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The Role of Springboarding in Economic Catch-Up: A Theoretical Perspective

I. Introduction

The growth of emerging market multinationals (EMNEs) has been a key development in the global economy over the past decade (Deng 2012; Luo and Zhang 2016). While there is little dispute regarding the rapid internationalization of emerging market firms, explaining the phenomenon has been more problematic (Luo and Tung 2018; Narula 2012; Williamson and Wan 2018). The common element in attempts to explain EMNE internationalization is the belief that such firms are engaged in catch-up, that is, they are seeking to achieve technological and competitive parity with comparable developed market multinationals (DMNEs) (Lee 2005; Meyer 2018).

Catch-up is based on the fundamental assumption that there exists a group of aspiring MNEs, within which EMNEs dominate, that are industry laggards and whose internationalization behavior is driven by the need to catch up with industry leaders. These firms suffer latecomer disadvantages that are apparent in their weaker ownership advantages, the institutional and market constraints they face at home, and a lack of international business experience (Hennart 2018; Ramamurti 2012). While such a view seems consistent with the behaviour of many EMNEs, it fails to explain differences in relative rates of catch-up with some firms, industries, and countries, achieving faster catch-up. Here springboard theory is useful, suggesting that EMNEs will engage in a systematic strategy of asset-seeking internationalization to accelerate catch-up (Luo and Tung 2007; 2018).

However, recent reviews (Luo and Tung 2018; Luo and Zhang 2016) have called for a better understanding of differences between EMNEs that springboard, and those that do not. Firms within these two categories are likely to experience diverse market and institutional conditions, to rely on contrasting degrees on government support, and to display different forms of advantage (Hennart 2018; Ramamurti 2012).

This paper addresses such understanding by developing theoretical arguments that distinguish between firms and sectors where catch-up and springboarding are likely, and where it is less likely to be observed. This latter group, termed 'path-creating firms', are able to create industry leading positions, at least in their home market, positions that could provide the foundation for subsequent internationalisation. Specifically, the paper offers a taxonomic extension encompassing emerging market firms that may be engaged in catch-up, in springboarding, or in neither of these, because of their industry- or firm positioning in terms of technology, business models, or a combination of the two. To perfect these distinctions, we draw on the interaction of country- and firm-specific factors that help explain differing rates and levels of firm internationalization (Rugman 2010).

II. The Limitations of Catch-Up Theorizing

Catch-up theory assumes a fixed and unidirectional process of cumulative knowledge building emphasizing the importance of home country conditions in determining catch-up rates (Lee 2005). However, more recent work has highlighted a tactic available to EMNEs for overcoming home country development constraints through springboarding, a deliberate strategy to accelerate firm growth and competitive capability through recurrent and revolving international activities.

Aggressive springboarding implies that a firm will undertake a series of overseas investments or acquisitions to overcome competitive weaknesses (De Beule et al. 2014; Ramamurti and Williamson 2019), to compensate for latecomer disadvantages (Carpenter and Nakamoto 1989) and to address domestic institutional and market failures (Rottig 2016). Such behaviour is 'revolving' where the acquired assets are used to augment competitiveness in the firm's home market.

The paper is a response to calls acknowledging that EMNEs do not constitute a homogeneous group and respond in distinctive ways to the influence of home market conditions (Buckley and Hashai 2014; Hobdari et al. 2017; Rui et al. 2016), innovation and learning processes (Li 2010; Meyer 2018),

the creation of ownership advantages (Narula 2012; Ramamurti and Williamson 2019; Williamson and Wan 2018), and internationalization (Kotabe and Kothari 2016).

While catch-up is a prevalent strategy within EMNEs, it is also a heterogeneous process. Extant research has uncovered marked differences in the pace of catch-up (Awate et al. 2018; Kotabe and Kothari 2016; Kothari et al. 2013; Kumar et al. 2019), in the specific learning strategies adopted by EMNEs (Awate et al. 2012; Gao 2018; Haakonsson and Slepnirov 2018; Li 2010; Rui et al. 2016), and in the influence of home market conditions on internationalization (Gammeltoft and Sornn-Friese 2005; Hertenstein et al. 2017; Kumaraswamy et al. 2012; Lee 2005; Lee et al. 2016; Meyer 2018). Furthermore, catch-up through emulation is not the only strategy available to EMNEs seeking to upgrade their capabilities. An alternative strategy, albeit a risky one, is to pioneer a new technology or business model. Examples include India's Bharat Forge (Pillania 2008), Mexico's Cemex (Lessard and Lucea 2009), Brazil's Embraer (Maculan 2013), and China's Huawei (Schaefer 2020).

The springboard perspective would benefit from more meticulous categorization (Luo and Tung 2018; Luo and Zhang 2016), and it is accepted that not all EMNEs engage in either catch-up or springboarding (compressed catch-up), activity (Luo and Zhang 2016). The contribution we make is a theory extension emphasizing the contextualizing of existing theories by proposing new concepts or taxonomies.

Our contribution necessitates relaxation of the assumption that emerging market firms and the sectors within which they compete are always laggard, characterized by inferior technology or business models. Relaxing this assumption enables the identification of a group of EMNEs that are neither attempting catch-up, nor necessarily engaged in springboarding activities with the aim of accelerating such catch-up.

Easing the latecomer assumption appears increasingly appropriate at a time when some of the larger emerging markets are showing evidence of technological and global leadership in several

sectors. Years of rapid growth, targeting of inward foreign investment, massive investments in R&D and infrastructure, and government directed industrial development, have created emerging market firms that are leading, rather than lagging, competitors (Lewis 2018; Veugelers 2017). China, for example, ranks second in the world (behind the United States), in terms of value added created by high-tech manufacturing (Veugelers 2017), in turn creating leading enterprises (Grosse 2016) in sectors such as solar energy panels (Fialka 2016), wind turbines (Lema et al. 2013; Tan and Mathews 2015), and low emission vehicles (Bohnsack 2018). India has world-class competitors in IT services, generic pharmaceuticals, and engine castings. Thailand has world-class food and drink processing capability within EMNEs such as CP Foods and ThaiBev, while Brazil's JBS SA is now the world's largest meat processor.

III. The Influence of Home Market Conditions on Emerging Market Firm Development

The development of all firms is heavily influenced by the home market conditions they face including market size, growth rates, and reliance on market processes, institutional support, and openness. Home market conditions determine the quantity, quality, and cost of resources available to the firm (Cuervo-Cazurra et al. 2018). Emerging markets are characterized by several key features including resource deficiencies, particularly with regard to advanced technologies and management skills (Awate et al. 2012; Meyer and Xin 2017), market and institutional weaknesses (Meyer and Peng 2016), and widespread government intervention in economic affairs (Wang et al. 2012).

Emerging markets typically offer lower-cost resources including labour, ranging from highly skilled to unskilled, as well as opportunities for firms to accumulate financial resources (Ramamurti 2012). Large markets and rapid market growth enable cost and scale advantages and require a sound understanding of emerging market consumer needs. Such capabilities may be transferable to other emerging economies (Verbeke and Kano 2016). Large and growing markets can be suitable locations

for important stages in value chains, offering advantages to emerging market firms in terms of both production and marketing opportunities as income levels rise (Buckley and Hashai 2014).

The institutional structure of emerging economies also influences firm development, strategy, and structure. Institutional weaknesses shape the efficacy of corporate governance, influencing ownership choices, private versus public, for example, affiliation within business groups (Khanna and Yafeh 2007), and network relations (Kali 1999). Ownership is important where political intervention is widespread, enabling state-owned firms to enjoy privileged access to markets, resources, and information (Benito et al. 2016). Similarly, decisions to internationalize may be supported and facilitated through ownership-based political connections. Business group affiliation can provide advantages through the provision of shared resources, learning and experience, and the coordination of strategic actions (Chang and Hong 2000; Lamin 2013). Emerging firm strategy, particularly international growth, may benefit from group experience of overseas markets, access to shared network connections, and higher levels of transactional trust (Yaprak and Karademir 2010). Because of incomplete or poorly functioning institutions, emerging market firms develop capabilities for managing under conditions of institutional uncertainty, skills that may have applicability in other emerging economies (Carney et al. 2016; Cuervo-Cazurra and Genc 2008; Henisz 2003).

Scarcer are opportunities to build higher-value assets including advanced technology and brands. Levels of technological development in emerging markets are generally lower than those of advanced economies reflecting less developed national innovation systems (Jurowetzki et al. 2018), knowledge isolation, and the absence of complementary business services (Rui et al. 2016; Kumaraswamy et al. 2012), as well as weaknesses in intellectual property protection regimes (Gammeltoft and Sornn-Friese 2005). Technological weaknesses encourage emerging market firms to focus on process innovations where they can utilize advantages of lower cost and scale, or to modify products to meet the specific needs of emerging market consumers (Govindarajan and Ramamurti 2011). More substantial innovation may occur where the absence of legacy systems or

previous technologies enables leapfrogging (Chen and Li-Hua 2011), or rapid technological obsolescence facilitates industry entry (Adner and Levinthal 2002). There exist a number of mechanisms for overcoming domestic resource deficiencies, the most important of which involve strategic asset seeking, often through overseas mergers and acquisitions (Madhok and Keyhani 2012).

A further defining characteristic of emerging markets is pervasive government intervention in economic affairs (Wang et al. 2012). Government intervention influences business opportunities in a variety of ways including determining market access, the provision of resources, the regulation of competition, intellectual property protection, and opportunities for learning. Government policies can provide positive incentives if market or institutional weaknesses are remedied, or negatively where interventions are poorly planned.

As well as influencing home country conditions, governments can have a direct impact on firm competitiveness and upgrading within emerging countries. They may offer privileged access to necessary resources including finance, land, and information (Yiu and Lau 2008). Policies to protect local firms from import competition or market entry of foreign firms, the setting of national, regional, and international standards (Lee et al. 2016), the implementation of national development plans (Luo et al. 2010; Sheng et al. 2011) as well as tolerance of domestic market domination (MGI 2018) all favour emerging market firms. Similarly, requirements on local content or joint venture partnerships for example, affect learning paths and sources (Haakonsson and Slepnirov 2018). In practical terms governments can provide additional resources facilitating catch-up, reduce unfair competition when intellectual property protection is difficult, provide a framework for firm development within national plans, and reduce risk and information asymmetries faced by late-comer firms (Kotabe et al. 2017). Government may intercede in GVC relations, expediting access to such chains, overcoming power asymmetries that impede knowledge transfer, and facilitating local firms upgrading efforts (Pietrobelli and Staritz 2018). The interaction between firm strategy and

access to the resources offered by GVCs influences catch-up options for local firms, and in particular, their need to internationalize (Pananond et al. 2020).

Emerging market firms are not ignorant of such opportunities and will often invest in political networking capabilities to overcome institutional voids. Research on China suggests that such capabilities are most effective when complementing absorptive capacity and for firms pursuing radical innovations (Kotabe et al. 2017). While political ties can facilitate upgrading, they may bring constraints when emerging market firms are under pressure to follow government preferences (Cui and Jiang 2012).

IV From Country Specific Advantages to Firm Specific Advantages: Firm Upgrading Paths

Our approach to explaining firm upgrading and the likelihood of springboarding behaviour is outlined in Table 1 that sets out three upgrading paths that emerging market firms might adopt (Lee and Lim 2001). The first two- path-following and path-compressing - are both catch-up strategies. Where they differ is in the rate and form of catch-up. While both might involve springboarding, this is particularly likely within a path-compressing strategy where fast catch-up is attempted. The third route, path-creating, is distinctive in that it is not prompted by catch-up and is unlikely to involve springboarding. We discuss each of these paths in turn setting out their key features including learning strategies and their relationships to home country advantages, firm specific advantages, government policies, and internationalization strategies.

These strategies are intimately inter-connected with the industry structure of emerging markets. Any upgrading strategy can be conceived as a means by which firms, constrained by the domestic industrial structure attempt to escape its restrictions by following an upgrading strategy. Firms emerge from the cage of the existing domestic industrial and technological environment by strategies that include internationalization, learning, innovation, and external acquisition of

knowledge. These strategies are co-determined by the domestic environment and its extant industrial structure.

Table 1 Upgrading Strategies Within Emerging Market Firms and Industries

Features/Strategies	Path-Following	Path-Compressing	Path-Creating
Pace of upgrading	Slow	Fast	Varies (depends on home market conditions)
Use of springboarding	Possible but limited.	Very likely, particularly in the early stages of catch-up.	Unlikely
Learning focus	Duplicative	Duplicative and integrative.	Creative
Primary learning strategies	Linkages and spillovers.	Reliance on both overseas knowledge and national innovation system.	Incorporation of diverse sources of largely local knowledge focusing on opportunities created by market and institutional conditions.
Primary knowledge sources	Incumbent competitors (often with local presence). Primarily external.	Industry leaders and suppliers. Primarily external and often overseas.	Domestic market, consumers, platform or network participants, customers, government policies and regulations. Primarily national and internal.
Technology focus	New to firm and economy. Focus on production capabilities.	New to economy, technological leapfrogging. Focus on both product and production capabilities.	New to world. Focus on both technological and managerial knowledge.
Level of absorptive capacity required	Modest	High and dynamic.	High and integrative.
Dependence on home country conditions	High	Modest	High
Investment in innovation	Modest to high with focus on technology.	High focus on links to established competitors and strategic asset-seeking.	High but independent. Complementarity of technological and managerial competences.
Level and timing of internationalisation	Modest, latecomer	High, early mover.	Low to modest, late mover, heavy reliance on the home

			market.
Importance of government linkages	Modest	High for internationalisation path.	Critical for market access, dominance, and resources.
Illustrative sectors	Mobile phone manufacture, Internal combustion engine vehicles, shipping containers.	New energy vehicles, wind turbines, solar power, high speed trains, drones, shipbuilding.	Mobile payments Generic pharmaceuticals Advanced analytics Global delivery of IT projects

Source: the authors

IV. A Theoretical Evaluation of Upgrading Paths

This paper argues that a number of underlying determinants will dictate the feasibility and outcome of upgrading paths. These factors operate across all emerging economies but are more salient and prevalent in some rather than others. The degree of state ownership varies markedly across these economies and the policy environment differs, as do scale, level of development, natural resource endowments, and technological and innovation systems. The key determinants of upgrading paths are: (1) the host country political, social, and economic environment, (2) domestic market imperfections, (3) the sectoral makeup and technology domain in the host country and, nested within these, (4) the nature of the firm in its domestic setting. This classification of factors ranges from the macro, through meso to micro level determinants of upgrading paths. We apply these factors to the three paths outlined in Table 1 and use them to explain the likelihood, or otherwise, of springboarding behaviour occurring. The third upgrading route, that of path-creating, we argue is the one least likely to display springboarding and because of its novelty, is illustrated in our discussion through the example of China's mobile payments sector.

Path-Following Emerging Market Firms

Path-following businesses are a major subset of all emerging market firms and are characterized by a desire to emulate their advanced market competitors. Typically, they are found in stable and mature sectors such as mobile phone manufacture where production is globally fragmented, and competitive advantage is cost-based. Path-following firms benefit from a large domestic market and rapid growth in two ways: in future sales and ability to reduce costs through economies of scale; and in attracting overseas investors and technology (Brandt and Thun 2016). Where products and technologies are relatively mature, path-following firms can pursue a gradual process of upgrading with emphasis, particularly in the early stages, on mastering process technologies (Gao 2018). Their primary sources of learning are provided by competitors through supply relations and joint ventures. The attraction of path-following firms to overseas partners is their understanding of, or access to, the domestic market or in the provision of lower cost means of production. The technology they require is likely to be both limited and specific and may be managed within outsourced supply relations. The technologies they gain may be new to the country and perhaps, to the local industry, but are well established elsewhere. For this, they require only modest levels of absorptive capacity when entering cooperative relations with international investors, while enjoying time to augment absorptive skills. Path-following firms display a high level of dependence on the home country for both the resources they require (finance, human capital, lower costs, scale) and in attracting the foreign transmitters of technology through cross-border supply relations or FDI. While they need to make investments in innovation, these are likely to be modest, to focus on process technologies, and involve high levels of interaction with technology providers to access tacit knowledge (Li 2010).

Government policies, particularly those requiring joint ventures as a condition for market entry or for technology transfer to occur (Branstetter 2018), facilitate the learning process. Learning within path-following firms is likely to be unilateral (from competitor to emerging market firm), and to emphasize duplicative learning through repetition (Rui et al. 2018). Such firms are generally considered to be latecomers and their internationalization is modest since their primary role is in

exploiting existing low-cost resources. Some may be pressurized to upgrade by buyers, and perhaps to internationalize to follow lead firms (Hertenstein et al. 2017).

Path-following firms benefit from a variety of domestic market imperfections. Buckley et al. (2007; 2018) suggest that Chinese multinationals benefit from access to below equilibrium cost of capital that subsidizes development and outward FDI. This is an example of a more general case of imperfections in capital markets. The root causes of this may be deliberate state intervention, banking imperfections, or internal subsidies within business group structures. Cross-subsidization from domestic to foreign operations, particularly within the context of highly protected domestic markets, may then occur. Labour market imperfections may also be present meaning that local firms in the early stages of upgrading may enjoy lower costs where they are not required to adhere to minimum wage levels, workplace regulations with regard to safety and hours of work, or to recognize organized labour groups. Opportunities for (potential) foreign investors to internalize sectors of the labour market either directly or through highly effective contractor suppliers, and appropriate rents, may be a further inducement to cooperation and technology sharing.

Imperfections in intellectual property protection may enable local firms to accelerate upgrading if such technologies are obtained at below market prices or would not otherwise be available.

Imperfect domestic final goods and services markets help to both attract foreign investors, and to allow local firms to amass excess profits for which one outlet is foreign investment. This may represent a better strategy than domestic diversification, particularly when path-following firms constitute much of a country's evolving industrial base, or where the state encourages firm internationalisation.

Springboarding is unlikely to be a strategy adopted by path-following firms as their rate and pattern of upgrading is primarily determined within mutually beneficial and ongoing relations with DMNEs, typically those attracted to the domestic market for asset- or market-seeking reasons. It is most likely to be observed when emerging market firms face reluctance by a partner organization to

maintain technology or related transfers for fear of creating a competitor. In such a case continued upgrading might require the emerging market firm to sever existing GVC links and to initiate greater self-development with the aim of possible future re-engagement (Lee et al. 2018). Springboarding may be an attractive strategy during the period of disengagement.

Path-Compressing Emerging Market Firms

The second group of upgrading firms, path-compressing firms, are also engaged in catch-up, but at a faster pace. This upgrading path is found in sectors characterized by frequent technological shifts or industry consolidation and restructuring. Such conditions encourage rapid catch-up with the possibility of leaping prevailing technologies or business models. Path-compressing growth requires access to a greater amount and variety of resources, more disparate knowledge sources that extend beyond the home market and existing business partners, and the attenuation of risk. Environmental scanning skills and broader absorptive capacity are key capabilities (Helfat and Peteraf 2003).

The primary market imperfection encouraging path-compressing growth is firm ownership: particularly state ownership. State ownership provides diverse advantages in resource access (Buckley et al. 2007), the provision of insider information, adherence to state goals, dominant market positions, and risk mitigation (Wei et al. 2015). The faster pace of upgrading pursued by path-compressing firms means that they require additional resources while, at the same time, facing higher levels of risk than path-following firms. The benefits of state-ownership are important in addressing these needs.

The benefits SOEs enjoy result from the quantity, cost, or exclusivity of the resources made available to them. Government resources may be provided directly or indirectly. Financial resources are offered through concessionary funding, direct subsidies, or state provided guarantees, offering additional funds, or lower the costs at which funds are supplied. State provision of exclusive

information can enable an early move into attractive business opportunities or help in reducing risk levels. Other resources include preferential regulatory action, perhaps offering exemptions from anti-monopoly rules, bankruptcy, or import competition. In such cases a protected domestic market position may facilitate earnings and scale advantages as SOEs benefit from lower fixed or variable costs (Capobianco and Christiansen 2011). Additional resources may be provided indirectly where SOEs form part of business groups. In the latter case SOEs can pool resources, work collectively to overcome market or institutional weaknesses, or tap into social capital. In some cases, larger central SOEs have used group resources to assist smaller local SOEs seeking to internationalise (Li et al. 2017).

Where the state regulates outward investment, political connections are useful in obtaining permission for overseas investment, providing both additional resources (where investment is asset-seeking), and experience (for both market-and asset-seeking motives). State connections in overseas markets may be useful in assuring entry, in accessing seemingly closed markets, and in identifying preferred partners.

Given the relative knowledge isolation of most emerging economies (Rui et al. 2016), government support for SOE competitive upgrading is not unexpected. A distinguishing characteristic of a compressed catch-up strategy is the use of strategic asset-seeking overseas acquisitions. In such cases it is the state that provides permission to undertake such ventures, it may offer financial and other support, and facilitate the transfer of acquired capabilities back to the home market. More general policies that benefit such firms include policies on skilled returnees, and the adoption of national plans that aid in both domestic development and early internationalisation (Lu et al. 2011).

Several emerging markets adopt policies designed to facilitate path-compressing firms through outward foreign direct investment. Outward FDI brings two primary benefits to the domestic economy: access to critical resources that may be lacking at home including raw materials,

technology, brand names and management skills (Buckley et al. 2016); and entry to economic interests that contribute to home market growth such as global value chains, new market segments, and opportunities for upgrading (Sauvant and Chen 2014).

The ability to undertake aggressive internationalization at an early stage of firm development, and often with limited resources and experience, carries a high level of risk, particularly when overseas entry involves dissimilar markets and high control modes such as greenfield investment or mergers and acquisitions. The attraction of M&As is that they give direct access to tacit knowledge that is difficult to transact through markets (Florio et al. 2018). This is important because the capabilities needed by path-compressing firms are not just technological but involve commercial skills where new business models are necessary. For path-compressing firms the learning focus increasingly shifts to knowledge integration as disparate knowledge sets require assimilation (Rui et al. 2018; Lee 2005). Knowledge that is successfully assimilated is likely to be new to the economy and to the industry.

Because a path-compressing strategy involves the identification and acquisition of external and overseas knowledge it requires a higher level of political engagement and support. Path-compressing firms will favour springboarding as they pursue asset-seeking behaviour and may require government support to build the necessary resources (finance, international experience, scale, and absorptive capacity) before venturing overseas, as well as to negotiate the considerable challenges of overseas acquisitions faced by emerging market firms (Tingley et al. 2015). Permission may also be required for firm internationalization, which is likely to be aggressive and at a relatively early stage in the firm's development. Government is also likely to play a critical role in providing supporting conditions such as access to a large and fast-growing domestic market, publicly funded complementary R&D, critical human capital, and regulatory ambiguities. Examples include China's

restrictions on motorcycles in major cities that encouraged the nascent electric scooter industry, and the commitment to high speed rail, both at home and overseas.

Path-Creating Emerging Market Firms

The third group of emerging market firms identified in Table 1, path-creating, are not engaged in catch-up, rather they are seeking to develop in innovative ways. Their learning is not duplicative, but creative and innovative. Because of relative knowledge isolation and the limited international experience of many emerging market firms, pursuing an innovative path implies the integration of a wide range of knowledge drawing primarily on local sources and on local market opportunities. Greater familiarity with competitors, consumer needs, and government policies and preferences as well as considerable experience of operating in uncertain environments, gives emerging market firms an advantage in developing solutions to the challenges of institutional voids and market weaknesses (Peng et al. 2008).

Just like the other upgrading paths discussed, path-creating firms respond to, and exploit, market, and other institutional weaknesses. We illustrate our arguments by drawing on one of China's most innovative sectors, mobile payments. Our conceptualization highlights the criticality of the domestic market in the development of path-creating firms (Fathallah et al. 2018), with the domestic market, rather than asset-seeking forays into overseas markets, driving the evolution of these firms.

The mobile payments market in China is dominated by two competitors: Alipay (part of the Alibaba group), and WeChat Pay (owned by Tencent). Together, these two control 92 percent of the mobile payments market (Armstrong and Wang 2018). Payment systems in China reflect the widespread adoption of low-cost mobile phones. A strong mobile payments infrastructure and security concerns with credit cards, facilitated rapid growth in China's mobile payments market with 74 percent of all online payments made by mobile in 2017 (Nielsen 2018).

Rapid growth of the mobile payments market enabled the two competitors to achieve considerable scale. The combined market for the two firms tripled in the four years between 2013 and 2017, creating a market more than ten times that of Apple Pay, an app that comes pre-installed on all Apple phones (IHS 2016). Rapid growth also benefitted from the absence in China of a competitive legacy infrastructure in payment systems such as credit cards and check banking to overcome. The dearth of effective competition to mobile payments, and their enhanced security elements, contributed to their rapid adoption.

In contrast to EMNEs that internationalize to avoid or arbitrage institutional weaknesses (Cuervo-Cazurra and Genc 2008), path-creating firms have created ownership advantages by providing solutions to voids in risk and trust (Child and Rodrigues 2005; Williamson and Wan 2018). A source of a such advantage is excellent understanding of consumer needs and the insight to respond to these. For example, because of problems of trust and poor service, Chinese consumers display a marked preference for 'bundled' services from a limited range of companies that they know and trust. The emergence of both Alipay and WeChat Pay from within large, already highly successful, and trusted social platforms (Alibaba and WeChat), contributed to their reputation which is signaled by prominence (Gao et al. 2017). The origins of Alipay are found in its role as a supplementary service to e-commerce platform Taobao in providing an escrow function that ensured that buyers' funds were not released to the seller until the goods were received and assessed as merchantable. WeChat Pay, while initially enabling peer-to-peer payments, has expanded to utilize quick response (QR) codes as an effective technological solution to transactional risk in China. Both companies have performed the role of intermediaries in providing solutions to these voids (Mair et al. 2011). Such advantages, while clearly valuable in the Chinese and possibly other emerging markets, may be of limited value when applied to more developed economies that enjoy stronger institutions and regulations.

The learning processes of path-creating firms is complex with a focus on creativity achieved through a mix of trial and error (where the absence of foreign competitors means solutions are still to be found), repetition (to ensure reliability and sustainability) and in integration (in the absence of local specialists) (Rui et al. 2018). The desired result is frontier knowledge, new to the world. Again, in contrast to other catch-up paths, path-creation involves the integration of more than purely technical knowledge as managerial and marketing capabilities enable the enactment of new business models. Similarly, emerging markets such as China are now taking the initiative to set or influence global industry standards that can provide their firms with strong early mover advantages. A path-creating strategy requires high levels of absorptive capacity, with both technical and managerial skill required.

The innovation strategies of path-creating firms emphasize novelty. However, this does not always imply the development of original technologies. In the mobile payments industry both companies actively engage in what might be termed 'imitative incrementalism', a micro-innovation process that takes existing technologies, and those of competitors, and repackages them to provide adapted innovations rapidly, and highly focused on customer needs (Yang et al. 2016). While these technologies are not unique, in combination they provide functions valued by customers. Incremental innovation enables a rapid pace of upgrading. Such technologies also provide a foundation for future innovation, in the mobile payments sector by generating significant amounts of conversational data that are much richer than text data with obvious application to future machine-human interaction (Horwitz 2017). Also valuable in overcoming institutional voids has been the ability to use data that both firms have captured to develop credit scoring businesses (Tencent Credit and Zhina Credit) providing them with a competitive edge in introducing additional financial products.

Like most firms seeking to upgrade, path-creating firms use political connections to gain direct access to needed resources, to draw on public R&D spending, to benefit from government development plans and priorities, and from strategic support in areas such as market entry, competition policy and industry regulation. In the mobile payments sector, both companies have benefitted from government regulation restricting foreign competitors such as Facebook, Twitter, Snapchat, YouTube, and Google from entering the Chinese market. These restrictions range from direct bans, operating restrictions, to the disincentives created by the Great Firewall and the persistence of a non-convertible Chinese currency. The absence of such major competitors is clearly advantageous for their Chinese rivals, but there may also be an indirect benefit if Chinese users believe that domestic suppliers offer higher levels of trust and reliability because they are not subject to the arbitrary regulatory interventions that Western firms have experienced in China.

In addition, accommodative regulative policy has enabled the continuing domination of the industry by Alipay and WeChat Pay. Their combination of size, scope and enduring profit streams have enabled ongoing innovation and industry domination, and this has been tolerated by the Chinese authorities.

Unlike path-following and path-compressing firms, the pace of international development of path-creating firms is not obvious: it depends on home market conditions, particularly resource availability and government support for the firm or industry. The focus on home country conditions and in exploiting domestic market opportunities means that internationalization may not be a priority for such firms, particularly in the earlier stages of their development. Because of the relative absence of competitive pressure, the focus on home market conditions, and the need to continuously build absorptive capacity, we suggest that the pace of internationalization of path-creating firms will be lower than that of other catch-up firms and that springboarding is of less appeal to such firms. While some asset-seeking may occur, this is likely to be within the domestic market.

Even in later stages of firm and industry development there may be powerful impediments to internationalization. One is the level of risk involved in a path-creating strategy – technological and commercial risks – that discourages assumption of further risk associated with internationalization. Internationalization is a discontinuous and resource-intensive step requiring significant management effort (Pedersen and Shaver 2011). Second, the resource augmentation needed for path-creation appears better accomplished in the home rather than overseas markets. This reduces the likelihood of overseas asset-seeking investments. Third, the dominant market positions that may be necessary for a path-creating strategy reduce incentives to pursue international markets, particularly where domestic growth and profitability are high. Finally, the ‘push’ inducements for internationalization of emerging market firms are likely to be lower where they face little competitive pressure in the home market or where the incentive to ‘escape’ institutional voids is replaced by a desire to exploit such voids (Witt and Lewin 2007). However, some cautious internationalisation may occur.

Chinese mobile payments giants Alipay and WeChat Pay have been modest in their internationalization. WeChat Pay is available in more than 20 countries and 12 currencies and has around 100 million overseas users. Alipay is accepted in 26 countries (ASEAN Today 2017). But this process has not been an easy or a swift one. As a non-bank financial provider Alipay was not closely regulated by the People's Bank of China and it moved into a number of overseas markets. However, a tightening of regulations at the end of 2016 forced it to close all foreign financial accounts held by domestic Chinese (Brown 2017).

As a result, both companies have been cautious in their internationalization adopting strategies to limit the risks they face in overseas markets. Initially they have chosen a receptive target market: Chinese tourists travelling overseas who display a strong preference for mobile payment in overseas transactions (Nielsen 2018; SCMP 2017). Given that less than ten percent of the Chinese population travel overseas and less than ten percent hold a passport, the future potential of this market segment appears considerable.

A second strategy has been a focus on other emerging markets, particularly those within Asia. This is not just because this region attracts a significant number of Chinese tourists, but many of the Asian target markets such as Hong Kong, Indonesia, Malaysia, and Vietnam have significant ethnic Chinese populations or can be expected to be familiar with leading Chinese brands. Emerging markets may also be preferred because more mature economies have greater investment in legacy payment systems such as credit cards, widespread distribution of ATMs, and continuing acceptance of bank checks.

A further source of advantage for mobile payments companies has been their platform structure with the ability to offer a wide range of related and valued services from a single provider. The platform nature of both businesses is likely to influence internationalization. The competitive advantages of platform members are mutually interdependent with a more critical consideration being their application to the industry context rather than location. Platform operations such as the degree of openness are culturally sensitive, face higher than average overseas market entry and exit costs, and must negotiate differing technology and regulatory standards, all of which are disincentives to internationalization (Nambisan et al. 2019).

In summary, home market conditions are central to the catch-up and upgrading efforts of emerging market firms. We have posited the importance of market imperfections and institutional voids in determining the alternative development paths pursued by such firms. We suggest that four aspects of domestic market conditions are critical in determining upgrading paths: the size and growth of the domestic market; government policies in supporting and protecting domestic firms; opportunities for innovation; and the extent and nature of market imperfections. The interactions between these variables create the conditions for catch-up as path-following, path-compressing, and path-creating firms. The attractiveness of springboarding varies between these paths, being highest for path-compressing firms, and lowest for path-creating firms.

V. Conclusions

This paper is a response to calls for the need to refine models of EMNE internationalization, and in particular, the role of springboarding in the upgrading of emerging market firms. We have proposed a conceptual framework comparing the role of springboarding along three commonly adopted upgrading paths: path-following, path-compressing, and path-creating. Acknowledging that not all EMNEs can be modeled as latecomers relying on asset-seeking in overseas markets, opens up what has long been treated as a largely homogeneous group. In addition, the taxonomy highlights the dangers of generalizing the behavior of EMNEs from the experience of widely reported, successful cases (Bongalia et al. 2007; Lui and Li 2002; Shu 2017). Any valid generalization requires an understanding of a wider range of emerging market firms and EMNEs (Luo and Zhang 2016).

We believe that our analysis offers improved contextualization of the springboard perspective relaxing the assumption that all emerging market firms are lagging and driven by the need to achieve swift catch-up. The rapid development of several emerging economies suggests that path-creating firms could be increasingly commonplace in the future and these firms, particularly those that are privately-held (Clegg et al. 2018), are the least likely to display springboarding behaviour.

Our analysis throws some doubt on the conclusion of springboard thinking that international expansion invariably provides the optimum path to competitive upgrading (Luo and Tung 2018). In the case of path-creating firms it may be that uniqueness of home market conditions and the innovative business models they generate may have limited applicability to overseas markets or may require delayed introduction. This is illustrated by our example of China's mobile payments industry that is unmatched anywhere else in the world in terms of size, growth rate, and adoption. At present the advantages of incumbent firms are of significant value primarily in the home market, and perhaps in transactions linking China to other economies. This suggests that these firms, by drawing

on the unique conditions and market imperfections of their home market, may become strong competitors in a highly concentrated home market but face challenges when seeking to internationalize their competencies.

The applicability of our taxonomy to other emerging economies is a critical question. We have argued that home country advantages – large market size, strong growth, adequate resources, and supportive government policies in particular - are all key influences on a firm's upgrading path. While these conditions exist in China and to a lesser degree in some other emerging economies such as India, and perhaps Brazil, there are many other emerging economies that do not enjoy such environments (MGI 2018). In extremely challenging environments, springboarding, in the form of escape FDI, may arise (Barnard and Luiz 2018). Where resource deficiencies encourage path-following catch-up early internationalisation may also occur, but the type of assets being acquired are likely to be less sophisticated than those targeted by path-compressing firms (Cui et al. 2017; Elia and Santangelo 2017). For emerging economies that offer limited locational advantages, such as low cost or regional proximity, the ability to attract GVC activities may partly compensate for other home country weaknesses, again offering alternatives to asset-seeking internationalisation. Testing of these ideas will require further refinement.

Our discussion confirms that the evolution of path-creating EMNEs can be interpreted within existing internationalization approaches such as process models, the internalization approach, or the eclectic paradigm. This is not surprising given that such models have evolved in light of changing global market conditions (Dunning 1995; Johanson and Vahlne 2009; Narula 2006) and were originally designed to explain the behavior of leading firms. Similarly, all of the major theories emphasize the importance of home market conditions whether this is through the ability to create sustainable advantage, to internalize market and institutional failings, or to build a sufficient domestic base to underpin internationalisation. While boundary conditions may need to be relaxed when examining the majority of EMNEs, for example their access to a wider range of competitive

advantages, for path-creating firms, minor refinement of established models may be all that is required.

In theoretical terms, EMNEs remain challenging. The approach in Buckley et al. (2007), to conceptualize EMNEs as a special case, requiring specific adaptation of general theoretical principles, contrasts with theories targeted at EMNEs solely. Focusing purely on EMNEs results in unanchored theories. The separation of the effects of the domestic environment (including cultural influences) from domestic industry structure and from changes in technological domains remains a challenge for theorizing on the internationalization of EMNEs. Furthermore, the role of management needs more forensic enquiry, particularly in isolating potential key differences in strategic trajectories between DMNEs and EMNEs.

The discussion presented here should be considered as a first step in a more refined understanding of EMNEs, particularly the group of path-creating firms. Further work is needed to examine a wider range of sectors and home countries. There are inherent problems of trying to generalize from our example of path-creating firms from what may simply be 'Chinese characteristics', particularly the tolerance of monopoly power, strong government protection, and the existence of highly favourable home market conditions (Ramamurti and Hillman 2018).

Further refinement of some of the underlying concepts is also necessary. Recent work has questioned the utility of concepts such as catch-up and their restriction to emerging country firms (Ramamurti and Williamson 2019). In a dynamic competitive environment established firms may undertake radical restructuring, in effect 'catching-up' with less mature competitors who may have gained a leading position. Our analysis is also based on the idea that firms adopt a single path towards upgrading, but multiple paths may be possible, particularly in large markets with diverse resources (Lee et al. 2016). Particularly likely is the combination of path-compressing catch-up that generates path-creating capabilities (Haakonsson and Slepnirov 2018). Similarly, we have not

considered how stages of emerging market transition may impact both the choice of firm development path and learning strategy as market and institutional imperfections change (Bilgili et al. 2016). Transition may increase or decrease market and institutional imperfections as well as the level and forms of government intervention in an economy (Peng 2003). Such work could be most insightful.

References

- Adner, R., and D.A. Levinthal (2002) The Emergence of Emerging Technologies *California Management Review* 45(1): 50-66.
- Armstrong, P., and Y. Wang (2018) Is Alibaba Losing to Tencent in China's Trillion-Dollar Payment War? *Forbes*, 28 March.
- ASEAN Today (2017) Alipay vs WeChat Pay - Who is Winning the Battle, *ASEAN Today*, February 28.
- Awate, S., Larsen, M.M., and R. Mudambi (2012) EMNE Catch-Up Strategies in the Wind Turbine Industry: Is There a Trade-Off Between Output and Innovation Capabilities? *Global Strategy Journal* 2(3): 205-223.
- Barnard, H., and J.M. Luiz (2018) Escape FDI and the Dynamics of a Cumulative Process of Institutional Misalignment and Contestation: Stress, Strain and Failure *Journal of World Business* 53(5): 605-616.
- Benito, G.R.G., Rygh, A. and R. Lunnan (2016) The Benefits of Internationalization for State-Owned Enterprises *Global Strategy Journal* 6(4): 269-288.

Bilgili, T.V., Kedia, B. L. and H. Bilgili (2016) Exploring the Influence of Resource Environments on Absorptive Capacity Development: The Case of Emerging Market Firms *Journal of World Business* 51 (5): 700-712.

Bohnsack, R. (2018) Local Niches and Firm Responses in Sustainability Transitions: The Case of Low-Emission Vehicles in China *Technovation* Vol. 70-71(Feb-March): 20-32.

Bongalia, F., Goldstein, A., and J. Mathews (2007) Accelerated Internationalization by Emerging Multinationals: The Case of the White Goods Sector *Journal of World Business* 42(4): 369-383.

Brandt, L., and E. Thun (2016) Constructing a Ladder for Growth: Policy, Markets, and Industrial Upgrading in China *World Development* 80(C): 78-95.

Branstetter, L. G. (2018) *China's Forced Technology Transfer Problem – And What to Do About It* PIIE Policy Brief 18-13 Peterson Institute for International Economics, Washington.

Brown, A. (2017) Alipay vs WeChat Pay vs UnionPay - Important Research *FinanceFeeds* 5 November. <https://financefeeds.com/alipay-vs-wechat-pay-vs-unionpay-important-research/>

Buckley, P.J., Clegg, J., Cross, A. R., Liu, X., Voss, H., and P. Zheng (2007) The Determinants of Chinese Outward Foreign Direct Investment *Journal of International Business Studies* 38(4): 499-518.

Buckley, P.J., Clegg, J., Cross, A. R., Zheng, P., Voss, H., and X. Liu (2018) A Retrospective and Agenda for Future Research on Chinese Outward Investment *Journal of International Business Studies* 49(1): 4-23.

Buckley, P.J. and N. Hashai (2014) The Role of Technological Catch-Up and Domestic Market Growth in the Genesis of Emerging Country Based Multinationals *Research Policy* 43(2): 423-437.

Buckley, P.J., Munjal, S., Enderwick, P. and N. Forsans (2016) Cross-Border Acquisitions by Indian Multinationals: Asset Exploitation of Asset Augmentation? *International Business Review* 25(4): 986-996.

Capobianco, A., and H. Christiansen (2011) *Competitive Neutrality and State-owned Enterprises: Challenges and Policy Options* OECD, Paris.

Carney, M., Dielman, M., and M. Taussig (2016) How are Institutional Capabilities Transferred Across Borders? *Journal of World Business* 51(6): 882-894.

Carpenter, G.S. and K. Nakamoto (1989) Consumer Preference Formation and Pioneering Advantage *Journal of Marketing Research* 26(3): 285-298.

Chang, S.J. and J. Hong (2000) Economic Performance of Group Affiliated Companies in Korea: Intragroup Resource Sharing and Internal Business Transactions *Academy of Management Journal* 43(3): 429-448.

Chen, D., and R. Li-Hua (2011) Modes of Technological Leapfrogging: Five Case Studies from China *Journal of Engineering and Technology Management* 28(1): 93-108.

Child, J., and S.B. Rodrigues (2005) The Internationalization of Chinese Firms: A Case for Theoretical Extension *Management and Organization Review* 1(3): 381-410.

Clegg, L.J., Voss, H., and J.A. Tardios (2018) The Autocratic Advantage: Internationalization of State-Owned Multinationals *Journal of World Business* 53(5): 668-681.

Cuervo-Cazurra, A., and M. Genc (2008) Transforming Disadvantages into Advantages: Developing-Country MNEs in the Least Developed Countries *Journal of International Business Studies* 39(6): 957-979.

Cuervo-Cazurra, A., Luo, Y., Ramamurti, R., and S.H. Ang (2018) The Impact of the Home Country on Internationalization *Journal of World Business* 53(5): 593-604.

Cui, L., and F. Jiang (2012) State-Ownership Effect on Firms' FDI Ownership Decisions Under Institutional Pressure: A Study of Chinese Outward-Investing Firms *Journal of International Business Studies* 43(3): 264-284.

Cui, L., Fan, D., Liu, X., and Y. Li (2017) Where to Seek Strategic Assets for Competitive Catch-Up? A Configurational Study of Emerging Market Enterprises Expanding into Foreign Strategic Factor Markets *Organization Studies* 38(8): 1059-1083.

De Beule, F., Elia, S., and L. Piscitello (2014) Entry and Access to Competences Abroad: Emerging Market Firms Versus Advanced Market Firms *Journal of International Management* 20(2): 137-152.

Deng, P. (2012) The Internationalization of Chinese Firms: A Critical Review and Future Research *International Journal Of Management Reviews* 14(4): 408-427.

Dunning, J.H. (1995) Reappraising the Eclectic Paradigm in an Age of Alliance Capitalism *Journal of International Business Studies* 26(3): 461-491.

Elia, S. and G.D. Santangelo (2017) The Evolution of Strategic Asset-Seeking Acquisitions by Emerging Market Multinationals *International Business Review* 26(5): 855-866.

Fathallah, R., Branzei, O., and J-L. Schaan (2018) No Place Like Home? How EMNCs from Hyper Turbulent Contexts Internationalize by Sequentially Arbitraging Rents, Values and Scales Abroad *Journal of World Business* 53(5): 620-631.

Fialka, J. (2016) Why China is Dominating the Solar Industry *Scientific American* 19 December.
<https://www.scientificamerican.com/article/why-china-is-dominating-the-solar-industry/>

Florio, M., Ferraris, M., and D. Vandone (2018) *State-Owned Enterprises: Rationales for Mergers and Acquisitions* CIRIEC Working Paper 1801 Universite de Liege, Brussels.

- Gammeltoft, P., and H. Sornn-Friese (2005) National Embeddedness of Economic Activities: Industrial and Technology Policy in Korea and Taiwan *Asian Journal of Technology Innovation* 13(2): 1-22.
- Gao, C., Zuzul, T., Jones, G., and T. Khanna (2017) Overcoming Institutional Voids: A Reputation-Based View of Long-Run Survival *Strategic Management Journal* 38(11): 2147-2167.
- Gao, X., (2018) Effective Strategies to Catch Up in the Era of Globalization *Research-Technology Management* 61(3): 19-26.
- Govindarajan, V. and R. Ramamurti (2011) Reverse Innovation, Emerging Markets, and Global Strategy *Global Strategy Journal* 1(2): 1919-205.
- Grosse, R. (2016) How Emerging Market Firms Will Become Global Leaders *International Journal of Emerging Markets* 11(3): 274-287.
- Haakonsson, S.J. and D. Slepnirov (2018) Technology Transmission Across National Innovation Systems: The Role of Danish Suppliers in Upgrading the Wind Energy Industry in China *The European Journal of Development Research* 30(3): 462-480.
- Helfat, C.E. and M.A. Peteraf (2003) The Dynamic Resource-Based View: Capability Lifecycles *Strategic Management Journal* 24(10): 997-1010.
- Hennart, J.F. (2018) Springing from Where? How Emerging Market Firms Become Multinational Enterprises *International Journal of Emerging Markets* 13(3): 568-585.
- Henisz, W.J. (2003) The Power of the Buckley and Casson Thesis: The Ability to Manage Institutional Idiosyncrasies *Journal of International Business Studies* 34(2): 173-184.

Hertenstein, P., Sutherland, D., and J. Anderson (2017) Internationalization Within Networks: Exploring the Relationship Between Inward and Outward FDI in China's Auto Components Industry *Asia Pacific Journal of Management* 34(1): 69-96.

Hobdari, B., Gammeltoft, P., Li, J., and K.E. Meyer (2017) The Home Country of the MNE: The Case of Emerging Country Firms *Asia Pacific Journal of Management* 34(1): 1-17.

Horwitz, J. (2017) China's Tencent is a Sleeping Giant in the Global Artificial Intelligence Race *Quartz* <https://qz.com/974408/tencents-wechat-gives-it-an-advantage-in-the-global-artificial-intelligence-race/>

IHS (2016) Tencent Outperforms its Competitors Baidu and Alibaba Thanks to Weixin (WeChat) *IHS Markit Insights* 29 November. <https://technology.ihs.com/586026/tencent-outperforms-its-competitors-baidu-and-alibaba-thanks-to-weixin-wechat>

Johanson, J. and J-E Vahlne (2009) The Uppsala Internationalization Process Model Revisited: From Liability of Foreignness to Liability of Outsidership *Journal of International Business Studies* 40(9): 1411-1431.

Jurowetzki, R., Lema, R. and B-A. Lundvall (2018) Combining Innovation Systems and Global Value Chains for Development: Towards a Research Agenda *The European Journal of Development Research* 30(3): 364-388.

Kali, R. (1999) Endogenous Business Networks *The Journal of Law Economics and Organization* 15(3): 615-636.

Khanna, T., and Y. Yafeh (2007) Business Groups in Emerging Markets: Paragon or Parasites? *Journal of Economic Literature* 65(2): 331-372.

Kothari, T., Kotabe, M., and P. Murphy (2013) Rules of the Game for Emerging Market Multinational Companies from China and India *Journal of International Management* 19(3): 276-299.

Kotabe, M., Jiang, C.X. and J.Y. Murray (2017) Examining the Complementary Effect of Political Networking Capability With Absorptive Capacity on the Innovative Performance of Emerging Market Firms *Journal of Management* 43(4): 1131-1156.

Kotabe, M., and T. Kothari (2016) Emerging Market Multinational Companies' Evolutionary Paths to Building a Competitive Advantage from Emerging Markets to Developed Countries *Journal of World Business* 51(5): 729-743.

Kumar, V., Singh, D., Purkayastha, A., Popli, M. and A. Gaur (2019) Springboard Internationalization by Emerging Market Firms: Speed of First Cross-Border Acquisition *Journal of International Business Studies* doi.org/10.1057/s41267-019-00266-0.

Kumaraswamy, A., Mudambi, R., Saranga, H., and A. Tripathy (2012) Catch-Up Strategies in the Indian Auto Components Industry: Domestic Firms' Responses to Market Liberalization *Journal of International Business Studies* 43(4): 368-395.

Lamin, A. (2013) Business Groups as Information Resource: An Investigation of Business Group Affiliation in the Indian Software Services Industry *Academy of Management Journal* 56 (5): 1487-1509.

Lee, J., Kim, J-C., and J. Lim (2016) Globalization and Divergent Paths of Industrial Development: Mobile Phone Manufacturing in China, Japan, South Korea, and Taiwan *Journal of Contemporary Asia* 46(2): 222-246.

Lee, K. (2005) Making a Technological Catch-up: Barriers and Opportunities *Asian Journal of Technology Innovation* 13(2): 97-131.

Lee, K., and C. Lim (2001) Technological Regimes, Catching-Up and Leapfrogging: The Findings from the Korean Industries *Research Policy* 30(3):459-483.

Lee, K., Szapiro, M. and Z. Mao (2018) From Global Value Chains (GVC) to Innovation Systems for Local Value Chains and Knowledge Creation *The European Journal of Development Research* 30(3): 424-441.

Lema, R., Berger, A., and H. Schmitz (2013) China's Impact on the Global Wind Power Industry *Journal of Current Chinese Affairs* 42(1): 37–69.

Lessard, D., and R. Lucea (2009) Embracing Risk as a Core Competence: The Case of CEMEX *Journal of International Management* 15(3): 296-305.

Lewis, J.A. (2018) *Technological Competition and China*, CSIS Center for Strategic and International Studies, Washington, November.

Li, P.P. (2010) Toward a Learning-Based View of Internationalization: The Accelerated Trajectories of Cross-Border Learning for Latecomers *Journal of International Management* 16 (1): 43-59.

Li, M.H., L. Cui and J. Lu (2017) Marketized State Ownership and Foreign Expansion of Emerging Market Multinationals: Leveraging Institutional Competitive Advantages *Asia Pacific Journal of Management* 34(1): 19-46.

Lu, J., Liu, X., and H. Wang (2011) Motives for Outward FDI of Chinese Private Firms: Firm Resources, Industry Dynamics, and Government Policies *Management and Organization Review* 7(2): 223-248.

Lui, H. and K. Li (2002) Strategic Implications of Emerging Chinese Multinationals: The Haier Case Study *European Management Journal* 20(6): 699-706.

Luo, Y., and R.L. Tung (2007) International Expansion of Emerging Market Enterprises: A Springboard Perspective *Journal of International Business Studies* 38(4): 481–498.

Luo, Y., and R.L. Tung (2018) A General Theory of Springboard MNEs *Journal of International Business Studies* 49(2): 129-152.

Luo, Y., Xue, Q. And B. Han (2010) How Emerging Market Governments Promote Outward FDI: Experience from China *Journal of World Business* 45(1): 68–79.

Luo, Y., and H. Zhang (2016) Emerging Market MNEs: Qualitative Review and Theoretical Directions *Journal of International Management* 22(4): 333-350.

Maculan, A-M. (2013) Embraer and the Growth of the Brazilian Aircraft Industry *International Journal of Technology and Globalisation* 7(1-2): 41-59.

Madhok, A., and M. Keyhani (2012) Acquisitions as Entrepreneurship: Asymmetries, Opportunities, and the Internationalization of Multinationals from Emerging Economies *Global Strategy Journal* 2(1): 26–40.

Mair, J., Lanuza, I.M. and M. Ventresca (2011) Building Inclusive Markets in Bangladesh: How Intermediaries Work Institutional Voids *The Academy of Management Journal* 55(4): 819-850.

Meyer, K. E. (2018) Catch-Up and Leapfrogging: Emerging Economy Multinational Enterprises on the Global Stage *International Journal of the Economics of Business* 25(1): 19-30.

Meyer, K.E. and M.W. Peng (2016) Theoretical Foundations of Emerging Economy Research *Journal of International Business Studies* 47(1): 3-22.

Meyer, K.E. and K.R. Xin (2017) Managing Talent in Emerging Economy Multinationals: Integrating Strategic Management and Human Resource Management *International Journal of Human Resource Management* 29 (11): 1827-1855.

MGI (2018) *Outperformers: High-Growth Emerging Economies and the Companies that Propel Them* McKinsey Global Institute, San Francisco September.

Nambisan, S., Zahra, S.A., and Y. Luo (2019) Global Platforms and Ecosystems: Implications for International Business Theories *Journal of International Business Studies* (forthcoming)

DOI: 10.1057/s41267-019-00262-4.

Narula, R. (2006) Globalization, New Ecologies, New Zoologies, and the Purported Death of the Eclectic Paradigm *Asia Pacific Journal of Management* 23(2): 143-151.

Narula, R. (2012) Do We Need Different Frameworks to Explain Infant MNEs from Developing Countries? *Global Strategy Journal* 2(3): 188-204.

Neilsen (2018) 2017 Outbound Chinese Tourism and Consumption Trends, *Neilsen Insights* 28 February.

Pananond, P., Gereffi, G., and T. Pedersen (2020) An Integrative Typology of Global Strategy and Global Value Chains: The Management and Organization of Cross-Border Activities *Global Strategy Journal* 10(3): 421-443.

Pedersen, T., and J.M. Shaver (2011) Internationalization Revisited: The Big Step Hypothesis *Global Strategy Journal* 1(3-4): 263-274.

Peng, M. W. (2003) Institutional Transitions and Strategic Choices *The Academy of Management Review* 28(2): 275-296.

Peng, M.W., Wang, D.Y.L., and Jiang, Y. (2008) An Institution-Based View of International Business Strategy: A Focus on Emerging Economies *Journal of International Business Studies* 39(5): 920-936.

Pietrobelli, C. and C. Staritz (2018) Upgrading, Interactive Learning, and Innovation Systems in Value Chain Interventions *The European Journal of Development Research* 30(3): 557-574.

Pillania, R.K. (2008) Internationalisation at Bharat Forde Limited: A Case Study *Management Decision* 46(10): 1544-1563.

Ramamurti, R. (2012) What is Really Different About Emerging Market Multinationals? *Global Strategy Journal* 2(1): 41-47.

Ramamurti, R. and P.J. Williamson (2019) Rivalry Between Emerging-Market MNEs and Developed-Country MNEs: Capability Holes and the Race to the Future *Business Horizons* 62(2): 157-169.

Ramamurti, R. and J. Hillemann (2018) What is "Chinese" About Chinese Multinationals? *Journal of International Business Studies* 49(1): 34-48.

Rottig, D. (2016) Institutions and Emerging Markets: Effects and Implications for Multinational Corporations *International Journal of Emerging Markets* 11(1): 2-17.

Rugman, A.M. (2010) Reconciling Internalization Theory and the Eclectic Paradigm *Multinational Business Review* 18(2): 1-12.

Rui, H., Cuervo-Cazurra, A., and C. A. Un (2016) Learning-By-Doing in Emerging Market Multinationals: Integration, Trial and Error, Repetition, and Extension *Journal of World Business* 51(5): 686-699.

Sauvant, K.P. and V.Z. Chen (2014) China's Regulatory Framework for Outward Direct Foreign Investment *China Economic Journal* 7(1): 141-163.

SCMP (2017) Contactless Competition: WeChat Pay is Coming to Hong Kong's MTR, and Alipay May Not be Far Behind *South China Morning Post* 23 November.

<https://www.scmp.com/news/hong-kong/economy/article/2121330/contactless-competition-wechat-pay-coming-hong-kongs-mtr>

Schaefer, K.J. (2020) Catching-Up by Hiring: The Case of Huawei *Journal of International Business Studies* (forthcoming).

- Sheng, S., Zhou, K., and J.J. Li (2011) The Effects of Business and Political Ties on Firm Performance: Evidence from China *Journal of Marketing* 75(1): 1-15.
- Shu, E. (2017) Emergent Strategy in an Entrepreneurial Firm: The Case of Lenovo in its Formative Years *International Journal of Emerging Markets* 12(3): 626-636.
- Tan, H., and J.A. Mathews (2015) Accelerated Internationalization and Resource Leverage Strategizing: The Case of Chinese Wind Turbine Manufacturers *Journal of World Business* 50(3): 417-427.
- Tingley, D., Xu, C., Chilton, A., and H.V. Milner (2015) The Political Economy of Inward FDI: Opposition to Chinese Mergers and Acquisitions *The Chinese Journal of International Politics* 88(1): 27-57.
- Veugelers, R., De (2017) *The Challenge of China's Rise as a Science and Technology Powerhouse*, Breugel Policy Contribution 17, Breugel, Brussels, July.
- Verbeke, A. and L. Kano (2016) The New Internalization Theory and Multinational Enterprises from Emerging Economies: A Business History Perspective *Business History Review* 89(3): 415-455.
- Wang, C., Hong, J., Kafourous, M., and M. Wright (2012) Exploring the Role of Government Involvement in Outward FDI from Emerging Economies *Journal of International Business Studies* 43(7): 655-676.
- Wei, T., Clegg, J., and L. Mei (2015) The Conscious and Unconscious Facilitating Role of the Chinese Government in Shaping the Internationalization of Chinese MNCs *International Business Review* 24(2): 331-343.
- Williamson, P.J. and F. Wan (2018) Emerging Market Multinationals and the Concept of Ownership Advantages *International Journal of Emerging Markets* 13(3): 557-567.

Witt, M.A., and A.Y. Lewin (2007) Outward Foreign Direct Investment as Escape Response to Home Country Institutional Constraints *Journal of International Business Studies* 38(4): 579-594.

Yang, X., Sun, S.L., and R.P. Lee (2016) Micro-Innovation Strategy: The Case of WeChat *Asian Case Research Journal* 20(2): 401-427.

Yaprak, A., and B. Karademir (2010) The Internationalization of Emerging Market Business Groups: An Integrated Literature Review *International Marketing Review* 27(2): 245-262.

Yiu, D. and C-M Lau (2008) Corporate Entrepreneurship as Resource Capital Configuration in Emerging Market Firms *Entrepreneurship Theory and Practice* 32(1): 37-57.