Shaping Regional Strategies of Multinational Corporations

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ABSTRACT

This paper examines the factors that drive the success of multinational corporations (MNCs) in their pursuit of regional strategies. We develop a comprehensive regional success factor model to investigate the effects of regional management autonomy and regional product/service adaptation on the regional success of MNCs. Using structural equation modeling, we also analyze the interaction effects of regional orientation and inter-regional distance. We evaluate our model by means of both primary and secondary data for Fortune Global 500 firms. Our findings show that appropriate degrees of regional management autonomy and regional product/service adaptation are highly contingent upon contextual influences on MNCs.

INTRODUCTION

The recent literature on regional multinationals (Rugman, 2005; Rugman and Verbeke, 2008a) has proposed regional strategies to multinational corporations (MNCs) as a promising alternative to earlier internationalization strategies that build on the concepts of global integration and local responsiveness (e.g., Bartlett and Ghoshal, 1989; Prahalad and Doz, 1987). The increased strategic importance of the *region* for MNCs, as an intermediate geographical level in between the traditional world-country dichotomy, is largely attributed to changing patterns in both world trade and foreign direct investment (FDI) over time – particularly the development of the broad triad regions of North America, Europe, and Asia (Ohmae, 1985; Rugman, 2000; Rugman and Hodgetts, 2001a). Thus the relevance of regional strategies is supported by observations of an incomplete cross-border integration for different types of markets (i.e., for products, capital, labor, and knowledge), referred to as semiglobalization, where both the barriers and the links among these markets explain the regional expansion of MNCs (Ghemawat, 2003, 2005, 2007). This trend is reflected in regional sales data for Fortune Global 500 firms showing that most MNCs do not achieve a truly global sales dispersion because they are regionally oriented, mainly towards their home region (Rugman, 2003b; Rugman and Verbeke, 2004c). Although considerable evidence highlights the existence and increasingly important role of regional strategies for MNCs, to the best of our knowledge, no empirical study has provided a clear answer to the question of how to actually develop and implement a regional strategy in a successful manner.

This research gap is mainly because much scholarly work on regionalization focuses either on the different *phenomena* of regional strategies (e.g., Girod and Rugman, 2005; Li, 2005; Yin and Choi, 2005) or on their *outcome*, such as the geographical distribution of sales and assets (e.g., Collinson and Rugman, 2008; Oh, 2009) or the regional performance of MNCs (e.g., Yip, Rugman, and Kudina, 2006). However, in existing combinations of these two research fields, leading to a *regional*

strategy-performance relationship, a foundation in organization theory is largely missing in the international business literature. Few authors have considered the organizational context of MNCs, and thereby the fact that the relationship between regional strategies and MNC performance is contingent on conditions and developments inside and/or outside of the firm (e.g., Bausch, Fritz, and Boesecke, 2007; Goerzen and Asmussen, 2007). Furthermore, existing empirical studies about the performance of regional strategies largely focus on relative figures of regional data – for example, regional sales divided by total sales or return on sales (e.g., Li and Li, 2007; Rugman and Oh, 2007). This methodology based on secondary data analyses may be eye opening for regional performance phenomena, but it is not able to explore their *causal* influences.

The aim of this paper is to address these challenges by examining the factors that drive the success of MNCs in their pursuit of regional strategies. A promising path for conceptualizing such factors is provided by the recent academic work on regional strategies, where autonomous management at the regional level and product/service adaptations to regional market requirements characterize a regional strategy (Rugman, 2005). Besides these basic elements of regional strategies, we aim to consider contextual influences in the regional strategy-performance relationship, resulting in a contingency perspective for the explanation of the success of the regional strategies of MNCs. To investigate these causal relationships, we develop a *regional success factor model* and explore the interactions of regional success factors with MNC performance. Apart from these conceptual contributions, we also want to extend existing knowledge in methodological terms by collecting not only secondary but also primary data for Fortune Global 500 firms. In assessing the regional success of these MNCs, we want to consider various regional success indicators, which are derived from longitudinal data over nine financial reporting periods (2000–2008). Furthermore, we aim to analyze the relationships in a regional success factor model with structural equation modeling (SEM) on the

basis of the partial least squares (PLS) method, which has not yet been used to study the regional strategies of MNCs and their performance.

Thus, we take a differentiated multidimensional view that links theoretical insights about the main elements of regional strategies – regional management autonomy and regional product/service adaptation – to regional performance research and the contingency approach. In combination with our research methodology that allows the test of causal relationships, we can examine the degree of these two characterizing factors of regional strategies that is appropriate for MNCs to achieve superior regional performance – which thereby leads to their classification as *regional success factors of MNCs*. For MNC managers, the knowledge of such managerial and product-/service-related success factors is crucial to properly translate regional strategies into corporate performance. Therefore, while the conceptual and methodological underpinnings of our study should ensure *rigorous* research, the respective findings should also deliver *relevant* information for the managerial practice of MNCs.

The remainder of this paper is structured as follows. In the next section, we briefly review the literature on regional strategies and their constituting elements: regional management autonomy and regional product/service adaptation, and regional contextual influences. We then develop hypotheses on these relationships to derive our regional success factor model. Subsequently, we outline the research design and research methodology to empirically test our hypotheses. After presenting the empirical results, we conclude with a discussion of the implications of our findings, the limitations of our study, and some suggestions for further research.

LITERATURE REVIEW

Regional Strategies

Regional strategies emerged particularly in the 1990s, with the development of trading blocs such as the EU, AFTA, and NAFTA that enabled MNCs to benefit from growing FDI opportunities inside their own regions (Morrison, Ricks, and Roth, 1991; Rugman and Verbeke, 1998; Westney, 2006). Although such free trade zones have still benefited from the positive effects of external FDI (Buckley *et al.*, 2001; Feils and Rahman, 2008), the economic data show that, at the same time, intra-regional trade and FDI have increased significantly (Dunning, 2001; Rugman, 2000; Rugman *et al.*, 2001a). Along with these developments, MNCs have continued to adjust their strategies and organizational designs, to relocate their subsidiaries, and to align their product-/service-related and functional market interfaces to the requirements of their geographic markets (Doz and Prahalad, 1991). For the cross-border configuration of these corporate activities, regionalization does suggest MNCs should exploit their strengths and determine their competitive strategies separately for each region (Morrison *et al.*, 1991). When firms pursue a regional strategy respective regions become the primary organizational focus of their activities and management is required to recognize fully the nature and changing conditions of the host regions. As a result, MNCs are advised to design strategies on a regional rather than a global basis (Rugman, 2003a; Rugman *et al.*, 2001a; Rugman and Moore, 2001b).

Such regional strategies of MNCs require a market strategy approach tailored to regional conditions and the creation of region-based components in the MNC's "[…] coordination and control structure to address the specific managerial challenges in those regions" (Rugman, 2005). The regional dimension in MNC strategies thereby implies a decomposition of MNCs' strategic decision-making processes and their product/service offering into global, regional, and national components

(Rugman, 2005; Rugman *et al.*, 2008a). This is illustrated in Rugman's (2005) *regional strategy matrix*, where MNCs following a regional strategy are characterized by a high degree of *regional management autonomy* and the *regional adaptation of products/services*. Within their regional environments, by means of these region-based adaptation strategies and organizational structures, MNCs can achieve both regional responsiveness and regional integration benefits (Rugman, 2005; Rugman *et al.*, 2008a). Therefore, the regional strategy matrix effectively illustrates a regional environment-strategy-structure relationship.

Regional Management Autonomy

In the literature, different reasons are brought forward for installing autonomous regional management in MNCs. Based on transaction cost theory some argue that regional management represents an efficient intra-firm governance mechanism for the *bounded rationality* and *bounded reliability* of MNCs in their management of numerous national subsidiaries (Arregle, Beamish, and Hébert, 2009; Rugman and Verbeke, 2005; Verbeke and Kenworthy, 2008). Others argue that MNCs need to create a *favorable organizational context* fitting to their external environment when trying to deploy non-location-bound and location-bound knowledge and innovations (Verbeke *et al.*, 2008). Furthermore, regional management is an organizational response of MNCs to balance the pressures to stay local and to globalize (Buckley and Ghauri, 2004; Enright, 2005a). These two conflicting pressures affect a firm's functional activities along its value chain, because they impose the need for both customer-end (or downstream) and back-end (or upstream) firm-specific advantages (FSAs) on MNCs (Rugman, 2005; Rugman *et al.*, 2008a). The deployment of customer-end and back-end FSAs, however, is irrespective of a particular value chain function (Rugman, 2005). As a result, the geographical division of corporate functions along MNCs' value chains represents the appropriate unit of analysis for regional management (Buckley *et al.*, 2004). Based on

an analysis of Enright's empirical studies (2005a, 2005b) we can identify the four most important categories of regional management activities: *regional strategy development, regional market and product/service development, regional market coordination,* and *regional operational administration*.

Regional Product/Service Adaptation

It has been argued that the products and services of MNCs often are regionally adapted to specific market requirements and conditions at the regional level, particularly to satisfy regional customer demands (Rugman, 2005; Rugman *et al.*, 2008a). In addition, the regional level becomes increasingly important for product/service adaptations in the EU and North America but also in Asia, driven by attempts at institutional convergence and a reduction of trade and investment barriers. For Rugman and Verbeke (2008b), "[…] industry competition thus increasingly occurs at the regional level, rather than the national level." An MNC's regional adaptation of its products/services, therefore, is a form of market responsiveness to achieving a unique competitive position as a regional insider (Ohmae, 1985; Rugman *et al.*, 2004c). The extent to which a product/service is regionally adapted thereby heavily depends upon the geographic reach of its embodied FSAs (Rugman, 2005; Verbeke, 2009). Such region-bound FSAs are company strengths beyond the limited geographic scope of a single country, while they are still location-bound within the countries of a particular region (Morrison *et al.*, 1991; Morrison and Roth, 1992; Rugman, 2005). More specifically, a regional product/service results either from augmenting the geographic reach of location-bound FSAs to the regional level or from the regionally limited deployability of non-location-bound FSAs (Rugman, 2005; Verbeke, 2009). This is why the regional adaptation of products/services involves intra-regional resource commitments in the form of investments in foreign markets and subsidiaries (Rugman, 2005). The result of such region-specific adaptation

investments is a linkage of the MNC's existing (non-location-bound and location-bound) FSAs with its country-specific advantages (CSAs) in the form of regional/locational advantages (Rugman, 2005; Rugman and Verbeke, 2001c; Rugman *et al.*, 2004c, 2008a).

Regional FSAs result from regional competencies of an MNC concerning the core customer benefits and characteristics of an actual product/service offering such as features, design, packaging, quality level, and brand name (Kotler and Armstrong, 2004; Rugman, 2005). A combination of the different forms of regional product/service adaptations (Keillor, Hult, and Kandemir, 2004; Onkvisit and Shaw, 2009; Takeuchi and Porter, 1986) with the reasons for adapting products/services to regional demands (De Búrca, Fletcher, and Brown, 2004; Onkvisit *et al.*, 2009), leads to four broad categories: *design, functional scope, brands,* and *offering portfolio (Figure 1)*. These four categories reflect the main types of regional product/service adaptations according to the international marketing literature (De Búrca *et al.*, 2004; Kotabe and Jiang, 2009; Kotler *et al.*, 2004; Onkvisit *et al.*, 2009).

<< place Figure 1 about here >>

Regional Contextual Influences

According to contingency theory (Donaldson, 2001), the organizational effectiveness of an MNC can be explained as a function of the fit of its strategy and structure with its internal and external contingencies (Zeithaml, Varadarajan, and Zeithaml, 1988). Applied to regional MNCs, the simultaneous achievement of intermediate degrees of integration and responsiveness at the regional level is contingent upon their particular regional environment-strategy-structure relationship. According to the more recent literature on regionalization (Ghemawat, 2001, 2008; Proff, 2002;

Rugman, 2005; Rugman *et al.*, 2004c, 2008a), two *regional contextual influences* particularly affect this relationship: an MNC's *regional orientation* and the *inter-regional distance* it faces.

Regional orientation is a form of the geographic orientation of MNCs in contrast to local or global orientation (Banalieva and Santoro, 2009). It relates to a certain focus of senior management in the geographic expansion of MNCs (Delios and Beamish, 2005; Rugman, 2005). Specifically, it reflects a firm-internal, regiocentric orientation of MNC managers, who mainly view the region as a potential market (Proff, 2002; Wind, Douglas, and Perlmutter, 1973), resulting in a narrow geographic market focus (Rugman *et al.*, 2008a) and a selectivity in the geographic scope of activities (Rugman, 2005; Rugman *et al.*, 2004c). The regional orientation of an MNC is an important *internal contingency variable* in the relationship between an MNC's regional strategy and/or structure components and the achievement of its corporate goals and objectives (Rugman, 2005).

In addition, regional MNCs have to consider the costs and risks of *inter-regional distance* in the economic evaluation of their international growth plans (Ghemawat, 2001; Rugman, 2005). Inter-regional distance comprises cultural, administrative/political/institutional, geographic, and economic dimensions (Ghemawat, 2001; Ricart *et al.*, 2004; Rugman, 2005), as illustrated in the so-called "CAGE framework" (Table 1, Appendix). The inter-regional distance faced by a particular MNC may result in a competitive disadvantage from its liability of foreignness in the form of the additional costs of doing business abroad (Zaheer, 1995, 2002). Inter-regional distance, therefore, is an important *external contingency variable* in the achievement of an MNC's corporate objectives, particularly regarding adaptation, aggregation, and arbitrage benefits from regional strategy-structure combinations (Arregle *et al.*, 2009; Buckley *et al.*, 2004; Rugman, 2005).

HYPOTHESES AND REGIONAL SUCCESS FACTOR MODEL

As indicated above, the regional performance and overall competitiveness of MNCs is influenced by the regional environment-strategy-structure fit. More specifically, the regional success factors of MNCs – given by appropriate degrees of managerial decision-making autonomy and regional product/service adaptation – are highly internally contingent upon their regional orientation and highly externally contingent upon the inter-regional distance they face. A graphical illustration of these theoretically derived, causal relationships leads to a *regional success factor model* (Figure 2). The specific hypotheses underlying the model will be elaborated in the following section.

<< place Figure 2 about here >>

Regional Management Autonomy and Product/Service Adaptation

Regional management structures are established by MNCs primarily to meet the needs of regional customers (Rugman and Collinson, 2005). Such managerial support at the regional level may include, for example, regional cash management (Venzin, Kumar, and Kleine, 2008) or the coordination of regional production (Rugman and Collinson, 2004b). Therefore, according to Rugman (2005), a lack of market success can be partly explained by headquarters-based, centralized decision-making, which, "[…] may not always be appropriate to address region-specific challenges [that] may be better handled through region-based […] organizational structures." Richter (2007) also provides evidence of the fact that regional activities prevent MNCs from suffering performance decreases, particularly during their initial foreign expansion. Consequently, it seems reasonable to hypothesize that increases in the decision-making autonomy of regional management should positively influence the regional performance of MNCs.

Hypothesis 1: Regional management autonomy is positively associated with regional success.

The regional adaptation of products/services relates to the market strategies of MNCs, which in the case of international foreign market entries contributes to their sustained export performance (Calantone *et al.*, 2006; Kotabe *et al.*, 2009). Positive effects from market adaptations are mainly because of limitations in creating global products/services suitable for many countries, which is difficult and involves many pitfalls (Elango, 2004), given that customer preferences highly vary between regions (Malhotra *et al.*, 2005). This suggests that the performance of MNCs is positively associated with the regional adaptations of products/services. The dependence of these performance effects on regional customer demands implies for MNCs that – in addition to back-end advantages from upstream FSAs – particularly "[…] strong downstream FSAs are necessary to achieve market success in the market considered, […] at the national, regional, or inter-regional level" (Rugman *et al.*, 2008a). Consequently, we hypothesize that increases in the regional adaptation of products/services should positively influence the regional performance of MNCs.

Hypothesis 2: Regional product/service adaptation is positively associated with regional success.

Regional Orientation and Inter-Regional Distance

An MNC's regional orientation is reflected in its regional geographic scope. Low degrees of a firm's regional orientation or in other words its broad geographic scope – measured by its spread of geographical and product markets entered – has been found to negatively moderate profitability increases resulting from its international expansion (Rugman, 2005; Vermeulen and Barkema, 2002). This is because a broader geographic scope strains the firm's absorptive capacity (Cohen and Levinthal, 1990), indicating that foreign expansions are easier to absorb by the MNC if they occur in

countries that are "related" (Phene and Almeida, 2008; Rugman, 2005; Vermeulen *et al.*, 2002). This explains why MNCs often expand by regions because each of them consists of "related" countries that are relatively close to one another (Ghemawat, 2005). At the same time MNCs allocate substantial decision-making autonomy to their regional management to better absorb, or exploit, the growing diversity of regional environmental developments and organizational resources (Enright, 2005a; Lehrer and Asakawa, 1999). A limited geographic scope, represented by a strong regional orientation, should facilitate this organizational learning of regional management in handling region-specific challenges (Rugman, 2005; Ruigrok and Wagner, 2003). Conversely, for MNCs with a high geographic scope, absorptive capacity constraints are salient that – even though the firm builds on an extensive internationalization experience and highly autonomous regional management in all regions – lead to an organizational and environmental complexity, which is extremely difficult to handle successfully (Bausch and Krist, 2007; Elango, 2004; Verbeke, Li, and Goerzen, 2009). As a result, the extent to which a high degree of regional management autonomy is effective at the regional level – meaning that it considerably contributes to the regional success of an MNC – is contingent upon the internal contextual variable regional orientation. This leads us to hypothesize that the regional orientation of an MNC should positively moderate the relationship H1 between regional management autonomy and regional success.

> *Hypothesis 3a: A firm's regional management autonomy will have a stronger impact on regional success given a higher regional orientation.*

The regional orientation of an MNC also affects its successful regional product/service adaptation since its widespread geographic diversification may involve "[…] pitfalls similar to the conventional drawbacks of product diversification" (Rugman, 2005). Although MNCs are able to handle moderate levels of product diversification effectively, a high diversity in products and markets

constrains their performance (Elango, 2004). Consequently, the degree to which an MNC can successfully adapt its products/services to each region is dependent upon the internal contingency variable regional orientation. More specifically, an MNC's increasing regional orientation should positively interact with the influence that regionally adapted products/services have on its regional success. As a result, it seems reasonable to hypothesize that the regional orientation of an MNC should positively moderate the relationship between regional product/service adaptation and regional success, as postulated in H2.

Hypothesis 3b: A firm's regional product/service adaptation will have a stronger impact on regional success given a higher regional orientation.

Considerable research has been directed to investigating the relationships between different indicators of inter-regional distance and the effectiveness of regional management in achieving regional market success. In light of a high geographic distance, increases in regional decision-making responsibilities have been found to be important to effectively explore regional markets (Yeung, Poon, and Perry, 2001). In addition, it has been shown that autonomous management is related to regional performance effects, if it leads to a better linkage of an MNC's institutional distance to its resources and structures (Venzin *et al.*, 2008), reducing its liability of foreignness (Miller and Richards, 2002). The effectiveness of the regional management activities of MNCs is thereby highly contingent on their societal, cultural, and economic environment (Collinson *et al.*, 2008; Rugman and Brain, 2004a). Consequently, negative performance effects from the risks and coordination costs of the MNC increase with the cultural heterogeneity in the firm's portfolio of international operations – mainly because of complexities in transferring management practices abroad and in adapting the firm's value chain activities to respective market requirements(Tong and Reuer, 2007). Inter-regional distance thereby can hamper the market-seeking expansion of MNCs in

host regions if it is not associated with high regional management autonomy to link the MNC's "[…] existing knowledge base with host-region location advantages […] which do not simply meld together without managerial intervention" (Rugman, 2005). Therefore, an increasing inter-regional distance faced by the MNC should positively interact with the degree to which increases in regional management autonomy lead to regional success. More specifically, we expect that the external contingency variable inter-regional distance has a positive moderating effect on the hypothesized relationship H1 between an MNC's regional management autonomy and its regional success.

Hypothesis 4a: A firm's regional management autonomy will have a stronger impact on regional success given a higher inter-regional distance.

This moderating effect of inter-regional distance also influences the successful regional adaptation of products/services because the size of these regional product/service adaptation investments is driven by "[…] home/host region differences in the cultural, administrative, geographic, and economic sphere […]" (Rugman, 2005). Consequently, increases in the inter-regional distance faced by the MNC lead to rising costs from its liability of foreignness, which can be reduced by regionally adapted products/services, particularly by FSAs at the downstream end (Ohmae, 1985; Rugman, 2005; Rugman *et al.*, 2008a). Given that these adaptations imposed by inter-regional distance are mainly related to the customer end, high risks for the MNC result from one-sided, upfront investments for adapting its products/services to host region demands. These high risks, however, have to be incurred by MNCs to achieve regional success, because cultural and economic differences between regions influence consumers' product/service choices as well as the diffusion and acceptance of new products/services (Kotabe *et al.*, 2009; Malhotra *et al.*, 2005). Therefore, the extent to which an MNC can successfully address regional demands by its regionally adapted products/services is contingent on the external contextual variable inter-regional distance. Based on

this assumption we propose that increases in inter-regional distance should positively interact with the effect that a regional product/service adaptation has on the regional success of an MNC. Consequently, we expect that the inter-regional distance faced by an MNC should positively moderate the hypothesized relationship H2 between regional product/service adaptation and regional success.

Hypothesis 4b: A firm's regional product/service adaptation will have a stronger impact on regional success given a higher inter-regional distance.

In the following section, we will provide an overview about our sample and data and explain the measures of our independent and dependent variables. We then test our proposed model and explore the appropriate degree of regional management autonomy and regional product/service adaptations in MNCs.

RESEARCH DESIGN AND METHODOLOGY

Sample and Data

Our empirical analysis is based on data from MNCs, ranked as Fortune Global 500 firms in the period 2000–2008 by the magazine *Fortune* (2001-2009), resulting in a total sample of 663 companies. On the basis of the countries where the headquarters of our sample companies are located, we identified the home regions of these MNCs by using the UNCTAD methodology for the regional classification of countries (Arregle *et al.*, 2009). This led to a continental perspective for the regional presence of these MNCs (Ghemawat, 2005), covering five regions: Africa, Asia-Pacific, Europe, North America, and South America.

We compiled our secondary data from geographical segment reporting in annual reports and/or SEC filings. Our sample of 663 companies, during the nine-year period 2000–2008, provided 5,967 firm-year observations. For each of these years, we collected the geographically provided information of these firms – according to the five regions mentioned above. This was supplemented by an "other" category if this classification was not possible from the available data, which produced the necessary regional data to measure the constructs regional orientation and regional success of our research model. The primary data for the 663 sample companies were collected by means of survey-based, quantitative inquiry techniques. In the design of our questionnaire, we provided detailed definitions of the most important constructs (e.g., regional management autonomy, regional product/service adaptation, and inter-regional distance) and ensured that the survey was completed by the respondents for only one region – where their firm has been most successful (e.g., in terms of sales, profitability, and/or sales growth). This led to an application of our regional success factor model only to the most successful region of our sample firms – given either by their home region or by one of their foreign regions – which constitutes a meaningful approach for studying regional success factors.

To ensure that the survey was completed by respondents with a profound knowledge about the regional strategies of their firms, we directly contacted all 663 MNCs of our sample via telephone. To identify appropriate key informants, we used the listings of Hoover's (2009) database and then targeted those MNC managers that are corporate experts for regional strategies. In particular, this included the managers at corporate headquarters who are responsible for the worldwide corporate strategies of their firms. After sending out our survey (mainly during the second quarter of 2009), we received 114 responses, corresponding to a response rate of 17.2%. This is above the usual expected response rate of cross-national mail surveys of between 6% and 16% (Harzing, 1997, 2000), and thereby was perceived as satisfactory. Responses from 18 firms had to be eliminated

because of incomplete or implausible answers, leading to 96 useable responses from the 663 sample companies (response rate 14.5%), which we used in our research model. With respect to industry membership, our research sample was representative and the answers were tested for potential response biases.

Measures

We finally came up with a survey including 52 main questionnaire items that constituted the measurement models of the principal constructs, as depicted in Figure 3 of the Appendix. The reliability and validity of these measures were evaluated by means of respective quality criteria (Chin, 1998b). We used statements on five-point Likert scales to derive subjective estimates of responding MNC managers for the questionnaire items. Before sending out our survey, we tested the content and expert validity of the questionnaire items by means of an indicator's proportion of substantive agreement and by its substantive validity coefficient (Anderson and Gerbing, 1991). We also performed two subsequent in-depth pretests of our survey with 18 experts, highly recognized and experienced either in the area of regional strategies and/or with methodological issues in this area of research. In the following we provide an overview of the measures of our model.

Regional Management Autonomy

We measure the total degree of regional management autonomy by drawing on the most relevant dimensions of managerial decision-making autonomy of regional management centers, which may be granted in the areas of *regional strategy development*, *regional market and product/service development*, *regional market coordination*, and *regional operational administration*. Conversely, the degree of decision-making autonomy in each of these dimensions of regional managerial activities influences the overall extent to which regional management can autonomously decide at

the regional level (Ohmae, 1985). Drawing on this rationale, a formative direction of causality exists between the four dimensions and regional management autonomy. Given that these four dimensions are formulated at a similar level of abstraction and cannot be observed directly (Chin, 1998a), they represent latent first-order variables in the nomological network of the latent second-order construct regional management autonomy. Consequently, as illustrated in Figure 3, the multidimensional latent construct regional management autonomy is measured at the level of the latent first-order variables.

Regional product/service adaptation

As indicated above, a MNC may regionally adapt its products/services in the areas of *design, functional scope, offering portfolio,* and *brands*. The extent to which a MNC realizes an adaptation of downstream and upstream FSAs along these four dimensions, determines the MNC's overall regional product/service adaptation to regional requirements and conditions. Thus a change in one of these four dimensions should cause a change in the resulting regional product/service adaptation, illustrating the formative direction of causality between the four dimensions and regional product/service adaptation. This is confirmed by Albers and Götz (2006) who show that the market orientation, or responsiveness, of a firm should be modeled in a formative manner, if it is achieved by a set of different strategic measures. Here, the regional market responsiveness of the MNC is expressed by the degree of its regional product/service adaptation that – as a latent second-order construct – is realized by four different strategic measures, or dimensions, at a similar level of abstraction (Chin, 1998a). The resulting nomological network between the four dimensions and the latent second-order variable – as illustrated in Figure 3 – requires a measurement model at the level of the four not directly observable, first-order constructs (Chin, 1998a), regional design, regional functional scope, regional offering portfolio, and regional brands.

Regional Orientation

A MNC's regional orientation is reflected by three indicators of this latent construct, including a *market-related* and an *activity-related regional orientation*. Furthermore, due to the fact that the regional orientation reflects a firm-internal, regiocentric orientation of MNC managers towards the region as a potential market (Wind *et al.*, 1973), a *subjective estimation of MNC managers* of this market-related regional orientation represents another important indicator of this latent variable. While this subjective estimate is derived from our survey, the objective measurement of the MNCs' market-related regional orientation is measured by the distribution of sales across economic regions – whereas its activity-related regional orientation is also assessed objectively by the regional dispersion of its assets (Goerzen *et al.*, 2007; Oh, 2009; Rugman, 2005; Rugman *et al.*, 2004c). All three manifest variables indicate different degrees of a MNC's regional orientation, which is assumed to decrease from home-regional to host-regional, from host-regional to bi-regional, and from bi-regional to multi-regional (global).

Inter-regional Distance

As indicated above, the inter-regional distance faced by a MNC is a latent moderating variable, which is observed by its manifest variables indicating an inter-regional *cultural*, *administrative/political/institutional*, *geographic*, and *economic distance*. The inter-regional distance – based on all of the different firm-external, environmental elements represented by its indicators – can substantially increase the liability of foreignness of MNCs, which results in costs and investments to complement their existing FSAs with new, location-bound FSAs and CSAs (Rugman, 2005).

Regional Corporate Success

The organizational and strategic effectiveness of MNCs at the global level is usually measured by their corporate success, for example by their return on investment, profit, or other performance variables (Donaldson, 2001; Zeithaml *et al.*, 1988). An MNC's effectiveness at the regional level depends on factors such as its particular regional product/service offering, certain regional performance variables, regional management configurations, and specific contingency variables. We conceptualize the effectiveness at the regional level as *regional corporate success*, consisting of three different variables. The first regional performance metric, often applied by regionalization scholars, is the percentage of intra-regional sales, meaning the *relationship between sales revenue within a particular region and the total sales revenue* of the MNC (e.g., Richter, 2007).

Even though this geographical dispersion of sales indicates an MNC's ability to successfully penetrate regional markets (Rugman *et al.*, 2004c, 2008a), an important additional condition besides sales-based success should be fulfilled. As stated by Rugman (2005), "[…] ultimately it is market penetration (*if achieved in a profitable way*) that provides the best, in fact the only, indicator of global corporate success." Consequently, the profitability that an MNC realizes in a particular region is a second important indicator of regional corporate success. Here, relative figures should also be utilized – given by the ratio of *regional profits to total profits* – to assess the degree of relative importance of this region's profitability in comparison to total firm profits. Besides a success indicator of downstream FSAs – given by the ratio of regional sales to total sales – a third regional success indicator has to be considered. According to Rugman and Verbeke (2008a), this is the ratio of *regional assets to total assets*. The measures of this geographical dispersion of both the sales and the assets of MNCs reflect the outcome of regional strategies and structures in the form of downstream and upstream FSAs (Rugman *et al.*, 2008a).

With respect to the prevailing criticism of such relative regional performance measures (e.g., Asmussen, 2009), we argue that – in comparison to other MNCs – a relatively higher portion of regional revenue, profits, or assets in a certain region corresponds to a higher contribution to the firm's overall performance. Taking into consideration that all the firms ranked in the Fortune Global 500 listing are, by definition, very successful companies in the markets where they generate their sales, a relatively higher regional contribution to the firm's total sales, profits or assets shows that this MNC is more successful within this region than other firms. In other words, a firm within this sample that realizes a higher contribution to its total performance by means of its regional sales, profits or assets than another company is more successful within this region than another firm operating in the same region. Consequently, we believe that these relative metrics are well suited for assessing the regional performance of MNCs.

The three firm-specific regional corporate success indicators presented are contingent on the internal and external organizational context of MNCs. Consequently, regional corporate success in this paper is regarded as the result of a "fit" of appropriate degrees of firm-specific regional management autonomy (as regards managerial decisions) and regional product/service adaptation (as regards product attributes/service elements) with interaction effects from the internal regional orientation of the MNC and its external inter-regional distance.

Controls

To assure that the relationships postulated in our model are not affected by additional influences, control variables are used. In our study, two control variables seem particularly relevant: an MNC's firm size and its regional competition. Although firm size can have an impact on regional performance by its influence on the geographic scope of MNCs (Beleska-Spasova and Glaister,

2009), regional competition in the form of intra-regional and/or foreign competitive attacks may affect regional corporate success by triggering different strategic responses by the firm (Hutzschenreuter and Gröne, 2009).

Research Methodology

We applied SEM as the analytical methodology to investigate the causal relationships in our regional success factor model. Of the relevant SEM techniques, we applied the PLS approach (Lohmöller, 1984, 1989; Wold, 1966). This was particularly because of the advantages of PLS over alternative SEM methods in component-based predictive modeling (Chin and Newsted, 1999; Henseler, Ringle, and Sinkovics, 2009), which qualifies for its application particularly in the early stages of research and theory development. Because the theoretical basis for the relationships among our latent variables – regional management autonomy, regional product/service adaptation, regional orientation, inter-regional distance, and regional success – is still at an early stage in the international business field, PLS qualifies as a modeling technique for our study. Furthermore, the PLS algorithm allows the estimation of moderating effects from interaction variables because it does not require that the error terms of the indicator variable are uncorrelated, which poses a problem with other SEM techniques such as LISREL (Chin, Marcolin, and Newsted, 2003). The consideration of such moderating influences is of particular importance for international business research involving a contingency view on theoretical models such as our regional success factor model, where contextual influences are assumed to affect the regional strategy–performance relationship.

The empirical testing in our study sequentially analyzed the two types of relationships between the latent variables in Figure 2. First, we estimated the *direct effects* of the exogenous variables regional management autonomy and regional product/service adaptation as well as of the contextual

variables regional orientation and inter-regional distance on the endogenous construct regional success (*basic regional success factor model*). Second, we estimated the *moderating effects* that emanate from the latent contingency variables regional orientation (H3a and H3b) and inter-regional distance (H4a and H4b) on the relationships of the basic model (*extended regional success factor model*). The ability of these specified models to describe the relationships between the observed variables is the main focus in the quality evaluation of structural equation models (Chin, 1998b). Thus, apart from evaluating the explanatory power and predictive ability of the structural model, the reliability of parameter estimations is evaluated by the significance of factor loadings in terms of their t-values (Chin, 1998b). To calculate t-values, the resampling procedure bootstrapping is applied (Chin, 1998b; Efron and Tibshirani, 1993).

RESULTS

Basic Regional Success Factor Model

In evaluating the basic regional success factor model (Figure 4 and Table 2), we observe that the portion of explained construct variance for regional success reaches a moderate level of 0.46. Furthermore, the effect size of the independent variables on regional success reaches small to medium values. The required significance level of at least 5% in the two-sided t-test is achieved by all latent constructs – apart from regional management autonomy and regional orientation, both significant at the 10% level. These results imply that all latent first-order variables of regional product/service adaptation are important defining characteristics of this multidimensional construct. With respect to our research hypotheses, the sign of the path coefficient for regional product/service adaptation, recognizing its significance level of 5%, provides strong support for H2 – whereas H1 is rejected at the 10% significance level by the respective sign for regional management autonomy. Moreover, we observe the direct effects of the contextual variables regional orientation and inter-

regional distance on regional success, which in the case of the former are positive and significant at the 10% level and strongly negative at the 1% significance level for the latter. After introducing the control variables firm size and regional competition, only minor changes to the hypothesized relationships are observed. H2 is still supported – even though only at the 10% significance level – whereas the hypothesized relationship in H1 is rejected now at the 5% significance level. Consequently, the overall predictive ability of the basic structural model is considerable, which is supported by notable values of the Stone-Geisser test of almost 0.3.

<< place Figure 4 about here >>

<< place Table 2 about here >>

Extended Regional Success Factor Model

In the extended regional success factor model (Figure 5, Table 3), the consideration of interaction effects leads to a substantial increase in the endogenous variable's coefficient of determination to a value of 0.63. The effect size of the exogenous and interaction variables on regional success reaches small to high values. In addition, almost all latent variables – apart from regional product/service adaptation, regional orientation, and the interaction variable of regional orientation and regional management autonomy – reach the required significance level of at least 5% in the two-sided t-test. Once more, this implies the importance of all latent first-order variables of regional product/service adaptation as defining characteristics of this multidimensional construct. Concerning our research hypotheses, H1 is rejected again – now at the 1% significance level – whereas H2 is not supported. This is because even though the sign of the path coefficient of regional product/service adaptation confirms H2, the respective t-value is not significant. Furthermore, the signs of the path coefficients of the interaction variables of regional orientation and regional product/service adaptation, and of inter-regional distance and regional product/service adaptation, which are both at significance levels

of 5%, provide strong support for H3b and H4b. This means that the positive relationship between an MNC's regional product/service adaptation and its regional success is strongly positively affected by its regional orientation and its inter-regional distance. At the same time, however, the signs of the path coefficients for the other interaction variables point in the opposite direction of the research hypotheses, implying that H3a and H4a are rejected. The rejection of H4a – which relates to the interaction variable of inter-regional distance and regional management autonomy – is significant at the 10% level. In addition, we notice the direct effects of the moderating variables on regional success, which are marginally positive and not significant in the case of regional orientation, whereas strongly negative for inter-regional distance at the 5% significance level. In the case of the extended model, the introduction of the control variables firm size and regional competition also leads to only minor changes in the hypothesized relationships. Again, H1 is rejected – now with significance at the 5% level – and H2 is also not supported, once again because of its missing significance. The hypothesized relationships in H3b and H4b are confirmed with a significance of the former at the 5% level and the latter at the 10% level. Furthermore, H3a and H4a are rejected once again, but these rejections were not significant. Thus, the extended structural model has a high overall predictive ability, which is supported by high values of the Stone-Geisser test of almost 0.4.

<< place Figure 5 about here >>

<< place Table 3 about here >>

DISCUSSION: IMPLICATIONS FOR THEORY AND PRACTICE

This paper aimed to explore success the factors of regional strategies for MNCs by investigating the appropriate degree of regional management autonomy and regional product/service adaptation. Although research on regional strategies has increased over the past decade, the core question of our paper has not been answered sufficiently so far. Against this background our study is, to the best of

our knowledge, the first that explores the interactions between regional success factors and MNC performance based on a longitudinal study including not only secondary but also primary data on a large sample of Fortune Global 500 firms. We also advance theory in international business by applying SEM as an analytical methodology to investigate the causal relationships in our regional success factor model which has not been performed so far in this field of research. Based on this we can draw a number of interesting conclusions for theory and practice.

Contrary to H1 and the mainstream literature on regionalization (Rugman, 2005; Rugman *et al.*, 2008a), our results suggest that high degrees of regional management autonomy granted by an MNC have a weakly significant negative impact on its regional success. One can think of several reasons why this may be the case. First, these adverse performance effects may be explained by the fact that high regional management autonomy can lead to inefficiencies in coordination and control (Bartlett *et al.*, 1989) – where regionally decentralized decision-making exceeds the degree that is necessary for the efficient management of regional products/services. In other words, the growth of benefits from additional, regional managerial efforts to address customer preferences at the downstream end of MNCs' value chains does not compensate for the growth in its associated costs (Proff, 2000). Second, decision-making by corporate headquarters gives subsidiaries the impression that the MNC is interested in their affairs (Vora, Kostova, and Roth, 2007) – which in the case of considerable intermediate layers of coordination and control by regional management may have adverse effects, with negative performance implications.

Our empirical results suggest that, consistent with H2, a firm's regional adaptation of its products/services has a highly significant positive impact on its regional success. This supports the contention of other regionalization scholars that regions and the specific demands of customers, governments, and other stakeholders have to be considered in MNCs' products/services to succeed in regional markets (Rugman, 2005; Rugman *et al.*, 2004c, 2008a). Concerning the elements that

constitute the regional strategies of MNCs, we found that the regional design, the regional functional scope, the regional offering portfolio, and the regional brands of their products/services highly influence the degree of regional adaptation. This supports the proposition that MNCs – for the successful penetration of geographical regions – have to develop region-bound FSAs to adapt their market strategy approach to regional requirements and conditions (Rugman, 2005; Rugman *et al.*, 2008a). The ability of MNCs to develop region-specific capabilities thereby can highly contribute to the explanation of their regional market success with their product/service offering, both within and beyond their home region. More generally, this implies that MNCs achieve an optimal mix or moderate levels of global integration and national responsiveness by means of different combinations of these four region-bound FSAs in the regional adaptation of their products/services. The processes of an MNC's value creation by its regional product/service adaptation based on regional FSAs should thereby receive utmost attention in regionalization theory and its scholarly reflection on regional firm strategies.

With respect to the organizational and environmental context faced by regionally operating MNCs, we found that the internal context in the form of their regional orientation has a positive direct influence on their regional success, whereas the external context given by their inter-regional distance exerts a direct negative effect on their regional performance. This may be explained by the fact that an MNC's high orientation, or focus, on only one particular region and its low inter-regional distance lead to low organizational and environmental complexity – resulting in a low inter-regional liability of foreignness, which contributes to the survival of MNCs (Ghemawat, 2008; Rugman, 2005; Verbeke *et al.*, 2009).

Concerning the interaction effect of the regional orientation of MNCs (H3a and H3b), our results provide no support for its influence, hypothesized in H3a, on the relationship between their regional management autonomy and regional success, where this internal contextual variable seems to have

almost no impact at all. However, we found a highly significant positive interaction effect for the hypothesized impact in H3b of an MNC's regional orientation on the relationship between its regional product/service adaptation and its regional performance. This shows that the regional orientation of a firm seems to be relatively unimportant for the impact that its regional management autonomy has on regional success, whereas the performance effects from its regional product/service adaptation are highly positively affected by this internal contingency. The latter finding can be explained by the fact that the narrow geographic market focus of MNCs, given by their strong regional orientation, supports the development of those FSAs in the regional adaptation of their products/services – which are capable of highly satisfying customer needs within the region, leading to positive effects on regional success (Rugman, 2005; Rugman *et al.*, 2008a). In other words, MNCs with a geographically limited regional focus seem to be able to use their region-bound capabilities more effectively as regards the successful regional adaptation of their products/services. This effective employment of their region-bound FSAs also reduces the MNCs' overall amount of one-sided, location-specific investments at the customer-end – which are required for the regional adaptation of their products/services (Rugman, 2005) – constituting a further positive effect on regional performance. Conversely, the reduced regional orientation of MNCs seem to lower their ability, first, to mentally absorb such increases in their multinationality, and second – as a consequence – to effectively develop those FSAs required for a successful regional product/service adaptation.

The rejection of H4a means that the negative impact that highly autonomous regional management has on the regional success of MNCs is reduced in the case of high inter-regional distance. Conversely, in the case of low inter-regional distance, the negative performance effects that result from highly autonomous management persist to a large part because they are only reduced marginally by low values of this external context of the MNC. These relationships can be explained

by several reasons. First, at low levels of inter-regional distance, MNCs face only a minor liability of foreignness where their respective familiarity with regional demands and requirements does not require a high allocation of decisions at the regional level (Yeung *et al.*, 2001; Zaheer and Mosakowski, 1997). Therefore, because no discernible benefits are expected from a high level of regional management autonomy its negative influence on a firm's regional performance largely remains. Second, if an MNC is exposed to high inter-regional distance, a delegation of decision-making to regional management may contribute to reducing uncertainties related to the economic, socio-cultural, and business environment, which facilitates the successful exploitation of regional FSAs (Collinson *et al.*, 2008). This effect alleviates the negative impact that regional management autonomy has on regional success. Third, at increased levels of inter-regional distance, higher decision-making responsibilities at the regional level can contribute to the better coordination of intra-regional operations (Enright, 2005b; Ricart et al., 2004), for example in national subsidiaries or regional production and distribution hubs (Buckley *et al.*, 2004). The coordinative support of autonomous regional managers in reaping such regional agglomeration benefits contributes to reducing the negative effect of a high regional management autonomy on performance (Arregle *et al.*, 2009; Rugman *et al.*, 2001c). Overall, these explanations show that – in light of increases in an MNC's inter-regional distance – decision-making by regional management involves benefits that mitigate its negative effects on regional performance. At the same time, however, the low inter-regional distances of MNCs may imply that decision-making by corporate headquarters and/or national subsidiaries creates more regional value than highly autonomous regional management (Ghemawat, 2005). This external contingency thereby contributes to the theoretical explanation of limitations and opportunities in the delegation of decision-making autonomy to the regional level.

The strong confirmation of H4b indicates that the regional adaptation of products/services becomes increasingly important for regional success in the case of rising levels of inter-regional distance.

This is consistent with existing accounts of regionalization theory that MNCs – which face high inter-regional differences in the various markets they serve – need to establish a regional insider position for their regionally adapted products/services to be successful (Ohmae, 1985; Rugman, 2005; Rugman *et al.*, 2004c). MNCs realize these product/service adaptations mainly by their regional FSAs. This means that region-specific capabilities, particularly those at the customer end that enable the deep penetration of markets (Millar, Choi, and Chen, 2005; Rugman, 2005), need to be employed to successfully address inter-regional differences. The costs for developing such regional FSAs as well as the associated location-bound investments for melding them with CSAs at the regional level seem to pay off in light of high inter-regional differences, given the associated positive regional performance effects. Consequently, the MNCs' commitment to distant foreign host regions – given by the development of region-specific FSAs for the regional adaptation of their products/services – constitutes an important element in their successful regional expansions across borders. Therefore, and more generally, the interaction effect of inter-regional distances on the successful regional product/service adaptations of MNCs lays the platform for a broad theoretical basis for the explanation of firms' cross-border expansions into distant regions.

Furthermore, after the consideration of the interaction effects of an MNC's regional orientation and its inter-regional distance, we found that H1 is again rejected, given the highly significant negative relationship between an MNC's regional management autonomy and its regional success. At the same time, however, we could not find support for the hypothesized positive relationship in H2 between an MNC's regional product/service adaptation and its regional success even though this was confirmed earlier in the absence of interaction effects from organizational and environmental contingencies. An MNC's successful product/service adaptation thereby seems to be highly dependent upon both its internal and external context – as shown by the strong support for H3b and H4b. This indicates that the regional market strategies of MNCs should correspond to the

requirements of the organizational and environmental context they face. Therefore, MNCs' development of those FSAs that are necessary for their successful regional product/service adaptations is highly contingent upon these contextual influences. In other words, an MNC's successful regional product/service adaptation seems to highly depend upon achieving a proper regional environment-strategy-structure fit. This seems only partly true for an MNC's regional management autonomy, whose impact on regional success was only found to be weakly negatively affected by the external contingency inter-regional distance (H4a), whereas a firm's regional orientation exerted no notable influence on this relationship (H3a). More specifically, the influence of an MNC's regional management autonomy on its regional performance seems to be exclusively dependent upon its inter-regional distance, indicating a weaker form of the regional environment-strategy-structure fit. In general, however, this implies that there is no universal "best way" for implementing regional strategies, nor that their realization is solely situation-specific.

CONCLUSION, LIMITATIONS, AND AVENUES FOR FUTURE RESEARCH

Our findings suggest that low degrees of regional management autonomy and high levels of regional product/service adaptation are appropriate for MNCs to be regionally successful. The possible adverse effects of high degrees of regional management autonomy on regional success are mitigated by an MNC's inter-regional distance. Furthermore, our results indicate that the regional performance associated with high levels of regional product/service adaptation is positively influenced by both an MNC's regional orientation and its inter-regional distance. These research findings imply that MNCs should optimize their regional success by varying their regional management autonomy and regional product/service adaptation in light of their organizational and environmental context. Although we hope that the findings of our study make a valuable contribution to the existing knowledge in theory and practice about the framing and implementation of regional strategies in

MNCs, the results and implications of our study need to be interpreted with caution, because they are subject to several limitations.

As in many studies in this field, our data are limited to Fortune Global 500 firms, which results in a bias of our findings towards large companies. Furthermore, our sample size constrains the generalizability of our findings. In addition, the applied methods of data collection can be challenged about their potential biases in the managerial perceptions of our primary data, as well as accounting and tax distortions in our secondary data. The timely consistency of our research is limited by the fact that our secondary data relate to the years 2000–2008, whereas our primary data were collected in 2009. Moreover, the PLS method has methodological disadvantages, which other statistical methods could have avoided, and this might have led to different results.

In future research, the application of qualitative research designs for such analyses – such as case studies or interviews – could lead to a more fine-grained understanding of the firm- and sector-specific nature of the success factors of regional strategies. Researchers could also direct the research perspective towards small and medium-sized firms, geographical levels other than the region, and/or to the perceptions of national and/or regional managers instead of the corporate headquarters of MNCs. Finally, there is a rich avenue of work to be pursued on how region-specific capabilities – such as our identified four FSAs, the regional design, regional functional scope, regional offering portfolio, and/or regional brands of products/services – are linked to region-bound/location-bound advantages in the form of CSAs. Any of these research avenues could lead to a more profound understanding of the success factors of regional strategies. Such insights would further advance the existing knowledge in the field about how the regional extent of the market can be translated into an improved geographic competitiveness of MNCs by "[…] appropriate strategies at the level of each broad region […]" (Rugman, 2009).

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APPENDIX

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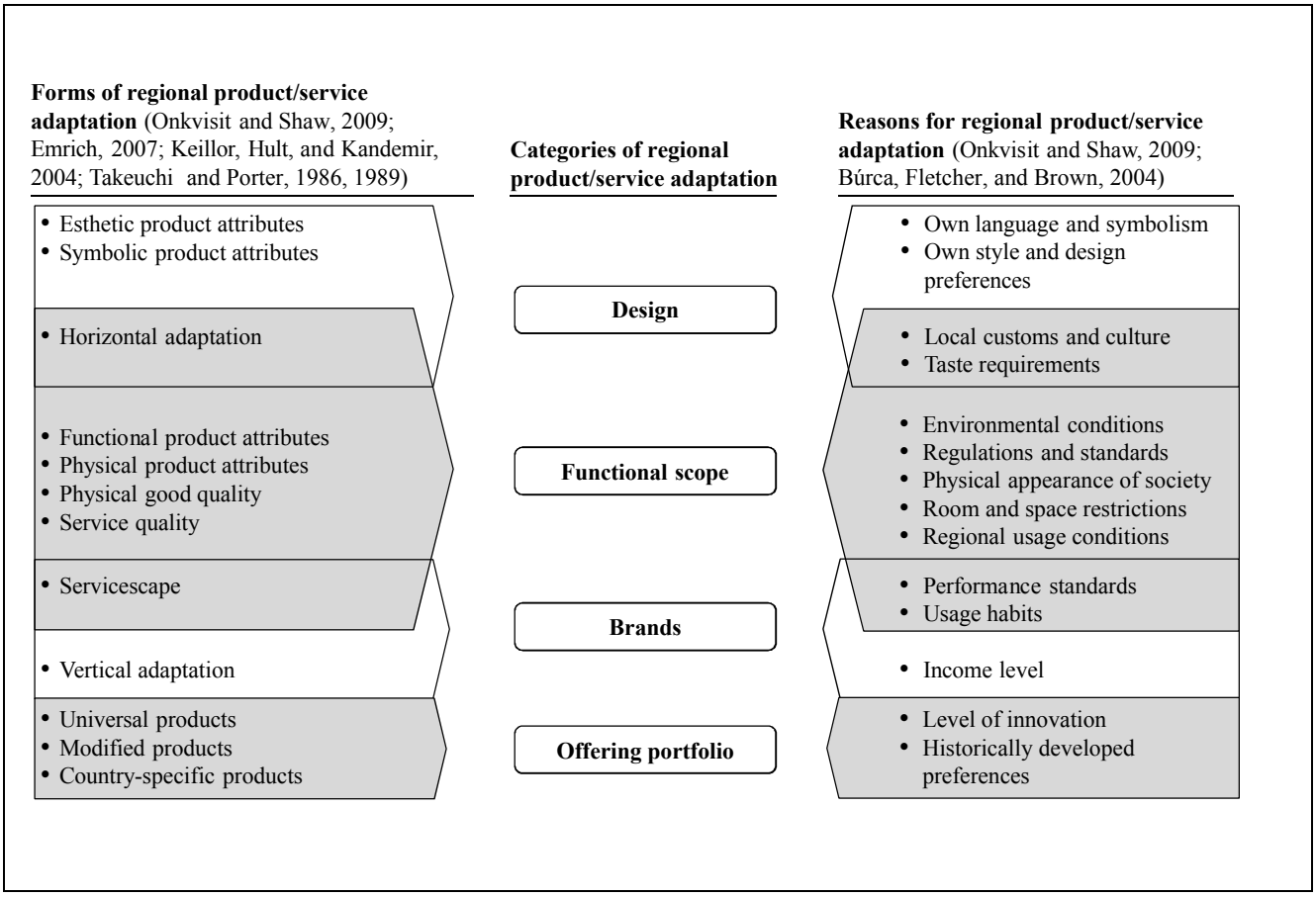
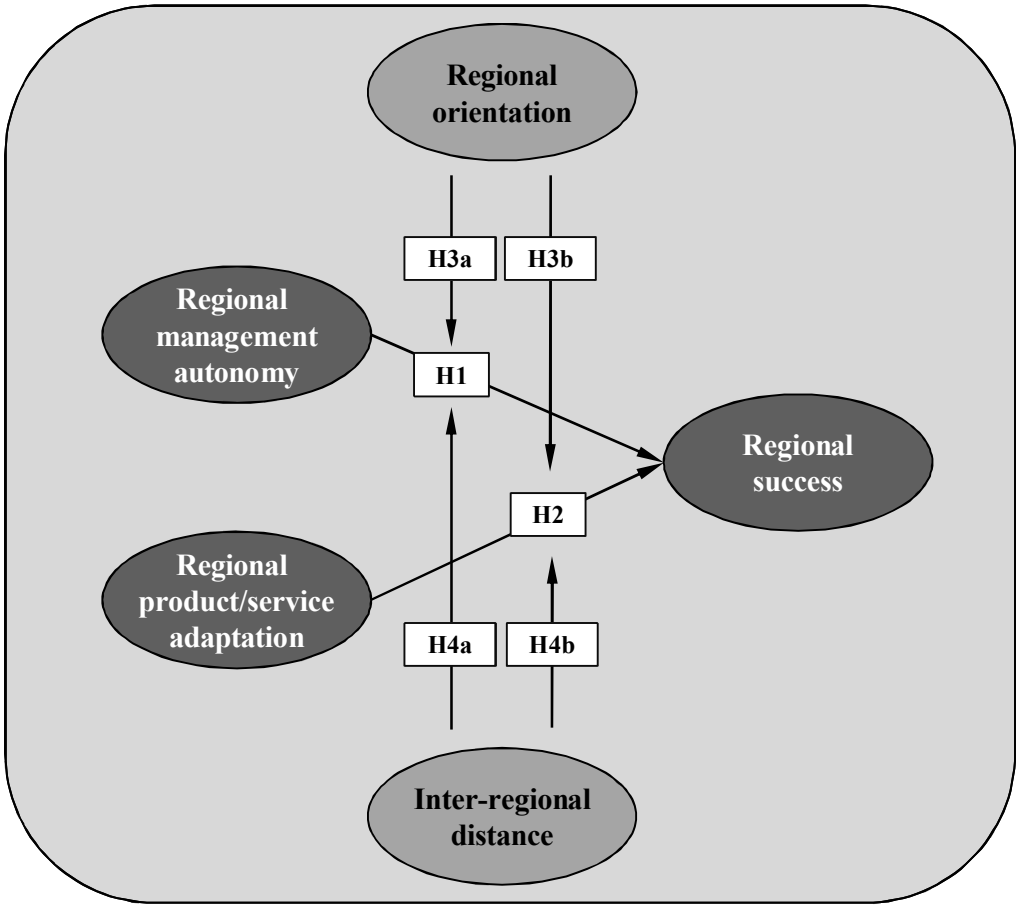
FIGURES AND TABLES

FIGURE 1



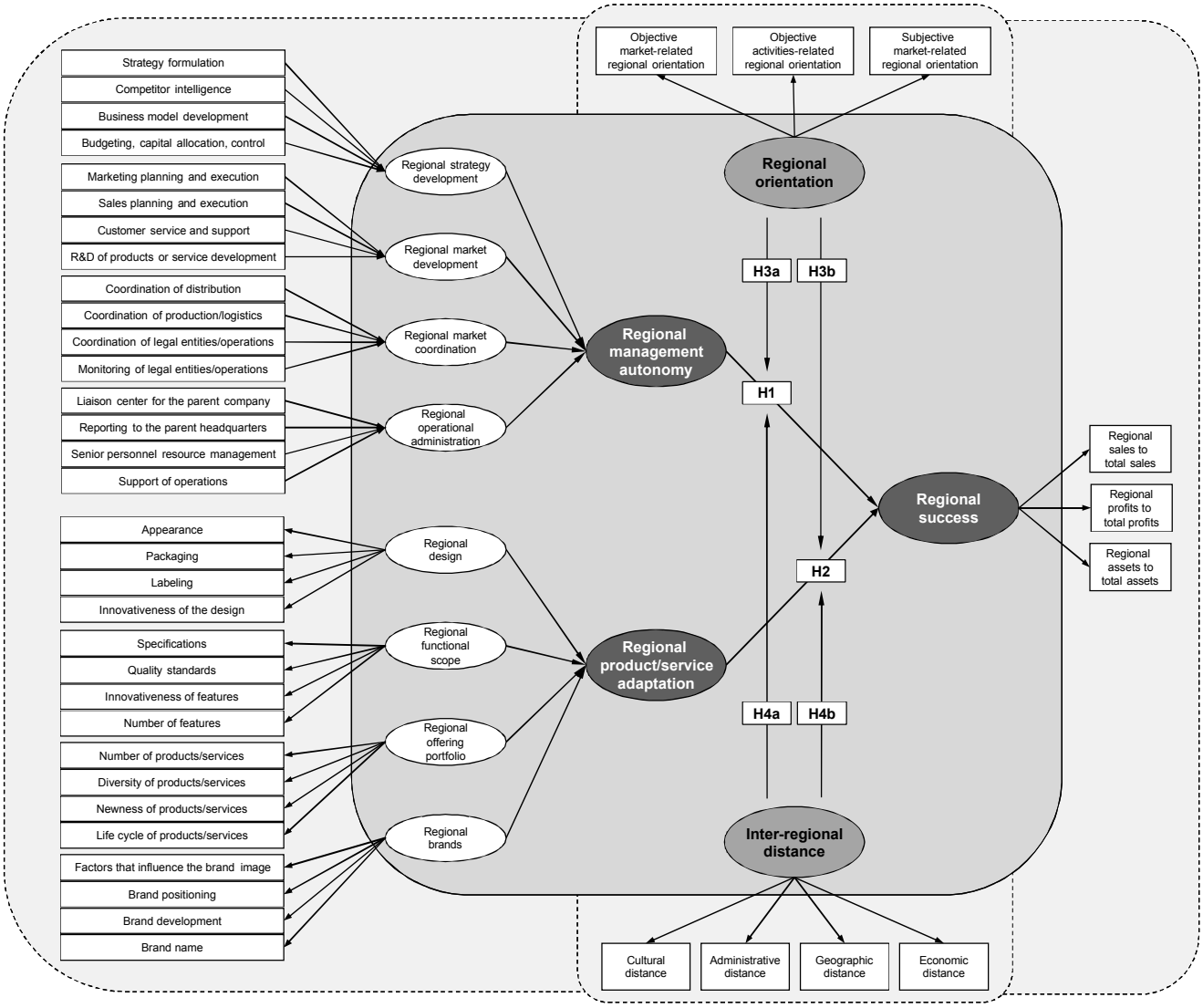
Categories of regional product/service adaptation

FIGURE 2



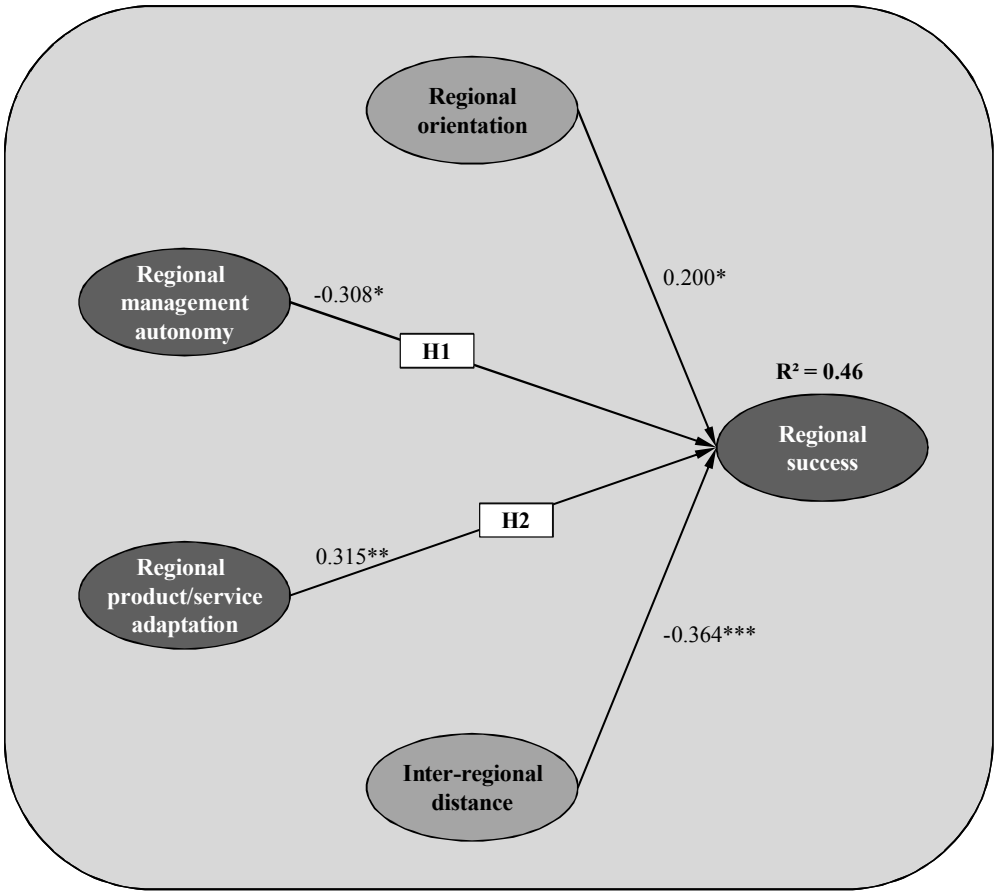
Regional success factor model

FIGURE 3



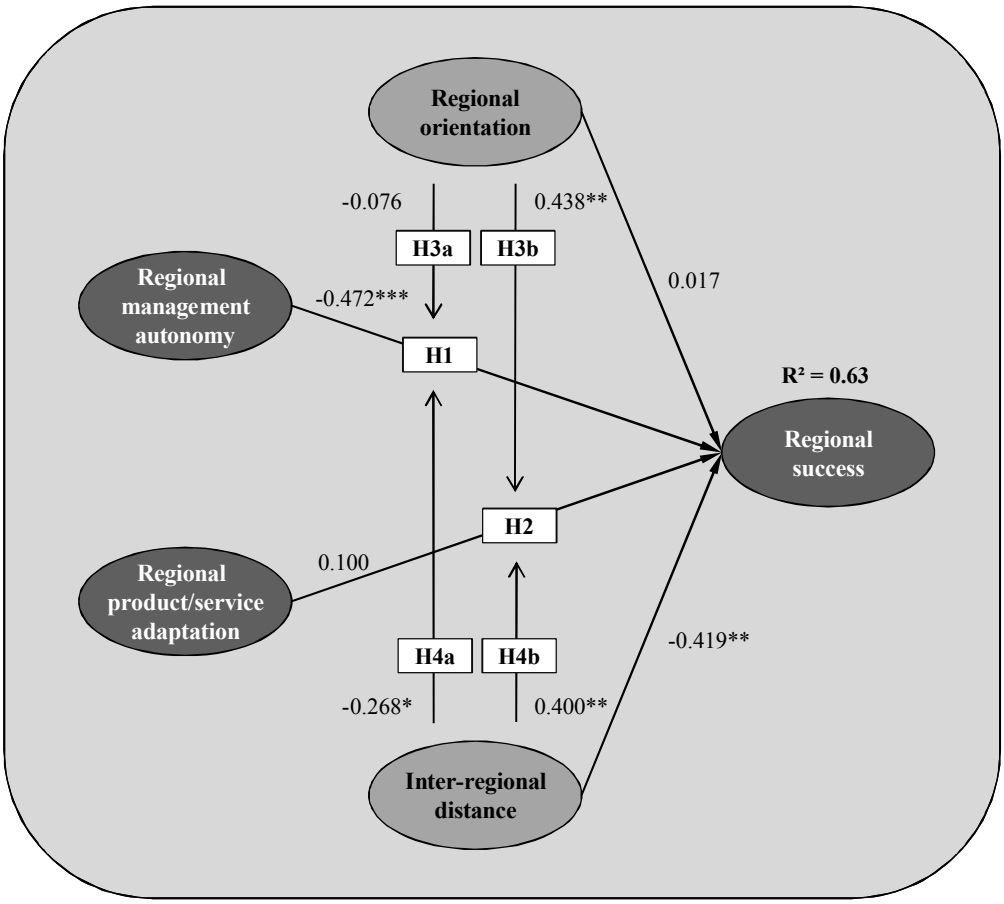
Measurement model

FIGURE 4



Basic regional success factor model

FIGURE 5



Extended regional success factor model

TABLE 1

Dimensions of inter-regional distance

Inter-regional distance			
Cultural distance	**Administrative/political/ institutional distance**	**Geographic distance**	**Economic distance**
▪ Different languages ▪ Different ethnicities; lack of connective ethnic or social networks ▪ Different religions ▪ Level of trust ▪ Different values, social norms, and dispositions	▪ Lack of colonial ties ▪ Lack of shared regional trading bloc (monetary or political association) ▪ Lack of common currency ▪ Political hostility ▪ Government policies ▪ Institutional weakness	▪ Physical distance, remoteness ▪ Lack of a common (land) border ▪ Lack of sea or river access ▪ Size of country/region ▪ Weak transportation or communication links ▪ Differences in time zones ▪ Differences in climates and disease environments	▪ Differences in consumer incomes (rich-poor differences) ▪ Other differences in costs and quality of – Natural resources – Financial resources – Human resources – Infrastructure – Intermediate inputs – Information or knowledge

TABLE 2

Evaluation of the basic structural model

Model	Latent constructs	R^2	Effect size	Path coefficients	t-values	Stone-Geisser-test
Basic structural model	**Regional management autonomy**		0.162	-0.308	1.893*	
	Regional product/service adaptation		0.171	0.315	2.190**	
	Regional design			*0.282*	*7.689***	
	Regional functional scope			*0.295*	*4.086***	
	Regional offering portfolio			*0.205*	*6.099***	
	Regional brands			*0.438*	*5.736***	
	Regional orientation		0.065	0.200	1.675*	
	Inter-regional distance		0.220	-0.364	3.238***	
	Regional success	0.460				0.292
Basic structural model incl. control variables	**Regional management autonomy**		0.129	-0.290	2.017**	
	Regional product/service adaptation		0.134	0.277	1.905*	
	Regional design			*0.281*	*6.727***	
	Regional functional scope			*0.294*	*4.235***	
	Regional offering portfolio			*0.205*	*5.703***	
	Regional brands			*0.439*	*6.371***	
	Regional orientation		0.077	0.213	1.562	
	Inter-regional distance		0.134	-0.311	2.366**	
	Regional success	0.489				0.284
	Firm size		0.053	-0.183	1.391	
	Regional competition		0.009	0.073	0.565	

Asterisks denote significance levels of two-sided t-test: * indicates significance at the 10% level, ** at the 5% level, and *** at the 1% level.

TABLE 3

Evaluation of the extended structural model

Model	Latent constructs	R^2	Effect size	Path coefficients	t-values	Stone-Geisser-test
Extended structural model	**Regional management autonomy**		0.403	-0.472	2.972***	
	Regional product/service adaptation		0.020	0.100	0.456	
	Regional design			*0.282*	*5.309***	
	Regional functional scope			*0.295*	*4.060***	
	Regional offering portfolio			*0.205*	*4.813***	
	Regional brands			*0.438*	*5.252***	
	Regional orientation		0.001	0.017	0.122	
	Inter-regional distance		0.399	-0.419	2.518**	
	Regional orientation x regional management autonomy		0.013	-0.076	0.586	
	Regional orientation x regional product/service adaptation		0.312	0.438	2.533**	
	Inter-regional distance x regional management autonomy		0.104	-0.268	1.886*	
	Inter-regional distance x regional product/service adaptation		0.268	0.400	2.041**	
	Regional success	0.625				0.414
Extended structural model incl. control variables	**Regional management autonomy**		0.383	-0.455	2.188**	
	Regional product/service adaptation		0.014	0.084	0.363	
	Regional design			*0.282*	*8.528***	
	Regional functional scope			*0.295*	*4.112***	
	Regional offering portfolio			*0.205*	*5.329***	
	Regional brands			*0.438*	*7.628***	
	Regional orientation		0.003	0.041	0.175	
	Inter-regional distance		0.300	-0.404	1.887*	
	Regional orientation x regional management autonomy		0.024	-0.106	0.492	
	Regional orientation x regional product/service adaptation		0.284	0.415	2.136**	
	Inter-regional distance x regional management autonomy		0.116	-0.284	1.392	
	Inter-regional distance x regional product/service adaptation		0.246	0.390	1.715*	
	Regional success	0.640				0.395
	Firm size		0.016	-0.093	0.445	
	Regional competition		0.024	0.103	0.697	

Asterisks denote significance levels of two-sided t-test: * indicates significance at the 10% level, ** at the 5% level, and *** at the 1% level.