitimacy *challenges* (Kim & Aguilera, 2015; Xu & Shenkar, 2002), these perspectives do not specifically account for institutionally derived *advantages*, which affect EMNEs choosing their asset-seeking locations (Boisot & Meyer, 2008). The distinction of the types of country institutional environments, and the comparative advantages associated with each type, lies in the domain of comparative institutional analysis (CIA). Institutional heterogeneity leads to variations in the strategic factor markets across countries that supply qualitatively different strategic assets (Clausen, 2014; Hall & Soskice, 2001). To fill the knowledge gap on EMNEs' asset-seeking strategies, this study explores the linkages between an EMNE's competitive scenario consisting of a configuration of interdependent decision-making factors, and the comparative advantage offered by the institutional environment of its FDI location.

We extend the awareness-motivation-capability (AMC) framework of competitive dynamics (Chen, 1996; Smith, Ferrier, & Ndofor, 2001) to the competitive catch-up context to guide our exploratory study. Prior studies suggest that AMC conditions influence the competitive behaviours of established multinational firms (Hutzschenreuter & Grone, 2009; Yu & Cannella, 2007). Recent

research also suggests that AMC conditions are indicative of the response of emerging economy firms towards inward FDI (Meyer & Sinani, 2009), as well as their decisions to conduct outward FDI for competitive catch-up (Cui et al., 2014). This study broadens the AMC framework and formally contrast the characteristics of AMC conditions between conventional competitive actions and competitive catch-up.

We executed a research design following the procedures of fuzzy-set qualitative comparative analysis (fsQCA). We used a combination of managerial survey and archival data from a sample of 68 strategic-asset-seeking FDIs conducted by Chinese firms into the high-tech industries of OECD countries. Our findings reveal four distinct configurations of AMC conditions associated with two different types of comparative institutional advantages of FDI host countries. Based on these findings, supplemented by further qualitative case evidence, we propose a taxonomy of four distinct types of strategic-asset-seeking strategies by EMNEs, which include a casual updating strategy, a defensive mimicking strategy, a proactive experimenting strategy, and an aggressive overtaking strategy.

This study makes three main contributions to the literature. First, we contribute novel insights into the strategic variations of EMNE's asset-seeking FDI. The classification of strategy has long been a central agenda of business research (Miles & Snow, 1978; Zahra & Pearce, 1990). Following this effort, our taxonomy showcases the various systematic and identifiable approaches by which EMNEs pursue their competitive needs of asset-seeking. It provides a theoretical toolkit of analysing strategic formulation of individual EMNEs, with implications for future research on their strategic outcomes. In so doing, we extend the literature on EMNEs from its prior focus on characterising EMNEs against their advanced economy counterparts, towards more nuanced analysis of strategic heterogeneity among EMNEs that contrasts them with each other.

Second, we contribute to the comparative institutional analysis literature. Using a comparative approach, political economists have developed a range of varieties of capitalism (VoC) models that address cross-country differences of institutional arrangements (Hall & Soskice, 2001; Hancké, Rhodes, & Thatcher, 2007; Whitley, 1999). While highly relevance to international business research (Martin, 2014; Jackson & Deeg, 2008), the VoC models focus exclusively on domestic economic actors, namely incumbent firms. For these firms, institutional comparative advantages are endowed

and predetermined by their countries of origins (Hall & Soskice, 2001; Jackson & Deeg, 2008).

Linking the VoC approach with FDI location choice, we argue that comparative institutional advantages can be strategically pursued by foreign firms. Therefore, we highlight the role of firm strategy in comparative institutional analysis from the perspective of foreign entrants.

Third, we contribute to the AMC framework of competitive dynamics. The proponents of the AMC framework have emphasized that AMC conditions function in an interactive manner rather than in isolation (Chen, 1996; Chen & Miller, 1994; Chen, Su, & Tsai, 2007). Our study is the first to capture the interactive nature of the AMC framework using a configurational meta-theoretical approach (Fiss, 2007; Fiss, Marc, & Cambré, 2013; Ragin, 2008a). This match will fully unleash the potential to reveal the interdependency between the complex and systematic linkages of AMC conditions and the competitive behavioural outcomes of firms.

Theoretical background

Strategic-Asset-Seeking FDI and Varieties of Capitalism

EMNEs often target foreign strategic factor markets in advanced economies to seek access to superior technologies, managerial know-how, sophisticated human resources, and other strategic assets that are unavailable or hard to acquire domestically (Awate et al., 2015; Madhok & Keyhani, 2012; Musteen, Datta, & Francis, 2014). This type of strategic-asset-seeking FDI by EMNEs is recognized as a competitive behaviour that serves a firm's catch-up strategic intent (Cui et al., 2014). However, it presents some unique features that distinguish it from the conventional competitive actions.

Conventionally, rival firms initiate a series of attacks and counterattacks to offset the tactical and strategic effects of each other's actions, with the aim of protecting and/or strengthening their competitive advantages (Chen, 1996; Chen & Miller, 1994). Strategic-asset-seeking FDI, on the other hand, is not triggered by specific market-based events, but by a firm's strategic intent to transform its competitive position against market leaders with whom they aim to catch up in the future (Hamel & Prahalad, 1989). This strategic intent drives firms' competitive catch-up activities to secure long-term

strategic objectives, rather than winning a current competitive edge over an existing rival (Cui et al., 2014; Luo & Tung, 2007; Rui & Yip, 2008).

Strategic-asset-seeking FDI, as a competitive catch-up behaviour, can be directed at different locations of foreign strategic factor markets with comparative institutional advantages (Jackson & Deeg, 2008). Developed economies demonstrate considerable differences in institutional systems that underpin their strategic factor markets (Hall & Soskice, 2001; Whitley, 2003). Based on the VoC model of Hall and Soskice (2001), a coordinated market economy (CME) presents comparative advantages for incremental innovation and specific assets, while a liberal market economy (LME) has comparative advantages for radical innovation and transferable assets (Hall & Soskice, 2001; Jackson & Deeg, 2008; Martin, 2014). Compared to other CIA analytical approaches (e.g. Hancké et al., 2007; Whitley, 1999), the Hall and Soskice's (2001) VoC model is more "firm-centred" (Amable, 2003: 81), in that it more directly addresses institutional resources available to firms and the ways firms solve their coordination problems (Hall & Thelen, 2009; Schneide, Schulze-Bentrop, & Paunescu, 2010). It helps underpin the institutional environments in which firms formulate catch-up strategy. Therefore, adopting their CME/LME distinction as a basis of understanding the strategic variations in EMNEs' asset-seeking FDI, we maintain that EMNEs can leverage CME/LME comparative institutional advantages, with the aim of enhancing their competitive positions, by expanding into the types of foreign strategic factor markets that best fit with their specific strategic assets needs.

Awareness-Motivation-Capability (AMC) Framework

We adopt the AMC framework of competitive dynamics (Chen, 1996) as a guiding theoretical framework to identify the competitive conditions driving EMNEs to target foreign strategic factor markets with CME/LME institutional advantages. The AMC framework provides a foundation for a systematic understanding of the competitive conditions that interactively drive competitive catch-up actions. The application of the AMC framework requires researchers to identify its components that are most relevant to the specific competitive action under investigation (e.g., Ferrier, 2001; Yu & Cannella, 2007). Accordingly, we extend the AMC framework from its traditional emphasis on

rivalrous competition (Chen & Miller, 2015), into competitive catch-up by identifying the specific AMC conditions most relevant for strategic-asset-seeking FDI by EMNEs (Table 1).

[Insert Table 1 about here]

The AMC framework is grounded in three streams of theory which are all relevant for competitive catch-up. The awareness dimension of the AMC framework derives from communication-information theory, which highlights the information seeking and information processing aspects of decision making (Smith & Grimm, 1991). The information most relevant to strategic-asset-seeking FDI is competitive threats and opportunities in foreign strategic factor markets (Cui et al., 2014); both of which are highly dynamic due to frequent technological changes and intensive competition in the global market. Therefore, EMNEs with long-term strategic needs (*longitudinal awareness*) and recognition of catch-up opportunities despite uncertainties and risks (*lateral awareness*) will be more likely to engage in competitive catch-up behaviours. More specifically:

Longitudinal awareness. The *strategic time horizon* of a firm influences the longitudinal extent of its information scanning. Cognitive focus on future competitive threats and opportunities forms the strategic intent for competitive catch-up (Rui & Yip, 2008). Firms need to expand their strategic time horizon when evaluating the opportunities in foreign strategic factor markets, which can be leveraged to serve their long-term catch-up objectives. This is because commercial outcomes based on strategic assets, especially those that serve as strategic objectives to achieve enduring quality (such as those incrementally innovative and specific assets in CME environments) and innovation leadership (such as those radically innovative and transferrable assets in LME environments), may require a longer time period to be realized (Le Breton-Miller & Miller, 2006).

Lateral awareness. Competitive threats and opportunities often co-exist as two integral aspects of a competitive environment (Meyer & Sinani, 2009). Lateral awareness determines the extent to which a firm can recognize and capture valuable information despite uncertainties and/or risks. Information in the same competitive environment may be perceived and communicated

differently by firms depending on their *risk tolerance level*, which consequently influences the competitive action they will take. EMNEs are exposed to a significant level of risk when seeking strategic assets overseas given information asymmetry. Tolerance for risks is therefore important for EMNEs to overcome psychic distance that hinders knowledge transfer and learning.

The motivation dimension of the AMC framework is supported by the expectancy-valence theory, which concerns the incentives for firms to engage in a competitive action (Chen et al., 2007), where the incentives are affected by the anticipated outcome of the action (Vroom, 1964). For firms to engage in competitive catch-up, the incentives must arise from the long-term perspectives of survival, growth, competitiveness, and, ultimately, market leadership (Awate et al., 2015; Cui et al., 2014), rather than from immediate gains in existing markets. Motivation is thus likely to be higher for firms whose survival is threatened due to intensifying global competition (*external motivation*), and whose internal financial position incentivizes them to redress current competitive disadvantages and/or to pursue future gains associated with sustainable competitiveness (*internal motivation*). Specifically:

External motivation. Firms can be externally motivated to respond to competitive pressures as the contacts between rival firms intensifies (Yu & Cannella, 2007). Due to *industry globalization*, frequent interactions with global competitors can raise the competitive benchmark of EMNEs, expose their competitiveness gap with global rivals, and subsequently incentivize them to acquire foreign strategic assets that help close the competitiveness gap (Cui et al., 2014; Luo & Tung, 2007). However, research also suggests that laggard firms can act proactively, not based on their current competitive status, but by a certain strategic intent (Rui & Yip, 2008). This indicates that industry globalization is likely to be a discretionary condition for competitive catch-up as it may not influence the catch-up motivation of proactive firms as it does with other firms.

Internal motivation. Competitive catch-up is also motivated by the internal resource position of a firm, particularly its *unabsorbed slack* (Hambrick, Cho, & Chen, 1996; Nohria & Gulati, 1996; Tan & Peng, 2003), that provides risk buffer and thus incentives to engage in searching behaviours (Awate et al., 2015). This buffering role facilitates the motivation of strategic-asset-seeking FDI because it enables the firm to search broadly and continuously (Cui et al., 2014), and therefore increases the expectation for success (Vroom, 1964). However, a lack of unabsorbed slack can also

motivate searching behaviours, as firms may be driven by the hunger for resource security (Cyert & March, 1963; Lin, Cheng, & Liu, 2009; Wiseman & Bromiley, 1996). These different financial positions are likely to motivate firms to seek different types of assets. For instance, a high level of slack may motivate a firm to engage in distant search for radical improvements; whereas the security motive of a low level of slack may urge a firm to make incremental improvements while leveraging its existing resource base.

The capability dimension of the AMC framework is informed by resource-based theories (Barney, 1991; Peteraf, 1993). Competitive actions are more likely to be successful when supported by action-enabling resources (Hambrick et al., 1996; Smith et al., 2001). In the context of strategic-asset-seeking FDI, to successfully expand into foreign strategic factor markets, firms need to overcome liabilities of foreignness (Zaheer, 1995) and outsidership (Johanson & Vahlne, 2009), by engaging with host country institutional actors to buffer the institutional costs of attaining host country legitimacy (*institutional capability*), and by leveraging linkages within business networks to access strategic assets and learning opportunities (*network capability*). Specifically,

Institutional capability. Host country institutional barriers represent a significant challenge for firms conducting FDIs (Xu & Shenkar, 2002; Zaheer, 1995). In particular, EMNEs may face legitimacy challenges in host countries due to political and social resistance from local stakeholders. These legitimacy challenges can create institutional barriers for accessing host country resources and strategic assets (Cui & Jiang, 2009). Overcoming such institutional barriers can be enabled by the *host country political ties* possessed by the investing firms. Connections with political actors can channel information and facilitate negotiations between institutions and businesses (Zheng, Singh, & Mitchell, 2015). However, the effectiveness of political ties varies substantially across institutional settings and business activities (Li, Zhou, & Shao, 2009; Peng & Luo, 2000). Depending on the specific strategic assets targeted, host country political ties may be non-essential in a location where the formal institutions facilitating the strategic factor market are well-established, such as in OECD countries (Sun, Mellahi, & Wright, 2012). As such, host country political ties are likely to be discretionary for strategic-asset-seeking FDI.

Network capability. Business networks create knowledge opportunities for learning, while a lack of access to business networks exposes firms to the liabilities of outsidership (Johanson & Vahlne, 2009; Musteen et al., 2014). As valuable strategic assets, especially those knowledge-based resources, are embedded in host country business networks (Mathews, 2006), EMNEs need to leverage *host country business ties* to access such assets. Business ties with other organizations such as buyers, suppliers, and competitors can help firms establish collaborative business relationships that ultimately benefit business development (Peng & Luo, 2000). In the strategic-asset-seeking context, business ties can facilitate information sharing and resource exchange with business partners (Adler & Kwon, 2002).

Research Propositions

A Configurational Approach to the AMC Framework

The nature of the interrelationships between the above identified AMC conditions and firms' competitive behaviour in the catch-up context is central to the development of our research propositions. Prior studies have highlighted the interactive and interdependent nature of the AMC factors that trigger competitive action (Chen & Miller, 1994; Chen et al., 2007), and have called for a configurational approach to capturing such interdependency. The configurational approach is advantageous for explaining complex systems of relationships (Fiss et al., 2013, Ragin, 2008a). It shifts the focus from independent causal conditions to "tight constellations of mutually supportive elements" (Miller, 1986: 236), as the configuration of a set of causal conditions can provide a better explanation of the variance in behavioural outcomes than would be provided by isolating those conditions (Fiss, 2007, 2011; Miller, 1986). The configurational approach also allows for the detection of equifinality (Fiss, 2011), a situation where different combinations of causal elements that may lead to the same outcome (Katz & Kahn, 1978). In summary, the configurational approach recognizes that the individual causal elements are often an *insufficient* but *non-redundant* part of a solution, where the solution itself is *unnecessary* but *sufficient* for the result, namely, an INUS condition (Mackie, 1965). Table 2 shows the rationale of incorporating the configurational approach

into the AMC framework by reflecting the interdependency (conjunctural causation) and equifinality features of the AMC factors within the context of our study.

[Insert Table 2 about here]

Interdependency among AMC Conditions

The theoretical foundations of the AMC framework suggest interactions among its three dimensions. For instance, motivation development depends on the cognitive processes of sensing and evaluating (i.e., awareness) the value of action outcome and the ability (i.e., capability) to achieve that outcome (Vroom, 1964). Also, while a search for information is initiated upon the perception of a problem (i.e., awareness), taking action on the information will inevitably require organizational resources and commitments (i.e., capability) (Smith & Grimm, 1991). Furthermore, prior empirical studies show evidence of interdependency among AMC factors, although interdependency is treated as an exception rather than a normality in these studies. For example, Chen et al. (2007) show that the effects of awareness and capability factors on the perceived competitive tension leading to the extent of competitive action are contingent on the level of motivation. Hence, theoretical and empirical evidence supports that the AMC dimensions do not function independently of each other.

With regard to the specific AMC conditions for strategic-asset-seeking FDI (see Table 1), both longitudinal and lateral awareness conditions are necessary for EMNEs to recognize the strategic needs and opportunities that could close the competitiveness gap with global market leaders, but are not sufficient to trigger catch-up activities if the firm does not perceive enough incentives (i.e., not motivated) or does not possess sufficient capability to achieve the catch-up goals (Luo & Tung, 2007). While motivation, especially internal motivation, addresses the necessary incentives for firms to engage in competitive catch-up, it alone cannot lead to competitive catch-up action if the firm is unaware of which competitiveness gap to close and where to seek the needed strategic assets (Meyer & Sinani, 2009), or if it does not have the capabilities to access such assets (Cui et al., 2014). Lastly, capabilities to overcome liabilities of foreignness and outsidership enable EMNEs to penetrate foreign strategic factor markets, which constitute an indispensable part of the competitive catch-up strategy.

However, the capabilities alone do not guarantee competitive action if firms are not motivated to utilize them, or are not aware of where to leverage them (Deng, 2009). In summary, the individual AMC conditions identified in our research context are insufficient to trigger the action of competitive catch-up, but they jointly constitute necessary and hence non-redundant conditions for such an action. As summarized in Table 1, the longitudinal and lateral awareness conditions influence EMNEs' recognition of CME/LME advantages in host countries, while their motivations of leveraging such advantages are induced by external competitive pressure and internal resource position, and their actions supported by their capability of penetrating institutional barriers and network boundaries for asset access. The question remains how these AMC conditions jointly relate to the specific comparative institutional advantages pursued by EMNEs. Therefore, to guide our exploratory analysis, we propose:

Proposition 1: Configurations of AMC conditions are associated with the level of CME/LME institutional advantages presented by the locations of EMNEs' strategic-asset-seeking FDIs.

Equifinality of AMC Configurations

Equifinality of AMC configurations implies the possibility of different configurations of AMC conditions associated with the same outcome (i.e., the same level of CME/LME institutional advantage leveraged by EMNEs in their strategic-asset-seeking FDIs). This possibility is underpinned by the notion of competitive perception asymmetry. Chen and Miller (2012) argue that AMC elements influence competitive action via the perceptions of the actor, which are necessarily asymmetrical, because different decision makers may assign different levels of salience to the same condition (Marcel, Barr, & Duhaime, 2011). It is therefore possible that the same competitive scenario may lead to different competitive actions (Chen & Miller, 2012), and *vice versa*. As such, there is no fixed prescription for a competitive scenario that will be uniquely associated with a certain behavioural outcome. Hence, the linkage between AMC conditions and competitive behaviour outcome is unlikely to be unique, but possibly equifinal.

Specific to the context of this study, we argue that the possibility of equifinality is more likely when there are discretionary AMC conditions, which are non-essential to the competitive catch-up behaviour but add variations to the initial competitive scenario. This is because the salience of discretionary conditions, as opposed to essential conditions, is more likely to be perceived differently by the various actors, and as a result, both the absence and the presence of discretionary conditions may be associated with the same behavioural outcome due to competitive perception asymmetry. As presented in Table 1, we have identified certain AMC conditions as discretionary. For example, external motivation may be a discretionary factor that promotes competitive catch-up, as firms may choose to engage in catch-up strategies proactively before any external competitive pressure eventuates (Rui & Yip, 2008). Given this managerial discretion (i.e., some firms act proactively while others act reactively), the absence and presence of external motivation may both be present in the configurational solutions leading to competitive catch-up. Also, institutional capability may be discretionary as not all the desired strategic assets are politically sensitive, and firms can choose to avoid those assets that expose their liabilities of foreignness. This is more likely in host countries, such as advanced economies where government direct intervention of economic activities is not prevalent but rather is limited to key strategic sectors (e.g. defence industry and critical infrastructure). Moreover, EMNEs can also adopt a stealthier approach to foreign strategic factor markets, where they overcome institutional barriers by diluting their foreign identity (Cui & Jiang, 2012) and/or without relying on host country political ties. Accordingly, as EMNEs can vacillate between institutional capability and other means to respond to host country institutional barriers, both the possession and lack of institutional capability may be represented in configurational solutions leading to competitive catch-up. Overall, the presence and absence of these discretionary AMC conditions, while not influencing the catch-up action, do create varieties in the initial competitive scenarios that lead to EMNEs leveraging CME and LME institutional advantages in their strategic-asset-seeking FDIs:

Proposition 2: Multiple configurations of AMC conditions can be associated with the level of

CME/LME institutional advantages presented by the locations of EMNEs' strategic-asset-seeking FDIs.

Methodology

Research Design

Given the theoretical novelty of linking competitive scenarios with variations in the location choices of strategic-asset-seeking FDI by EMNEs, this study employs a research design of qualitative comparative analysis, which follows a synthetic strategy that integrates the strengths of variable- and case-based approaches (Ragin, 1987: 84), as it enables the exploration of configurational relationships based on empirical cases. Analytically, we followed a set-theoretic approach utilizing the technique of fsQCA for three reasons. First and foremost, while traditional regression-based analysis is more suited for isolating the effect of individual factors, fsQCA is able to model configurational relationships and equifinality (Schneider et al., 2010). These features are aligned with our research propositions. Second, although conventional methods, such as cluster analysis and deviation scores, can be used for testing typological and configurational theory, they are nevertheless limited in terms of providing insights into how different design elements work together (Fiss, 2007, 2011). Grounded in set theory, fsQCA is an analytic technique that allows for a detailed analysis of how conditions collectively relate to the outcome in question (Crilly, 2011; Fiss, 2007, 2011; Ragin, 2008a). Third, fsQCA is suited to analysis based on a small-to-medium sized sample (Ragin, 2008a), which is likely to be the case for studying an emerging phenomenon where information, in terms of both scope and depth, is limited.

Sample and Data

We conducted fsQCA on a sample of strategic-asset-seeking FDI into OECD countries by Chinese high-tech manufacturing firms. We focused on OECD host countries because these countries have stable and advanced social and economic infrastructures which lead to comparative institutional advantages in sustaining advanced strategic factor markets (Hall & Soskice, 2001; Hotho, 2014; Schneider et al, 2010). We focused on Chinese investing firms because China has become a major investor in the global marketplace, and Chinese firms are increasingly investing in developed economies with the strategic intent of competitive catch-up through strategic-asset-seeking FDI (Cui et al., 2014; Rui & Yip, 2008). As a result, our sampling frame consisted of all Chinese firms that (1)

fell in OECD's (2011) classification of high-tech manufacturing industries, (2) were publicly listed during the period 2005 to 2011, and (3) had a market capitalization above 50 million US dollars. A total of 426 firms were included using this sampling frame.

We conducted an executive survey to collect detailed information on the strategic-asset-seeking FDIs of these firms. 86 out of the 426 firms had multiple records of strategic-asset-seeking FDIs into OECD countries during the observation period, and in these cases we asked the respondents to reflect on the latest FDI to ensure information accuracy by minimizing potential rosy retrospection bias. Hence, our unit of analysis is FDI, which matches with our objective of exploring the configurational linkages between the competitive scenarios faced by firms before their strategic-asset-seeking FDIs and the levels of comparative institutional advantages associated with the chosen FDI locations.

From June 2012 to March 2013 we received a total of 131 completed responses, yielding a 31 percent response rate. From these responses, 68 were found to be valid as the associated firms provided information on their strategic-asset-seeking FDIs into OECD countries. We conducted non-response bias tests on a range of investing firm characteristics including firm age, size (number of employees, total assets, total sales), ownership, and research and development (R&D) activities (expenses and intensity). No systematic difference was found between the responding and non-responding firms, indicating that non-responding bias is not a major issue (detailed results upon request from the authors).

We combined the survey data with archival data to construct our dataset. Most of the causal conditions, other than unabsorbed slack which was sourced from OSIRIS, were based on the survey data. The outcome variables, namely the LME/CME advantages associated with FDI locations, were based on the coordinated market index from Hall and Gingerich (2009), which were originally sourced from various research publications and OCED databases. A detailed explanation of data sources and variable calibration is presented below.

Calibration

An advantage of fsQCA is variable calibration. Fuzzy sets are calibrated using external criteria, and not all variations are deemed important (Ragin, 2008a). External standards can be implemented by using specified values of an interval scale that correspond to the three key breakpoints of (1) full membership, (2) full non-membership, and (3) the crossover point; or by referring to a “qualitative assessment of the degree to which cases with given scores on an interval scale are members of the target set” (Fiss, 2011; Ragin, 2008a: 85, 2008b). Based on the availability of established external standards and following the practices of prior fsQCA studies (e.g., Criily, 2011; Fiss, 2011; Hotho, 2014; Judge, Fainshmidt, & Brown III, 2014; Schneider, et al., 2010), we adopted direct and indirect approaches to calibrate outcomes and causal conditions, the details of which are presented in Table 3.

[Insert Table 3 about here]

CME and LME institutional advantages. We adopted the country coordination index of Hall and Gingerich (2009) to proxy the comparative institutional advantages associated with the location of the strategic-asset-seeking FDIs of EMNEs. This index was developed for Hall and Soskice’s (2001) VoC model, which is often contrasted with the clustering approach of the national business system framework (Hotho, 2014; Whitley, 2003). These two approaches are consistent in terms of the fundamental claim that configurations of country institutions shape the strategy, structure, external relationships, and innovation activities of firms, and are therefore the source of differences in institutional advantages across countries. The VoC model is more appropriate for this study because first, it pays particular attention to firms as well as firms’ interaction with the process of institutional adjustment and with other economic actors, including producer groups, trade unions, and governments (Amable, 2003; Hall & Thelen, 2009; Peck & Zhang, 2013). Second, it places emphasis on the difference in economic coordination mechanisms across countries which lead to comparative institutional advantages of leveraging different types of innovative activities. These advantages are particularly relevant for EMNEs conducting strategic-asset-seeking FDIs as they search for core competence enhancing solutions in foreign strategic factor markets. Moreover, this VoC model allows for the quantification of the level of comparative institutional advantages, which “serves the

analytical purposes of reducing complexity and facilitating the exploration of key dimensions and main relations” (Hotho, 2014: 6).

Hall and Gingerich’s (2009) composite coordination indices of OCED countries were developed using the country-level indicators of shareholder power, dispersion of control, size of stock market, level of wage coordination, labour turnover, and degree of wage coordination (see Hall & Gingerich, 2009 for detailed sources of the indicators). These indicators produced two factors, which were coordination in corporate governance (C_i^{CG}) and coordination in labour relations (C_i^{LR}), through a confirmatory factor analysis procedure, where the values of the indicators were normalized to be between 0 and 1 using Thomson’s regression method with correlated factors. The resultant factor scores were used to create a composite index of strategic coordination as follows:

$$C_i = (C_i^{CG} + C_i^{LR}) / \max (C_i^{CG} + C_i^{LR})$$

The larger the composite index of strategic coordination for a country i (C_i), the more this country was incorporated into CME institutions, and therefore the greater the *CME institutional advantages* of its strategic factor market. With reference to the calibration approach adopted by Schneider et al. (2010) and Judge et al. (2014), we adopted a refined four-value fuzzy set calibration (cf. Ragin, 2008a). OECD countries, such as Germany, were considered as full members in the set and were assigned the value of 1. Countries, including Spain and the Netherlands, were considered as having a high degree of membership at the 0.67 level to represent “more in than out” in the set. Countries, such as Italy and Australia were considered as having a low degree of membership at the 0.33 level to represent “more out than in” in the set. Countries, such as the US, were coded as full non-membership (i.e., a score of 0) of the set (cf. Schneider et al. 2010).

LME institutional advantages, on the other hand, derive from the functioning of a market-coordination mechanism in an advanced economy, which replaces strategic coordination (performed by the state or societal authorities) in terms of allocating economic inputs (Hall & Soskice, 2001; Jackson & Deeg, 2008). Hence, the more dominant the market-coordination mechanism over strategic coordination in a country (i), the more this country was incorporated into LME institutions, and therefore the greater the *LME institutional advantages* of its strategic factor market. As C_i represents

the extent of strategic coordination within a country i , the calibration of *LME institutional advantages* was the negation of the calibration of *CME institutional advantages*.

AMC conditions. The longitudinal and lateral awareness factors, namely *strategic time horizon* and *risk tolerance for innovation* respectively, were calibrated based on the primary data gathered from our executive survey of the sample firms. We used Quinn's (1985) scale of managerial strategic time horizon. Risk tolerance level was measured by a three-item scale adopted from Covin and Wales (2012) ($\alpha=0.69$). We calibrated the two conditions by following the standard Likert scale approach introduced by Ragin (2008a) and Fiss (2011). Specifically, using a seven-point Likert scale measurement, we coded membership as fully out for a response of 2 or below ("disagree" or "strongly disagree"), and fully in for a response of 6 and above ("agree" or "strongly agree"). The crossover point was the middle of the scale (a neutral response of 4) (cf. Fiss, 2011).

In terms of motivation factors, *industry globalization* was measured by a three-item scale adopted from Birkinshaw, Hood, and Jonsson (1998) ($\alpha=0.70$) to capture external motivation. We then followed Fiss (2011) to use distribution-adjusted anchor points to calibrate the average score of the three industry globalization items. We used 3 (observed minimum), 4.5 (median), and 6 (observed maximum) as the anchor points for calibration. *Unabsorbed slack* was measured using the current-ratio of the focal firm prior to the year of establishing strategic-asset-seeking FDI (Lin et al., 2009), which was sourced from the OSIRIS database to capture internal motivation. For calibration, we chose anchor points in line with the International Monetary Fund (IMF) standards for assessing Asian companies (IMF, 2014). Specifically, a current ratio below 1 was considered fully out (absent of sufficient slack), while a current ratio greater than 2 was considered fully in (presence of sufficient slack), with 1.5 as the crossover point.

Institutional and network capability factors were captured by *host country political ties* and *host country business ties* respectively. Following prior studies, host country political and business ties were measured by survey scales adapted from Peng and Luo (2000). Three items of the survey asked executives to evaluate the extent to which they had utilized political ties prior to the focal FDI entry ($\alpha=0.84$). Another three items asked executives to evaluate the extent to which they had utilized

business ties prior to the focal FDI entry ($\alpha=0.89$). Following Fiss (2011), we used distribution-adjusted anchor points of 3, 4.5, and 6 to calibrate the fuzzy-set membership of these variables.

Results

Configurational Solutions

We started the analysis by testing whether any of the causal conditions qualified as a necessary condition. The results showed that none of the individual conditions exceeded the consistency threshold of 0.90 for necessary conditions (Greckhamer, 2011; Schneider et al., 2010). Table 4 shows the results of the fuzzy-set analysis of the linkages between the configurations of AMC conditions and the CME/LME institutional advantages associated with the strategic-asset-seeking FDI locations. The configurational solutions are presented in the style following the recommendation of Ragin and Fiss (2008), where black circles (●) indicate the presence of a condition and circled crosses (⊗) indicate its absence. Large circles indicate core conditions while small ones indicate peripheral conditions. Blank spaces indicate ambiguous situations in which the corresponding causal condition may be either present or absent, and therefore play no significant role in the configurational solution. The fsQCA returned four solutions based on configurations of both core and peripheral conditions.

[Insert Table 4 about here]

We adopted a consistency threshold of 0.83 for CME solutions and a threshold of 0.81 for LME solutions following two analytical criteria. Firstly, we conducted a sufficiency analysis using Ragin's (2008a) truth table algorithm to identify attribute combinations consistently linked to an outcome above the acceptable consistency benchmark of 0.80 (Greckhamer, 2011; Ragin, 2008a). Secondly, Schneider and Wagemann (2012) suggest that the "PRODUCT" value of consistency, which is a result of multiplying the consistency measure and Proportional Reduction in Inconsistency (PRI), should also be used as a complementary consistency measurement. We used a PRODUCT gap of 0.51 for CME solutions, and 0.61 for LME solutions. We obtained a coverage of 0.35 on CME

solutions and a coverage of 0.36 on LME solutions. These overall coverage levels indicate the empirical importance of the solution as a whole (Crilly, 2011; Ragin, 2008a). Table 4 also reports the raw and unique coverage levels for each individual configurational solution.

The results provide support for our propositions. Overall, the consistency scores demonstrate the presence of a clear set-theoretic relationship. In other words, configurations of AMC conditions, rather than the conditions in isolation, are associated with the levels of CME/LME institutional advantages, supporting the interdependence of AMC conditions (Proposition 1). Moreover, we found multiple configurational solutions of AMC conditions are linked with a high level of either CME or LME institutional advantages, which support the equifinality of AMC configurations (Propositions 2).

Interpretation of Configurational Solutions

Each configurational solution identified from the fsQCA (see Table 4) represents a unique competitive scenario underlying the location choice for the strategic-asset-seeking FDI of EMNEs for competitive catch-up. Interpretation of these configurational solutions provides an in-depth understanding of strategic diversity in the strategic-asset-seeking FDIs of EMNEs. Four detailed configurational solutions, corresponding to four strategic types of strategic-asset-seeking FDI, are illustrated below. It should be noted that the fsQCA results alone cannot infer causality. Although the results do establish the relationship, and we collected our data in such a way that the AMC conditions preceded the FDI event, we do not have direct evidence for a causal mechanism (or the exclusion of other mechanisms for that matter). Therefore, we do not intend to make causal inference from the fsQCA results. Instead, the results provide evidence for a taxonomy of strategic-asset-seeking strategies of EMNEs, by suggesting distinct combination of AMC factors associated with different institutional comparative advantages. To facilitate the interpretation of the results, we identified representative cases associated with each solution from truth tables (available on request), where cases with membership greater than 0.5 imply substantive case knowledge (cf. Greckhamer, 2011; Hotho, 2014). We present detailed qualitative information regarding one representative case for each solution. All case information was collected from publicly available archival sources (e.g. corporate annual reports, corporate minutes, media interviews, and news reports).

Solution 1 represents strategic-asset-seeking FDI conducted under financial stress (lack of unabsorbed slack) but with no immediate external competitive pressure (absence of industry globalization), which implies that the investing firm lacks incentives to engage in aggressive or radical competitive catch-up. This type of FDI does not necessarily reflect a clear long-term strategic objective, and is targeted towards foreign strategic factor markets with CME institutional advantages that support the development of incremental innovation assets. By implementing this strategy, the investing firm can update its competitiveness incrementally through leveraging the resources available via its network linkages (e.g. business ties in the host country) to primarily redress any internal resource shortage that threatens the firm's survival. Constrained by the lack of internal financial flexibility and political assets internationally, this type of strategic-asset-seeking FDI is likely to be carried out in a casual manner. We term the strategy derived from solution 1 as a *casual updating strategy* of strategic-asset-seeking FDI. A typical case from our sample that represents this solution is Zoje Sewing Machine's partial acquisition of Duerkopp-Adler in Germany.

Zoje Sewing Machine Co. Ltd (Zoje, *hereafter*) is a privately-owned listed company, which supplies affordable sewing machines to clothing companies. As a typical niche market product, industrial sewing machines have a limited market size with price sensitive buyers. To maintain its market share and profitability, Zoje needed to continuously improve its product quality while lowering its manufacturing costs. To fulfil its strategic needs for delivering new products to the domestic market and enhancing its incremental innovation capability, the company sought strategic assets in CMEs. During the global financial crisis (GFC), Zoje's German partner, Duerkopp-Adler Sewing Machine Co., Ltd (DA, *hereafter*), suffered heavily loses around 20 million Euros per year. As a leading manufacturer in the sewing machine market, DA has a good industrial reputation for reliable products. To enhance its own R&D capability for incremental innovation, Zoje first situated its subsidiary in Germany in June 2010, and then invested 12.8 million Euros for 29% of the shares in DA one month later. In return, DA transferred some of its manufacturing technology to Zoje Europe, the German FDI project of Zoje. With skilful R&D staff from a CME and systematic technology from DA, Zoje, since 2010, has gradually updated its manufacturing technology and quality. However,

due to financial constraints, and the lack of solid political ties within Germany, Zoje's FDI project in Germany was mainly concerned with updating its technology to deal with short-term challenges. In 2014, Zoje divested its 29% shares in DA in order to maintain cash flow for future development.

Solution 2 represents a type of strategic-asset-seeking FDI by financially distressed investors with long-term strategic orientation. This type of FDI does not necessarily respond to immediate international competition, however, it is targeted towards foreign locations in order to obtain incrementally innovative and specific assets (CME advantages). This indicates that the investing firm intends to build upon its existing resource base to become a more efficient competitor in its specialty niche, but not to deviate radically from its existing resource base. Moreover, the capability requirements for both institutional and network aspects indicate that such FDI needs to penetrate substantial host country barriers to access the desired strategic assets, which are not readily available from the open market. Overall, this strategy has a developmental focus on the long-term strategic time horizon and incremental approach of the strategic-asset-seeking behaviour. We term this strategy as a *specialty developing strategy*. The case of Huayi Compressor Co's merge with Gubigel in Spain demonstrates this strategy.

Established in 1996, Huayi Compressor Co. Ltd (Huayi, *hereafter*) is a state-owned listed company specializing in compressor manufacturing. Before 2012, the company focused on manufacturing compressors for home appliances, which only provided a 10% gross profit margin. Realizing the limited market potential for its existing products, Huayi launched a new strategy in 2011 to upgrade its manufacturing capability through FDI, and to diversify its product line to industrial compressors which have a 20% gross profit margin in the global market. In early 2012, Cubigel Compressor Co. Ltd. (Cubigel, *hereafter*), a reputable Spanish compressor manufacturer, nearly went bankrupt. As one of the top four industrial compressor manufacturers in the world, Cubigel had more than 20% of the market share in Europe. Although the financial burden of this Spanish manufacturer was heavy, Huayi was optimistic regarding its long-term market potential if it could be merged with Huayi. Huayi planned to spend 3- 5 years on post-merger integration with Cubigel, which showed a longer term vision

and an incremental manner for the upgrading of production capabilities through a cross-border merger. With government support and strong business ties in Spain, and Huayi's long-term strategic orientation and risk tolerance, the FDI project of merging Cubigel eventually succeeded in 2012 and Huayi's investment helped Cubigel to make a profit in the same year. Four years after this merger, Huayi became the second largest compressor manufacturer in the world, and the largest industrial compressor manufacturer in Europe.

Solution 3 reveals a strategy by which EMNEs with strong financial positions can utilize network capabilities to exploit LME institutional advantages for seeking radically innovative and transformable strategic assets with uncertain commercialization value. This strategy is driven by a long-term vision rather than being motivated by immediate external competitive pressure. In fact, the absence of industry globalization conditions in this configurational solution indicates that the investing firm is initiating a catch-up strategy proactively before international competitive pressure penetrates its home market. This catch-up strategy is also exploratory and experimental, because LME strategic assets support radical innovation which can generate significant variations in the value and applicability of outcomes, which then expose the catch-up firm to substantial uncertainty. We term this strategy as a *proactive experimenting strategy*. Kingenta's Greenfield investment in a US-based R&D subsidiary represents this strategy.

Kingenta Ecological Engineering Group (Kingenta, *hereafter*) is a key Chinese high-tech enterprise devoted to R&D, production, and marketing of slow/controlled-release (SCRF), water soluble (WSF), compound, phosphorus chemicals, and other specialty fertilizers. Since it was founded in 1998, Kingenta has quickly developed into one of the world's largest production bases of SCRF with RMB 8.7 billion of total assets. Kingenta's Chairman, Lianbu Wan, stated that "Kingenta needs to have a long-term vision, and aims for international markets. We must act quickly and seize opportunities to enter into foreign markets in order to obtain pre-emptive advantages, rather than follow our rivals." Motivated by strong financial resources and healthy cash flows, as well as having the goal of building long-term cooperation with American research institutions to enhance its R&D capability, the company had funded several rounds of industry exhibitions and forums, and enticed potential American

partners to visit its headquarters in Shandong Province in China. Also Kingenta's top management team had taken several business trips to the US in order to understand the heterogeneous agriculture regulations in different states which may impact on its production of SCRF, and more importantly to develop local business networks. In 2007, through collaborating with local business partners, Kingenta's FDI project in the US successfully introduced a new SCRF product that had the same quality as other internationally renowned brands but with much lower production costs.

Solution 4 captures the type of strategic-asset-seeking FDI based on a long-term strategic vision and a strong internal financial position which motivates the investing firms to explore unfamiliar territories for cutting-edge competitive resources. With this strategy, a catch-up firm actively utilizes its internal financial buffer to aggressively pursue institutionally sensitive resources in foreign strategic factor markets, with the long-term goal of overtaking the competitive position of incumbent global market leaders. This aggressive move requires strong institutional capabilities in combination with network capabilities to offset liabilities of foreignness and outsidership. In order to challenge global market leadership, EMNEs implementing this aggressive catch-up strategy need to look beyond their comfort zone, given that updating their existing advantages incrementally reduces the likelihood of EMNEs overtaking the incumbent global leaders from advanced economies. Instead, it is imperative that the catch-up firms search broadly and in an exploratory manner in foreign strategic factor markets with LME advantages, especially for foreign strategic assets that support radical innovation. We term this strategy as an *aggressive overtaking strategy* for strategic asset seeking. Hikvision's Greenfield FDI project in the US is used to illustrate Solution 4 further.

From its inception in 2001, Hikvision has grown as one of the world's largest suppliers of video surveillance products and solutions. Featuring the industry's strongest R&D workforce (5,300 researchers and specialists equalling 44.2% of the company's full-time equivalent workforce) and devoting eight percent of its annual revenue into R&D for continued product innovation, Hikvision has adopted a future and long-term orientated corporate strategy with an emphasis on challenging and overtake current market leaders. In a media interview, the vice president, Yibo Zheng, emphasised that "we have great ambitions to develop our

company as a future global leader in a rapid way. Therefore, we are buying important R&D related strategic assets everywhere”. To collaborate with local business partners in the US that have each specialized in different stages of the advanced manufacturing process, Hikivision’s FDI project was initiated with the aim of integrating design, development, and manufacturing of innovative standard- and high-end products in this global industry. However, it was recognized that a potential obstacle of entering into advanced markets was the sensitivity within local communities regarding the extent to which their privacy would be protected by surveillance products/technology that were introduced by a foreign producer. Prior to investing in the US market, Hikivision built solid relationships with local government and legal authorities, as well as business distribution and technology partners, in the US through industry exhibitions and forums with the aim of building trust with locals. Moreover, sufficient financial resources due to IPO in China have enabled Hikivision to undertake an aggressive asset-seeking strategy in the US and motivated it to overtake its competitors from developed countries in the long run. After eight years, the FDI project in the US has led to Hikivision becoming one of the top global brands and one of the top 10 suppliers in its industry.

Robustness Tests

We performed robustness checks to understand the stability of the configurational solutions. Following Crilly (2011), we checked the robustness of our results by reducing the threshold used in the fsQCA procedure. Specifically, a reduced consistency threshold of 0.75, the minimum threshold recommended by Ragin (2008b), Crilly (2011), and Meuer (2014) was adopted. Although the coverage level increased (0.50 for CME solutions and 0.69 for LME solutions), the overall solution consistencies reduced significantly (0.71 for CME solutions and 0.71 for LME solutions). Nonetheless, this test reproduced all of the 4 configurational solutions from the original test.

We also conducted a robustness check to rule out some alternative explanations for the configurational solutions, such as FDI into OECD countries for market-seeking or institutional escape, rather than strategic-asset-seeking purposes. With the full sample of 131 FDIs into developed and

developing countries, we performed fsQCA using the same AMC conditions but with alternative outcome variables, such as host country gross domestic product (GDP), GDP per capita growth rate, and the World Governance Index (WGI). These additional tests helped us to solidify the proposed AMC framework as a theoretical ground for understanding strategic-asset-seeking FDI as a competitive catch-up strategy. If similar configurations of AMC conditions were found to explain market-seeking (GDP and GDP per capita growth as outcome variables) or institutional escape (governance quality as an outcome variable) FDI by EMNEs into OECD countries, then we would not be able to conclude that the configurational solutions identified by us necessarily reflect a taxonomy of competitive catch-up strategies. As expected, these additional tests did not produce similar solutions. Indeed, forcing the AMC framework on the analyses of market-seeking or institutional escape FDI generated poor results by fsQCA standards. For example, when analysing GDP and GDP per capita growth rate, only one solution for each could be generated and these had a considerably low consistency threshold (e.g. 0.35 coverage score with 0.68 consistency score for GDP, and 0.33 coverage score with 0.80 consistency score for GDP growth rate per capita). Detailed results of these robustness tests are available upon request.

Discussion and Conclusion

EMNEs expand into foreign strategic factor markets through strategic-asset-seeking FDI. The drivers of this strategic behaviour are associated with the competitive needs of a firm (Cui et al., 2014; Hutzschenreuter & Grone, 2009), while its outcomes vary as firms expand into foreign locations differentiated by their respective comparative institutional advantages (Boisot & Meyer, 2008; Jackson & Deeg, 2008). There has been a knowledge gap in the literature regarding the location choice for strategic-asset-seeking FDI by EMNEs for competitive catch-up purposes. Based on the VoC model that distinguishes CME and LME institutional advantages, this study explores the strategic variation in the strategic-asset-seeking FDI by EMNEs through integrating the AMC framework with a configurational approach towards the identification of configurational relationships.

Main Findings

This study identifies the configurations of AMC conditions that are associated with CME/LME advantages of an EMNE's strategic-asset-seeking FDI location. The four configurational solutions provide support to our propositions that (1) the awareness, motivation, and capability conditions of competitive behaviours jointly explain the strategic-asset-seeking behaviours of EMNEs in a systematic and non-linear additive manner, and that (2) the strategic-asset-seeking FDI by EMNEs can be driven by equifinal configurations of AMC conditions, representing the alternative competitive scenarios faced by the investing firms who may have the same strategic asset needs. Finally, our findings contribute to the development of a taxonomy of strategic-asset-seeking FDI strategies. Specifically, a causal updating strategy and a specialty developing strategy are pursued by EMNEs targeting foreign strategic factor markets with CME institutional advantages, while a proactive experimenting strategy and an aggressive overtaking strategy are enabled by targeting strategic factor markets with LME institutional advantages. Overall, these findings enrich our understanding of the unconventional internationalization strategy postulated in the existing EMNE literature (Awate et al., 2015; Cui et al., 2014; Luo & Tung, 2007), which has focused on *why* EMNEs conduct FDI for competitive catch-up, but not *how*, or more specifically *where*, they implement this strategy.

Contributions

This study makes the following contributions to the literature on EMNEs, comparative institutional analysis, and competitive dynamics. Firstly, existing literature on EMNEs acknowledges FDI as a channel of spring-boarding (Luo & Tung, 2007) or linkage-leverage-learning (LLL) (Mathews, 2006) for competency building. It is well documented that seeking strategic assets is one of the most important motives for EMNEs (Cui et al., 2014; Lu, Liu & Wang, 2011; Luo & Tung, 2007). However, this line of research mainly focuses on characterising EMNEs against their advanced economy counterparts, and accordingly highlights the unifying characteristic of EMNEs' internationalization strategy. A deeper understanding of EMNEs require examination of the heterogeneity in EMNEs' strategic choices when pursuing internationalization as a channel of competitive catch-up. Our configurational analyses and taxonomy development is a timely effort in

this direction. As with other frameworks of strategy classification (e.g., Miles & Snow, 1978), our taxonomy provides a conceptual classification of individual EMNEs. It implies that there are various systematic and identifiable approaches by which EMNEs pursue their competitive needs of asset-seeking, which may be associated with different strategic outcomes. In other words, the taxonomy equips researchers with a theoretical toolkit of differentiating EMNEs with each other, rather than treating them as a homogenous group.

Secondly, this study links comparative institutional analysis with the internationalization strategy of EMNEs. The comparative approach of institutional analyses is originally intended for country-level comparison (Chatain, 2014; Hall & Soskice, 2001; Hotho, 2014), with business implications mainly within countries (Clausen, 2014). Firm strategy has played a very limited role in this literature, other than the notion of institutional arbitrage by developed country firms. Generally, the institutionally derived comparative advantages have been considered exogenous to firms, as endowments by firms' countries of origin. How foreign firms can strategically pursue such comparative institutional advantages in a host country has not been studied. Our study integrates the role of firm strategy into the comparative approach of institutional analyses by examining the implications of comparative institutional advantages from the perspective of foreign entrants. We specifically demonstrate that VoC models, such as the CME/LME model of Hall and Soskice (2001), which have been predominantly applied to study the behaviours of business actors *within a given country's* institutional environment, can be a useful theoretical framework for analysing *cross-border* business activities. As such, we bring comparative institutional analysis closer to the core of international business research agenda.

Thirdly, we contribute to the competitive dynamics literature by addressing the interdependencies of the AMC framework using a configurational approach. Prior research has recognized the interdependent nature of the elements in the AMC framework (e.g., Chen et al., 2007), but research efforts to delineate the systematic complexity have been constrained by a conventional correlational approach (Cui et al., 2014). The configurational approach adopted in this study accounts for this complexity both theoretically and empirically (Fiss, 2011; Ragin, 2008a). Moreover, our extension of the AMC framework to the context of strategic-asset-seeking FDI also echoes the call by

Chen and Miller (2015) for reconceptualising competitive dynamics to incorporate a wider range of competitive behaviours of firms (Chen & Miller, 2015). Overall, the theoretical extension and the configurational approach opens up new opportunities for the AMC framework to guide competitive scenario analyses across various competitive contexts.

Limitations and Future Research

Limitations of the study indicate potential directions for future research. First, we adopt Hall and Soskice's (2001) VoC model instead of other alternatives because this model is more centred on firm behaviours (Amable, 2003; Schneide et al., 2010). However, as with all the other CIA approaches, this model has its own limitations. One criticism concerns its dichotomous classification of capitalism systems, which lead to potential oversights of more detailed types of comparative institutional advantages. The other criticism is that this model does not address the role of the state, which necessarily limits its applicability to the analysis of a wider range of countries, such as the Asian varieties of capitalism (Witt & Redding, 2014) and some other European economies (Hancké et al., 2007). EMNEs are increasingly expanding their footholds in not only the traditional advanced economies, but also other host countries to fulfil their asset-seeking objectives. Consequently, the adopted VoC model might obscure highly relevant differences in the institutional competitiveness of different locations (e.g. Italy vs. the Netherlands) as well as in the competitive configurations of firms seeking strategic assets, such as the motivations and institutional capabilities required in state-organized business systems versus collaborative business systems. Moreover, the country-level proxy of CME/LME advantages cannot account for regional variations within a country. In light of these limitations, future research may evaluate alternative VoC models and explore more nuanced measures for institutional advantages that may be applied to country and regional levels.

Second, our empirical analysis, based on cross-sectional data, relies on the assumption of path-dependency in institutional evolution. This key assumption underlies the literature on the varieties of capitalism (Jackson & Deeg, 2008), indicating that the differences in institutional arrangements between LMEs and CMEs tend to be stable over time (Hall & Gingerich, 2009). Nonetheless, the competitive environment and characteristics of firms can evolve over time. As a

result, the strategic types included in our taxonomy may be implemented by EMNEs at different stages of their development. The potential sequential adoption of various competitive catch-up strategies could be investigated in future research by employing a longitudinal research design.

Relatedly, as EMNEs evolve into a mature stage of internationalization, their scale and scope of FDI activities may present a possibility where a single firm may be simultaneously pursuing multiple types of FDIs, leading to a mixed, or an integrated, strategy. Although the majority of EMNEs are still in early stages of their internationalization where multiple strategic types of FDIs are uncommon within a firm, overtime an integrated strategy is likely to become more prevalent. Future research may have the opportunities of analysing the integrated FDI strategies of EMNEs by drawing on multi-level data where multiple asset-seeking FDIs are nested within a firm.

Practical Implications

The findings from this study offer several practical implications. In general, we highlight the importance of evaluating the competitive needs and capabilities of a firm when crafting strategies for expanding into foreign strategic factor markets. Specifically, our findings suggest that risk tolerance and building up business networks in host countries consistently exists in the mentality of decision makers within EMNEs, and most of the decision makers have a long-term orientation in pursuing institutional advantages in OECD countries. This implies that entrepreneurial culture and strategic vision are important conditions for firms to pursue competitive catch-up through strategic-asset-seeking FDI. Furthermore, the findings reveal that investing firms with relatively weak or limited firm-level resources and less environmental pressure (particularly firms who implement a “casual updating strategy”) would prefer to focus on foreign strategic factor markets with CME institutional advantages, while investing firms that have solid firm-level resources and intensive environmental pressure (particularly firms who implement an “aggressive overtaking strategy”) tend to seek foreign strategic assets facilitated by LME institutions. Understanding these behavioural patterns can enable host country businesses and policy-makers to better interact with incoming EMNE investors through the identification of potential areas of collaboration so as to capitalize on complementary strengths.

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Table 1. AMC conditions for competitive catch-up through strategic-asset-seeking FDI

Conditions under the A, M, and C dimensions	Differentiating between the two types (CME and LME) of outcomes	Essential and discretionary conditions distinguished within the dimension
Awareness		
<ul style="list-style-type: none"> • Strategic time horizon – competitive catch-up requires cognitive focus on future competitive threats and opportunities (<i>longitudinal awareness</i>) • Risk tolerance for innovation – firms need to overcome awareness barriers (e.g. uncertainties, risks, and psychic distance) in order to realize learning benefits (<i>lateral awareness</i>) 	<p>No – awareness of long-term strategic needs and opportunities is always required for firms to engage in any kind of competitive catch-up behaviours</p>	<p>No –firms need to recognize the long-term strategic value (longitudinal awareness) and the possibility of realizing the value (lateral awareness) to justify their behaviour, hence both conditions are essential</p>
Motivation		
<ul style="list-style-type: none"> • Industry globalization – competitive contacts intensify motivation to respond (<i>external motivation</i>) • Unabsorbed slack – both high and low levels of unabsorbed slack provide organizational incentives for searching behaviours (<i>internal motivation</i>) 	<p>Yes – firm-specific conditions form incentives for either incrementally improving firm’s resource position to secure survival or radically taking risks to pursue novel resources</p>	<p>Yes – since competitive catch-up behaviours are mainly internally motivated, external competitive pressure may be non-essential for proactive firms</p>
Capability		
<ul style="list-style-type: none"> • Host country political ties – political ties play buffering and enabling roles (Zheng et al., 2015) that allow firms to overcome institutional distance and liabilities of foreignness (Xu & Shenkar, 2002; Zaheer, 1995) (<i>institutional capability</i>) • Host country business ties – linkages of business network create knowledge opportunities for learning that allow firms to overcome liabilities of outsidership (<i>network capability</i>) 	<p>No – liabilities of foreignness and outsidership exist regardless of the type of strategic assets firms seek in foreign strategic factor markets</p>	<p>Yes – while network linkage is a pre-requisite for learning, non-market strategy based on institutional capability may be non-essential in an environment where formal institutions are well-developed, such as the OECD countries</p>

Table 2. A configurational approach to the AMC framework

	Two meta-theoretical approaches to organizational research		Evidence that AMC framework is configurational
	Correlational (ceteris paribus conditions)	Configurational (INUS ¹ conditions)	
Effects of individual <u>causal elements</u> : Additive or conjunctural?	<ul style="list-style-type: none"> • Additivity of individual effects is generally assumed • Individual causal element is assumed to be capable of influencing the outcome regardless of the presence or absence of other elements • As such, each individual element is an independent cause for the outcome 	<ul style="list-style-type: none"> • Interaction between individual effects is generally assumed • Individual effects are conjunctural in that the role of any individual element is critically dependent on the presence or absence of other elements • As such, each individual element is an <i>insufficient</i> but <i>non-redundant</i> part of a causal solution 	<ul style="list-style-type: none"> • Theoretical foundations of the framework suggest that the AMC components overlap and interact • Prior empirical studies show that the strength of the effect of individual AMC elements is contingent on other elements • As such, individual elements will not affect action independently, but in conjuncture with other elements
Possible combination(s) of causal elements into <u>causal solution(s)</u> : Unifinal or equifinal?	<ul style="list-style-type: none"> • There exists one optimal configuration of causal elements • Theoretically relevant causal elements can be empirically fitted through an OLS regression to form a unique linear combination • As such, the optimal causal solution is uniquely identifiable 	<ul style="list-style-type: none"> • Causal elements form subgroups to influence the outcome • Equifinal subgroups, namely different combinations of causal elements, may lead to the same outcome • As such, each causal solution is itself <i>unnecessary</i> but <i>sufficient</i> 	<ul style="list-style-type: none"> • AMC elements influence competitive action via the perceptions of the actor • Competitive perceptions are asymmetrical, firms under different AMC conditions may be prompted to the same competitive behaviour • Discretionary AMC conditions may contribute to equifinal configurational solutions

INUS refers to “an insufficient but necessary part of a condition, which is itself unnecessary but sufficient for the result” (Mackie 1965:245).

Table 3. Calibration of sets

Type	Variable	Measurement & Data Source	Calibration Anchors	Fuzzy Sets	Note and References
Outcomes	<i>CME institutional advantages</i>	Based on the co-ordination index of Hall and Gingerich (2009)	0.1, 0.33, 0.67, 0.95	4	Qualitative judgment for anchor points following LME/CME country classification grouped by Hall and Soskice (2001), and empirical applications (e.g. Judge et al. 2014; Schneider et al. 2010).
	<i>LME institutional advantages</i>	Based on the negation of Hall and Gingerich's (2009) index	0.1, 0.33, 0.67, 0.95	4	As above
Awareness	<i>Strategic time horizon (Longitudinal awareness)</i>	A single item scale adopted from Quinn (1985)	2, 4, 6	3	Standard Likert scale approach. See Ragin (2008a) and Fiss (2011)
	<i>Risk tolerance for innovation (Lateral awareness)</i>	A 3-item scale ($\alpha = 0.69$) adopted from Covin & Wales (2012)	2, 4, 6	3	The standard Likert scale approach. See Ragin (2008a), and Fiss (2011)
Motivation	<i>Industry globalization (External motivation)</i>	A 3-item scale ($\alpha = 0.70$) adopted from Birkinshaw et al. (1998)	3, 4.5, 6	3	Distribution-adjusted calibration anchor points following Fiss (2011)
	<i>Unabsorbed slack (Internal motivation)</i>	One-year lagged current ratio (Lin et al., 2009), data sourced from OSIRIS	1, 1.5, 2	3	Anchor points follow International Monetary Fund standards for assessing Asian companies (IMF, 2014)
Capability	<i>Host country political ties (Institutional capability)</i>	A 3-item scale ($\alpha = 0.84$) adapted from Peng & Luo (2000)	3, 4.5, 6	3	Distribution-adjusted calibration anchor points following Fiss (2011)
	<i>Host country business ties (Network capability)</i>	A 3-item scale ($\alpha = 0.89$) adapted from Peng & Luo (2000)	3, 4, 5	3	Distribution-adjusted calibration anchor points following Fiss (2011)

Table 4. Configurational solutions

Competitive antecedents of strategic asset-seeking FDI	Expansion into foreign strategic factor markets with:			
	<i>CME institutional advantages</i>		<i>LME institutional advantages</i>	
	Solution 1	Solution 2	Solution 3	Solution 4
Awareness				
<i>Strategic time horizon (Longitudinal awareness)</i>		●	●	●
<i>Risk tolerance for innovation (Lateral awareness)</i>	●	●	●	●
Motivation				
<i>Industry globalization (External motivation)</i>	⊗		⊗	
<i>Unabsorbed slack (Internal motivation)</i>	⊗	⊗	●	●
Capability				
<i>Host country political ties (Institutional capability)</i>	⊗	●		●
<i>Host country business ties (Network capability)</i>	●	●	●	●
Consistency	0.85	0.84	0.83	0.85
Raw Coverage	0.28	0.25	0.30	0.27
Unique Coverage	0.11	0.08	0.09	0.07
Overall Solution Consistency	0.84		0.85	
Overall Solution Coverage	0.35		0.36	

Note: Black circles indicate the presence of a condition, and circles with "X" indicate its absence. Large circles indicate core conditions; small ones, peripheral conditions. Blank spaces indicate “don't care”.