When To Localize?

Integration And Responsiveness In Subsidiaries In Transition Economies

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Abstract

The Integration-Responsiveness framework with the typology of international, multi-domestic, global and transnational MNE strategies has become a standard in strategic management textbooks. Yet, despite this popularity, surprisingly little evidence exists for under which conditions each type of strategy is most appropriate. This paper revisits the typology using a contingency approach to derive hypotheses on the merits of alternative strategies. These hypotheses are tested on a sample of subsidiaries in two transition economies. We find that cultural distance affects the effectiveness of global, transnational, and multi-domestic strategies, while the mode of entry and ownership affects the effectiveness of in particular global and transnational strategies.

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Introduction

The merits of respectively standardization and localization of products and processes have been a pivotal theme in international strategic management research. Bartlett and Ghoshal (1989), following Prahalad and Doz (1987), argue that local responsiveness and global integration can indeed be achieved simultaneously, and develop a typology based on a matrix of four strategies: international, multi-domestic, global and transnational. This typology has become a standard analytical tool in strategic management textbooks.

Bartlett and Ghoshal recommend that multinational enterprises (MNEs) pursue a transnational strategy combining both global integration and local adaptation. Yet even companies that Bartlett and Ghoshal highlight as examples to follow have since struggled, and have reverted to more 'global' organizational structures. Recent textbooks thus suggest that the 'transnational' strategy is rather idealistic and most firms have to make critical choices between global integration and local adaptation (e.g. Peng, 2009, Verbeke, 2009). However, solid empirical evidence regarding the merits of alternative types of strategy is surprisingly scarce. A few studies have explored the antecedents of either strategy in terms of organizational (Harzing 2000, Roth & Morrison, 1990, Rugman & Verbeke 1992) or environmental characteristics (Ghoshal & Nohria, 1993). Others have used this typology as controls when studying for instance entry mode (Harzing 2002), corporate social responsibilities (Husted & Allen, 2006) or international human resource management (Dickmann & Miller-Camen, 2006). However, few if any studies actually present solid evidence if and for whom either strategy would actually enhance subsidiary performance, as acknowledged by Ghoshal (1987) himself.

Our starting point for revisiting the Bartlett and Ghoshal typology is that the quest for generally applicable rules or performance effects may be futile because different strategies are effective in different local contexts. Therefore, a contingency framework is required to assess the merits of alternative strategies, and to identify under which conditions respectively global, multi-domestic and transnational strategies enhance subsidiary performance (Grewal, Chandrashekaran & Dwyer, 2008, Katsikeas, Samiee & Theodosiou, 2006, Roth, 1995). Hence, our research question is, “under which circumstances do alternative strategies enhance subsidiary performance?”.

In developing our arguments, we draw on recent advances on knowledge governance in MNEs (Foss et al., 2011; Minbaeva et al. 2011), and explore the nature of knowledge exchanges and control mechanisms in different MNE strategies. Global strategies integrate strategic decisions and centralize core operations, and thus assign subsidiaries very specific task. Hence, knowledge flows are primarily top down, and control is tight. Multi-domestic strategies assign subsidiaries a specific scope with respect to local markets, but allow more local adaptation. International strategies, also known as multi-domestic strategies, involve an initial transfer of knowledge, but no explicit strategy of exploiting either global integrating advantages, not local adaptation advantages, and thus limited ongoing exchange of knowledge..

Transnational strategies depend on extensive intra-organizational trade, strategic coordination and knowledge exchange that rely not only on formal structures but on informal mechanisms (Foss et al., 2010) and absorptive capacity (Volberda, Foss & Lyles, 2010). The different subsidiaries of the MNEs thus are highly interdependent both strategically and operationally (Harzing, 2000). To enable such complex coordination, the MNE has to have a shared organizational culture that encourages cooperation and knowledge sharing (Bartlett & Ghoshal, 1989).

The issues of integration and responsiveness are particularly pertinent in countries with a distinct local business environment that inhibits the smooth transfer of business models. Especially in transition economies, institutional frameworks often require idiosyncratic adaptations, while the local resource endowment is typically rich in labor but short of specialist human capital (Luo, 2003, Meyer and Peng 2005). In consequence, we expect a larger variation of strategies adopted by MNEs operating in such countries, and have thus chosen as our empirical field two transition economies, Poland and Hungary. The data used in our regression analysis are drawn from a questionnaire survey and include 345 observations of subsidiaries of MNEs originating in a wide range of countries of origin. The dataset thus provides a rich variation of corporate strategy in a rapidly evolving context.

Our results confirm our theoretical expectations that international strategies underperform any of the other three strategies the more distant the subsidiary is from headquarters, and for subsidiaries in full equity control. Moreover, transnational strategies underperform in subsidiaries established by acquisition, which is because a transnational strategy requires a high degree of coordination between business units that cannot easily be achieved in a unit with its own established structure and culture.

This paper contributes to the literature in several ways. First, we develop a contingency perspective and offer empirical evidence on one of the most popular sets of concepts in the international strategy literature, the integration-responsiveness framework, which to date suffers from a lack of empirical verification of its performance implications. Second, we extend the knowledge governance perspective of the MNE by showing how organizational strategies with different knowledge exchange patterns are effective in different local contexts.

Theoretical foundations

The integration responsiveness (IR) framework

In the 1980s and early 1990s, scholars began to systematically investigate the strategies of MNEs along the dimensions of local adaptation and global integration. Early studies tended to treat these dimensions as opposite poles of the same scale, or at as two highly correlated scales (Dow, 2006; Luo, 2001; Johnson, 1995; Roth & Morrison, 1990; Venaik, Midgley, & Devinney, 2000). Prahalad and Doz (1987) challenged this approach suggesting that the two dimensions are not exclusive but can be combined if suitable organizational structures are created and implemented. They thus introduced the notion of a 'multi-focal' corporation that simultaneously is locally responsive and globally integrated.

These ideas have been further developed by Bartlett and Ghoshal (1989) who developed the now famous 2x2 strategy matrix with the dimensions local responsiveness and globally integration, and identified four types of strategy. A global strategy focuses on global integration at the expense of local responsiveness, thus integrating organizational processes to a high degree and benefitting from economies of scale and scope as well as from integrated learning across a global organization. A multi-domestic strategy focuses on local responsiveness, for instance by offering locally adapted products in each market, yet foregoes potential economies of scale.[i] An international strategy is low on both global integration and local responsiveness. It thus benefits from neither economies of scale nor fit to local consumers, and thus is largely treated as an inferior strategy chosen only by MNEs with little international experience.

Bartlett and Ghoshal (1989) focus most the transnational strategy, which combines the benefits of global scale and learning with the benefits of locally adapted products and processes. It is associated with high levels of intra-MNE trade in goods and services, as well as extensive lateral knowledge flows. A transnational strategy also allows selected subsidiaries to become strategic centers for a particular product or technology (Harzing, 2000). It is thus associated with extensive knowledge flows not only vertically between headquarters and subsidiaries, but horizontally between different subsidiaries (Ghoshal & Bartlett, 1990, Gupta & Govindarajan 2000, Kostova & Roth, 2003). In fact, every subsidiary is embedded in a different local community of practice, and the competitive advantage of the transnational MNE is to a large extend created by organizational learning that connect, integrates and exploits this geographically dispersed knowledge (Andersson, Forsgren & Holm, 2002, Meyer, Mudambi & Narula, 2011, Monteiro, Arvidsson, & Birkinshaw, 2008, Tallman & Chacar, 2011). Hence, subsidiaries are not only recipients if knowledge from the parent, but an important source of knowledge that contributes to the resource-base and the competitiveness of the MNE (Mahnke, Pedersen & Venzin, 2005, Mudambi, 1999).

How do companies achieve integration and responsiveness simultaneously? Ghoshal and Bartlett (1990, Bartlett & Ghoshal 1993) suggest a combination of a collaborative organizational culture and a matrix structure that facilitates intensive horizontal knowledge exchange within the organization. They present for example the cases of ABB (of Sweden and Switzerland) and Acer (of Taiwan), who at the time had adopted respectively a matrix-structure and a network structure of strategic and regional business units to achieve both high degrees of global coordination and responsiveness to local markets.

While the transnational strategy is associated with a matrix organization, other strategies require less complex organizational arrangements: international strategies typically use an international division parallel to the domestic divisions, global strategies are associated with functional divisions, while multi-domestic strategies use geographic divisions (Egelhoff, 1982, Pla-Barber, 2002, Wolf and Egelhoff, 2002).

The transnational strategy – and especially the matrix organization needed to implement it – has been criticized as being overly ambitious, creating complex intra-organizational processes that create conflicts of interest, generate counterproductive organizational politics, and weaken incentives for individual business units (Burns & Wholey, 1993, Devinney, Midgely & Venaik, 2000, Foss, Husted & Michailova, 2010, Mudambi & Navarra, 2004). In fact, both ABB and Acer went through periods of major strategic change when their strong organizational culture hit its limits in an organization of growing scope and complexity. Thus, there remain considerable doubts whether the transnational form is actually sustainable in large organizations.[ii]

Antecedents

The different types of strategy have been associated with different types of MNEs (Table 1). In particular, companies with non-location bound advantages created centrally and exploited throughout the organization are more likely to pursue a global strategy. On the other hand, MNEs that compete to a large extend on the basis of location bound advantages that they combine at each location with the global, non-location bound advantages can do so with a multi-domestic strategy (Harzing, 2002, Rugman & Verbeke, 1992). This leads to the question, who chooses which strategy?

**** Insert Table 1 about here ****

Some studies investigate the determinants of the choice of strategy, and found a wide range of firm, industry and context-level variables to influence this choice. For example, Kobrin (1991) finds that technological intensity and advertising intensity were favoring global integration, while Luo (2001) finds a range of organizational and industry characteristics to favor global integration. On other hand, idiosyncratic local business practices, demand patterns and institutional environments induce MNEs to provide subsidiaries with greater autonomy to engage in local learning (Andersson et al., 2002, Monteiro et al. 2008, Tallman, 1991) and to be locally responsive (Luo & Peng, 1999, Roth & Morrison, 1991, Xin & Pearce, 1996).

Moreover, subsidiaries develop a life of their own, and become actors within the MNE that thrive to perform in the interest of its leaders and associated stakeholders. In particular, subsidiaries bid for global mandates to that provide them with specific functional or regional responsibilities within the MNE (Birkinshaw & Morrison, 1995), and they aim to influence decision making at the corporate level in their interest (Ambos, Andersson & Birkinshaw, 2010, Bouquet & Birkinshaw, 2008). The dynamics of subsidiary action thus may strengthen subsidiary autonomy and local adaptation, but also the alignment of the subsidiaries policies with the performance criteria established by the headquarters – and hence stronger global integration.

Consequences

The merits of alternative strategies have been extensively discussed in the marketing literature, which focuses on specifically on the standardization or adaptation of products and of marketing processes (Birnik and Bowman, 2007; Cavusgil, Zou & Naidu, 1993; Grewal, Chandrashekaran, Dwyer, 2008; Katsikeas et al. 2006; Laroche et al. 2001; Roth, 1995; Solberg, 2000) and the impact on marketing innovation in the MNE (Venaik, Midgley & Devinney, 2005). However, Bartlett and Ghoshal's (1989) strategy types are broader than just marketing; they concern all aspects of the headquarter-subsidiary relationship, and thus have implications for example for human resource practices (Kim & Gray 2005, Dickmann & Müller-Camen 2006, Fenton-O'Creevy, Gooderham & Nordhaug 2008), innovation activities (Marin & Bell, 2010) and configurations of information technology (Manwani & O'Keefe 2003). At the level of subsidiaries, the MNE's strategy influences, among other effects, the ways in which the subsidiary engages with its local environment in terms of political activity (Blumentritt & Nigh 2002) and corporate social responsibility (Husted and Allen, 2006). It also impacts on the individuals working in the subsidiary, notably the use of expatriates in leadership roles (Gaur, Delios Singh, 2007) and the career paths of both global and local employees (Newburry, 2001). Figure 1 synthesizes this literature.

*** *Insert Figure 1 about here* ***

Note that entry mode appears in the synthesis as both an antecedent and a consequence of the choice of strategy. This is because, according to Harzing (2002), MNEs choose their preferred mode of entry for a new country based on their global strategy. Subsequent to the entry, the strategy actually implemented in the subsidiary (notably the degrees of control and integration) is critically determined by the mode by which the particular subsidiary has been established – and only slowly over time converges with the MNEs preferred strategy.

This raises a broader issue for our study. Integration-responsiveness in any specific subsidiary is not only an outcome of strategic decisions made at corporate headquarters, but co-determined by local influences. In other words, the actually implemented strategy at subsidiary level is likely to vary across locations. In our empirical study, we look at the implemented strategy at the subsidiary level, and thus incorporate location specific features such as the institutional distance between headquarters and the focal subsidiary.

Hypothesis Development

A contingency perspective on subsidiary performance

The performance of subsidiaries is contingent on a wide range of organizational and contextual variables, of which the strategy of the MNE is particularly critical. Earlier studies of subsidiary performance have incorporated antecedents of subsidiary strategies such as marketing standardization/adaptation (Grewal et al., 2008, Katsikeas et al., 2006), institutional distance (Gaur, Delios & Singh, 2007), local density (Miller & Eden, 2006), subsidiary isolation (Monteiro et al., 2008),subsidiary independence (Subramanian & Watson, 2006) and external networks (Andersson, Forsgren & Holm, 2002). Relatedly, subsidiary performance benefits from knowledge received from other entities of the MNE, a key feature of global and transnational strategies. Yet, such benefits are subject to saturation effects and constrained by the subsidiary's own absorptive capacity (Ambos & Ambos, 2009, Mahnke, et al. 2005).

An important implication of this contingency perspective is that studies of the performance implications of integration/responsiveness strategies at the subsidiary level need to incorporate the antecedents of the choice of strategy. In other words, performance is contingent on the contextual factors that led to the choice of strategy in the first place (Roth, 1995, Katsikeas et al., 2006). For example, Grewal, Chandrashekaran and Dwyer (2008) find the effectiveness of global strategies to be contingent on the munificence of the local environment, that is its market potential relative to other markets. This contingency arises because different strategies fit different purposes. What is best for one firm is not necessarily good for another firm.

In consequence, our baseline argument is that it is not possible to predict performance effects of alternative form for an aggregate sample. Our analysis investigates *under which circumstances* subsidiaries perform better when managed under a transnational, global, multi-domestic or international strategy.

Organizational Context

The organizational context of subsidiary firstly varies with the equity control that the MNE holds over the subsidiary; with higher equity control in wholly-owned subsidiaries (WOSs), compared to joint ventures (JVs), MNEs also attain more operational control. Global strategies require a high degree of control, including the ability of headquarters to determine actions by the subsidiary, for instance to react flexibly to opportunities that extend beyond a particular national market, or to strategically compete with global competitors (Harzing, 2000, Luo, 2001). Hence, if MNEs aim to leverage resource and capabilities across their operations, then securing full control over the strategy of the subsidiary become a critical success factor (Filatotchev, Stephan & Jindra, 2008, Mudambi 1999). Such control, however, requires full ownership because joint ventures are subject to joint control, which slows down strategic decision making and implementation. In fact, many JVs require consensus of the main shareholders before implementing substantive strategic change (Gulati, 1998, Harrigan, 1988). Foreign investors with full control over their subsidiaries thus are able to reduce their coordination costs and to implement strategic change rapidly (Filatotchev et al., 2008). Hence, we expect global strategies to be more effective when the MNE holds full ownership in the subsidiary, while global strategies with joint venture ownership are subject to coordination challenges that may have negative performance implications.

Multi-domestic strategies are designed to enable a high degree of local adaptation, while utilizing the core competences of the organization. Systematic adaptation requires MNEs to keep strategic control over key aspects of the operations, including in particular the brand name, while developing local adaptation within the centrally set parameters. Summing up these arguments, we hypothesize that full ownership has different performance implications in global and transnational organizations, compared to international organizations:

Transnational strategies likewise require intensive coordination. In addition, knowledge flows not only between HQ and subsidiary, but between different subsidiaries within the network of the MNE (Kostova & Roth, 2003, Monteiro et al., 2008). Such complex interactions need an appropriate balance of normative and formal control mechanisms (…), though perhaps less than global or multi-domestic strategies. A shared organizational culture may be more important than hierarchical control, especially where internal markets are used. Thus, we expect that a transnational strategy would be more successful when the subsidiary is in full MNE ownership. In contrast, international strategies require no such integration and coordination as they are initially set up with the technologies and brands of the parent, but then left to their own devices. Compared to global and transnational strategies, thus, we expect international strategies to be less negatively affected by shared ownership.

Hypothesis 1: If subsidiaries are under full equity control, then global, multi-domestic and transnational strategies perform better than international strategies.

The second key aspect of organizational context is the organizational heritage, notably the form of establishment: acquired firms tend to carry the heritage of the previously existing organization whereas greenfield are created to the design of the MNE (Kogut and Singh, 1988). A cooperative organizational culture is difficult to transfer to new organizational units that already have a different inherited structure, or a strong identity of their own. This applies in particular when a subsidiary joins the MNE by way of acquisition of a formerly independent firm. Each firm has its own organizational structures and cultures, which acquirers find hard to change, especially when this culture is embedded in a different national culture. Hence, post-acquisition restructuring is a major challenge for international acquisitions (Birkinshaw, Bresman & Hakanson, 2000, Capron & Guillen, 2009, Zollo & Singh, 2004), especially in transition economies where many firms carry inheritances of state-ownership and central planning (Estrin & Meyer, 2011, Filatotchev, et al. 2008, Meyer & Lieb-Doczy, 2003). As a consequence of these obstacles to integration, foreign investors intending to implement a transnational strategi, which is highly dependent on shared organizational culture, will find it difficult to create appropriate internal coordination processes in acquired business units. They may thus use greenfield to create a new operation that optimally fits with the global structure of the MNE (Hennart & Park, 1993, Kogut & Singh, 1988), while acquired units are likely to struggle to perorm within a transnational structure.

On the other hand, MNEs with an international or multi-domestic strategy may pursue acquisitions as a mode of entry because they may need local resources that enable them to achieve a high degree of local responsiveness (Harzing, 2002). Moreover, they need less coordination and knowledge exchange with the subsidiary, and thus can provide the acquired subsidiary with a high degree of independence.

However, transnational strategies (and to lesser extend global strategies) are only effective if the new subsidiary is tightly integrated in the MNEs organization, including coordination mechanisms and organizational culture. Hence, MNEs pursuing a transnational strategy would face particularly high costs of post-acquisition restructuring, and a high chance that this restructuring fails to 'fit' the acquired business units into the tight structures of the MNE. Therefore, we expect that firms growing by acquisition would face particular problems when trying to implement a transnational strategy:

Hypothesis 2: If subsidiaries have been established by acquiring a local firm, then transnational strategies perform worse than any of the other strategies.

Geographic Context

Organizational contexts are embedded in a broader environmental contexts. For subsidiaries a primary challenge is that their local context varies from that of headquarters. The degree of difference – or distance – arises in particular from cultural differences (Hofstede 1980; Kogut and Singh, 1988). Cultural distance, the degree of differences in the formal and informal institutional framework, has emerged as a major determinant of various aspects international business strategies (Kogut & Singh, 1988, Kostova 1999, Tihanyi, et al., 2005). Principally, cultural distance has two opposing effects. On the on hand, it is raising the costs of doing business, for instance due to rising cultural frictions causing intra-organizational conflicts (Luo & Peng, 1999, Chen et al., 2010), and inhibiting the transfer of knowledge and of organizational practices (Ambos & Ambos, 2009, Kostova & Roth, 2002, Monteiro et al. 2008). On the other hand, it is increasing the chance of business opportunities arising from complementaries and arbitrage opportunities (Estrin, Baghdasaryan & Meyer, 2009, Ghemawat, 2007, Slangen & Hennart, 2008). Many empirical studies suggest a negative effect (e.g. Grewal et al., 2008) but the empirical evidence is far from conclusive (Tihanyi, et al., 2005).

When operating in nearby countries, MNEs may not have to pay much attention to cultural differences and local peculiarities as the potential loss from a mismatch with local conditions is small. Hence, MNEs may perceive their existing business model to be effective with small adaptations, and not bother about local adaptation. Thus, an international strategy is likely to be viable. On the other hand, in more distant countries, liability of foreignness is likely to inhibit such 'naïve' foreign entry (Zaheer, 1995). An international strategy is unlikely to be effective in distant countries because its transfer is inhibited by various obstacles to the transfer of organizational practices (Kostova and Roth, 2002), and local consumers are unlikely to appreciate un-adapted products. In consequence, the more distant the host country from the home country in cultural terms, the more an MNE needs an explicit strategy that either exploits the advantages of global integration, or adapts the products and processes locally – or both (Gaur & Lu, 2007; Xu & Shankar, 2002). Consequently, marketing scholars have found similarity of markets and cultures to be key determinants of the degree of local adaptation (Roth, 1995, Katsikeas, et al., 2006).

The international strategy type does usually not receive much attention in strategic management writings because it fails on both key dimensions: it fails to deliver locally adapted products, and it fails to exploit opportunities of global learning. However, these dis-advantages only arise when there are substantial differences between home and host countries. If distance is small – as between neighboring European countries – few learning benefits can be gained by global integration, and few adaptations to local culture are required. Hence, we propose that subsidiaries of MNEs from distant origins would perform less well when employing an international strategy:

Hypothesis 3: The more culturally distant the host country, the more global, transnational and multi-domestic strategies perform better than international strategies.

Methodology

Sample and survey

To test our propositions, we need detailed information on the strategies of MNEs and their subsidiary in a context that likely exhibits considerable differences to the MNEs headquarters. Thus, we use a dataset developed through a questionnaire survey in two Central European transition economies: Poland and Hungary. Transition economies experience idiosyncratic local pressures for adaptation, while at the same time offering opportunities for global product strategies due to the rapidly evolving nature of the context (Kozminski and Yip, 2000). With investors originating in a wide range of countries of origin, this dataset provides a rich variation of corporate strategy in a rapidly evolving context. FDI in these two countries has grown rapidly from negligible levels in 1990. These countries thus provide the opportunity to analyze a wide range of recently established subsidiaries by both large and small MNEs in an emerging economy (Filatotchev et al., 2008; Meyer & Peng, 2005).

We utilize a dataset from an earlier questionnaire survey of all subsidiaries of foreign MNEs that a) have been established within ten years before the survey, b) have at least ten employees, and c) have at least 10% foreign equity.[iii] The questionnaire had been designed jointly with the local teams that managed in the data collection. It was translated into local languages and sent in both languages to the chief executive of each MNE subsidiary for which contact information was available in the database. In most cases, this was followed up with telephone calls and personal interviews. Responses were obtained from 424 representing MNE subsidiaries a response rate of over 13 percent

Most of the subsidiaries are affiliated to West European MNEs, (80%) with most of the remainder belonging to North American MNEs (12%). This corresponds to patterns described in the earlier research on the pattern of FDI in this region (Meyer & Peng, 2005). The questionnaire covered different aspects of the characteristics, activities and knowledge flow patterns of the subsidiary unit and its parent MNE. The next sub-section introduces the variables we use and describes them in detail.

Measurements

Subsidiary performance. The measurement of subsidiary performance is a major challenge in international business research because MNEs rarely publish subsidiary level financial data, and where they do, these data are affected by accounting practices motivated by tax minimization strategies such as ‘transfer pricing’ (Eden, 2001). Therefore, studies of subsidiaries mostly use perceptional performance measures based on key informants assessment of the subsidiary performance against a relevant benchmark such as industry average or the company’s own targets (Grewal, et al., 2008, Monteiro et al., 2008, Subramaniam & Watson, 2006). In our survey, respondents were asked to assess their subsidiary relative to pre-establishment expectations using 5-point Likert scales on five performance criteria: (1) productivity (2) profitability (3) revenue growth (4) domestic market share (5) new product development. The index ‘performance’ is the average of these five items.

Explanatory variables: Our focal explanatory variable is a categorical variable for the four types of strategy defined by Bartlett and Ghoshal (1989). They were constructed as follows. Respondents were asked to rate the degree of respectively local responsiveness and global integration on two five-point Likert scale items: (1) The foreign parent has centralized many functions such as R&D, finance and procurement. (2) Your firm conducts many major functions locally. (3) The foreign parent has to a high extent standardized products and services worldwide. (4) Your firm has adopted its products and services to a high degree to the local context. We took the average of items 1 and 3 and reduced this measure to a dummy ‘integrated’ distinguishing high and low. Likewise, we constructed ‘local’ as a dummy from item 2 and 4. We then defined the dummies for organizational strategy as follows: *Transnational* = 1 if local = high and integrated = high, *Multi-domestic* = 1 if local = high and integration = low, *Global* = 1 if local = low and integrated = high. *International* strategy represents the case of local = low and integrated = low, and forms the omitted case in our empirical analysis.

Moderating variables. Cultural distance is a concept widely used in empirical international business research (Tihanyi et al., 2005), yet its conceptualization and measurement remains controversial. Many studies employ Kogut and Singh’s (1988) index, which is based on Hofstede’s (1980) work on national culture. However, there are widespread concerns regarding the validity of Hofstede’s indices, when constructing and validating his indices he did not use what would now be regarded as state-of-the-art statistical techniques (Shenkar, 2001; Javidan et al., 2006). In addition, the underlying data were collected in the 1970s, while some values, especially for emerging economies, were later estimates based different populations. Hofstede argues that the indices are still valid because culture is essentially constant over time (Hofstede, 2007), but this view is highly controversial, especially with respect to transition economies such and Poland and Hungary (Meyer & Peng, 2005). However, if culture evolves, then it is necessary to replace Hofstede’s indices with more recent data.

We thus follow Estrin et al. (2009) and employ indices constructed in the same way as the Kogut-Sing index, but using data from the more recent GLOBE study (Javidan & House, 2001; House et al., 2004). This study recently developed nine indices based on new data and contemporary empirical techniques (Javidan et al., 2006). We select their ‘practices’ indices rather than the ‘values’ indices because foreign investors are concerned primarily with the practices they actually encounter in a host country, rather than desirable states of the world as reflected in the ‘values’ indices (Estrin et al., 2009). Moreover, like Hofstede, the GLOBE ‘value’ indices may capture marginal rather than absolute levels of values (Maseland & Van Hoorn, 2009). Hence, we proxy *cultural distance* with an index employing the Kogut-Singh formula to GLOBE practices indices.

Our next two hypotheses suggest that aspects of entry mode moderate the effects of alternative strategies on subsidiary performance. Hence, we define a dummy variable *Wholly-owned* that takes the value 1 if the subsidiary is fully owned by the foreign MNE, and 0 otherwise. Moreover, we define *Acquisition* as taking the value of 1 if the subsidiary was originally established by partial or full acquisition, and 0 otherwise. The classification is based on information provided in the questionnaire.

Control variables. We include a number of location, parent and subsidiary-level variables as controls. First, we control for country-level influences such as the institutional framework and resource endowments with a dummy that takes the value of 1 for *Hungary*, Poland being the base case.

Second, we control for parent level influences by a country of origin variable, namely the GDP of that country (*GDP Source*), which captures the level of development and resource munificence that the MNE can draw upon in developing its global operations. We also control for strategic differences using the dummy *Focused Strategy*, which takes the value of 1 if the firms adopt the focused strategy and 0 otherwise.

Third, we include a number of subsidiary specific variables. The variable *Year* represents the year of the legal establishment of the subsidiary and thus captures the acquisition age. We expect older subsidiaries to be more tightly integrated, which makes global and transnational strategies more effective. The variable *Exports* is measured as the percentage of the firms' selling its good or service in foreign markets. We expect that exporting subsidiaries need more tight integration with the parent MNE.

The modes of establishment of the subsidiary are controlled for by distinguishing four categories and controlling for them by dummy variables. Full acquisitions serve as base case, and dummy variables capture respectively *Greenfield*, *Joint-venture* and *Partial acquisition* modes.

Table 2 reports the descriptive statistics for the variables in our analysis and Table 3 reports the correlations. We note that none of the correlations is so high as to become cause of concern, the highest being between *Cultural Distance* and *Hungary* with r=0.4.

**** Insert Tables 2 and 3 about here ****

A common concern when using perceptional measures created through questionnaire data is common method bias. We have designed our study such as to minimize the possibility of such a bias. While our dependent variable is a Likert-scale based perceptional measure of subsidiary performance, our focal explanatory variable are either factual information collected in form of dummies (*Acquisition, Wholly-owned*), have been transformed in a complex manner (the strategy types) or are derived from an archival source of data (*Cultural Distance*).

We reduced the chance of respondents own mental models affecting their responses by firstly placing the pertinent questions in different parts of the questionnaire (which also served to collect data for other studies), using reverse scales for some items, and by focusing our tests on complex relationships that are unlikely to exit in the respondents own mental models.

Results

The results of our regression analysis are reported in Table 4. Model 1 only includes the control variables, and confirms that most of them are highly significant and signed as expected. The overall model statistics are satisfactory with F=4.4 being significant at 0.1% level. In line with our expectations, this model suggests that greenfield subsidiaries and joint ventures perform better than acquisitions (base case), older subsidiaries perform better, as do subsidiaries receiving extensive resources from the parent and being associated with focused strategies.

*** *Insert Table 4 about here* ***

Model 2 adds the direct effects of Bartlett and Ghoshal's strategy types, global, transnational and multi-domestic (international being the base case). None of the coefficients is statistically significant. This is consistent with our baseline argument that different strategies fit different types of businesses and that none of the strategy types provides a general advantage for all businesses. The key is strategic fit.

Model 3 adds the moderating effects of cultural distance to the base model to test hypothesis 3. We find all three moderating effects to be statistically significant suggesting that all three generate superior performance compared to an international strategy in distant countries. These significant effects confirm the hypothesis. However, the direct effects of *Global, Transnational* and *Multi-domestic* now turn negative suggesting that with low cultural distance, these strategies may actually underperform an *International* strategy.

Model 4 adds the moderating effects with *Wholly-owned* and finds that the interactions with *Global* and *Multi-domestic* are positive and significant. This suggests a variation over our hypothesis H2, which predicted positive moderating effects for global and transnational strategies. Hence, the success of transnational strategies is less dependent on ownership control than global strategies, perhaps because the transnational model gives subsidiaries a degree of negotiated autonomy in a complex network of relationships, and thus can accommodate external shareholders better than a global strategy.

Model 5 adds the moderating effects with *Acquisition* and finds that a *Transnational* strategy underperforms in subsidiaries that were established by acquisition, as suggested by in hypothesis H3. This result illustrates the consequences of post-acquisitions struggles in organizations that for their global performance depend on an integrative and collaborative corporate culture, and suggests that such organization may more successfully grow organically.

Discussion

We proposed an environmentally contingency approach to MNE strategy by explaining how context *at the subsidiary level* moderates the feasible of alternative strategies of the Bartlett and Ghoshal typology. Our first contribution thus has been to demonstrate the contingent nature of the performance impact of strategy types: We have found no significance in the direct effects when not simultaneously considering moderating effects capturing the fits of the strategy with the organziation and the local environment (Model 2). However, several of our hypothesized moderating effects are significant, suggesting that a contingency model is the appropriate way to model subsidiary performance. Future research thus may explore other contingencies.

Second, distance matters. While it has an ambiguous effects on many strategic decisions caused by increases in both potential costs and potential benefits (Tihanyi et al., 2005), we suggest that that institutional distance has a clear negative effect on the relative effectiveness of global and transnational strategies. We found positive moderating effects on three types strategies (Model 3), suggesting that they are more effective than international strategies in distant locations. In other words, an international strategy appears to be viable in nearby countries, but in more distant ones where a more explicit strategy is required.

Third, control is important for global strategies because they involve extensive coordination and the need for subsidiaries to align themselves smoothly with strategic initiatives and operations originating from the parent firm. Such alignment is hard to achieve when strategies need to be coordinated with a partner, which makes global strategies ineffective in joint ventures.

Fourth, acquisitions serve some purposes but not others. They provide access to local resources that are of interest in particular to firms pursing a high degree of local adaptation in a multi-domestic strategy. They can also be better accommodated by such firms because they do not require a highly integrated organizational culture. In contrast, transnational strategies aim to tap into local knowledge pools, but knowledge thus accessed is to be shared within the global corporation. This is difficult to achieve if the subsidiary has a succinct identity of its own. Therefore acquisitions are not a mode suitable to grow a transnational strategy.

As all empirical studies our analysis has limitations that may be addressed in future research. First, the Bartlett and Ghoshal typology itself has been criticized in view of the growing complexity of the strategies of MNEs; and the disaggregation of value chains in particular (Devinney et al. 2000; Rugman et al. 2011). This critique extends to our analysis and suggests that future research may test more complex models that take into account the stage in the value chain.

Conclusion

In this paper, we enhance the understanding of one of the key textbook models of international business by providing some empirical evidence when which strategy is appropriate. Despite its popularity, the model lacked empirical validation (part from specific applications in the field of marketing (Grewal et al., 2008, Roth, 1995). We find support for a contingency model emphasizing strategic fit of the strategy with the context (especially institutional distance) and the mode of establishment of the subsidiary. In particular, we find that international strategies may perform well in nearby countries, but underperform in distant countries. Moreover, global and multi-domestic strategies perform better with full ownership control, while transnational strategies underperform when implemented in acquired subsidiaries. These insights suggest that MNEs need to align their entry strategies with their integration-responsiveness strategy type.

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Figure 1: Antecedents and Consequences of Integration/Responsiveness: A Synthesis of the Literature

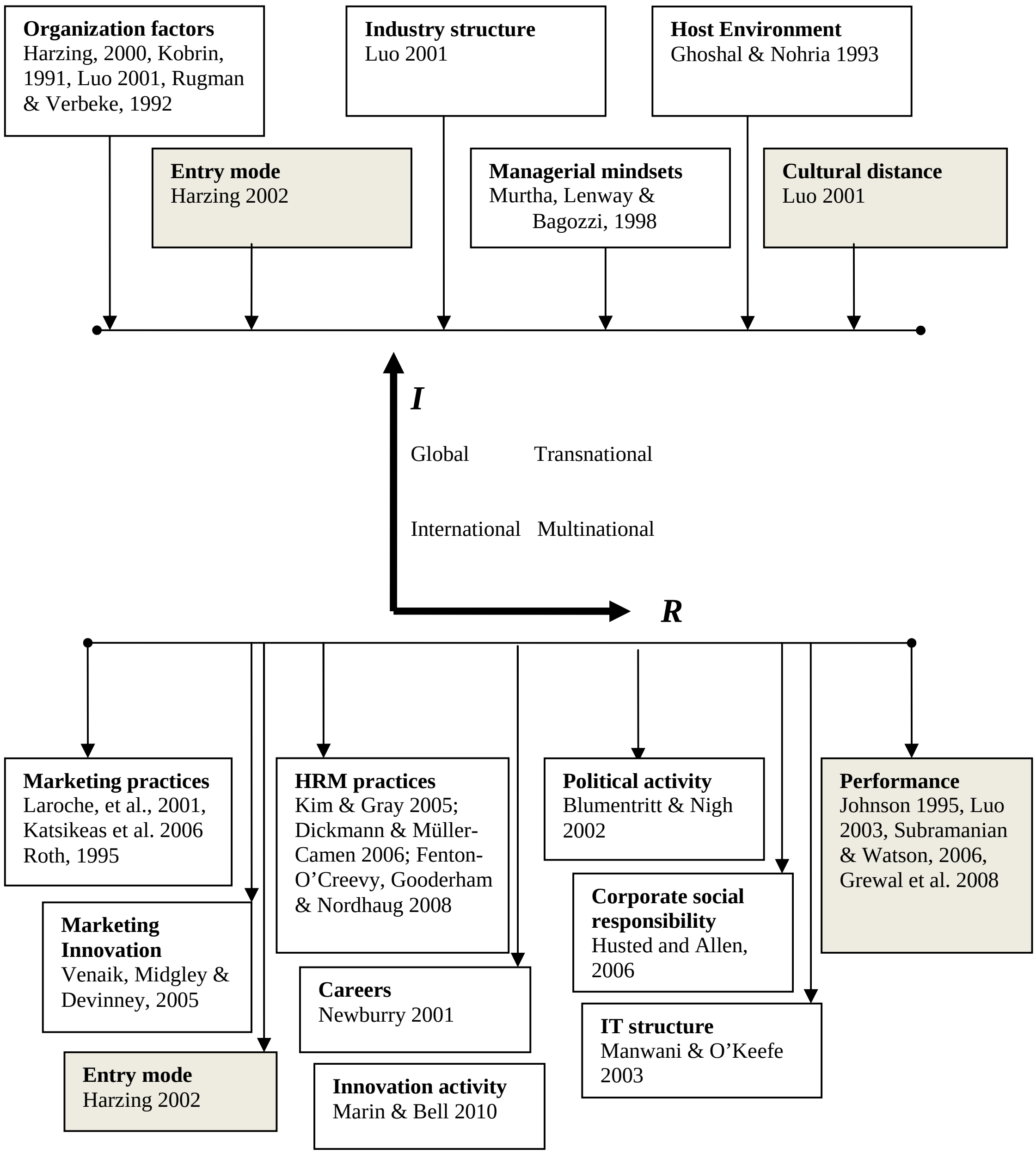

Table 1: Four Types of Strategy

	International	**Global**	**Multi-domestic**	**Transnational**
Ability to exploit global scale and innovation	low	low	high	High
Ability to deliver localized products	low	high	low	High
Knowledge flows	down	Mainly down	bilateral	Network
Control	Formal (scope and task)	Formal (scope)	Formal (task)	Normative (organizational culture)

Table 4 Regression: Strategy and Subsidiary Performance

	Model 1		*Model 2*		*Model 3*		*Model 4*		*Model 5*
	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B
Constant	136.2 ***	39.6	141.9 ***	41.8	148.1 ***	42.0	135.9 ***	41.7	143.1 ***
Hungary	.016	.134	.004	.139	.010	.139	.003	.138	-.014
Year	-.066***	.020	-.069***	.021	-.071***	.021	-.066**	.021	-.070***
Export	-.002	.002	-.001	.002	-.001	.002	-.001	.002	-.001
Greenfield	.311*	.150	.350*	.154	.352*	.154	.379**	.154	.131
JV	.357*	.177	.451*	.184	.454*	.183	1.110**	.355	.257
Partial acquisition	.118	.206	.203	.213	.204	.213	.824*	.365	.187
Resource transf.	.179***	.045	.204***	.050	.216***	.050	.204***	.049	.211***
Focused	.236*	.122	.266*	.126	.290*	.127	.246*	.126	.255*
GDP source	4.284E-6	.000	2.743E-6	.000	1.727E-6	.000	5.950E-7	.000	4.150E-6
Distance	-.063	.060	-.077	.062	-.449**	.169	-.070	.062	-.079
Global			.078	.205	-1.887+	1.035	-.505	.335	.189
Transnational			.184	.214	-2.067*	1.030	.055	.331	.416+
Multi-domestic			.120	.199	-2.110*	1.025	-.329	.282	.150
Distance * Global					.382*	.196			
Distance * Transnational					.434*	.193			
Distance * Multi-domestic					.434*	.194			
WOS * Global							.969*	.424	
WOS * Transnational							.370	.419	
WOS * Multi-domestic							.859*	.387	
Acquisition * Global									-.016
Acquisition * Transnational									-.655*
Acquisition * Multi-domestic									-.103
Adj R^2	0.086		0.094		0.102		0.106		0.099
R^2	0.111		0.128		0.143		0.147		0.141
F	4.408***		3.759***		3.444***		3.558***		3.366***
N	362		345		345		345		345

+p<0.1, *p<0.5, **p<0.01, ***p<0.001

Table 2: Descriptive Stats

	Mean	*Std. Deviation*
Hungary	.53	.500
Year	1994.86	2.949
Export	31.17	37.017
Greenfield	.42	.495
Acquisition	.23	.424
Joint Venture	.21	.409
Resource transfer	4.43	1.31
Focused	.62	.485
Global	.28	.448
Transnational	.26	.441
Multi-domestic	.32	.469
GDP Source	2.58 E4	5.90 E3
Distance	5.36	1.11

Table 3: Correlations

	Hungary	Year	Export	Greenfield	Acquisition	Joint Venture	Resource Transfer	Focused	Global	Trans-national	Multi-domestic	GDP Source	Distance
Hungary	1												
Year	-.014	1											
Export	.076	.165**	1										
Greenfield	-.008	.043	.028	1									
Acquisition	.066	.029	.073	-.475**	1								
Joint Venture	.016	-.116*	-.027	-.445**	-.287**	1							
Resource Transfer	-.061	.002	.048	.144**	.073	-.142**	1						
Focused	-.133*	.020	.034	.016	-.025	.017	-.046	1					
Global	-.039	.028	.241**	.108*	.060	-.104*	.162**	-.015	1				
Transnational	.072	-.052	-.135*	.086	.018	-.090	.204**	-.041	-.369**	1			
Multi-domestic	.072	.058	-.160**	-.155**	.001	.127*	-.220**	.003	-.429**	-.414**	1		
GDP Source	-.041	-.038	.091	.087	-.050	-.020	.097	-.077	.110*	-.082	-.033	1	
Distance	.439**	-.019	.054	-.034	-.004	.060	-.107*	-.046	-.064	.088	.044	.170**	1

Endnotes

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[i] Bartlett and Ghoshal (1989) use the term 'multinational' for this strategy, but later authors adopted the term multi-domestic to avoid confusion with the concept of MNE, which encompasses firms pursuing any of these strategies.

[ii] Some authors found the 2x2 matrix too limiting and thus added a third dimension. For example, Rugman, Verbeke and Yuan (2011) incorporate the supply chain position of the subsidiary, arguing that the Bartlett and Ghoshal typology only acknowledges aggregate subsidiary's role and assumes a singular bundling of subsidiary's entire value chain. They extend Bartlett and Ghoshal's subsidiary's typology to the level of value chain activities. They argue that subsidiaries now can easily access a broader set of local advantages in the region and across a broader geographical space by bundling their internal resource base with these external resources.

[iii] Further details of the survey have been published in a book, and parts of this dataset have been used in other studies that do not investigate integration-responsiveness related issues. /ADD REFERENCES AND ACKNOWLEDGEMENTS AFTER REVIEW PROCESS/.