# Theoretical foundations of antecedents of internationalization and moderators in multinationality—performance relationship

*M-P* relationship

213

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# What is missing?

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#### Abstract

**Purpose** – In this paper, the authors undertake a systematic analysis of multinationality–performance (*M-P*) literature published in the last decade, when antecedents for internationalization and moderators of the *M-P* relationship had attained a center stage in international business and international management research. Though *M-P* relationship is one of the most widely studied topics within international business literature, so far synthesis of the entire theoretical landscape is missing in extant literature.

**Design/methodology/approach** – Through keywords search process, the authors found 111 studies in management literature that look at internationalization, its antecedents, performance of internationalized firms, and moderators of the *M-P* relationship. The focus of this study is to identify theoretical foundations used to explain the antecedents and moderators in *M-P* relationship, in order to suggest the future research direction for the field. The authors classify the antecedents and moderators based on their theoretical underpinnings not only to identify commonly used theoretical foundations in the last 10 years of international strategy research but also to highlight potential areas for future research.

**Findings** – The authors' analysis indicates that research on international strategy in the last decade was dominated by theory testing in the context of developed economies. The authors' review suggests that majority of the antecedents and moderators in the *M-P* relationship are anchored within institutional theory, organizational structure, resource-based view, social capital, and upper echelon theory.

**Originality/value** – The authors' findings are indicative of a rich research potential of *M-P* relationship in the contextual research setting of emerging markets while leveraging more diversified theoretical bases and multiple levels of research design.

**Keywords** Performance, Antecedents, Literature review, Internationalization, Moderators **Paper type** Literature review

#### 1. Introduction

The determinants (or antecedents) of internationalization and the contingent factors (or moderators) of multinationality–performance (*M-P*) relationship are the two most widely studied topics in the international strategy area (Glaum and Oesterle, 2007; Hitt *et al.*, 2006b; Li, 2007). Though there is an ongoing debate (Contractor, 2007; Hennart, 2007) between the proponents of the horizontal S-curve *M-P* relationship based on the three-stage theory (Contractor *et al.*, 2003; Lu and Beamish, 2004) and the critiques of the normative *M-P* relationship (Berry and Kaul, 2016; Hennart, 2011; Marano *et al.*, 2016; Verbeke and Forootan, 2012), none of the prior studies took stock of the theoretical state of current research and provided a theoretical direction for advancement of the *M-P* relationship debate. In response to Hennart's (2007; pp. 446) concern on "lack of strongly developed theory underlying



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empirical *M-P* studies," we make an attempt to identify theories used by researchers in 111 studies published on *M-P* relationships in 15 major journals over the last 10 years. We believe that theoretical review of prior and relevant literature "closes areas where a plethora of research exists, and uncovers areas where research is needed" (Webster and Watson, 2002). Subsequently, we posit our research question as: *what are the theoretical foundations through which antecedents and moderators in the M-P relationship have been analyzed?* 

To provide a comprehensive theoretical state of M-P relationship research, we adopt an approach that is different from the existing review articles on the M-P relationship (Annavariula and Beldona, 2000; Hit et al., 2006b; Li, 2007; Nguyen, 2017). We apply a set of specific principles to avoid making explicit assumptions underpinning a literature review. First, we develop an integrative framework that organizes prior research using quantitative logic. Our focus is on theoretical foundations used by researchers in their papers to explain how/why (arrows) various constructs influence each other rather than the constructs (boxes) themselves (Thomas et al., 2011). Our review is not just limited to reporting empirical studies like some of the earlier literature reviews did on M-P relationship (Hitt et al., 2006; Li, 2007) but covers conceptual papers as well. Second, we synthesize the theoretical foundations underpinning M-P research and suggest research directions on theoretical fronts. Third, we follow a systematic approach to review research by (1) identifying limitations in the prior studies (in introduction section) (2) locating studies (in methods section), (3) selecting and evaluating studies (in methods section), (4) analyzing and synthesizing studies (in research findings section), and (5) reporting and using the results to identify future areas of research (in discussion and conclusion section) (Tranfield et al., 2003). To summarize, we intend to use evidence available in the existing M-P relationship literature to provide theoretical insights and guidance for the researcher interested in a similar phenomenon. Our approach enables us to avoid descriptive narration of the literature while building an analytical view point of the literature (Hart, 1998; Jones and Gatrell, 2014).

The paper makes three major contributions to the international strategy literature. First, we observe that current research (except social capital) looks, predominantly, at environmental (institutional theory) or firm-level (organizational structure, resource-based view (RBV)) theories to explain what enables firms to internationalize (as antecedents). The performance implication from multinationality in the presence of contingent variables (as moderators) is explained mostly using environmental (institutional theory) or firm-level (organizational structure, RBV) based theoretical foundations. Hence, individual-level (upper echelon theory, human capital, social capital, and managerial cognition) antecedents and moderators have received scarce attention as the research focus has either been on what enables (as antecedents) internationalization or what enhances (as moderators) performance from multinationality. Second, it is important to jointly study the antecedent of internationalization and the moderator of M-P relationship. With the help of a novel integrating framework, we analyzed same strategic factors that might be both determinants and contingent in the context of M-P relationship. Our literature review shows that researchers have used a comprehensive model covering both antecedent/s and moderator/s of performance, to invoke only one of the levels (environmental, firm, or individual) of the argument based on institutional theory, organizational structure, social capital, and upper echelon theory. Surprisingly, a comprehensive analysis of international strategy using various theoretical foundations and research design cutting across multiple levels (environmental, firm, or individual) of theories is vet to get adequate attention from the research community. Third, we identify that in the last decade, research on international strategy has been largely focused on empirical theory testing in the context of developed economies (with exception of emerging markets (EMs) such as India and China). It is indicative of a rich research potential of M-P relationship in the contextual research setting of EMs (specially non-Indian and non-Chinese context) while leveraging more diversified theoretical bases and multiple levels of research design (Andersson et al., 2014; Khanna, 2015; Meyer, 2015; Whetten, 2009).

*M-P* relationship

We create an integrative framework of  $(n+1)X(n+1)^T$  matrix (Figure 1) to organize extant literature and to identify theoretical foundations underlying antecedents and moderators in the M-P relationship. We assumed that the selected studies would have different types of theoretical foundations. Therefore, the studies have been classified into four categories: (1) studies with both antecedents and moderators – coded as category-1; (2) studies with only antecedents, but no moderators – coded as category-2, (3) studies with only moderators but no antecedents – coded as category-3; and (4) studies with no antecedents and moderators – coded as category-4. Hence, the frequencies of studies in category-1 with various combinations of theoretical foundations of antecedents and moderators was assigned to one of the cells in  $nXn^T$  matrix. Category-2 studies were assigned to one of the cells in  $nX(n+1)^T$  matrix and category-3 studies to one of the cells in  $(n+1)Xn^T$  matrix. Finally, category-4 studies were assigned to (n+1)X(n+1) location of the matrix.

215

#### 3. Methods

#### 3.1 Sample identification

We undertook a systematic review of literature to find relevant research papers for this study (Tranfield *et al.*, 2003). As a first step, following the common practice in literature review (Hitt *et al.*, 2006b), we identified 15 well-regarded journals in management and international business (IB) fields. This set had nine main-stream management journals (Academy of Management Journal, Academy of Management Perspectives, Academy of Management Reviews, Administrative Science Quarterly, Strategic Management Journal, Journal of Management Studies, Journal of Management, Organization Science, and Management Science) and six IB journals (Journal of International Business Studies, Global Strategy Journal, International Business Review, Journal of International Management, Journal of World Business, and Management International Review). The impact factor of the journals (Table I) indicates the importance of the papers published through these outlets. We searched these 15 journals for studies published in the period from 2005 to 2014 that included terms such as "internationalization," "globalization," "geographic diversification," or "expansion" in the title or keywords. The search yielded 1,857 studies. Of these, papers that were not based on internationalization or its performance effect or were focused on summarizing

Moderators Antecedents	(1) TA <sub>1</sub> <sup>a</sup>	(2) TA <sub>2</sub> <sup>b</sup>	 	(n) TA <sub>n</sub> c	(n+1) No Moderators
(1) TA <sub>1</sub> <sup>a</sup>	Articles with antecedent/s based on TA <sub>1</sub> and moderator/s based on TA <sub>1</sub>	Articles with antecedent/s based on TA <sub>1</sub> and moderator/s based on TA <sub>2</sub>		Articles with antecedent/s based on TA <sub>1</sub> and moderator/s based on TA <sub>n</sub>	Articles with only antecedent/s based on TA <sub>1</sub>
(2) TA <sub>2</sub> <sup>b</sup>	Articles with antecedent/s based on TA <sub>2</sub> and moderator/s based on TA <sub>1</sub>	Articles with antecedent/s based on TA <sub>2</sub> and moderator/s based on TA <sub>2</sub>			
(n) TAn <sup>c</sup>	Articles with antecedent/s based on TAn and moderator/s based on TA1				
(n+1) No Antecedents	Articles with only moderator/s based on TA <sub>1</sub>				Articles without any antecedent/s and moderator/s

a Theoretical Argument of type 1

With both antecedents and moderators (category-1)

Only with antecedents, but no moderators (category-2)

No antecedents and moderators (category-4)

Figure 1. Integrative framework



b Theoretical Argument of type 2

<sup>&</sup>lt;sup>c</sup> Theoretical Argument of type n

216

**Table I.**Distribution of selected studies across journals and year of publication

Year Journal title	Citation index	2002	2006	2007	2008	2009	2010	2011	2012	2013	2014	Total
Academy of Management Journal	4.074		1		1		2	2		1		7
Academy of Management Perspectives	2.826					-		1				2
Academy of Management Reviews	7.817		П		က							4
Administrative Science Quarterly	7.075										2	2
Global Strategy Journal	NA							4	က	2	_	10
International Business Review	1.871			1		2	2		1	2	2	10
Journal of International Business Studies	5.534	П	П	2	က		2	က		2	2	16
Journal of International Management	2.594		П			7		1	2	1	П	7
Journal of Management Studies	3.277		П				_	1				က
Journal of Management	6.862	_								2		က
Journal of World Business	3.039			2	_				2	2	က	10
Management International Review	0.929			∞	П	2	_	1	က		П	17
Organization Science	3.807				2	П						က
Strategic Management Journal	3.780		Π	2	က	2	2	4		2	П	17
Management Science	3.304											
Total		2	9	15	14	6	10	17	11	14	13	111

internationalization-related studies published elsewhere (e.g. book reviews) were eliminated. We also browsed through the reference sections of recent studies to identify studies. We finally arrived at a set of 111 studies of which 41 studies appeared in management journals and 70 studies appeared in IB journals (Table I).

# 3.2 Sample analysis

Figure 2 outlines the year-wise distribution of the selected studies appearing in the 15 journals. About 45 percent of these studies were published in Strategic Management Journal, Management International Review, and Journal of International Business studies. The studies highlight the importance of internationalization as a strategic choice as well as a phenomenon of interest for IB scholars (Figure 3). Quantitative studies dominated the sample (79 percent) indicating a maturity in the field with large amount of empirical validation (Figure 4). Figure 5 highlights that the *M-P* relationship literature in the last decade has been dominated by studies based on developed economies (60 percent). However, emerging-economy-related studies are catching up (26 percent, most of which are in the recent years).

# 3.3 Coding scheme

We began by identifying 44 antecedents and 57 moderators as strategic factors in the 111 studies. Subsequently, we searched for theoretical arguments that explain the role of each of these antecedents and moderators. Our approach was as follows. First, we looked for explicit

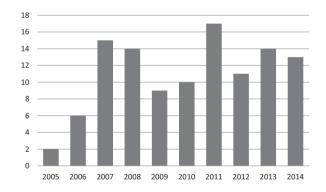


Figure 2. Year-wise distribution of selected studies

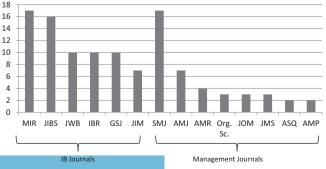
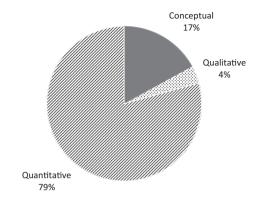


Figure 3.
Journal-wise distribution of selected studies[1]



# 218

**Figure 4.** Focus areas of selected studies



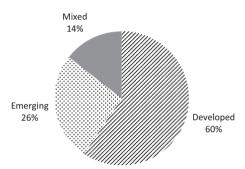


Figure 5.
Distribution of selected studies across institutional context

theoretical anchor words in the heading or in the abstract or in the main body of paper (such as Hitt et al. (2006a) that explicitly mentioned human capital and social capital as anchor theoretical foundations in the abstract). Second, we looked for explicit citations of seminal theoretical studies (such as Sapienza, et al. (2006) that explicitly referred to theoretical studies on dynamic capability). Third, we looked for usage of words that indicate anchor theoretical foundations (such as Musteen et al. (2014) that used words such as "social capital" and "resource" while building their foundations). Fourth, we looked for citations from studies anchoring on specific theoretical foundations (such as Qian et al. (2013) that referred to institutional-theory-based earlier studies). In instances where we could not find any definitive theoretical foundations despite following the steps mentioned earlier, one of the authors read the study to identify the underlying theoretical foundations. In case of multiple or overlapping theoretical foundations for antecedents/moderators within the same study, we considered the dominant theoretical argument as the core theory used for simplification of reality (Bettis et al., 2014). To summarize, we mapped each antecedent and moderator to one of the categories of theoretical foundations. The mapping was based on the underlying logic used to explain the role of the antecedents and the moderators.

#### 4. Research findings

Based on the coding scheme (Appendix A1 maps studies with theoretical foundations), we found that the antecedent/s and/or moderator/s in the *M-P* relationship studied in last 10 years can be traced to one of the eight different categories of theoretical foundations: institutional theory (DiMaggio and Powell, 1991; Scott, 1995), agency theory (Jensen and



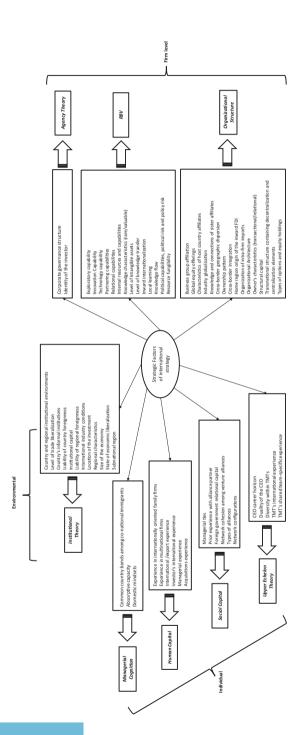
Meckling, 1976), organizational structure (Chandler, 1962), RBV (Barney, 1991; Penrose, 1959; Wernerfelt, 1984), upper echelon theory (Hambrick and Mason, 1984), human capital (Becker, 1964), social capital (Burt, 1992), and managerial cognition (Huff, 1990). A thorough analysis of the selected studies suggests that there are three different units of analysis of the theoretical foundations — environmental (institutional theory), firm (agency theory, organizational structure, and RBV), and individual (upper echelon theory, human capital, social capital, and managerial cognition). This broad categorization is in line with earlier literature review (Raisch and Birkinshaw, 2008). Figure 6 summarizes the list of antecedents and/or moderators used in these studies and its corresponding theoretical mapping. Subsequently, using an integrative framework, we classify the comprehensive list of antecedents and moderators from all studies into two orthogonal dimensions (Figure 7).

# 4.1 Theoretical foundations of antecedents

A quick review of the facilitators (or antecedents) of internationalization (45 percent of selected studies) shows that RBV, institutional theory, organizational structure, and social capital theories have been used extensively (Figure 8). This indicates that researchers are predominantly (except social capital) looking at environmental (institutional theory) or firmlevel (organizational structure, RBV) theoretical foundations to explain internationalization. Even studies that use social capital as the theoretical argument (25 percent of the studies), lean toward firm-level arguments. On this general trend, Teece (2014) argues that dominant internationalization theories (Buckley and Casson, 1976; Dunning, 1988; Kogut and Zander, 1993) explain suitable form of international operation based on "transaction costs/hold-up issues" or "resource transfer cost savings and learning issues." However, such an approach neglects the role of the firm or the individual (leaders/entrepreneurs) level capabilities as drivers or consequences of internationalization. Scholars working in the field of internationalization should explore the possibility of combining contractual frameworks with a theory of capability development (Cantwell, 2014; Zhang et al., 2019).

4.1.1 Resource-based view. The majority of antecedents under RBV category indicate use of strategic resources and capabilities-based theoretical foundations that enable internationalization, Chittoor et al. (2009) verified the role of inward internationalization of resources and technologies by Indian pharmaceutical firms in facilitating outward internationalization for eventual better performance. Guillén and García-Canal (2009) elaborated the role of resources for international growth of new multinational enterprises (MNEs) from emerging economies as compared to the role of resources in the traditional American model of MNEs. Asmussen and Goerzen (2013) looked at the impact of interplay of proprietary and partnering capabilities on the (international) locations of firm activities. Using business groups as the structural context, Iona et al. (2013) have argued that innovation capability through organizational and/or managerial practices provides higher performance in business-group-affiliated firms compared to unaffiliated firms. Based on a meta-analysis of 120 independent samples reported in 111 studies, Kirca et al. (2011) have supported the internalization argument (Buckley and Casson, 1976; Hennart, 1982) that multinationality is an efficient organizational form that equips firms to transfer their firm-specific tangible and intangible assets to host locations and in return generate higher profits in international markets. Buckley et al. (2014) looked at the positive and negative effects of strategic resources on acquired firms for emerging market multinational corporations (EMNCs) from BRIC countries. Holburn and Zelner (2010) studied 186 firms from the electric power generation industry in 64 host counties and 28 home counties to connect political capabilities, political risk, and policy risk of the home country to the location of firm's international investments, utilizing data from the first decade of internationalization (1990–1999). Using information from globally located marketing subsidiaries of six large multinational corporations





**Figure 6.** Mapping of theoretical foundations



headquartered in Sweden, Monteiro et al. (2008) identified that knowledge flow as a resource within MNEs determines the performance of subsidiaries. Lu et al. (2010) extended dynamic capability view of internationalization (Teece, 2014) based on the survey data of 775 SMEs from China and argued that the information acquisition capability and adaptive capabilities of firms mediate the relationship between its resources (institutional capital and managerial ties) and international performance. Zhang et al. (2007) identified that in case of export-market-focused international joint ventures (IJV) where the MNEs have a majority ownership, R&D intensity is positively related to performance. In the context of large Korean MNEs, Lee and Rugman (2012) identified that innovation capabilities and marketing capabilities affect performance and the relationship is moderated by home region origin of the inward foreign direct investment (FDI). Efrat and Shoham (2012) argued that short-term performance of born global (Rennie, 1993) firms is impacted mostly by environmental or external resources, whereas in the long run, internal resources become more crucial to firm's survival and success. In summary, extant research dominantly used RBV from Barney (1991) to identify various form of resources and their enabling role in international expansion (Sheng and Hartmann, 2019). But the limited explanation for resources with valuable, rare, imperfectly imitable, and non-substitutable (VRIN) characteristics to maintain sustainable competitive advantage under conditions of environmental change (which is more prevalent when a firm internationalizes) is not explicitly acknowledged and indicates a possible area of research (Purkayastha and Sharma, 2016).

4.1.2 Institutional theory. Institutional-theory-based antecedents have been commonly used in the *M-P* relationship as home and host institutions majorly influence the firm's strategy to handle external changes (Oliver, 1991). Kostova *et al.* (2008) extended MNE's context from neoinstitutionalism such as social embeddedness of organizations to the ideas of agency, social construction, and power and politics. Qian *et al.* (2013) opened the black-box liability of foreignness (Zaheer, 1995) into complex interactions between the liability of a country's foreignness and the liability of regional foreignness. Based on a meta-analysis of 66 independent samples (with a cumulative sample size range of 2,255 to 24,152), Tihanyi*et al.* 

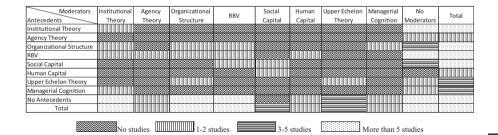


Figure 7.
Theoretical foundations used for antecedents and moderators in *M-P* relationship

Total

Figure 8. Theoretical foundations used for antecedents of *M-P* relationship



(2005) failed to find statistical evidence for the effect of cultural distance and entry mode choice on international diversification. Linking globalization of markets and industries, Wiersema and Bowen (2008) argued that industry globalization and foreign-based competition are significant factors for the degree and scope of international diversification by US firms. Examining institutional effects in the context of regions, Arregle et al. (2013) argued that both country and regional institutional environments influence the degree of internationalization. Based on nine-year data from 50 countries, Holmes et al. (2013) identified that a country's informal institutions, in the form of the cultural dimensions of collectivism and future orientation, shape the country's formal institutions and affect the country's level of inward FDI differently. Meyer (2006) discussed the reduction of product diversification in diversified conglomerates due to changes in the internal and external environment, notably the globalization of markets and supply chains. Extending his earlier work, Dow (2006) identified a potential status quo bias among exporters, leading to systematic underadaptation. Hutzschenreuter et al. (2014) argued that governance, cultural, and geographic distances have a negative effect on a firm's performance in decreasing order. In another culture-based research, Hutzschenreuter and Voll (2008) explained that the moves for expansion involving "a high level of added cultural distance per unit of time" and expansion into culturally distant countries in an irregular fashion are reasons for lower profitability in MNEs. In a nutshell, researchers incorporated institutional differences between home and host market as the source of liability of foreignness in multiple dimensions of cultural, political, and economic distances (Salomon, 2016). Though institutional theory (North, 1990; Zucker, 1987) is a powerful theoretical lens to analyze cross-border differences, it does not incorporate the role of firm-specific heterogeneity as a mitigation factor. It leads to the possible inference that explanations based only on institutional theory provide a limited view of the global strategy adopted by firms.

4.1.3 Organizational structure. Our review identifies organizational structure as an important theoretical argument for research on internationalization (Bartlett and Ghoshal, 1988). In the meta-analysis of 141 studies covering 28 different countries, Carney et al. (2011) suggested that the structural characteristics of business group affiliations influence a firm's performance through specific strategic actions such as internationalization. Complementing earlier work on the network effect of business group affiliation, Lamin (2013) identified that the knowledge and connections gathered by a firm's sister affiliates allowed business-groupaffiliated firms to attract clients from more industries and foreign markets and also attain higher international sales. Birkinshaw et al. (2006) researched on the less understood underlying motivation to move business unit and corporate HQs to host locations. Anchoring on the real option theory (Amram and Kulatilaka, 1998) and signaling theory (Spence, 1973), Hasan et al. (2011) showed that global equity offerings served as a deliberate structural tool to increase issuers' international visibility and their propensity to operationally diversify to international markets. Applying the springboard argument to the R&D context, Chung and Yeaple (2008) looked at structural aspects of R&D cost management and knowledge sourcing from international market. Zhang et al. (2015) analyzed how legitimacy pressure, customer involvement, and market ambiguity structured the perceived internationalization performance. In the context of emerging economy, Singh (2009) argued on interdependencies between export and domestic sales based on structure (business group affiliation and firm size) and strategic resources (advertising and R&D expenditure). Kumar et al. (2012) argued that high product diversification has detrimental effect on the global diversification of business-group-affiliated firms. Based on case studies and interviews of several Australian firms, Trudgen and Freeman (2014) argued that performance measurement of born global firms is partially dependent on the development phase of firms. Except born global firms, all other firms operate at domestic market for some (or may be for a very long) time before expanding into international market. Hence, each of the internationalizing firms already has certain structures in place. Our literature review of research papers that used certain forms of organizational structure as antecedent of internationalization indicates that most of the EM-specific studies remained focused on business group as a structure, while research on developed markets dealt with varied aspects of structural dimensions. Hence, detailed analysis of business groups and the incorporation of other structural dimensions in the context of EM might be an area for future research (Purkayastha, 2018).

4.1.4 Social capital. The presence of multiple antecedents under the social capital theory establishes the importance of managerial (or individual) competence manifested in dynamic managerial capability (Helfat and Martin, 2015). Integrating international entrepreneurial orientation (Covin and Miller, 2014), Zucchella et al. (2007) identified that the previous experience of the entrepreneur and the niche positioning of the businesses are linked to international precocity. Musteen et al. (2014) discussed the importance of international networks in early internationalization. Based on the foreign market entry decisions of 1,010 US venture capital firms between 1991 and 2002, Guler and Guillén (2010) identified the role of social capital at home location on internationalization. Through primary case analysis, Prashantham and Dhanaraj (2010) argued that entrepreneurs dynamically create and appropriate social capital over time as international expansion of new ventures has its roots within social networks. Extending the international entrepreneurship theory (McDougall and Oviatt, 1994), Zhou et al. (2007) argued that social networks help SMEs that are internationally oriented to expand rapidly and profitably in international market. Bertrand (2011) researched on the effect of a firm's import of intermediate goods as the firm-level social capital on export performance. Based on 120 international strategic alliances formed by Danish firms, Nielsen and Gudergan (2012) looked at the damaging effect of a firm's prior experience with the partners on its upstream innovative performance. Lew et al. (2013) researched the moderating effects of structural capital (defined as existence of network relationships, an actual alliance, and network duration on the relationship) on the exploratory capability-performance relationship. A more closer look at theoretical arguments used in the social capital theory—based papers indicates that the dominant approach is confined to structural and relational dimensions of social capital (Nahapiet and Ghoshal, 1998). Hence, exploring the cognitive dimension of social capital (Tsai and Ghoshal, 1998) might be an area of interesting research.

#### 4.2 Theoretical foundations of moderators

We found that RBV, organizational structure, and institutional-theory-based theoretical arguments are often used when the research focus is to explain a firm's internationalization performance in the presence of contingent variables (or as moderators) (Figure 9). One possible explanation of the dominant use of external or firm-level theoretical foundations could be that the net benefits of multinationality are majorly dependent on overcoming the liability of foreignness (Zaheer, 1995) through firm-specific advantages.

4.2.1 Resource-based view. In the last 10 years of research on the M-P relationship, RBV-based theoretical foundations have the maximum numbers of moderators. Research has explored the contingent role of technological innovation (Musteen et al., 2014), managerial experience, and resource fungibility (Sapienza et al., 2006) as strategic resource. Kim et al.

Moderators	Institutional	Agency	Organizational	RBV	Social	Human	Upper Echelon	Managerial
	Theory	Theory	Structure	KDV	Capital	Capital	Theory	Cognition
Total								
	ш				100			
N	o studies	1-	-2 studies	3-5 st	udies 📖		fore than 5 studi	ies

Figure 9.
Theoretical foundations used for moderators in *M-P* relationship



(2015) identified the importance of strategic factor market differences in host countries when compared to home countries. In a special issue of Management International Review, Bausch and Krist (2007) received empirical support for moderating the role of R&D intensity. Verbeke et al. (2009) revisited the M-P relationship and elaborated three key moderating parameters underlying the performance outcome from multinationality; variety of strategic motivations for FDI, environmental complexity resulting from bundles of discrete FDI decisions, and organizational complexity. Venzin et al. (2008) studied five European retail banks using case analysis to identify that M-P relationship is dependent significantly on banks' strategic decisions. Based on two case studies from China (Li Ning and Tianyu), one from India (Dr. Reddy's), and one from Brazil (Video Brinquedo), Luo et al. (2011) conceptualized that emerging economy enterprises' unique capabilities (combinative capability, hardshipsurviving capability, absorptive capability, intelligence capability, and networking capability) and distinctive competitive advantages (cost, speed, and channel) are what set them apart from their rivals in other countries. Anchoring on the real options theory, Lee and Makhija (2009) argued that Korean firms achieved valuable flexibility through FDI and export-related international investments during the economic crisis. Fang et al. (2007) argued that a firm's knowledge characteristics (valuable vs rare) are linked to the subsidiary's performance horizon (long term vs short term). Chang et al. (2013) researched that converted wholly owned subsidiaries outperform continuing joint ventures in industries characterized by high levels of intangible assets (e.g. technology or brand) after controlling for factors that may affect the conversion decision. Bertrand (2011) argued that the export experience is a valuable resource that moderates the effects of offshore outsourcing positively. Based on the data from 500 USA MNEs for 2001-2005, Rugman and Oh (2010) looked at internationalization as a movement of resources within a region. Zhou and Wu (2014) observed that the performance advantage of early internationalization of a firm becomes obsolete as new ventures become mature, especially among the firms with a low level of international commitment. In summary, dominant treatment of RBV as moderator in M-P relationship is firm-specific asset or capability based on strategic resources. Interestingly, the application of microfoundation of (dynamic) capability such as sensing, seizing, and transformation (Teece, 2007) is missing and hence, gives an interesting opportunity to apply more nuanced argument from resource-based arguments (Barney, 1991; Sirmon et al., 2007).

4.2.2 Organizational structure. The next dominant category of moderators to evaluate the performance implication of multinationality is the firm's organizational structure. Resonating the springboard (Luo and Tung, 2007) perspective, Chittoor et al. (2009) identified that the inward internationalization to performance relationship is moderated by EM structural characteristics such as the business group affiliation. In a recent research on relationship between business group affiliation, innovation, internationalization, and firm's performance, Iona et al. (2013) tested and found that the interplay between business group affiliation and innovation leads to better performance in firms that face competition in international markets rather than in firms where the product market is restricted to the domestic market. Balasubramanian Elango and Sethi (2007) found the moderating role of the extent of trade within an economy in M-P relationship. David et al. (2010) identified that characteristics of the ownership (transactional vs relational) define expectations (profitability vs growth) from diversifications. Based on 563 Sino-Japanese IJVs in the 1985-2001 period, Lu and Ma (2008) argued that the affiliation to local or national business group defines the performance of an IIV based on locational and industry characteristics. Based on the prospect theory, Matta and Beamish (2008) argued that levels of in-the-money unexercised options and equity holdings decide the international orientation of near-retiring CEOs. Based on FDI data of publicly listed Korean firms in the manufacturing sector during 1970–2003, Chang and Rhee (2011) established that the speed of FDI expansion enhances firm performance in the presence of superior internal resources and capabilities. Based on 100 most internationalized companies, Garbe and Richter (2009) argued that MNEs that follow a transnational structure containing decentralization and centralization elements are more successful than MNEs adopting a centralized hub or decentralized federation. On the basis of 76 US and 13 UK law firms, Brock et al. (2006) discussed the role of culture in the M-P relationship. Mauri and Neiva de Figueiredo (2012) used US data from 30 manufacturing industries in the period from 1999 to 2006 to argue that performance variability from multinationality can be explained by cross-border geographic dispersion, cross-border integration, and outsourcing. In the context of EM, Kumar et al. (2012) argued that international orientation and group-level resources positively moderate product diversification and international expansion. Trudgen and Freeman (2014) argued that the rapidity of internationalization and the psychic distance of initial markets influence the duration of each phase. Supporting the argument that internationalization is a cross-region trade (Ghemawat, 2003), Chen and Tan (2012) found that the M-P relationship varies significantly depending on location (such as whether internationalization takes place within the Greater China region, within Asia, or outside Asia). Unlike the usage of organization structure as antecedent, the treatment of organizational structure is more exhaustive. A possible area for research can be studying structural changes in state-owned enterprises (SOEs) in China in response to institutional transformation and implications for inward and outward FDI (Ren et al. 2019).

4.2.3 Institutional theory. Environment-based arguments such as the role of institutional theory are also used as a moderator to evaluate the performance effect of multinationality. Based on data from 189 US firms listed in the Fortune 500 companies that have operations in six or more countries, Qian et al. (2013) identified that regional diversification has an inverted U-shape effect on the firms' performance. Such a relationship is contingent upon the mix of host regions' characteristics (developed vs developing). Based on meta-analysis, Tihanyi et al. (2005) found that the cultural distance—international diversification relationship is dependent on the nature of the industries and the distance between cultural differences, de Jong and van Houten (2014) identified that the effect of the extent of internationalization on performance is dependent on the cultural diversity of host countries. Researching on non-US data, Yang and Driffield (2012) reported that the M-P relationship is usually U-shaped for non-US firms as against the inverted U-shape observed in the context of the United States. In another interesting research setup (178 domestic firms from 20 different industries), Nadkarni et al. (2011) created a sensemaking model and argued that the early international performance is dependent on the fit between conditions in international industry and domestic mind-sets. Applying the springboard argument in the R&D context, Chung and Yeaple (2008) looked at R&D cost management and knowledge sourcing from the international market. Extending the seminal work from Kogut and Zander (1993), Hernandez (2014) identified that common country bonds among conational immigrants positively influence a firm's internationalization choice and firm's survival through processes of local learning and knowledge transfer. Based on subsidiaries from Fortune 500 corporations in China during 1998–2006, Ma, Tong, and Fitza (2013) argued for economic significance of interrelatedness among industry, corporate parent, and home-country effects. In the context of large Korean multinational enterprises, Lee and Rugman (2012) identified that the home region origin of the inward FDI moderates the effect of innovation and marketing capabilities on performance. Using a multicountry research setting based on 623 MNEs from 14 EMs for 2000–2006, Banalieva and Sarathy (2011) argued that M-P relationship for EM MNEs is dependent on industry (electronics vs nonelectronics) and such relationship is contingent upon the level of trade liberalization in such economies. Anchoring on the resource dependence theory (Pfeffer and Salancik, 1978), Hessels and Parker (2013) looked at specific dimensions of internationalization (exporting and importing) and interfirm collaborations (formal and informal). Based on 7,673 SMEs sampled from 18 European countries in 2003, they identified context specificity of these strategies (internationalization and collaboration) with respect to



CCSM 27.2

226

the various constraints SMEs face. Pangarkar (2008) proposed dispersion of sales across geographic regions as new measures for degree of internationalization and deployed a perceptual, multi-item measure of performance. Like in the case of organization structure, a comprehensive application of institutional theory is required to identify the moderating effects of strategic factors in *M-P* relationship. One possible area of interesting research could be the analysis of institutional transformation and its implications on global strategy.

# 4.3 Theoretical foundations in comprehensive models

The theoretical foundations used in comprehensive models (both antecedent/s and moderators in a single research setting) are mainly based on institutional theory, organizational structure, social capital, and upper echelon theory (Figure 10). We observe that researchers focus on only one of the levels (environmental, firm, or individual) to explain facilitators or performance enhancers. One possible explanation could be the demand from academic journals for parsimonious explanation of *M-P* phenomena using a single overarching theory.

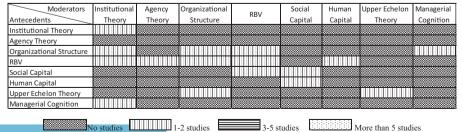
4.3.1 Institutional theory. Qian et al. (2013) differentiated liability of foreignness at country and regional level (Zaheer, 1995) and identified a complex interactive effect between the nuanced forms of liability of foreignness. Tihanyi et al. (2005) found that for US-based MNEs, cultural distance is linked to entry mode choices, international diversification, and performance. In these MNEs, relationships are contingent upon characteristics of industries.

4.3.2 Organizational structure. In the context of EM, Kumar et al. (2012) argued that product diversification does not help internationalizing EM business groups, whereas international orientation and group resources enhance benefits from international expansion. Trudgen and Freeman (2014) argued that performance measurement of born global firms is partially dependent on firms' phase of development at the time. Further, the rapidity of internationalization and the psychic distance of initial markets influence the duration of each phase.

4.3.3 Social capital. Based on the decisions of 1,010 US venture capital firms between 1991 and 2002 on entry into the foreign market, Guler and Guillén (2010) identified the role of social capital at home location on a firm's internationalization. Lew *et al.* (2013) researched on the moderating effects of structural capital (such as presence of network relationships and alliances) on the exploratory capability—performance relationship.

4.3.4 Upper echelon theory. Barkema and Shvyrkov (2007) identified that the formation of subgroups due to diversity within top management teams (TMTs) hampers communication within the TMT and the firm's propensity to enter new geographic areas. But as TMT members interact over long durations, the positive effect of cognitive capability and negative effect of social implications vary. Drawing from the agency theory (Jensen and Meckling, 1976), George et al. (2005) argued that a firm's ownership characteristics (internal owners, e.g. CEOs and other senior executives vs external owners, e.g. venture capitalists and institutional investors) influence the scale and scope of international expansion. For instance, the presence of external ownership plays a moderating role as there is a behavioral change in owners regarding the scale and scope of internationalization.

Figure 10. Theoretical foundations used for antecedents and moderators in *M-P* relationship (comprehensive model)





#### 5. Discussion and conclusion

The objective of this review paper is to identify theoretical foundations of antecedents and moderators in *M-P* relationship research. Research papers published in the top 15 management and IB journals in the last 10 years were examined for this purpose. We found that several theoretical strands of research (such as institutional theory, agency theory, organizational structure, RBV, upper echelon theory, human capital, social capital, and managerial cognition) have been used by scholars. Given the diverse theoretical strands in extant research, we developed an integrative framework to categorize published research and map it with underlying theories. Our intent is to contribute to ongoing discussion on the theoretical explanation of drivers of international strategy – transaction costs (Jean-Francois Hennart, 1982), cross-border transfer of knowledge-based resources (Kogut and Zander, 1993), internalization of strategic resources (Buckley and Casson, 1976; Guillen, 2000), transfer of network-based capabilities (Elango and Pattnaik, 2007), and dynamic capability (Teece, 2014). We contribute by finding gaps in existing literature and suggest options for future research. Overall, our findings extend and deepen the theoretical understanding of antecedents and moderators in the *M-P* relationship. The gaps in the extant research are as follows.

First, we find that multiple theoretical foundations, both at antecedent and moderator levels, are yet to be explored. Most international strategy researchers have used environmental (institutional theory) or firm-level (organizational structure, RBV) theoretical foundations to explain what enables a firm to internationalize (Figure 8). Similarly, performance implication of multinationality in the presence of contingent variables (or moderators) has also been explained using environmental (institutional theory) or firm-level (organizational structure, RBV) based theories (Figure 9). Most of the institutional-theory-based arguments are centered on countryspecific institutional characteristics, industrial evolution, and regional dynamics of cross-border trade. Organizational structure is another important theoretical categorization that encompasses the knowledge link between the organizations, structural capital, and financial capital. RBV is another theory that is being used extensively to explain the role of firm-specific assets in IB. Most of the papers in our sample have used capability, knowledge, and learning as a specific extension of RBV. In contrast, individual-level (upper echelon theory, human capital, social capital, and managerial cognition) antecedents and moderators have received scarce attention. We consider this finding both significant and a surprising research gap in recent international strategy research. Individuals play a critical role in the value creation of firms through adoption of change in industry environments (Sirmon and Hitt, 2009), asset orchestration (Helfat et al., 2007), or reconfiguration of organizational routines (Teece, 2012). Future research by IB and management scholars should focus on theoretical foundations based on individual-level theories in M-P relationship. We surmise that the effect of individual-level factors will not be straightforward. Scurve theorists have argued that at the lower level of internationalization, there is a negative effect on the performance due to the liability of foreignness (Lu and Beamish, 2004). Subsequently, there is a positive effect on the firm's performance due to economy of scale and scope. Individual-level factors such as board, CEO, and/or TMT's international experience and education will reduce liability of foreignness or flatten the initial negative curve. But such factors will also augment benefits of internationalization as firm will be in a better condition to leverage opportunities from the international market. There is possibility that it will also reduce the negative side of diseconomy of scale or the third leg of the S-curve. Thus, there is possibility that any individual-level factor will differentially affect different parts of the S-curve. It will be an interesting extension of the theoretical and empirical debate on the S-curve hypothesis.

Our second finding is about the absence of multi-level studies on internationalization. Scholars with a focus on building comprehensive models, that is, antecedent/s and moderator/s within one research setting (Figure 10) to examine theoretical underpinning of institutional theory, organizational structure, social capital, and upper echelon theory have paid attention to only one of the levels – environmental, firm, or individual. A comprehensive analysis of the *M-P* 



228

relationship cutting across multiple levels (environmental, firm, or individual) is yet to get attention from the research community. The cross-country nature of IB poses both an opportunity and a challenge for researchers to create a comprehensive research design. This is because the effect of institutional transformation on internationalization (Stucchi *et al.*, 2015) operates at different levels compared to the effect of firm- or individual-level capabilities on global expansion (Chittoor *et al.*, 2015; Teece, 2014). As international expansion has transformed into management of a value chain across borders (Wiersema and Bowen, 2011), our analysis identifies that cross-fertilization of theories originating from different levels will provide a more nuanced explanation of the *M-P* relationship.

Third, around 50 percent of the studies in our sample directly analyze the *M-P* relationship under multiple contexts of internationalization without incorporating any antecedents of multinationality (*M* part of *M-P* relationship) or moderators of *M-P* relationship. This signifies that the context of internationalization (Khanna, 2014, 2015; Meyer, 2015) is still a major focus area when researchers are studying international strategy. From the descriptive statistics on the focus areas of our selected studies (Figures 4 and 5), we find that though international strategy research in the context of emerging economies is gaining momentum, developed economies still remain the core focus area.

Our findings also point to multiple avenues for future research. First, scholars can examine internationalization from the theoretical strand of upper echelon. The impact of board members, CEO, and TMT-based managerial characteristics such as TMT structural interdependence (Hambrick *et al.*, 2015), CEO's personality (Herrmann and Nadkarni, 2014), CEOs' transformational or transactional leadership style (Kang *et al.*, 2015) on internationalization and performance (Quigley and Hambrick, 2015) has not been studied.

Second, new research can examine internationalization from the theoretical strand on dynamic capabilities. Recent studies in strategic management literature have focused dynamic managerial capability (Adner and Helfat, 2003) anchoring on managerial human capital, managerial social capital, and managerial cognition as a source of strategic change (Helfat and Martin, 2015). Given that international expansion is a major strategic change for an organization, international strategy research, based on relevant managerial human capital (such as prior relevant education and experience of board members) (Mahoney and Kor, 2015), managerial social capital (such as opportunity, ability, and motivation of managers to internationalize and maximize profit from internationalization) (Adler and Kwon, 2002), and managerial cognition (such as cognitive structure and cognition process of managers that enable and manage internationalization) (Helfat and Peteraf, 2015; Zott and Huy, 2020)(in press), would be an interesting and valuable extension of extant body of knowledge.

Third, new studies on internationalization should create more comprehensive research design in this field. One way forward is to leverage relatively unexplored theoretical foundations such as agency theory, RBV, upper echelon theory, and managerial cognition to incorporate both antecedent/s and moderator/s in one research setting. Other interesting research endeavors would be to focus on multi-level theoretical construct from different levels (environmental, firm, and individual) within one research setting. Detailed direction from Andersson *et al.* (2014) would be a good starting point to incorporate the required conceptual and analytical considerations in forming cross-level research design.

Fourth, the operationalization of the dependent variable (performance) is another source of variation in *M-P* relationship research. The performance construct can be operationalized in different ways like historical accounting measures such as return on assets (ROA), return on equity (ROE), return on sales (ROS) and market-based measures such as Tobin's q (Berry and Kaul, 2016; Verbeke and Forootan, 2012). This might lead to complimentary or contradictory findings using the same theoretical underpinnings. Similarly, there could be difference in the outcome-based related or unrelated international diversification of the firms (Verbeke and Brugman, 2009) or the economic cycle of the firms (Zúñiga-Vicente *et al.*, 2019).

To illustrate, the RBV may argue that the superior outcome from international expansion is possible only if it is related to the core competence of the organization (Prahalad and Hamel, 1990). But, the social-capital-based view may indicate similar positive outcome only when it is complementary international diversification (Markides and Williamson, 1994). Thus, the linkage between theoretical lenses and difference in performance outcome of internationalization is an interesting avenue for research.

Fifth, an interesting observation from our literature review is the absence of culture-based moderators or mediators to explain change in *M-P* relationship. Cultural distance (Hofstede, 1983; Shenkar, 2001) explains the challenges of doing business in host market environment (Sharma, 2019) There is a rich and relevant literature on cultural distance (Shenkar, 2001), added cultural distance (Hutzschenreuter *et al.*, 2014; Hutzschenreuter and Voll, 2008), or marginal cultural distance (Popli and Kumar, 2016) that can be used to provide more nuanced and comprehensive understanding of performance outcome of multinationality.

Sixth, continuous reduction of trade barriers among developed and emerging economies (OECD, 2009) and rapid integration of emerging economy firms into the global economy (Kiss et al., 2012; Kumar et al., 2020) have made emerging economy an important context for international management research. Research contrasting and integrating developed and emerging economies could bring out nuanced perspectives of performance implication of internationalization. We also observe that as international strategy research is crowded with empirical contributions, there is a scope for nuanced theoretical contribution through case studies (Eisenhardt, 1989) or action research (Checkland and Holwell, 1998) based approach. Considering that case study approach helps to recognize "patterns of relationships among constructs within and across cases and their underlying logical arguments" (Eisenhardt and Graebner, 2007; p.25), scholars can adopt such research methodology to work on IB theories that are less developed. Role of cognition and cognitive capability has received limited attention in strategic management and IB research due to the challenges associated with collecting reliable and suitable data (Gavetti, 2012; Maitland and Sammartino, 2015). It will be an interesting endeavor to address novel research question such as CEO's managerial cognitive capability (Helfat and Peteraf, 2015) and its effect on international expansion into global financial market (Bell et al., 2012; Li et al., 2016).

To sum up, our analysis of 111 studies from the last 10 years of research on *M-P* relationship published in 15 major general management and IB journals suggests that there is scope for further examination of new theoretical anchors, use of integrative (both developed and emerging economies combined), and multi-level (environmental, firm, and individual) research design to extend *M-P* relationship research.

#### Note

 AMJ: Academy of Management Journal, AMP: Academy of Management Perspectives, AMR: Academy of Management Reviews, ASQ: Administrative Science Quarterly, GSJ: Global Strategy Journal, IBR: International Business Review, JIBS: Journal of International Business Studies, JIM: Journal of International Management, JMS: Journal of Management Studies, JOM: Journal of Management, JWB: Journal of World Business, MIR: Management International Review, Org. Sc.: Organization Science, SMJ: Strategic Management Journal, Mgmt. Sc.: Management Science.

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M-P

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233

M-P

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240

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#### Further reading

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# Appendix

Reference	Theoretical found	lations used for (b) Moderator	for	Additional theoretical foundations used for (a) Antecedent (b) Moderator		
MICHELLE .	(a) Antecedent	(b) Moderator	(a) Antecedent	(D) MODELATOR	analysis	
Narula (2012)	No Antecedent	No Moderator	Not Applicable	Not Applicable	Firm	
Kostova <i>et al.</i> (2008)	Institutional Theory	No Moderator	No Antecedent	Not Applicable	Environmenta	
Chittoor et al. (2009)	RBV	Organizational Structure	No Antecedent	Institutional Theory	Firm	
Hitt et al. (2006a)	Human Capital	Social Capital	Social Capital	Human Capital	Individual	
Qian et al. (2013)	Institutional Theory	Institutional Theory	No Antecedent	No Moderator	Environmenta	
Guillén and García- Canal (2009)	RBV	No Moderator	Institutional Theory; Organizational Structure	Not Applicable	Firm	
Zucchella <i>et al.</i> (2007)	Social Capital	No Moderator	Human Capital	Not Applicable	Individual	
Asmussen and Goerzen (2013)	RBV	No Moderator	No Antecedent	Not Applicable	Firm	
Yu et al.(2011)	Human Capital	Social Capital	Social Capital	No Moderator	Firm	
Carney et al. (2011)	Organizational Structure	RBV	No Antecedent	No Moderator	Firm	
Jean-Francois Hennart (2012)	No Antecedent	No Moderator	Not Applicable	Not Applicable	Firm	
Iona et al. (2013)	RBV	Organizational Structure	Organizational Structure	No Moderator	Firm	
Musteen et al. (2014)	Social Capital	RBV	No Antecedent	Institutional Theory	Individual; Firm	
Ramamurti (2012)	No Antecedent	No Moderator	Not Applicable	Not Applicable	Firm	
Tihanyi <i>et al.</i> (2005)	Institutional Theory	Institutional Theory	No Antecedent	No Moderator	Environmenta	
Sapienza <i>et al.</i> (2006)	No Antecedent	RBV	Not Applicable	No Moderator	Firm	
de Jong and van Houten (2014)	No Antecedent	Institutional Theory	Not Applicable	No Moderator	Environmenta	
Kim et al. (2015)	No Antecedent	RBV	Not Applicable	Institutional Theory	Firm	
Glaum and Oesterle (2007)	No Antecedent	No Moderator	Not Applicable	Not Applicable	Firm	
Kirca <i>et al.</i> (2011)	RBV	RBV	No Antecedent	Institutional Theory	Firm	
Bausch and Krist (2007)	No Antecedent	RBV	Not Applicable	Institutional Theory	Firm	
Contractor (2007)	No Antecedent	No Moderator	Not Applicable	Not Applicable	Firm	
Ruigrok et al. (2007)	No Antecedent	No Moderator	Not Applicable	Not Applicable	Firm	

**Table AI.**Theoretical argument/
s used to explain role of
antecedents and
moderators in *M-P*relationship

المنسارة الاستشارات

<i>M</i> -relationshi	Unit of	cal foundations used	Additional theoretic	ations used for	Theoretical found	
relationsin	analysis	(b) Moderator	(a) Antecedent	(b) Moderator	(a) Antecedent	Reference
	Firm	Institutional Theory	Not Applicable	Organizational Structure	No Antecedent	Elango and Sethi (2007)
	Individual	Institutional Theory	Not Applicable	Human Capital	No Antecedent	(López-Duarte and García-Canal (2007)
24	Firm	Not Applicable	Not Applicable	No Moderator	No Antecedent	Hennart (2007)
	Firm	Not Applicable	Not Applicable	No Moderator	No Antecedent	Verbeke <i>et al.</i> (2009)
	Firm	RBV	No Antecedent	Human Capital	RBV	Buckley <i>et al.</i> (2014)
	Firm	Not Applicable	Not Applicable	No Moderator	No Antecedent	Wiersema and Bowen (2011)
	Firm	Not Applicable	Not Applicable	No Moderator	No Antecedent	Hennart (2011)
	Firm	Not Applicable	Not Applicable	No Moderator	No Antecedent	Hult (2011)
	Firm	Not Applicable	Not Applicable	No Moderator	No Antecedent	Cardinal <i>et al.</i> (2011)
	Firm	No Moderator	Not Applicable	Institutional Theory	No Antecedent	Yang and Driffield (2012)
	Firm	No Moderator	Not Applicable	RBV	No Antecedent	Verbeke and Brugman (2009)
	Firm	Organizational Structure; Social Capital	Not Applicable	RBV	No Antecedent	Venzin et al. (2008)
	Firm	Not Applicable	Not Applicable	No Moderator	No Antecedent	Augier and Teece (2007)
	Firm	Not Applicable	Institutional Theory	No Moderator	Organizational Structure	Lamin (2013)
	Firm	Agency Theory	Not Applicable	Organizational Structure	No Antecedent	(David <i>et al.</i> (2010)
	Individual	No Moderator	No Antecedent	Social Capital	Social Capital	(Guler and Guillén (2010)
	Firm	Institutional Theory	Not Applicable	Organizational Structure	No Antecedent	Lu and Ma (2008)
	Firm	Not Applicable	Not Applicable	No Moderator	No Antecedent	Spencer (2008)
	Firm	Not Applicable	Not Applicable	No Moderator	No Antecedent	Frenkel (2008)
	Firm	Institutional Theory	Not Applicable	RBV	No Antecedent	Luo <i>et al.</i> (2011)
	Firm	No Moderator	Not Applicable	RBV	No Antecedent	Lee and Makhija (2009)
	Individual	No Moderator	No Antecedent	Institutional Theory	Managerial Cognition	Nadkarni <i>et al.</i> (2011)
	Environmental	Not Applicable	RBV	No Moderator	Institutional Theory	(Wiersema and Bowen, 2008)
	Firm	Not Applicable	Agency Theory	No Moderator	Organizational Structure	(Birkinshaw <i>et al.</i> (2006)
	Firm	Not Applicable	No Antecedent	No Moderator	Organizational Structure	Hasan <i>et al.</i> (2011)
	Firm	Not Applicable	Not Applicable	No Moderator	No Antecedent	Li and Tallman (2011)
	Firm	Not Applicable	Institutional Theory	No Moderator	RBV	Holburn and Zelner (2010)
	Firm	No Moderator	Not Applicable	RBV	No Antecedent	Fang <i>et al.</i> (2007)
	Firm	Agency Theory	No Antecedent	Organizational	Upper Echelon	Matta and Beamish
				Structure	Theory	(2008)
	Environmental	Not Applicable	No Antecedent	No Moderator	Institutional Theory	Arregle et al. (2013)
	Firm	No Moderator	Not Applicable	RBV	No Antecedent	Chang <i>et al.</i> (2013)
	Firm	Not Applicable	Not Applicable	No Moderator	No Antecedent	Kumar (2009)
	Individual	No Moderator	No Antecedent	Upper Echelon	Upper Echelon	Barkema and
				Theory	Theory	Shvyrkov (2007)
	Environmental	No Moderator	Institutional	Institutional	Organizational	Chung and Yeaple
			Theory	Theory	Structure	(2008)
	Firm	Not Applicable	Not Applicable	No Moderator	No Antecedent	Qian <i>et al.</i> (2010)

Table AI.

(continued)

**242** 

			Additional theoreti	**	
Reference	Theoretical found (a) Antecedent	lations used for (b) Moderator	for (a) Antecedent	(b) Moderator	Unit of analysis
Hernandez (2014)	Managerial Cognition	Institutional Theory	No Antecedent	No Moderator	Individual
Perkins (2014)	Managerial Cognition	No Moderator	Institutional Theory; RBV	Not Applicable	Individual
George <i>et al.</i> (2005)	Upper Echelon Theory	Upper Echelon Theory	Agency Theory	Agency Theory	Individual
Holmes et al. (2013)	Institutional Theory	No Moderator	No Antecedent	Not Applicable	Environmenta
Kistruck <i>et al.</i> (2013) Lavie and Miller (2008)	No Antecedent No Antecedent	No Moderator No Moderator	Not Applicable Not Applicable	Not Applicable Not Applicable	Firm Firm
Monteiro et al. (2008)	RBV	No Moderator	No Antecedent	Not Applicable	Firm
Meyer (2006)	Institutional Theory	No Moderator	RBV	Not Applicable	Environmenta
Prashantham and Dhanaraj (2010)	Social Capital	No Moderator	No Antecedent	Not Applicable	Individual
Benito <i>et al.</i> (2011) Dow (2006)	No Antecedent Institutional Theory	No Moderator No Moderator	Not Applicable No Antecedent	Not Applicable Not Applicable	Firm Environmenta
Zhou <i>et al.</i> (2007) Qian <i>et al.</i> (2008) Lu <i>et al.</i> (2010) Hejazi and Santor	Social Capital No Antecedent RBV No Antecedent	No Moderator No Moderator No Moderator No Moderator	No Antecedent Not Applicable No Antecedent Not Applicable	Not Applicable Not Applicable Not Applicable Not Applicable	Individual Firm Individual Firm
(2010) Bertrand (2011) Sullivan <i>et al.</i> (2011) Chang and Rhee (2011)	Social Capital No Antecedent No Antecedent	RBV No Moderator Organizational Structure	No Antecedent Not Applicable Not Applicable	No Moderator Not Applicable RBV	Firm Firm Firm
Ma et al. (2013)	No Antecedent	Institutional Theory	Not Applicable	No Moderator	Environmenta
Powell (2013) Zhang <i>et al.</i> (2015)	No Antecedent Organizational Structure	No Moderator Managerial Cognition	Not Applicable No Antecedent	Not Applicable Social Capital	Firm Individual
Zhang <i>et al.</i> (2007) Garbe and Richter (2009)	RBV No Antecedent	Agency Theory Organizational Structure	No Antecedent Not Applicable	No Moderator No Moderator	Firm Firm
Hutzschenreuter et al. (2014)	Institutional Theory	No Moderator	Agency Theory	Not Applicable	Environmenta
Brock et al. (2006)	No Antecedent	Organizational Structure	Not Applicable	No Moderator	Firm
Hsu et al.(2013)	No Antecedent	Managerial Cognition	Not Applicable	No Moderator	Firm
Mauri and Neiva de Figueiredo (2012)	No Antecedent	Organizational Structure	Not Applicable	No Moderator	Firm
Lee and Rugman (2012)	RBV	Institutional Theory	No Antecedent	No Moderator	Firm
Xiao et al. (2013) Rugman and Oh (2010)	No Antecedent No Antecedent	Agency Theory RBV	Not Applicable Not Applicable	No Moderator No Moderator	Firm Firm
Demirbag <i>et al.</i> (2007)	No Antecedent	No Moderator	Not Applicable	Not Applicable	Firm
Singh (2009)	Organizational Structure	No Moderator	RBV	Not Applicable	Firm
Papadopoulos and Martín Martín (2010)	Upper Echelon Theory	No Moderator	No Antecedent	Not Applicable	Firm

Table AI. (continued)



				ical foundations used	** **	M-P	
Reference	Theoretical found (a) Antecedent	(b) Moderator	for (a) Antecedent	(b) Moderator	Unit of analysis	relationship	
Nielsen and Gudergan (2012)	Social Capital	No Moderator	Institutional Theory	Not Applicable	Individual		
Hutzschenreuter and Horstkotte (2013)	No Antecedent	Upper Echelon Theory	Not Applicable	No Moderator	Individual	243	
Lew et al. (2013) Jung and Bansal (2009)	Social Capital No Antecedent	Social Capital No Moderator	No Antecedent Not Applicable	No Moderator Not Applicable	Individual Firm		
Nielsen (2010)	Upper Echelon Theory	No Moderator	No Antecedent	Not Applicable	Individual		
Banalieva and Sarathy (2011)	No Antecedent	Institutional Theory	Not Applicable	No Moderator	Environmental		
Kumar et al. (2012)	Organizational Structure	Organizational Structure	No Antecedent	Institutional Theory	Firm		
Majocchi and Strange (2012)	Agency Theory	No Moderator	Upper Echelon Theory	Not Applicable	Individual		
Trudgen and Freeman (2014)	Organizational Structure	Organizational Structure	No Antecedent	Managerial Cognition	Firm		
Hessels and Parker (2013)	No Antecedent	Institutional Theory	Not Applicable	Organizational Structure	Environmental		
Pangarkar (2008)	No Antecedent	Institutional Theory	Not Applicable	No Moderator	Firm		
Chen and Tan (2012)	No Antecedent	Organizational Structure	Not Applicable	Institutional Theory	Firm		
Efrat and Shoham (2012) Hsu <i>et al.</i> (2013)	RBV No Antecedent	No Moderator  Upper Echelon	Institutional Theory Not Applicable	Not Applicable  No Moderator	Firm Individual		
Schmid and Dauth	No Antecedent	Theory Upper Echelon	Not Applicable  Not Applicable	No Moderator	Individual		
(2014) Zhou and Wu (2014)	No Antecedent	Theory RBV	Not Applicable  Not Applicable	No Moderator	Firm		
Contractor, Kumar, and Kundu (2007)	No Antecedent	No Moderator	Not Applicable	Not Applicable	Firm		
Gerschewski and Xiao (2014)	No Antecedent	No Moderator	Not Applicable	Not Applicable	Firm		
Hult et al. (2008) Hutzschenreuter and Voll (2008)	No Antecedent Institutional Theory	No Moderator No Moderator	Not Applicable No Antecedent	Not Applicable Not Applicable	Firm Environmental	Table AI.	

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