Regionalization strategy and performance
The moderating role of industry dynamism and top management team diversity

Winfried Ruigrok, Dimitrios Georgakakis and Peder Greve
Research Institute for International Management, University of St Gallen, St Gallen, Switzerland

Abstract

Purpose – This paper contributes to the debate about the performance implications of adopting a regional as opposed to a global strategic posture. The aim of this paper is to argue that the performance effects of a regionalization strategy vary based on the characteristics of the industry in which the MNE operates and the composition of its top management team (TMT).

Design/methodology/approach – This analysis is based on a cross-sectional dataset of 211 large European MNEs headquartered in four Western European economies at the end of 2005.

Findings – Results show that firms adopting a regional orientation outperform MNEs with global strategic positioning. This positive relationship is less pronounced under conditions of industry dynamism and inter-regional TMT diversity.

Originality/value – The study contributes to our understanding of whether and under what conditions MNEs benefit from adopting a regional as opposed to a global strategic posture.

Keywords Regionalization strategy, Performance, Dynamism, Top management teams, Diversity, Performance management, Diversity management

Paper type Research paper

Introduction

Due to the rising number of international activities of multinational enterprises (MNEs) and the increasing economic interdependence among nations, globalization has been seen by many as an undeniable reality. The notion of a global business reality has been used to refer to: a location shift from advanced or industrialized countries towards emerging markets (Buckley, 2009); changes in sourcing practices (Manning et al., 2008); the external or industry conditions that drive firms to expand outside their home region (Kostova and Zaheer, 1999); or the emergence of a global culture (Bird and Stevens, 2003). Meanwhile, extant research challenges the conventional meaning of globalization by indicating that most of the world’s successful MNEs are regional rather than global in terms of economic activity (Ghemawat, 2007; Rugman, 2000, 2005; Rugman and Verbeke, 2004; Ruigrok and Van Tulder, 1995). In a recent study, Rugman and Verbeke (2004) found that the world’s 500 largest MNEs generate an average of 80 percent of their sales in their home region, including the triad markets of NAFTA, the European Union, and Asia.

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This observation of the regionalization phenomenon has led researchers to inquire whether MNEs that pursue a regionalization strategy outperform those that adopt a global strategic orientation (Hitt et al., 2006; Rugman et al., 2008; Rugman and Oh, n.d.). Researchers have found that firms pursuing an intra-regional as opposed to a global strategy have exhibited higher financial performance (Rugman and Verbeke, 2004; Qian et al., 2010). The dominant theoretical explanation offered in this literature is that, by expanding mainly within their home region, firms can significantly reduce managerial and administrative costs related to cultural and geographic distance (Rugman, 2005) and benefit from legal, economic, and customer-related proximity across countries in the same region (Qian et al., 2008).

However, if a regional strategy is more economically beneficial for MNEs, we need to explain why some firms do not pursue a regional strategy but, instead, expand their activities outside the home region. Recent studies suggest that it may be possible to identify distinct boundary conditions at the firm and industry levels that increase the likelihood of MNEs being successful beyond their regional home base (Hitt et al., 2006; Thomas, 2005).

In this study, we subscribe to the notion that the pursuit of a regional (as opposed to a global) strategy will be positively associated with firm performance. We also suggest that the strength of this relationship depends on: the characteristics of the industry in which the MNE operates, and the background of the MNEs’ top management team (TMT). Drawing on contingency theory and the “matching managers to strategies” perspective, we hypothesize that the performance benefits of a regional strategic orientation will be less pronounced for firms that operate in highly dynamic industries and are managed by inter-regionally diverse TMTs. Thus, this study makes an empirical contribution that broadens our understanding of the regionalization-performance relationship and its contextual boundary conditions at the industry and organization levels.

**Theory and hypotheses**

Few topics in the international business (IB) literature have been as widely debated as the link between internationalization and performance. Different theoretical perspectives and empirical contexts have been employed in attempts to resolve this debate and clarify the direction and shape of the internationalization-performance relationship. For example, drawing on arguments from transaction cost theory, Daniels and Bracker (1989) suggest that, at early stages of internationalization, firms expand into culturally familiar countries and, therefore, experience lower degrees of operational complexity and higher firm performance. Later in the internationalization process, the marginal internationalization costs outweigh internationalization benefits, resulting in declining firm performance (Hitt et al., 1997). Meanwhile, drawing upon organizational learning theory, other studies provide evidence in support of a U-shaped relationship (Capar and Kotabe, 2003; Ruigrok and Wagner, 2003). Employing the logic of a stepwise and sequential internationalization process (Johanson and Vahlne, 1977), these studies argue that, at the first stages of foreign expansion, firms lack sufficient knowledge in dealing with economic, legal, and cultural differences and, thus, experience lower profitability. Subsequently, firms accumulate knowledge about dealing with the challenges and costs of internationalization. Firms at more advanced stages of internationalization are able
to reap benefits from the effective exploitation of global markets and outperform their competitors (Capar and Kotabe, 2003; Ruigrok and Wagner, 2003).

More recent studies have reconciled the earlier research findings into a three-stage model in which internationalization exhibits a horizontal S-shaped (cubic) relationship with firm performance. According to this model, firm performance is low at the initial stages of foreign expansion, increases at intermediate levels, and finally declines at high internationalization levels (Contractor et al., 2003; Lu and Beamish, 2004). The S-shaped relationship has subsequently been linked to the notion that MNEs’ are better able to exploit their international competitiveness within (as opposed to outside) their home region, leading to declining performance as they pursue inter-regional expansion opportunities (Rugman and Oh, 2010). Other scholars have questioned the generalizability of the horizontal S-shaped multinationality-performance relationship, arguing that characteristics of the home-country and home-region context may influence both the shape and inflection points of the relationship (Ruigrok et al., 2007).

The regionalization literature is based on the underlying notion that internationalizing MNEs possess unique resources and capabilities (firm-specific advantages or FSAs) that, in combination with home-country advantages (country-specific advantages or CSAs), enable MNEs to achieve competitiveness in foreign markets (Rugman, 1981). While MNEs’ utilization of FSA/CSA combinations are likely to be relatively homogeneous within regions, they require substantial adaptation to be effectively utilized across regions. This explains why the vast majority of the world’s largest MNEs are home-region oriented (Rugman and Verbeke, 2004), as well as why intra-regionally focused MNEs are relatively more successful than their globally dispersed competitors (Contractor, 2007; Rugman and Oh, 2010, n.d.).

A vast and growing body of evidence has emerged in recent years supporting the general notion that there is a positive relationship between regionalization and MNE performance. At the same time, several authors suggest that the shape and strength of this relationship is likely to be contingent upon contextual factors (Ruigrok et al., 2007; Rugman and Oh, n.d.). Specifically, the utilization of FSAs and CSAs within and across regions may be influenced by:

- organizational and structural characteristics of the MNE that facilitate its ability to leverage and combine FSAs and CSAs beyond the home region; and
- characteristics of the MNE environment that enable (or require) firms to proactively seek and effectively exploit expansion opportunities outside the home region.

In this paper, we investigate two such characteristics that may influence the strength of the regionalization-performance relationship. Several studies have shown that both the configuration of top management teams and the level of industry dynamism affect MNEs’ internationalization strategies (Greve et al., 2009; Kaczmarek and Ruigrok, n.d.; Schlie and Yip, 2000), as well as the benefits of international expansion (Kostova and Zaheer, 1999; Nielsen, 2010; Rugman and Oh, 2007).

The link between regionalization and performance
Over the past decades, the association between international strategy and firm performance has been widely debated in the literature. Convergence theorists such as...
Levitt (1983) initially hypothesized that MNEs can derive performance benefits from an increasingly global strategic posture. Since then, scholars have drawn upon theoretical perspectives, such as transaction cost theory and behavioral perspectives of the firm, to show that MNEs face either rising or diminishing returns to international expansion at different stages of the internationalization process, as benefits outweigh the costs of internationalization or vice versa (Contractor et al., 2003; Lu and Beamish, 2004; Ruigrok et al., 2007).

A recent and growing body of literature associates the peaks and troughs of MNE performance at different stages of internationalization with the crossing of regional boundaries. This research has shown that most of the successful MNEs conduct a majority of their economic activity within their home continent or regional market (Rugman and Verbeke, 2004; Rugman, 2005; Morrison and Roth, 1992). Firms that rapidly expand outside their home region and cultural settings are likely to experience high administrative costs (Hitt et al., 1997; Rindfleisch and Heide, 1997), slower internationalization learning (Ruigrok and Wagner, 2003), large psychic distance (Contractor, 2007; Hutzschenreuter and Voll, 2008), and greater risk of failing to adapt to new regional environments (Tallman and Li, 1996; Vermeulen and Barkema, 2002). As Ghemawat (2005, p. 102) pointed out:

Disappointments with strategies that operate at a global level may explain why companies that do perform well internationally apply a regionally oriented strategy in addition to – or even instead of – a global one.

Firms adopting an intra-regional strategic approach can reduce managerial costs of distribution, coordination, and transportation (Grant, 1987; Qian et al., 2010; Rugman, 2005) and increase the benefits of legal, political, economic, and cultural proximity across different countries in the same region. Specifically, performance benefits can derive from cultural and market similarities across countries in the same region (Rugman, 2005; Qian et al., 2008); faster learning in dealing with international complexity (Ruigrok and Wagner, 2003; Ruigrok et al., 2007); and effective exploitation of diverse intra-regional resources with relatively lower costs (Rugman, 2005).

In a recent study, Qian et al. (2010) employ a sample of US-based MNEs to assess how performance is affected by intra- and inter-regional diversification relative to total geographic diversification. The authors find that, while intra-regionally diverse firms exhibit a positive and linear relationship with firm performance, inter-regionally diversified firms display an inverted U-shaped performance relationship. Based on these findings, Qian et al. (2010, p. 1028) conclude that US firms expanding outside their home region at a moderate level “may also realize some positive returns, but such returns are inferior to an intra-regional strategy.”

H1. An intra-regional (as opposed to inter-regional) strategic posture is positively associated with firm performance.

The moderating role of industry dynamism
Recent studies argue that a thorough examination of the relationship between international strategy and firm performance requires careful consideration of the industry characteristics in which a focal firm operates (for a review, see Hitt et al., 2006). Indeed, extant research has shown that some industries tend to be more regional in terms of economic activity than others (Rugman and Oh, 2007; Schlie and Yip, 2000).
Kostova and Zaheer (1999) argue that organizations operating in dynamic and uncertain environments reap advantages by adopting a geographically dispersed strategic posture. This suggests that firms operating under continuously changing industry settings are more likely to expand in diverse regions.

Industry dynamism refers to the environmental instability and the extent to which the organization is affected by changes in the industry (Dess and Beard, 1984; Thompson, 1967). Under conditions of industry dynamism, MNEs can realize at least two key advantages by pursuing an inter-regional expansion strategy. First, MNEs will be able to draw upon and utilize diverse resources to maintain the required levels of innovation and competitiveness in dynamic markets (Kostova and Zaheer, 1999). These resources include diverse experience, operations, and distribution of knowledge from different regions (Qian et al., 2008). Since industry dynamism increases the need for the acquisition and utilization of distinct resources (Dess and Beard, 1984; Thompson, 1967), firms that operate in dynamic industries (such as pharmaceutical and high technology firms) are more likely to benefit from an inter-regional strategy and the subsequent acquisition of distinct resources (Hitt et al., 2006; Kostova and Zaheer, 1999).

Second, MNEs in dynamic industries face particularly high levels of uncertainty, which can be partially offset by a geographically dispersed strategic posture. Organizations that pursue an inter-regional strategy may mitigate uncertainty through the exploitation of economies of scale and scope, by offsetting volatilities in customer demand at a global level, and via the establishment of global market recognition (Hamel and Prahalad, 1985; Hout et al., 1982; Prahalad and Doz, 1987; Yip, 1995). Compared to an intra-regional strategic posture, an inter-regional presence may help such firms to reduce environmental uncertainty by gaining legitimacy at a global level (Kostova and Zaheer, 1999; Wan and Hoskisson, 2003).

On that basis, we suggest that the advantages of adopting a regional as opposed to a global strategy may be less pronounced particularly for firms in highly dynamic industries. In other words, intra-regional MNEs operating in dynamic industries will experience reduced performance advantages compared to inter-regional MNEs, as they will possess a comparatively limited pool of resources essential in dealing with their dynamic industry-level contingencies. Such firms will be less adequately equipped to face environmental uncertainty; therefore, we propose that industry dynamism will negatively moderate the relationship between intra-regional strategy and firm performance:

H2. The positive relationship between intra-regional strategic posture and firm performance will be less pronounced under conditions of high industry dynamism.

The moderating role of inter-regional TMT diversity
The capacity of an organization to respond to its various internal and external conditions partially varies with the composition of its TMT (top management team) (Carpenter et al., 2004; Certo et al., 2006; Hambrick, 2007; Hambrick and Mason, 1984; Kirca et al., 2011; Nielsen, 2010). Extant upper-echelons literature implies that TMT configuration has an important impact on international strategy and performance (Athanassiou and Nigh, 1999; Herrmann and Datta, 2005). Past TMT research has shown that MNEs with diverse TMTs expand to novel geographic areas (Barkema and
comply with institutional and environmental pressures from international stakeholders (Miller and Triana, 2009; Ruigrok and Georgakakis, 2012); and have access to diverse knowledge, networks, and resources that are essential in dealing with international complexity (Athanassiou and Nigh, 1999; Thomas, 2005).

Prahalad and Bettis (1986, p. 491) developed the notion of dominant logic, defined as “a shared cognitive map (or set of schemas) among the dominant coalition.” The authors theorized that top managers’ cognitive backgrounds and experiences play a key role in managing a firm’s diversified product portfolio. Thomas (2005) extended the notion of dominant logic to international business by coining the term “international dominant logic,” referring to the ability of the TMT to adequately manage the firm’s internationally diversified portfolio. Thomas argued that highly diversified MNEs need executives with diverse nationalities and international experience to enhance firm performance.

Other studies have argued that organizations need to compose their TMTs with executives who possess skills and characteristics that fit with the strategic contingencies of the organization (Breiden et al., 2006; Gupta, 1986; Leontiades, 1982). This notion of matching managers to strategies (MMTS) suggests that firms need to have TMT members with characteristics and backgrounds that match their internal and external strategic environments in order to achieve high firm performance (Gupta, 1986). While earlier MMTS literature typically focused on the advantages of aligning managers to strategic typologies (Gupta and Govindarajan, 1984; Thomas and Ramaswamy, 1996) and product diversification strategies (Govindarajan, 1989; Marlin et al., 2004), more recent work has emphasized the importance of achieving an adequate fit between internationalization strategy and TMT composition (Breiden et al., 2006; Kaczmarek and Ruigrok, n.d.; Kirca et al., 2011; Mellahi and Collings, 2010).

The MMTS concept suggests that the extent to which a firm can benefit from an intra-regional, as opposed to an inter-regional, strategy depends on the international configuration of its TMT. Specifically, TMT members with home-region nationalities will be best equipped to deal with challenges related to the within-region environmental contingencies of the organization. Executive teams with individual backgrounds from a diverse set of regions, on the other hand, will possess comparatively limited region-specific knowledge and experience. Thus, such TMTs will be better equipped to manage the complexity of an inter-regional strategic portfolio than an international strategy primarily focused on the home region:

\[ H3. \] The positive relationship between intra-regional strategic posture and firm performance will be less pronounced under conditions of high inter-regional TMT diversity.

**Methods**

**Sample and data collection**

The initial sample consisted of 335 large MNEs headquartered in four Western European countries (Switzerland, The Netherlands, the UK, and Germany) at the end of 2005. The publicly listed companies in each of these four countries were ranked by market capitalization. The largest 100 companies per country were included in the initial sample, provided that they met two conditions: they had operations in at least one foreign country, and they did not fall within the European Union’s SME
classification (i.e. less than 250 employees and less than €50 million annual revenue) (European Commission, 2012).

From the initial sample of 335 MNEs that met these criteria, 124 were dropped due to lack of data availability, leaving a sample of 211 companies. Our final sample consists of 50 Swiss, 64 German, 55 Dutch, and 42 British MNEs.

The four European countries were chosen for the following reasons. First, all of them are preferred homes for a large number of MNEs. Firms like Nestle, Philips, HSBC, and Siemens are examples of large MNEs headquartered in the chosen countries. This large number of international companies offers a suitable context for examining the relationship between intra-regional strategy and firm performance. Second, previous studies have reported that firms headquartered in these four countries attract a relatively large pool of foreign executive candidates from within and outside Europe (Ruigrok and Greve, 2008; Van Veen and Marsman, 2008). This provides us with an appropriate base for assessing the moderating role of inter-regional TMT diversity on the relationship between regionalization strategy and firm performance. Third, the UK and Germany are large European economies, while Switzerland and The Netherlands are relatively small, open European economies. This allows us to control for potential country-level differences between small and large Western European economies.

Company-level data was gathered from the Thomson ONE Banker database and double-checked with the firms’ annual reports. Demographic data of executives and TMTs were hand-collected from annual reports, corporate websites, various biographical databases (e.g. LexisNexis), and direct e-mail contact with the sample companies. Consistent with prior IB studies using European samples, we defined the term TMT as the highest level of corporate management by relying on companies’ self-reported definitions provided in the annual reports and corporate websites (Nielsen, 2009; Greve et al., 2009). In cases where two or more levels of senior management were reported, we defined the TMT as the CEO and immediate subordinates (Finkelstein and Hambrick, 1996; Wiersema and Bantel, 1992).

**Dependent variable**

Firm performance was measured as the two-year average ratio of return on sales (ROS). This accounting-based measure of firm profitability has been used by numerous past IB studies (Capar and Kotabe, 2003; Grant, 1987; Haar, 1989). Other studies have used return on assets (ROA) instead of ROS as a measure of firm financial performance (Farris et al., 1992; Hitt et al., 1997). We also conducted our analysis using ROA as the dependent variable, producing similar (but slightly weaker) patterns than the ROS results. Indeed, Hitt et al. (1997) argued that ROA and ROS tend to produce very similar results. Since we use a sample that consists of firms operating in different industries, ROS may be a more suitable performance indicator, as total assets is a measure that varies more strongly between firms across industries (Capar and Kotabe, 2003; Farris et al., 1992).

**Independent variable**

To calculate the degree of regionalization (DOR) we developed a measure that estimates the extent to which a firm has foreign sales within rather than outside its home region relative to its domestic sales. Specifically, we calculate DOR as:

\[
DOR = \frac{\text{MBR}_{21,12}}{12,1}
\]
\[
[1 - \frac{\text{Domestic Sales}}{\text{Other European Sales} + \text{Domestic Sales}}] \\
- [1 - \frac{\text{Domestic Sales}}{\text{Non European Sales} + \text{Domestic Sales}}]
\]

Firms with a high level of foreign sales within the region and a low level of foreign sales outside the region score high in DOR. Firms with medium levels of intra-regional and inter-regional foreign sales score medium, while firms low in intra-regional and high in inter-regional foreign sales score low in DOR. Rugman and Verbeke (2004, p. 7) classified MNEs into four different types:

1. Home-region-oriented firms (more than 50 percent of sales in their home region of the triad markets).
2. Bi-regional firms (at least 20 percent of sales in each of two regions, but less than 50 percent in any one region).
3. Host-region-oriented firms (more than 50 percent of sales in a triad market other than their home region).
4. Global firms (20 percent or more of sales in each of the three parts of the triad, but less than 50 percent in any one region of the triad).

In our measure, home-region-oriented firms represent the higher levels of DOR, bi-regionally-oriented firms belong to the middle levels, while host-region-oriented and global firms are at the lower levels of DOR.

An important advantage of our measure in comparison to prior studies is that it estimates the degree to which a firm pursues a regional as opposed to a global strategy by taking into account its home-country presence. Previous studies have argued that firms with a strong home-country presence are more likely to benefit from an expansion strategy in culturally-related and less-distant countries (Agarwal and Ramaswami, 1992; Ruigrok and Wagner, 2003). The inclusion of domestic sales as a separate feature of our measure offers a more precise conceptualization of a regional, as opposed to a global, strategic focus of a firm relative to its domestic presence, which has not been considered in past regionalization-performance studies.

**Moderator variables**

To test \( H2 \) and \( H3 \), we employed two moderator variables. First, in line with prior studies, industry dynamism was measured as the instability in sales growth in the main ICC industrial sector of each company. Specifically, we calculated dynamism in industry sales as the standard error of the regression slope coefficient divided by the mean value of sales over a three-year period (i.e. 2005 to 2007) (Carpenter and Fredrickson, 2001; Dess and Beard, 1984; Rajagopalan, 2004).

Second, to measure inter-regional TMT diversity, we first categorized all top managers into four regional categories based on their nationality: European, North America, Asian, and Other. The first three categories refer to Rugman and Verbeke’s (2004) concept of the broad triad markets. After we categorized all executive members into their respective regional categories, we measured the degree of inter-regional TMT diversity using Blau’s diversity index formula expressed as \( 1 \Sigma P_i^2 \), where \( P \) is the proportion of executives that belong to the \( i^{th} \) regional category. This formula has been applied by a range of past upper echelons and IB studies to measure TMT diversity in
categorical variables (Carpenter and Fredrickson, 2001; Tihanyi et al., 2000; Nielsen, 2009). High values imply TMTs composed of executives from different regions, and low values indicate TMTs composed of intra-regional TMT members.

**Control variables**
Firm size has been widely employed as a control variable in the internationalization-performance literature (Contractor et al., 2003; Ruigrok and Wagner, 2003). We measured firm size as the market capitalization of each company at year-end 2005 (Atiase, 1985; Berk, 1997; Griffin and Lemmon, 2002). As this variable was positively skewed (skewness = 4.09), we applied a logarithmic transformation, which is a common way of correcting skewness in this variable (Boeker, 1997; Griffin and Lemmon, 2002). Furthermore, as companies can operate in more than one industrial sector, we used as a control variable in our regression models the number of four-digit SIC codes in which each company is active. Finally, to control for possible country-level differences between MNE headquarter locations within our four-country sample, we included country dummies in all regression models.

**Results**
Table I provides the means, standard deviations, and correlations of the variables included in our analyses. Most variables display patterns consistent with previous literature. Firm size, for example, exhibits a positively significant relationship with ROS and a negative association with DOR. Additionally, inter-regional TMT diversity is negatively related with DOR and positively correlated with firm size (Barkema and Shvyrykov, 2007; Carpenter and Fredrickson, 2001; Nielsen, 2009; Tihanyi et al., 2000).

Table II provides the results of OLS regression with firm performance as the dependent variable. We tested for multicollinearity issues by running variance inflation factor (VIF) tests in STATA for all variables included in our study. The highest VIF score was 1.7, indicating that our analyses are not affected by multicollinearity problems (Guo et al., 1996).

The baseline model (model 1) contains control variables only. Models 2, 3, and 4 introduce DOR and the two interaction effects, respectively. Model 5 (full model) includes all variables and interaction effects. As model 1 in Table II shows, the number of SIC codes is negatively related with firm performance. The reason for this negative relationship may be that MNEs operating in multiple industrial sectors experience high degrees of strategic complexity. According to Hitt et al. (1997), firms often experience difficulties in dealing with their multiple strategic contingencies, because of their high

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Firm performance (ROS)</td>
<td>0.09</td>
<td>0.18</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>2. DOR</td>
<td>0.01</td>
<td>0.34</td>
<td>0.09</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
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<tr>
<td>3. Industry dynamism</td>
<td>0.002</td>
<td>0.001</td>
<td>−0.09</td>
<td>−0.08</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>4. Number of SIC codes</td>
<td>4.51</td>
<td>2.32</td>
<td>−0.08</td>
<td>0.04</td>
<td>−0.07</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>5. Firm size (log market cap.)</td>
<td>7.98</td>
<td>1.83</td>
<td>0.14*</td>
<td>−0.21*</td>
<td>0.01</td>
<td>0.18*</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>6. Inter-regional TMT diversity</td>
<td>0.12</td>
<td>0.18</td>
<td>0.02</td>
<td>−0.31*</td>
<td>0.08</td>
<td>0.05</td>
<td>0.34*</td>
<td>−</td>
</tr>
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Table I. Correlation matrix

Note: *p < 0.05
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<thead>
<tr>
<th></th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
<th>Model 3</th>
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<th>Model 4</th>
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<th>Model 5</th>
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<tr>
<td>Intercept</td>
<td>-0.06</td>
<td>0.09</td>
<td>-0.08</td>
<td>0.09</td>
<td>-0.10</td>
<td>0.09</td>
<td>-0.12</td>
<td>0.09</td>
<td>-0.13</td>
<td>0.09</td>
</tr>
<tr>
<td>Number of SIC codes</td>
<td>-0.01 *</td>
<td>0.00</td>
<td>-0.01 a</td>
<td>0.00</td>
<td>-0.01 a</td>
<td>0.01</td>
<td>-0.01 a</td>
<td>0.00</td>
<td>-0.01 a</td>
<td>0.00</td>
</tr>
<tr>
<td>Firm size (log market capitalization)</td>
<td>0.03 **</td>
<td>0.00</td>
<td>0.03 **</td>
<td>0.00</td>
<td>0.03 **</td>
<td>0.00</td>
<td>0.03 **</td>
<td>0.00</td>
<td>0.03 **</td>
<td>0.00</td>
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<tr>
<td>Inter-regional TMT diversity</td>
<td>-0.02</td>
<td>0.09</td>
<td>0.03</td>
<td>0.10</td>
<td>0.04</td>
<td>0.09</td>
<td>-0.11</td>
<td>0.11</td>
<td>-0.07</td>
<td>0.11</td>
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<tr>
<td>Germany</td>
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<td></td>
<td>Omitted</td>
<td></td>
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<td>Switzerland</td>
<td>0.05</td>
<td>0.04</td>
<td>0.05</td>
<td>0.04</td>
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<td>0.07</td>
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<td>0.07</td>
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<td>United Kingdom</td>
<td>0.00</td>
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<td>0.00</td>
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<td>0.00</td>
<td>0.04</td>
<td>0.01</td>
<td>0.05</td>
<td>0.01</td>
<td>0.04</td>
</tr>
<tr>
<td>Netherlands</td>
<td>0.10 *</td>
<td>0.04</td>
<td>0.11 *</td>
<td>0.04</td>
<td>0.10 *</td>
<td>0.04</td>
<td>0.11 *</td>
<td>0.04</td>
<td>0.10 *</td>
<td>0.04</td>
</tr>
<tr>
<td>DOR</td>
<td>0.09 *</td>
<td>0.04</td>
<td>0.29 ***</td>
<td>0.09</td>
<td>0.14 ***</td>
<td>0.05</td>
<td>0.31 ***</td>
<td>0.07</td>
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<tr>
<td>DOR X Industry dynamism</td>
<td></td>
<td></td>
<td>-91.83 ***</td>
<td>25.12</td>
<td></td>
<td></td>
<td>-84.39 ***</td>
<td>25.20</td>
<td></td>
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<tr>
<td>DOR X Inter-regional TMT diversity</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>$R^2$</td>
<td>0.07</td>
<td>0.09</td>
<td>0.14</td>
<td>0.04</td>
<td>-0.70</td>
<td>0.28</td>
<td>-0.57</td>
<td>0.28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj. $R^2$</td>
<td>0.04</td>
<td>0.06</td>
<td>0.10</td>
<td>0.04</td>
<td>0.11</td>
<td>0.16</td>
<td>0.12</td>
<td>0.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>2.11 *</td>
<td>2.38 *</td>
<td>3.73 **</td>
<td>2.85 *</td>
<td>3.81 **</td>
<td></td>
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</tbody>
</table>

Notes: $n = 211$; *$p < 0.10$; **$p < 0.05$; ***$p < 0.01$; ****$p < 0.001$
degrees of complexity due to industry and international diversification. This results in lower performance of the firms (Hitt et al., 1997). Additionally, industry dynamism exhibits a partially significant negative relationship with firm performance (Dess and Beard, 1984).

H1 predicts a positive relationship between regionalization strategy and firm performance. In line with our predictions, OLS results display a positive linear association between DOR and performance ($p < 0.05$). This finding is consistent with the arguments of Rugman and Verbeke (2004) that firms expanding outside their home region experience “liabilities of inter-regional foreignness”, and exhibit lower firm performance. It is also congruent with the recent empirical findings of Qian et al. (2010) that firms expanding within their home region exhibit positive firm performance, and outperform firms with inter-regional strategies.

Model 3 shows that industry dynamism ($p < 0.001$) negatively moderates the positive relationship between DOR and ROS, as predicted in H2. The negative moderating effect of industry dynamism is illustrated in Figure 1. This finding shows that MNEs operating in highly-dynamic industries are less likely to benefit from an intra-regional strategic orientation than firms operating in stable and munificent industrial settings. This outcome is in line with the suggestions of Kostova and Zaheer (1999) that firms operating under high degrees of environmental (industry) uncertainty are more likely to benefit from a geographically dispersed strategic positioning.

In model 4 we find support for H3, that inter-regional TMT diversity negatively moderates the positive relationship between DOR and firm performance ($p < 0.05$). As illustrated in Figure 2, firms with high levels of inter-regional TMT diversity may find that a strategic focus on the home region is detrimental to firm performance.

**Discussion**

This study illustrates the importance of examining contextual factors in the pursuit of a better understanding of the international strategy and performance relationship of MNEs. Overall, our findings are in line with previous research, showing that MNEs
with an emphasis on intra-regional expansion outperform MNEs that focus on inter-regional expansion. At the same time, however, we find that the positive association between regionalization strategy and MNE performance is weakened if industry conditions and TMT configuration are geared towards global (i.e. inter-regional) expansion strategies. These findings broaden the extant body of empirical regionalization-performance research and strongly suggest that there is room for further examination of the contextual conditions that strengthen or weaken the performance impact of different international expansion strategies.

The first contribution of this paper is that Western European MNEs based in Germany, the UK, The Netherlands, and Switzerland that follow an intra-regional strategy outperform MNEs with an inter-regional strategic posture. This result supports the findings of a limited number of existing studies that compared the financial performance of firms pursuing an intra-regional as opposed to a global strategy (Qian et al., 2008; Qian et al., 2010). The performance advantages associated with an intra-regional strategy help explain why most MNEs pursue an intra-regional rather than a global strategy (Rugman and Verbeke, 2004). Our finding is also in line with the view proposed by scholars investigating the link between MNEs’ degree of internationalization and performance. They argue that firms may overextend themselves and stray into “a suboptimal strategy” (Contractor et al., 2003) with “extreme degrees of internationalization” (Ruigrok et al., 2007), where the incremental costs of internationalization outweigh the incremental benefits of internationalization.

Second, we find that the positive association between MNE intra-regional strategy and performance is weakened if TMTs are configured on an inter-regional (or global) instead of an intra-regional basis. This suggests that MNEs may overextend themselves internationally in more than one way: first, by chasing revenues outside their home region and, second, by recruiting TMT members from outside their home region.

Third, building on the above, our paper sheds a different light on recent theorizing about the link between TMT internationalization and firm performance. Scholars such
as Mellahi and Collings (2010) and Nielsen (2010) have argued that an internationally diverse TMT is likely to influence MNE performance positively. Instead, we find that a regional strategy is most successfully pursued with a TMT whose members originate from the home region – with a TMT that is less inter-regionally diverse in terms of members’ nationalities. Our paper suggests that only MNEs that pursue an inter-regional expansion strategy are likely to benefit from a globally dispersed TMT membership.

Fourth, we find that the positive association between intra-regional strategy and MNE performance is weakened if industry conditions are geared towards global (i.e. inter-regional) expansion strategies. Our paper suggests that, in highly dynamic industries, the advantages associated with large-scale and global operations, such as a wide access to resources and scale advantages in dealing with complexity, appear at least partially to offset the high costs of learning and integration associated with inter-regional expansion (Kostova and Zaheer, 1999). Thus, this paper contributes to a better understanding of how contextual factors influence the relationship between MNEs’ intra-regional vs inter-regional (or global) strategies and performance (Hitt et al., 2006).

Finally, our paper points to a possible course of action to overcome the gulf between globalists (Bird and Stevens, 2003; Buckley, 2009; Manning et al., 2008; Prahalad and Bhattacharyya, 2011) and regionalists (Ghemawat, 2007; Rugman and Verbeke, 2004; Rugman, 2005; Ruigrok and Van Tulder, 1995). At first sight, our findings question the contention made by globalists that MNEs are becoming more inter-regional (or global) in terms of the scope of their operations. However, our analysis of the moderating effect of industry dynamism shows the relevance of examining contextual conditions under which firms may benefit from inter-regional expansion. The point at which an MNE’s internationalization outside its home region turns into a suboptimal strategy (Contractor et al., 2003) will vary according to key environmental factors (such as industry dynamism), and will be moderated by TMT configuration (such as inter-regional nationality diversity). It should be of interest to both globalists and regionalists to study the resource-seeking and integration strategies that MNEs apply in order to minimize the negative performance effects when working inter-regionally.

**Implications and limitations**

Recent studies have shown that the number of foreign executives at large European MNEs has gradually increased in the last few decades. Indeed, several studies have proposed that drawing top managers from an international talent pool enables companies to successfully increase their international activities and enhance performance outcomes (Heijltjes et al., 2003; Nielsen, 2010). The results of this study suggest that MNEs should pursue a globally diversified approach to TMT recruitment only if they have the ambition to expand beyond their home region. MNEs with regionally-oriented ambitions appear to benefit from recruiting new TMT members from their home market or region.

This study is subject to some limitations that highlight possible avenues for future research. Our sample consists of firms headquartered in four Western European countries. Thus, our results cannot necessarily be generalized to MNEs headquartered in other regional markets, such as North America and Asia. Further, we used cross-sectional data with a semi-lagged dependent variable to derive our results, which
means the results may be specific to the temporal context of our study. Future research can use longitudinal data sets or examine companies headquartered in a more diverse set of countries and across regions in order to provide more robust and generalizable results. Additionally, we employ TMT members’ nationalities to measure inter-regional TMT diversity, but have not taken into account executives’ international experiences and networks that may also influence their ability to manage the MNE in intra- and inter-regional contexts. To that end, further research should consider whether inter-regional TMT experience moderates the relationship between regionalization strategy and firm performance.

Finally, we only use industry dynamism as an environmental moderator, thereby disregarding the level of dynamism in the home country or region in which the MNE operates. Wan and Hoskisson (2003) found that firms located in less dynamic and munificent home-country settings are more likely to benefit from a highly diversified international strategy. In a recent study, Rugman and Oh (n.d.) provide theoretical and empirical evidence demonstrating that regional differences become more important than country-level differences over time. Future studies could employ multi-regional samples in order to investigate how intra-regional munificence or dynamism moderates the relationship between intra-regional strategy and firm performance.

References


About the authors

Winfried Ruigrok is the Dean of the Executive School of Management, Technology and Law, and Professor of International Management at the University of St Gallen, Switzerland. His research focuses on internationalization strategy, top management teams and boards. He has held previous positions at the Warwick Business School (UK), Rotterdam School of Management (NL), University of Amsterdam (NL), and European Commission (B).

Dimitrios Georgakakis is a PhD candidate of Strategic Management at the University of St Gallen, Switzerland. He received his MSc in management in 2009 from Brunel University (UK). His primary research interests are in the areas of top management team diversity, corporate governance and executive selection strategies.

Peder Greve is a Research Fellow at the Research Institute for International Management at the University of St Gallen, Switzerland. He obtained his PhD in International Management in 2009 from the University of St Gallen. His research focuses on the international market for executives and the role of top management teams in the firm internationalization process. Peder Greve is the corresponding author and can be contacted at: peder-mathias.greve@unisg.ch

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