

Essays on

Home-region Orientation of Multinational Corporations:

Theoretical Rationales and Empirical Analyses

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Vorwort

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Kiel, im Mai 2014

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Synopsis

1. Introduction

Over more than a decade, researchers in the academic field of “international business/ international management” (IB/IM) have been debating whether multinational corporations (MNCs) are becoming more global, or whether they are still mainly to be considered home-region oriented and might also stay at that level in the future. Opposed to the thesis introduced by Bartlett and Ghoshal’s (1989) archetypal work of the transnational solution – stating that most industries have become global and that many MNCs compete on a worldwide scale – recent empirical evidence indicates that the world’s largest MNCs follow a regional rather than a global strategy of international diversification (e.g., Delios and Beamish, 2005; Dunning, Fujita, and Yokova, 2007; Rugman, 2000; Rugman and Verbeke, 2004, 2005).

Research supporting MNCs’ home-region orientation has discovered that the majority of large MNCs achieve at least 50 % of their overall sales or assets in their home region of the broad Triad, and less than 20 % in each of the two other Triad regions (Rugman, 2000; Rugman and Verbeke, 2004, 2005). The Triad consists, based on an extended version of Ohmae’s (1985) classification of Triad regions, of the three regions North America, Europe, and Asia. Thereby, a MNCs’ home region is characterized as the Triad region locating its parent headquarters. According to Rugman and Verbeke, whereas around 85 % of Fortune Global 500 companies were home-region oriented, only 10 % were labeled as either bi-regional (achieving less than 50 % of their sales or assets in the home region and more than 20 % in a second Triad region) or host-region oriented (over 50 % of sales or assets from a Triad region other than their own). Only 2.5 % of MNCs were found to be global (achieving at least 20 % of their sales or assets in each Triad region). Several other studies have confirmed these basic findings, further supporting the concept of MNCs’ tendency towards a home-region orientation (e.g., Almodóvar, 2011; Arregle, Beamish and Hérbert, 2009; Asmussen, 2009; Banalieva and Dhana-raj, 2013; Beleska-Spasova and Glaister, 2009; Curran and Thorpe, 2013; Delios and Beamish, 2005; Dunning, Fujita, and Yokova, 2007; Oh, 2009; Oh and Rugman, 2012; Rugman and Verbeke, 2004, 2005, 2007; Rugman and Oh, 2010, 2012; Sammartino and Osegowitsch, 2013; Sethi, 2009; Yin and Choi, 2005).

Even though there is strong empirical evidence for MNCs’ home-region orientation, research has not yet developed a comprehensive, multifaceted rationale to explain this phenomenon.

The only exemption is the work by Rugman (2005) and Rugman and Verbeke (2004, 2005), applying arguments of transaction-cost economics to develop a general theory for the explanation of MNCs' home-region orientation (Sammartino and Osegowitsch, 2013). As a consequence, a more extensive theoretical approach is necessary to fully understand MNCs' home-region orientation.

The present doctoral dissertation investigates three research questions concerning MNCs' home-region orientation, developing and analyzing a theoretical rationale for the explanation of MNCs' home-region orientation, the impact of top management teams (TMTs) as well as performance effects of MNCs' regional orientation:

1. To what degree are theories from various fields of social science capable of explaining MNCs' home-region orientation?
2. How do top management team's characteristics influence MNCs' home-region orientation?
3. How is MNCs' performance affected by its intra- and interregional orientation?

2. Research Contribution

The aforementioned research questions were investigated in a doctoral thesis. It has been conducted under the supervision of Professor Joachim Wolf during my employment as a research assistant at the Chair of Organization Theory and Design at Christian-Albrechts-University of Kiel, as well as an external doctoral candidate and member of the postgraduate program 'Business Aspects of Loosely Coupled Systems and Electronic Business'. My research work resulted in the papers exhibited in table 1.

The first article (A) is based on a thorough overview of theories from the fields of economics, psychology, and sociology, which might be able to explain MNCs' home-region orientation. Consistent with each theory, it derives propositions for the development of a more multifaceted explanation of this phenomenon and allows further insight into the reasons for MNCs' home-region orientation. The second article (B) is an extension of article A, empirically testing a revised and extended version of the propositions developed. Article C investigates the influence of top management teams' demographic characteristics on MNCs' home-region orientation, including average age, company tenure, education level, and international experience, shedding further light on why MNCs tend to concentrate their business activities in their respective home region. In contrast, the final article (D) addresses the last research question, regarding the influence of intra- and interregional orientation on MNCs' performance by ana-

lyzing if a more interregional (= global) orientation results in higher performance levels compared to intraregionally (= home-region) oriented MNCs. In the following, a brief summary of each paper's contribution to its respective research field is given.

Table 1. Overview of Research Papers

Theoretical Article

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|---|--|---|
| A | Why MNCs Tend to Concentrate Their Activities in Their Home Region | Joachim Wolf, Till Dunemann, and William G. Egelhoff
<i>Published in: Multinational Business Review, Vol. 20 (2012), No. 1, pp. 67-91.</i>
<i>An earlier version of the article was published in: Academy of Management Annual Meeting Best Paper Proceedings, 2008, pp. 1-6.</i> |
|---|--|---|
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Empirical Articles

- | | | |
|---|---|---|
| B | Empirical Analysis of a Theoretical Rationale Explaining MNCs' Home-region Orientation | Till Dunemann |
| C | The Influence of Upper Echelons on MNCs' Home-region Orientation | Till Dunemann and Tobias C. Hoffmeister |
| D | The Influence of Intra- and Interregional Orientation on the Performance of German Stock Corporations | Till Dunemann |
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2.1 Theoretical Article on Why MNCs Tend to Concentrate Their Activities in Their Home Region

While MNCs' tendency to concentrate their activities in their respective home region has been empirically supported in various studies, with the exemption of Rugman (2005) and Rugman and Verbeke (2004, 2005), researchers have neglected to develop a comprehensive multifaceted theoretical rationale explaining the phenomenon. The approach adopted by Rugman (2005) and Rugman and Verbeke (2004, 2005) to explain MNCs' home-region orientation is based on arguments taken from transaction cost economics. It rests on the assumption that the geographical scope of a MNC is a result of its ability to connect firm-specific advantages in a useful manner with country specific advantages provided by foreign locations. They argue that MNCs' firm-specific advantages are more easily exploited within the home region com-

pared to other regions of the world. While this argument for a home-region orientation is substantial, it is also rather general and a common characteristic of transaction cost-based explanations. Firm-specific as well as country-specific advantages are broad categories and not able to clearly specify which aspects of MNCs and their host country environments need to be considered in the analysis. Additionally, prior empirical studies have discovered other necessary arguments, apart from transaction cost economics, to fully understand the international expansion behavior of MNCs (Aharoni, 1966; Henisz and Delios, 2001).

The article “*Why MNCs tend to concentrate their activities in their home region*” closes this research gap by providing a more diverse theoretical rationale explaining MNCs’ home-region orientation. It identifies, depicts, and compares seven theories and research streams from economics, psychology and sociology, concerning their contribution to the explanation of MNCs’ home-region orientation. From economics, the theories of new regionalism, new economic geography, and knowledge economy are considered. Regarding psychology, the theories of psychic distance and escalating commitment are consulted. At last, arguments from sociological theories – population ecology and neoinstitutional theory – are applied to the present context. Hypotheses are developed with regard to each theory’s explanation for MNCs’ home-region orientation.

These theories contain arguments providing additional arguments enriching our understanding of MNCs’ home-region orientation. Further on, the paper lays the theoretical groundwork for an empirical analysis of the developed hypotheses.

2.2 *Empirical Analysis of a Theoretical Rationale Explaining MNCs’*

Home-region Orientation

The previous article focused on the theoretical development of a theoretical rationale based on theories from economics, psychology, and sociology and the formulation of a set of hypotheses for the explanation of MNCs’ home-region orientation. Thus, it was not the target to empirically test the developed propositions. This issue was approached in the article “*Empirical Analysis of a Theoretical Rationale Explaining MNCs’ Home-region Orientation*”. It analyzed to what extent the arguments of each theory developed in the previous article are able to explain MNCs’ home-region orientation, based on the formulated hypotheses. In addition to those theories depicted in the previous article, path dependence theory was included as an additional theory, further contributing to our understanding of home-region orientation.

Due to its explorative character – most of the theories’ arguments, if at all, had been tested on aggregated macroeconomic data only – the first target was to develop an operationalization

meeting the requirements of a questionnaire. Hence, arguments of each theory were gathered to develop relevant variables for the explanation of home-region orientation. Based upon this operationalization, an internet-based survey was conducted. Relying on a sample of 48 questionnaires from study participants of German MNCs, the article analyzed the explanatory power of each theory's arguments. The empirical analysis of the relationships between MNCs' home-region orientation, measured as the ratio of intraregional sales (assets) to total sales (assets), and the independent variables was conducted based on analysis of correlation and standard multiple linear regression models.

Unfortunately, regression models yielded no significant results at all. Thus, it was not possible to empirically support the influence of each theory's line of reasoning on MNCs' home-region orientation. Nevertheless, in an explorative analysis, the theories' individual items were analyzed to gain insights as to which arguments are of value for the explanation of MNCs' home-region orientation. These results are based on the mean values of each argument and its correlation coefficients with intraregional assets and sales. Based upon these results, (1) the theory of new regionalism includes arguments, especially the reduction of customs tariffs and antidumping duties, the preferential treatment of trade partners' goods and the abolition of policy-induced price distortions, predicting MNCs' home-region orientation. (2) The arguments of the theories of new economic geography and knowledge economy show a reversed effect, being negatively correlated to MNCs' home-region orientation. Thus, they are not able to predict this phenomenon. (3) Arguments of psychic distance theory, especially similarities in political systems, geographic distance, commercial ties, and political ties are positively correlated to MNCs' home-region orientation. (4) Escalating commitment yielded no significant correlation with MNCs' home-region orientation. However, results showed that escalating commitment is more likely to happen within the home region. (5) The theory of population ecology shows a significant positive correlation with MNCs' home-region orientation, indicating that MNCs' competencies are adapted to the home region and might result in an increased home-region orientation. (6) Neoinstitutional theory exhibits no significant correlation with MNCs' home-region orientation whatsoever. (7) Path dependence theory is not able to reflect MNCs' home-region orientation either, even though the persistence of MNCs' home-region orientation over time and the negative performance effects detected in some previous studies suggest a possible path-dependence of this phenomenon.

In sum, apart from the theories of new economic geography, knowledge economy, escalating commitment, neoinstitutional theory, and path dependence theory, the theories analyzed are able to explain MNCs' home-region orientation at least to a certain extent and enrich our un-

derstanding of this phenomenon. Thus, German MNCs' tendency towards a home-region orientation is mainly based on the economical and political liberalization within the EU. Especially results on the arguments of the theories of new regionalism and psychic distance show that MNCs are more likely to invest and trade in countries exhibiting lower barriers to FDI and trade, which again are more likely to be found within the home-region of German MNCs. Additionally, the close geographic proximity to EU member countries will further facilitate intraregional FDI and trade, favoring home-region orientation relative to an interregional orientation. Also, as shown by population ecology, MNCs' comps are adapted to its home region and will reinforce MNCs' home-region orientation. MNCs often lack the ability to adjust their comps to the requirements of foreign regions, preventing them from increasing interregional orientation. As a result, being the first study of this kind, the study lays the groundwork for future empirical research on a theoretical rationale for the explanation of MNCs' home-region orientation.

2.3 The Influence of Upper Echelons on MNCs' Home-region Orientation

Whereas the previous two articles focused on various theories' explanatory potential of MNCs' home-region orientation, the third empirical study investigated the influence of Upper Echelons on MNCs' home-region orientation. Its central argument is the existence of a directional relationship between top management teams' (TMTs') demographic characteristics and MNCs' home-region orientation.

The concept of Upper Echelons follows the reasoning that experiences made in an executive's career have a direct influence on the executive's values, beliefs and reasoning and therefore ultimately also on his or her decision-making. For the past quarter of a century, scholars have consequently suggested that the aforementioned Upper Echelons' demographics are a sensible proxy to determine the influence of a company's strategic leadership (Finkelstein, Hambrick, and Cannella, 2009) on a firm's strategic orientation (Finkelstein and Hambrick, 1990; Gabarro, 2007; Wiersema and Bantel, 1992). Existing TMT research on MNC internationalization has so far focused on explanations of why MNCs will generally be more active in foreign countries than in their home country (e.g., Devinney, Midgley, and Venaik, 2000) or why MNCs will be more internationally diversified with regard to the total number of countries they are active in (e.g., Hitt et al., 2006). Still, in order to develop a more holistic understanding and in light of the introduction of the concept of MNCs' home-regional orientation, the impact of TMT characteristics on MNCs' internationalization per se needs to be readdressed

by testing the respective influence of TMT characteristics on the regional orientation of MNCs.

Therefore, the article “*The Influence of Upper Echelons on MNCs’ Home-region Orientation*” postulates that TMT characteristics also have a significant impact on the decision on where, and in particular in which region, a MNC will internationalize. It is argued that TMT’s values, experiences, beliefs, risk-aversion, information-processing capability, willingness to adapt to foreign environments, understanding of foreign regions and cultures, as well as perceptions of psychic distance have a major influence on whether MNCs internationalize within or beyond their home region. As a consequence, normative conclusions can be drawn as to which characteristics MNCs’ TMTs require to successfully expand their business activities into foreign regions. Equally, the study provides additional reasons as to why most MNCs focus their international activities on their respective home region and thereby extends research on the concept of MNCs’ home-region orientation.

The research analysis is based on lagged, longitudinal data on 38 German stock listed MNCs over a period of 11 consecutive years, resulting in a final sample of 380 observations per variable. Based on the previously introduced theories and assumptions, TMT characteristics of age, education, company tenure, and international experience are elaborated and hypotheses derived in order to test Upper Echelons’ influence on MNCs’ home-region orientation. Data was analyzed using ordinary least squares (OLS) fixed-effects regression models to control for unobserved differences between companies.

Results indicate that with increasing average TMT age, decreasing average TMT company tenure, decreasing average TMT education level and decreasing average TMT international experience, MNCs exhibit an increased home-region orientation. Based on Upper Echelons argumentation, TMT characteristics serve as a proxy for the TMT members’ values, norms, and beliefs with regard to strategic decision-making. Therefore, considering the findings, it is possible to define those TMT specific attributes – proxied by TMT characteristics – required by a MNC for the strategically desired regional orientation. The results indicate that aspects such as e.g., information-processing capacity, conservatism, risk-aversion, international networks of TMT members, as well as individual experience in general, have a fundamental influence on the regional expansion of MNCs. Based on this study, it can be argued that when diversifying into host regions, MNCs require managers with increased average information-processing requirements to deal with increased uncertainty and equivocality of foreign regions. Further, MNCs require TMTs with less average conservatism and higher adaptability to

new organizational and environmental settings. Additionally, access to international networks supports the reduction of uncertainty and equivocality of TMTs. Work and education-related experiences, as well as international experiences can further be expected to support TMT capabilities needed for a host-region orientation of MNCs as they promote the awareness of diversity of foreign markets.

2.4 The Influence of Intra- and Interregional Orientation on the Performance of German Stock Corporations

While the previous three articles dealt with reasons for the explanation of MNCs' home-region orientation, the fourth article empirically investigates the influence of different levels of regional orientation on MNCs' performance.

Even though the relationship between performance of MNCs and their degree of internationalization has become one of the most researched linkages in the field in the past 40 years of International Business research, few researchers have explored the value of regional metrics in the analysis of multinationality and performance (Banalieva and Santoro, 2009; Beleska-Spasova and Glaister, 2010; Chen, 2007; Li, 2005; Lee and Marvel, 2009; Qian et al., 2008; Richter, 2007; Rugman, Kudina, and Yip, 2007; Rugman and Oh, 2010). Research has mainly dealt with the influence of intraregional orientation on performance and neglected the interplay of intraregional (= home-regional) and interregional orientation.

As a result, the major concern of the study "*The Influence of Intra- and Interregional Orientation on the Performance of German Stock Corporations*" is to understand whether an intraregional or interregional orientation results in a higher performance level for MNCs. Hence, a three-stage theory of interregional orientation is developed and empirically tested. In this three-stage theory, the interregional orientation is divided into three stages with low, medium, and high levels of interregional orientation and its respective level of intraregional orientation (high, medium, and low) and each stage is tested with regard to its impact on MNC performance. A second aspect of this study is to analyze how this relationship is affected by phases of recession or expansion of the business cycle within the home region. So far, prior research has stated that MNCs should diversify their activities internationally during times of recessions in order to spread risk to various markets and countries and reduce the negative impact on returns. Though, whether this international diversification should be intraregionally or interregionally has not been dealt with.

The research analysis is based on longitudinal data on 53 of the largest German stock corporations in the period 2002-2010, resulting in a final sample of 477 observations. Data was ana-

lyzed using fixed-effects models with Driskoll-Kraay standard errors, being robust to cross-sectional and temporal dependence (Driskoll and Kraay, 1998; Hoechle, 2007). Especially when dealing with financial market data, such as return on sales (Driscoll and Kraay, 1998), cross-sectional correlation is likely to exist due to herd behavior (Bai and Kao, 2006). Common techniques that neglect to take cross-sectional dependence into account will result in inconsistently estimated standard errors (Driscoll and Kraay, 1998).

Results support the hypothesized inverted sigmoid relationship between interregional orientation and MNCs' performance, dividing the relationship into three stages. Additionally, results show that during recessions, or a reduction of GDP growth in general within the home region, higher interregional orientation leads to increased performance. Hence, by dispersing business operations across a wider selection of regions and foreign markets, MNCs profit from risk reduction through geographic differentiation.

3. Manifestations on Co-Authorship

Two of the four papers have been developed in co-authorship. In the first paper, the first two authors have contributed significantly more than the third author, while in the third paper, contributions have been equally shared.

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A Why MNCs Tend to Concentrate Their Activities in Their Home Region

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Abstract

The current paper analyzes to which degree theories from different fields of social science are able to explain the home-region orientation of MNCs. This is necessary since up to now there is only a relatively narrow, economics-oriented explanation for such an orientation. The analysis is based on a thorough review of the literatures, which refer to an MNC's home-region orientation and on different theories from the social sciences. The paper shows that several theories from economics, psychology, and sociology are able to explain an MNC's home-region orientation. By doing so, the paper contributes to the development of a more multi-faceted explanation of why MNCs generally prefer the home-region orientation. The paper derives propositions consistent with each theory. These propositions can be empirically tested in subsequent research studies.

Keywords: Multinational Corporations, Home-region Orientation, IB Theory

B Empirical Analysis of a Theoretical Rationale Explaining MNCs' Home-region Orientation

Till Dunemann

Abstract

This paper reports on a research project investigating arguments of various theories from the fields of economics, psychology, and sociology explaining multinational corporations' (MNC) tendency to concentrate their business activities on their respective home region. The central argument is that, apart from transaction cost-based explanations applied in prior research, the phenomenon of MNCs' home-region orientation needs a more multifaceted theoretical foundation. Based on questionnaire data from a sample of 48 German MNCs, the postulated influences of the arguments of each theory have been empirically tested. Even though regression analysis of the arguments' general explanatory power of MNCs' home-region orientation yielded no significant results, indications were found partially supporting the hypothesized relationships by conducting an explorative analysis of the arguments of each theory and their potential contribution to explain the phenomenon. Results show that in the case of German MNCs, the EU is a major factor leading to a concentration on the home region. Especially the economic liberalization and political harmonization within the EU enhance intraregional FDI and trade. Additionally, geographic proximity as well as the development of region-specific competencies increase MNCs' tendencies towards a home-region orientation.

Keywords: Home-region Orientation, Regional Strategies, Economic Theories, Psychological Theories, Sociological Theories

1. Introduction

Over more than a decade, a debate on the home-region orientation of multinational corporations (MNCs) has been ongoing in international business (IB) literature, first introduced by Rugman (2000) and Rugman and Verbeke (2004, 2005). In spite of the thesis that MNCs have become global and compete on a worldwide scale (Bartlett and Ghoshal, 1989; Doz, Santos, and Williamson, 2001), recent research has supported the concept of MNCs' tendency towards a home-region orientation (e.g., Almodóvar, 2011; Arregle, Beamish, and Hérbert, 2009; Arregle et al., 2013; Asmussen, 2009; Banalieva and Dhanaraj, 2013; Beleska-Spasova and Glaister, 2009; Curran and Thorpe, 2013; Delios and Beamish, 2005; Dunning, Fujita, and Yokova, 2007; Oh, 2009; Oh and Rugman, 2012; Rugman and Verbeke, 2004, 2005, 2007; Rugman and Oh, 2010, 2012; Sammartino and Osegowitsch, 2013; Sethi, 2009; Yin and Choi, 2005). This research discovered that MNCs tend to concentrate their international activities within and show little activity beyond their home region.

Even though there is strong empirical evidence for MNCs' home-region orientation, research has not yet developed a comprehensive, multifaceted rationale to explain this phenomenon. The only exemptions are Rugman (2005) and Rugman and Verbeke (2004, 2005), applying arguments of transaction-cost economics. As summarized by Wolf, Dunemann, and Egelhoff (2012), Rugman and Verbeke (2005) assumed a quite crude, rough-grained exploitation of firm-specific advantages within MNCs' home region and a resulting reduction of transaction costs.

Wolf, Dunemann, and Egelhoff (2012) have scrutinized the broad and rather general transaction-cost based approach adapted by Rugman and Verbeke (2005) to explain MNCs' home-region orientation, which leaves room for further expansion and improvement of theory. Accordingly, firm- and country-specific advantages neglect to specify and consider the aspects of MNCs and their respective host country environments since they are too broad constructs for the analysis of MNCs' home-region orientation. Further specification is needed with respect to the nature of the required relationship between firm-specific and country-specific advantages. As argued by Sammartino and Osegowitsch (2013), additional arguments beyond those of transaction cost economics should be considered to explain MNCs' home-region orientation. They propose that behavioral theories offer additional insights since they are, in comparison to transaction cost-based arguments, less focused on the evaluation of costs and benefits but treat MNCs as risk-averse entities, preferring a behavior of uncertainty reduction and resistance avoidance.

As a result, a more multifaceted theoretical explanation is necessary to fully understand MNCs' home-region orientation. This is underlined by the fact that the dominance of home-region oriented MNCs over global MNCs, discovered by Rugman (2000) and Rugman and Verbeke (2004, 2005) has not been challenged in IB literature (Wolf, Dunemann, and Egelhoff, 2012). Consequently, Wolf, Dunemann, and Egelhoff (2012) presented arguments why well-established theories of social sciences can be utilized to explain MNCs' home-region orientation. Since the authors developed their arguments on purely theoretical grounds, an empirical analysis of the arguments remains missing. Thus, the present research paper will take up this gap and empirically test the developed arguments.

It seems necessary to present some definitions on the key elements of MNCs' home-region orientation since the current paper departs here in some aspects from Rugman and Verbeke's work. According to Rugman (2000) and Rugman and Verbeke (2004, 2005) regional grouping typology, countries are classified into the Triad regions (Europe, North America, and Asia), an extension of the Triad concept developed by Ohmae (1985). The home region of German MNCs, expressed as the region where the MNC has located its headquarters, is defined as the member countries of the EU. Instead of taking a categorical approach, as was done by Rugman and Verbeke, home-region orientation is treated as a continuous variable. The higher intraregional business activities – meaning MNCs' concentration on the home region – the higher will be the home-region orientation of a MNC. The specifications of threshold values demarcating the categories of regional orientation criticized in several prior publications (Osegowitsch and Sammartino, 2008; Stevens and Bird, 2004) are avoided in this research.

The paper is structured as follows: I will first depict the considered theories explaining MNCs' home-region orientation and develop corresponding hypotheses. The following section will describe the methodology of the empirical research, including sample description and operationalization of variables. Subsequently, results will be presented, followed by a detailed explorative analysis. Ultimately, the paper will close with a conclusion including interpretation of results, limitations for future research and encountered and constraining research limitations.

2. Theories and Development of Hypotheses

In the following section, the core arguments of the theories that will be analyzed regarding their potential ability to explain MNCs' home-region orientation will be presented. Based on

this, hypotheses will be developed and empirically tested. While most of the theories tested here are discussed in Wolf, Dunemann, and Egelhoff (2012), I have added path dependence theory. Sammartino and Osegowitsch (2013, p. 58) raise the question if MNCs might “get locked into region-centric mindsets as their initial location decisions unfold” and if MNCs’ home-region orientation might be a result of a path-dependent process.

2.1 Economic Theories Explaining MNCs' Home-region Orientation

The first set of theories is descended from economic theory, especially from regional (spatial) economics. Within this stream of research, the theories of new regionalism, new economic geography, and knowledge economy offer potential insight into the home-region orientation of MNCs.

2.1.1 Theory of the New Regionalism

The new regionalism has evolved out of the growing importance of regional trade agreements, such as NAFTA, EU, or Mercosur. Economic liberalization has significantly stimulated FDI and international trade within the member countries of these regional trade agreements under the new regionalism (Paas, 2003).

Several incentives exist for MNCs to concentrate the majority of their business activities in countries belonging to regional trade agreements. These incentives include the reduction of customs tariffs and antidumping duties, facilitated realization of FDI, preferential treatment of trade partners’ goods, and standardization of legal and customs procedures (Cook and Kirkpatrick, 1997; Ethier, 1998a, 1998b, 2001; Garnaut, 1994; Lorenz, 1993). Regional trade agreements will reduce the costs associated with FDI and international trade within regional trade agreements’ areas and promote the concentration of such business activities within regions (Greenaway and Milner, 2002). This argument is supported by research of Feils and Rahman (2011), discovering increased intraregional FDI flows by the formation of regional trade agreements.

Intraregional FDI and trade of MNCs located within these regions are stimulated by regional trade agreements and the two tend to reinforce each other. As a result, an intraregional concentration of economic activity develops in most MNCs (Ethier, 2001; Feils and Rahman, 2011). Thus, fully consistent with existing literature, I derive the following hypothesis:

H1. The higher the degree of economic liberalization within the home region of a MNC, the higher will be the respective MNCs’ home-region orientation.

2.1.2 Theories of the New Economic Geography and Knowledge Economy

While in a previous paper by Wolf, Dunemann, and Egelhoff (2012) the theories of the new economic geography and the knowledge economy were treated separately, they will be combined in the following due to their various overlaps and similarities. Both theories acknowledge the existence of agglomeration forces leading to economic concentrations (Dunning, 2000; Krugman, 1991; Sheehan and Grewal, 2000; Sölvell and Birkinshaw, 2000). Whereas the new economic geography considers a wider range of agglomeration forces, including effects stemming from intensive exchange of information among firms and technology spillovers (Fujita, 2007), the knowledge economy concentrates on the rising knowledge intensity of firms, which increases agglomeration forces and generates higher economic concentration (Sheehan and Grewal, 2000). Hence, both theories cover the same topic, even though the knowledge economy focuses on the effects of knowledge, which is only one aspect of agglomeration forces within the new economic geography (Sheehan and Grewal, 2000; Sölvell and Birkinshaw, 2000).

The main argument of new economic geography is that economic activities tend to concentrate geographically in certain locations, similar to Marshalls' (1922) research on the physical concentration of business firms. Agglomeration forces will reinforce this concentration while dispersion forces lead to a reduction of concentration of economic activity (Krugman, 1991, Fujita, 2007). Associated with these forces, it is argued that a process of circular causation exists, intensifying the strength and speed of geographical concentration.

Agglomeration forces evolve based on three effects: Market size effects, condensed labor market effects, and effects stemming from increasing returns in production (Fujita, 2007). Accordingly, business firms strive for backward linkages; hence they prefer locations with good access to large markets to realize significant economy of scale effects. Additionally, large markets provide so-called forward linkages, allowing a local production of intermediate goods and leading to a decrease in the cost of adjacent products (Fujita, 2007). The concentration of economic activities also results in larger labor markets as more employees offering specific skills settle in these locations because of the greater availability of potential employers. As a result, demand for and supply of labor increases, which is beneficial to both employees and employers (Fujita, 2007; Krugman, 1991; Marshall, 1922). The effects stemming from increasing returns in production correspond to technology spillover effects, occurring due to the intensive exchange of information among firms within agglomerations, and result in reduced production costs as well as improvement of production quality. Based on circular

causation, these three agglomeration forces reinforce each other and lead to an even greater accumulation of business firms and potential employees in the region (Fujita, 2007; Fujita and Mori, 2005).

Even though economic agglomerations tend to occur mainly on a national or even more a local level, new economic geography's arguments are also relevant for the explanation of MNCs' home-region orientation (Wolf, Dunemann, and Egelhoff, 2012). If more relevant economic agglomerations exist within the home-region of a MNC, the more likely the MNC will source its inputs and sell its outputs within its home-region. Hence, it can be expected that MNCs will locate the better part of their business activities within the home region to benefit from existent agglomeration forces.

The theory of knowledge economy argues that these agglomeration forces are intensified by increased knowledge intensity, enhancing the concentration of economic activity (Sheehan and Grewal, 2000). The capability to combine different types of knowledge to develop new products and explore new markets is a crucial success factor for MNCs. MNCs will concentrate their knowledge-intensive business activities in those agglomerations that are characterized by the existence of relevant knowledge held by other firms or research institutions to reduce distance-related transaction costs and benefit from knowledge spillovers (Dunning, 2000).

Based on this argumentation, MNCs depend on the cooperation with public research units, networks of suppliers, firms with complementary competencies, key customers, or other knowledge-intensive firms within these agglomerations (Sheehan and Grewal, 2000). Especially shortened product life cycles, more frequent innovation, and increasing R&D intensity lead to a higher degree of inter-dependency and to a necessity of cooperation (Cantwell and Janne, 1999). Similar to the theory of new economic geography, MNCs locate their business activities in those regions exhibiting relevant knowledge-intensive agglomerations. As most of the MNCs have located their knowledge-intensive activities in agglomerations close to their home-market and the proximity of their headquarters, it can be expected that through the generated forces, MNCs are more home-region oriented. Research on the location of production and R&D of automobile manufacturers supports this assumption (Colovic and Mayrhofer, 2011). Especially German manufacturers concentrate their production and R&D activities within their home region. For example, Porsche manufactures 100 %, Daimler 69 % and BMW 85 % of their cars within the EU (CCFA, 2009).

Based upon the theories of new economic geography and knowledge economy, I derive the following hypothesis:

H2. The more relevant the agglomeration forces in the home region for a MNC, the higher will be the respective MNCs' home-region orientation.

2.2 Psychological Theories Explaining MNCs' Home-region Orientation

Besides economic theories, psychological theories give further insights why MNCs are home-region oriented by analyzing the behavior of MNCs' strategic decisions makers (Wolf, Egelhoff, and Dunemann, 2012). These psychological theories include psychic distance theory and escalating commitment theory.

2.2.1 Psychic Distance Theory

Johanson and Vahlne (1977), Johanson and Wiedersheim-Paul (1975) and Vahlne and Wiedersheim-Paul (1973) have been widely accepted as the originators of the concept of psychic distance. Johanson and Wiedersheim-Paul (1975, p. 308) defined it as "all factors which prevent or disturb the flow of information between the respective MNC and its markets". The factors influencing the perceived differences between home and foreign markets include, among others, political system, economic development, legal system, commercial and political ties (e.g., Brewer, 2007; Dow and Karunaratna, 2006).

Numerous studies have claimed a link between the concept of psychic distance and the internationalization patterns of MNCs (for a summary see Brewer, 2007), discovering that the volume and the location of MNCs' international activities can be explained by differences of psychic distance factors (Dow and Karunaratna, 2006). Therefore, MNCs are more likely to invest in foreign locations exhibiting a smaller psychic distance to their home country. Additionally, Dow and Karunaratna (2006) showed that these differences were positively related to the geographic distance between countries. Based on these arguments and according to Wolf, Dunemann, and Egelhoff (2012, p. 78), "the general preference of MNC managers to minimize psychic distance within an MNC will also tend to steer MNCs toward a home-region orientation". Thus:

H3. The greater managers' perceptions of the importance of psychic distance between the home region and other regions, the higher will be the respective MNCs' home-region orientation.

2.2.2 Escalating Commitment Theory

Escalating commitment theory describes a situation where decision makers hold on to a taken path of action, even though it has not yet led to the expected success and is unlikely to do so in the future (Brockner, 1992). Especially in strategic decision-making, such as the selection of international market entry forms, escalating commitment behavior is evident (Schwenk, 1984). Prior research has depicted escalating commitment theory in great detail (for reference, see e.g., Bazerman, Guiliano, and Appelman, 1984; Malnight, 1995; Staw, 1981; Whyte and Fassina, 2007). In the following, the focus will be on the conditions leading to escalating commitment to derive a potential explanation of MNCs' home-region orientation. Referring to Brockner (1992), Wolf, Dunemann, and Egelhoff (2012, p. 80) argue that the existence of escalating commitment is grounded on four conditions: "(1) a realized initial investment into an action has not yet led to success; (2) the managers decide to invest additional resources into the same action; (3) the possibility for managers to stop this action generally exists, but would lead to a loss of the conducted investments; and (4) it is unclear whether additional investments will help to realize the achieved goal".

Wolf, Dunemann, and Egelhoff (2012) interpret these conditions in the context of MNCs' home-region orientation and come to the conclusion that it can be characterized as a result of an escalating commitment process. Concerning the first condition, Aharoni (1966) delivered an indication for its validity. He discovered international managers' tendency to recoil from extending FDI that might enhance MNCs' profitability because they underestimate the chances and overestimate the risk related to FDI. Additionally, at least some research on the relationship of performance and MNCs' home-region orientation shows that MNCs are able to increase their profit by extending their international business activities beyond the home region (Beleska-Spasova and Glaister, 2010; Delios and Beamish, 2005, Dunemann, 2013).

The second condition also complies with home-region oriented MNCs since they have maintained their respective level of regional orientation over time (Rugman and Oh, 2007). The third condition is also supported since MNCs are free to expand their international investments to foreign regions, if they possess sufficient resources. The last condition applies to home-region oriented MNCs as well since it remains unclear whether additional investments within the home region will lead to the expected success. Accordingly, I expect that if escalating commitment behavior in decisions on FDI is evident within MNCs, they are more likely to stay home-region oriented. Thus:

H4. The more frequently a MNC has invested in locations within its home region with questionable future success, the higher will be the respective MNCs' home-region orientation.

2.3 Sociological Theories Explaining MNCs' Home-region Orientation

Based on sociological theories, it can be argued that MNCs' home-region orientation might be a result of decision makers' bounded rationality, driven by internal and external social interaction as well as historical processes. Hence, the theories of population ecology and neoinstitutional theory are depicted.

2.3.1 Population Ecology

According to population ecology, MNCs belong to populations of firms, which have evolved in a common setting, such as a specific industry or technological environment (McKelvey, 1978, 1982). Populations of MNCs are associated with a particular gene pool of competencies (comps) persistent over generations of employees and shared by other firms of its population (McKelvey, 1982; McKelvey and Aldrich, 1983). Comps can be defined as certain management skills, innovation processes, analytical techniques, and patterns of behavior, which are necessary to the MNC to survive in its environment (McKelvey, 1978; McKelvey and Aldrich, 1983). They are adapted to the economic and business environment of MNCs and are quite stable over time. As a consequence, replacing MNCs' gene pool and implementing new patterns of behavior will be challenging (Stinchcombe, 1965). MNCs' ability to change and adapt to different environmental circumstances is therefore reduced, resulting in structural inertia (Hannan and Freeman, 1984).

Thus, Wolf, Dunemann, and Egelhoff (2012, p. 81) argue that MNCs will be home-region oriented since they have "accumulated competencies, techniques, and behavioral patterns that have proven themselves in the region in which the MNC originated, and since it is generally unclear if these competencies will be of similar value in other regional settings". Research by Nonaka (1994) and Javidan et al. (2006) uncovered the significant difference of the process of knowledge creation in business firms and leadership patterns in various regions. Further on, Duysters and Hagedoorn (2001) revealed that MNCs exhibit strategy and organization parameters typical to their respective home region and unlikely to be adaptable to foreign regions. As a result, structural inertia and the existence of certain comps specific to the MNCs' home region environment will reduce the MNCs' ability to adjust to foreign regions to survive beyond home regions' environments. Thus, based on population ecology, I expect:

H5. The more adapted a MNC's comps to its home region, the higher will be the respective MNCs' home-region orientation.

2.3.2 Neoinstitutional Theory

Neoinstitutional theory focuses on managers heavily relying on the behavior and expectations of their social environment, especially if uncertainty is high, since they are unable to reliably judge the economic effectiveness of their strategies and actions (DiMaggio and Powell, 1983). These behaviors and actions serve as primary reference points for managers' own decision-making and actions (Meyer and Scott, 1983). Furthermore, the behavior of business firms in the MNCs' intermediate inter-organizational environment provides legitimization and information for their own decision-making and actions, and serves as further reference points (DiMaggio and Powell, 1983). Neoinstitutional theory points out that MNCs base their behavior on pressures from two groups of actors within their environment: Institutional actors and competitive actors, both influencing MNCs decision-making in terms of FDI.

With regard to the institutional environment, MNCs are confronted with strong pressures from labor unions, trade associations, and political actors. They are able to influence MNCs by sanctioning or promoting a certain type of behavior (Wolf, Dunemann, and Egelhoff, 2012). As these actors often are domestic or regional and the institutional environment is more legally regulated (Oberg, Schoellhorn, and Woywode, 2004), MNCs confronted by strong pressures from their institutional environment will show a higher degree of home-region orientation. Thus:

H6a. MNCs facing strong pressures from institutional actors will show a higher degree of home-region orientation than those MNCs facing less institutional pressure.

The second group of actors influencing MNCs decision-making on the location of FDI is aggregated in the competitive or inter-organizational environment composed of MNCs' competitors, customers, and suppliers (Henisz and Delios, 2001; Martin, Swaminathan, and Mitchell, 1998; Oberg, Schoellhorn, and Woywode, 2004). Henisz and Delios (2001), for instance, discovered that MNCs are more likely to locate a plant in a foreign country the more firms of the same industry and firms' suppliers have located their plants in the same foreign location. Supporting this research, Guillen (2002) showed that business group experience and imitation among firms from the same home-country industry lead to similar internationalization behavior. Accordingly, MNCs belonging to the same business group or industry exhibit the tendency to expand to the same foreign countries and regions. Thus:

H6b. The more a MNC invests in the same countries as its competitive environment, the higher will be the respective MNCs' home-region orientation.

2.4 Path Dependence Theory

Path dependence theory is another potential explanation for MNCs' home-region orientation (Sammartino and Osegowitsch, 2013). Similar to population ecology, path dependence theory argues that the evolution of institutions depends on historic events influencing the behavior of firms (David, 1985; North, 1990; Arthur, 1994). Path-dependent processes can be understood as non-ergodic, meaning that multiple equilibria or outcomes can result. These multiple equilibria implicate that path-dependent processes do not necessarily result in an optimal or clear-cut outcome (Ackermann, 2003). Further, these processes are influenced by the paths taken in the past, which determine the outcome (Ackermann, 2003; Araujo and Rezende, 2003). Self-reinforcing mechanisms are seen as the source of this path-dependency (Pierson, 2000). With each step along a certain path, these mechanisms will increase the likelihood to further follow the taken path. The result of this process is a lock-in, at which point alternatives to the taken path become less likely and the path becomes deterministic (Arthur, 1994).

The concept of path dependency has been used to suggest the presence of self-reinforcing mechanisms in the internationalization processes of firms. For instance, Chang and Rosenzweig (2001) show that firms tend to choose entry modes to internationalization based on those used in the past and suggest that internationalization is a path-dependent process. Further, Benito and Welch (1994) exhibit that accumulated experience and knowledge, usually supporting further international expansion, might also constrain firms from further internationalization.

In order to depict the home-region orientation of MNCs as path-dependent, the requirements of a path-dependent process need to be compared to the internationalization process eventually leading to home-region orientation. First of all, nonpredictability can be attested with regard to the internationalization process since, according to Rugman (2000) and Rugman and Verbeke (2004, 2005), different outcomes of this process are possible – home-regional, bi-regional, host-regional or global orientation – and cannot be predicted at the outset of the internationalization process. The possibility of different outcomes of the internationalization process are also in favor of non-ergodicity, since multiple equilibria are feasible and are based on the past decisions with respect to MNCs' regional orientation. As to inflexibility, whether firms follow a certain kind of internationalization process and exhibit one of the four kinds of regional orientation, it remains open if a shift from one kind of orientation to another is possi-

ble within the near future. Fourth, the resulting orientation might lead to inefficiency, meaning that a different kind of regional orientation might be a superior solution. Some researchers attested home-region orientation a positive impact on performance (Banalieva and Santoro, 2009; Sukpanich, 2007; Rugman, Kudina, and Yip, 2007; Rugman and Oh, 2010), while others indicated the opposite (Beleska-Spasova and Glaister, 2010; Chen, 2007; Dunemann, 2013). Nevertheless, it remains unclear if home-region orientation of MNCs is a superior solution and it can be expected that at least for some MNCs it is an inferior solution.

The following reasoning further underlines that the process towards home-region orientation can be characterized as path-dependent: Investments into the home region, which are not transferable to other regions, might lead to a path-dependent process. The conducted investments as well as future investments into that region might lead to a lock-in. This can be a result of the increased commitment to the home region, leading to self-reinforcing mechanisms due to e.g., economy of scale effects. Second, firms will prefer investments into their home region as long as returns from the home region will be higher than those from a foreign region including the costs accruing with the expansion to this foreign region (Bahlmann et al., 1996). Both arguments support the notion of path dependence theory that history matters and past events influencing future events (Beckman and Burton, 2008; Berman, 1998; Mahoney, 2000; Pierson, 2000). Thus:

H7. The more a MNC will invest into those regions it has invested to in the past, the higher will be the respective MNCs' home-region orientation.

3. Methodology

3.1 Sample and Data Collection

The sample consists of German MNCs derived from a list of top 500 German companies in 2009 (<http://top500.welt.de/list/2009/U/>), measured by total sales, including MNCs from manufacturing and service industries. In order to analyze MNCs and neglect purely domestic companies, a threshold of a minimum of 10 % of international sales was set, which is in line with prior research (e.g., Banalieva and Santoro, 2009; Gomes and Ramaswamy, 1999). Data was collected at the firm level via an internet-based questionnaire. Managers involved in strategy development of the investigated MNCs were contacted as sources of information. In sum, the total sample consists of data on 48 completed questionnaires, resulting in a response rate of 35 %. Nevertheless, missing values exist in the data set. They make up 2.2 % of the total amount of data points. These missing values were substituted via imputation of missing

values by maximizing the expectation values. This procedure is accepted as one of the most advanced techniques substituting missing values and minimizing distortion of data relationships (Graham, 2009). Regarding the total sample size, the relatively small sample size does not pose any problems for the empirical data analysis. Even though general predictions of optimal sample size are not possible, Skiera and Albers (2000) argue that the number of observations should be at least three times the number of estimators to derive robust relationships in multiple linear regression models. In the present study, this requirement is fulfilled as the number of estimators is 11 and total sample size consists of 48 MNCs.

3.2 Measures

3.2.1 Dependent Variables

The degree of home-region orientation of MNCs was used as dependent variable, measured as the ratio of intraregional sales to total sales (Chen, 2007; Osegowitsch and Sammartino, 2007; Sukpanich, 2007) and the ratio of intraregional assets to total assets. Besides sales, Rugman (2000) and Rugman and Verbeke (2004, 2005) have tested assets as an additional indicator of MNCs' home-region orientation. Especially in terms of FDI, assets are more likely to reflect the regional orientation of MNCs. In both cases, respondents were asked to state the amount of assets and sales within the EU, including domestic assets and sales, in the questionnaire. Thus, the home region is defined as those countries that are members of the EU.

3.2.2 Independent Variables

New Regionalism

Since the concept of new regionalism is drawn from macro-economic theory, prior analysis has been based on aggregated data on FDI between countries (e.g., de Melo and Panagariya, 1992; Ethier, 1998b, 2001). Therefore, based on previous literature, testable arguments had to be developed describing economic liberalization and the reduction of tariffs between member states of a regional trading agreement. Accordingly, a formative construct was developed to describe the aspects of economic liberalization and to test whether these indicators of liberalization enhance intra-regional FDI. A formative construct was chosen because these indicators are likely to influence the level of economic liberalization (Diamantopoulos, Riefler, and Roth, 2008). It seems unlikely that an elevation of liberalization will affect all of these indicators together, but will already be achieved through change of one of the following indicators. Based on Ethier (1998a, 1998b, 2001) and Cook and Kirkpatrick (1997), five indicators were selected covering the most important aspects of economic liberalization. These include the

reduction of customs tariffs and antidumping duties (Ethier, 1998a, 2001), facilitated realization of FDI (Ethier, 2001), preferential treatment of trade partners' goods (Ethier, 2001), abolition of policy-induced price distortions (Cook and Kirkpatrick, 1997), and standardization of legal and customs procedures (Cook and Kirkpatrick, 1997; Garnaut, 1994; Lorenz, 1993). Respondents were asked to evaluate the importance of the respective indicators with regard to FDI on a 5-point scale, ranging from 1 = "very low importance" to 5 = "very high importance".

New Economic Geography and Knowledge Economy

Similar to the theory of new regionalism, both theories of new economic geography and knowledge economy stem from economic theory. Therefore, they have not been tested on a micro-economic level. In order to test the relevance of these theories with regard to the home-region orientation of MNCs, a formative construct was developed combining arguments of the respective theories. A formative construct is necessary since the indicators determine the degree of agglomeration (Diamantopoulos, Riefler, and Roth, 2008). Concerning new economic geography, the following arguments were identified to influence the agglomeration forces leading to economic concentration: Market size effects, availability of qualified labor, and positive competitive effects, such as economies of scale, high R&D intensity, high investments in intangible resources, and knowledge spillovers (Fujita, 2007, Krugman, 1991, 2007). Respondents were asked to evaluate the importance of all three aspects on a 5-point scale, ranging from 1 = "very low importance" to 5 = "very high importance".

The theory of knowledge economy argues that agglomeration forces stem from the existence of public research units, networks of suppliers, firms with complementary competencies, key customers, or other knowledge-intensive firms in certain regions (Sheehan and Grewal, 2000). Consequently, respondents were asked to evaluate the importance of the existence of relevant universities and research institutions as well as the existence of suppliers and customers supporting R&D of products and technologies within the region in which the MNC invests. As Audretsch (2000), Dicken (1999), and Krugman (1991) argued, knowledge spillovers are a main factor leading to economic concentrations. So, it seems reasonable to include the importance of knowledge spillovers within the region in which the MNC invests in the operationalization. The evaluation was based on a 5-point scale, ranging from 1 = "very low importance" to 5 = "very high importance".

Psychic Distance Theory

Psychic distance theory has been considered in several empirical studies (e.g., Brewer, 2007; Child, Rodrigues, and Frynas, 2009; Dow and Karunaratna, 2006), demonstrating the need for a broad-based multi-dimensional operationalization of this theory's central construct. Based on these prior studies, 14 indicators were identified to measure the importance of psychic distance. In line with Brewer (2007), a formative construct was developed out of these indicators, as these are likely to affect the perceived psychic distance between two countries. Since all indicators of psychic distance have been operationalized in prior research, I will shortly introduce each indicator below. For more information on the respective indicators of psychic distance and their underlying argumentation, I refer to the references made in connection with each indicator.

The first indicator is the level of education, influencing the way people communicate and interpret information (Cavusgil, 1980; Dow and Karunaratna, 2006; Johanson and Vahlne, 1977). The legal system is another factor identified to influence the perceived psychic distance since a well developed and functioning legal system is more attractive to MNCs from foreign countries (Child, Rodrigues, and Frynas, 2009; Evans and Mavondo, 2002; Ghemawat, 2001; O'Grady and Lane, 1996). Culture has also been included as a factor influencing psychic distance (e.g., Dow, 2000; Dow and Karunaratna, 2006). Another factor influencing psychic distance is business practice (e.g., Ali, 1995; Brewer, 2007; Evans and Mavondo, 2002; Johanson and Vahlne, 1977; O'Grady and Lane, 1996), as differences are likely to enhance the risk of entry into a foreign country (Evans and Mavondo, 2002). Differences in political systems are likely to affect MNCs' communications at two levels: On the business-to-government level and the business-to-business or business-to-consumer level (Dow and Karunaratna, 2006). These differences result in enhanced risk that foreign MNCs misjudge governments' actions and how other business firms react to interventions by the foreign government. Also, differences in religion have been acknowledged as a component of psychic distance (Dow and Karunaratna, 2006; Johanson and Vahlne, 1977). Differences in language are the most obvious and easiest factor of psychic distance to identify, adopted by various researchers (Ali, 1995; Brewer, 2007; Carlson, 1974; Child, Rodrigues, and Frynas, 2009; Dow and Karunaratna, 2006; Evans and Mavondo, 2002; Ghemawat, 2001).

The level of economic development of a country is one of the most important factors of psychic distance (Brewer, 2007; Carlson, 1974; Ghemawat, 2001). Research indicates that rich countries exhibit a higher level of international economic activity compared to their poorer counterparts (Ghemawat, 2001). Dow and Karunaratna (2006) further identified differences in

time zone as a factor of psychic distance. It is argued that different time zones and the resulting small or non-existent overlap in working hours between very distant markets might lead to uncertainty with regard to the ability to rapidly resolve urgent problems.

Geographic distance has been identified as a factor of psychic distance by various researchers (Brewer, 2007; Carlson, 1974; Child, Ng, and Wong, 2002; Ghemawat, 2001) and has been found to be the “the single most influential ‘trade inhibitor’” (Dow and Karunaratna, 2006, p. 593). Even in the case of FDI, Ghemawat (2001) argues that geographic distance has a negative effect on investment flows since information networks should be kept in close proximity. Brewer (2007) introduced commercial ties as a further factor. He argues that commercial connections between the home and the foreign country increase the level of knowledge about the respective countries and encourage information flows. Historic ties between home and foreign country are likely to increase the level of knowledge of the countries and therefore enhance trade and investments between these countries (Brewer, 2007; Dow and Karunaratna, 2006; Ghemawat, 2001). Even though similar to political systems, political ties are treated as a separate factor since they refer more to the inter-state political environment, namely bilateral and regional trade agreements and defense treaties between countries (Brewer, 2007; Evans and Mavondo, 2002; Ghemawat, 2001). At last, the quantity and quality of information available on foreign countries is a factor of psychic distance (Brewer, 2007; Carlson, 1974).

Respondents were asked to evaluate the importance of each factor of psychic distance on a 5-point scale, ranging from 1 = “very low importance” to 5 = “very high importance”. For better understanding, the factors have been separated into two groups. The first set of factors refers to the importance of similarities between the home and the target country, while the second set refers to certain attributes between the home and the target country. Therefore, in the second set, respondents were asked to evaluate the importance of these attributes. In order to test the influence of psychic distance theory on the home-region orientation of MNCs, both formative constructs developed above are combined in one construct, reflecting perceived psychic distance.

Escalating Commitment Theory

In order to test whether the reasoning of escalating commitment is a likely explanation of MNCs' home-region orientation, it seems reasonable to analyze whether escalating commitment has happened in the past with regard to MNCs' investments in foreign countries or regions and if escalating commitment is more likely to happen within the home region or beyond. Therefore, the focus of the analysis was put on the first two aspects of escalating com-

mitment as these may lead to the conclusion that escalating commitment is a potential theory explaining home-region orientation. It was not the target of the analysis to test the last two conditions mentioned by Brockner (1992). Regarding the third condition, questioning the respondent about his/her ability to move away from a home-region orientation is hardly possible and may lead to no robust and biased results. It can be reasoned that decisions to stop investments in international locations are more likely to be a group process involving more than one manager. Referring to the fourth condition, it can be argued that respondents are unlikely to judge whether a more global orientation would result in increased MNCs' performance, since this aspect is probably beyond their scope of understanding. Consequently, conditions three and four are not included in the questionnaire. Hence, respondents were asked to rate on a 5-point scale, ranging from 1 = "never" to 5 = "very often", if, in the past, the MNC had invested in foreign locations where the MNC had already invested before, even though the likelihood of a future success of these investments was low or not evident. In a second question, respondents were asked to rate if these investments, that were continued even though future success was unlikely, were more likely to happen in locations outside the home region than within. Only those respondents who rated the first question with a value of at least 3 were referred to this second question. Here, a 3-point scale was provided ranging from 1 = "more often" to 3 = "less often". At this point, a 3-point scale seemed more appropriate since the major concern was if escalating-commitment behavior was more evident within or beyond the home region. Thus, a more detailed scale, such as a 5-point scale, was not necessary and might have complicated responses, at the same time giving little additional information.

Population Ecology

Up to date, population-ecological processes have not been argued to be an influencing factor of the home-region orientation of MNCs (for a good overview of research topics on population ecology, see Salimath and Jones, 2011). Therefore, a testable operationalization of its arguments had to be developed. In order to analyze whether MNCs' comps are adapted to their home region and are not likely to be transferable to interregional settings, a set of comps most likely to reflect the gene pool of MNCs was developed, which can be empirically tested. Based on McKelvey and Aldrich (1983, p. 112), "comps are defined as the elements of knowledge and skill that, in total, constitute the dominant competence of an organization". The dominant comps include the technological and organizational knowledge and skills necessary for MNCs to survive in their competitive environment. Based on this definition, in this study, MNCs' comps are operationalized as management skills, innovation processes, analytical techniques, and patterns of behavior (McKelvey, 1978; McKelvey and Aldrich, 1983).

These were identified to be influential in the process of internationalization and to reflect the dominant comps of MNCs. They include the abilities of differentiation, coordination, control, measurement of effectiveness, organizing processes and innovation of technology (McKelvey and Aldrich, 1983). Consequently, these four aspects were taken as indicators to test the existence of comps adjusted to MNCs' home region. A reflective multi-item construct was used, separating the comps into two sets: (1) management skills and analytical techniques and (2) innovation processes and patterns of behavior. A reflective rather than a formative construct was chosen since these four indicators reflect MNCs' gene pool and changes of the dominant comps are likely to influence all four indicators (Diamantopoulos, Riefler, and Roth, 2008). Furthermore, all four indicators are similar as they all describe certain patterns of behavior and of doing business. Respondents were asked to evaluate on a 5-point scale, ranging from 1 = "not at all" to 5 = "to a great extent", if relevant comps exist within their respective MNC that are more beneficial within the home region than beyond it. If respondents rated the first set of questions with at least a value of 4, they were asked in a second set to evaluate MNC's ability to adapt these comps in a way that they are equally beneficial beyond their home region. This ability to adapt was evaluated on a 5-point scale, ranging from 1 = "very easy" to 5 = "very difficult". Cronbachs' alpha has a value of .74, which exhibits a high internal consistency. It shows that both indicators properly reflect MNCs' comps as argued in population ecology. Factor analysis supports this notion. Not all respondents answered the second set of questions. Consequently, Cronbachs' alpha was calculated on a subsample of 14 respondents only, who answered both question of this second set. Therefore, these results of the inter-item correlation and Cronbachs' alpha have to be treated with caution due to small sample size.

Neoinstitutional Theory

Prior research analyzing neoinstitutional theory has mostly been based on aggregated data on firms and industries (e.g., Haveman, 1993; Henisz and Delios, 2001; Martin, Swaminathan, and Mitchell, 1998). Consequently, an analysis based on data from questionnaire and therefore a proper operationalization of the theory is missing. Isomorphism, as described in neoinstitutional theory, can be separated into two types, namely institutional and competitive (DiMaggio and Powell, 1983; Fennell, 1980; Meyer, 1979). Accordingly, I follow this definition and differentiate between institutional and competitive actors. With regard to the first type, a formative construct was developed, consisting of three kinds of institutional actors most likely to influence MNCs' isomorphous behavior (Meyer and Rowan, 1977; Scott, 1992; Scott and Meyer, 1991; Oberg, Schoellhorn, and Woywode, 2004): Labor unions, trade associations, and political actors. A formative construct was used since institutional actors influence

MNCs' behavior independently. Opposed to the assumption of a reflective construct, in this case, the indicators determine the construct (Diamantopoulos, Riefler, and Roth, 2008). Consequently, respondents were asked to evaluate to what extent their respective MNC was influenced by these external stakeholders in decisions on expansion to foreign locations on a 5-point scale ranging from 1 = "not at all" to 5 = "to a great extent".

Concerning the second type of isomorphism, a formative construct was developed including customers, suppliers, and competitors, that are most likely to be reference points in decisions on expansion to foreign locations (Henisz and Delios, 2001; Martin, Swaminathan, and Mitchell, 1998; Scott, 1992; Scott and Meyer, 1991; Oberg, Schoellhorn, and Woywode, 2004). The reason for a formative as opposed to a reflective construct is equivalent to that of the first type of isomorphism. Similar to the first type, respondents were asked to evaluate on a 5-point scale, ranging from 1 = "not at all" to 5 = "to a great extent", to what extent their MNC invests into foreign countries because other firms of the same industry have invested in the respective foreign country.

Path Dependence Theory

Little large-scale empirical research has been conducted analyzing path dependence theory, since some aspects of the theory are challenging with regard to their operationalization and in terms of data availability. Especially the argument of non-ergodicity, namely the effects of small historic events leading to a lock-in to a certain path (Arthur, 1994), poses serious problems in empirical analysis, especially regarding the process and the level of internationalization. Finding out about the reasons why a MNC has internationalized to a certain country or region in the past is a challenging task most likely not leading to results. Therefore, I have applied a broader version of path dependence – arguing future events to be influenced by past events – focusing on the argument that history matters (Beckman and Burton, 2008; Mahoney, 2000; Pierson, 2000; Sewell, 1999). Hence, the main argument of path dependence theory in this context – potentially indicating its relevance in explaining MNCs' home-region orientation – is that investments in a certain country or region in the past will lead to more investments in that country or region in the future. Based upon this reasoning, respondents were asked to evaluate on a 5-point scale, ranging from 1 = "not at all" to 5 = "to a great extent", if their respective MNC is likely to invest in regions it has invested in the past.

3.2.3 Control Variables

I included three control variables. The first is firm age, measured as the natural logarithm of the number of years since incorporation. Age is likely to have an influence on MNCs' home-region orientation and to influence MNCs' experiences (e.g., Banalieva and Santoro, 2009; Lee and Marvel, 2009; Qian et al., 2008). Firm age is expected to account for learning aspects and international experience that increase with age. Second, I controlled for firm size, measured as the natural logarithm of the number of employees (e.g., Beleska-Spasova and Glaister, 2010; Goerzen and Beamish, 2003; Lee and Marvel, 2009). It can be expected that firm size has an influence on home-region orientation since larger MNCs possess more resources to finance a global orientation in contrast to smaller MNCs. At last, in order to test for differences of MNCs' home-region orientation in different industries, I included an industry-dummy variable to control for industry effects (Beleska-Spasova and Glaister, 2010; Rugman and Sukpanich, 2006; Sukpanich, 2007), differentiating between manufacturing (coded 0) and service industries (coded 1). In those cases in which MNCs are active in manufacturing and service industries, their characteristics and sales data were analyzed and MNCs were categorized as either manufacturing or service MNCs according to their respective focus on one of the two industries. However, only few MNCs are active in both industry sectors. It is expected that manufacturing and service industries show dissimilar patterns of geographic diversification due to differences in their structural characteristics.

4. Statistical Analyses

4.1 Descriptive Statistics

Table 1 and 2 report descriptive statistics and the correlations of all variables. On average, German MNCs operated at a ratio of 68 % of foreign sales to total sales (FSTS) and 60 % of their total assets and sales within the home region. The analyzed MNCs vary in their ratio of FSTS from 10-92 %. Results further show that the two dependent variables representing MNCs' home-region orientation positively correlate with each other on a highly significant level ($r = .69$, $p < .001$). Consequently, MNCs characterized by a high level of intraregional assets also exhibit a high level of intraregional sales.

The formative construct of new regionalism is perceived as being of high importance, represented by an average value of 3.30 on a scale from 1 to 5 (table 1). Table 2 reports a weak positive correlation with intraregional assets ($r = .28$, $p = .05$). Obviously, the lower are barriers to trade and investment and consequently the higher economic liberalization, the higher

the intraregional orientation in terms of assets. Concerning the construct of new economic geography and knowledge economy, results indicate a high importance with a mean value of 3.71 and a significant negative correlation with intraregional sales ($r = -.31, p < .05$). The negative correlation efficient contradicts the theoretical argumentation that certain regional characteristics enhance MNCs' home-region orientation. Instead, these characteristics obviously lead to a greater interregional orientation. Consequently, it can be argued that relevant agglomerations do not necessarily exist within a MNC's home region and are more likely to be found in foreign regions.

Table 1. Descriptive Statistics of all Variables

	Observations	Mean	S.D.	Minimum	Maximum
Intraregional Assets	48	.60	.26	.05	1.00
Intraregional Sales	48	.60	.24	.15	.99
FSTS	47	.68	.19	.10	.92
New Regionalism	48	3.30	.80	1.40	4.80
New Economic Geography/Knowledge Economy	48	3.71	.62	2.17	4.83
Psychic Distance	48	2.70	.47	1.64	3.64
Escalating Commitment I	48	2.61	.88	1.00	4.00
Escalating Commitment II	20	1.85	.67	1.00	3.00
Population Ecology I	48	3.29	.87	1.00	5.00
Population Ecology II	25	3.44	.95	1.00	5.00
Neoinstitutional I	48	2.30	1.00	1.00	4.00
Neoinstitutional II	48	3.07	.77	1.67	5.00
Path Dependence	48	3.57	1.28	1.00	5.00
Industry	48	.67	.48	0	1
Firm Size	48	10.34	1.51	7	13
Firm Age	48	4.36	.91	1.10	5.29

Intraregional Assets = Intraregional Assets to Total Assets

Intraregional Sales = Intraregional Sales to Total Sales

Home-region Orientation = Mean of Intraregional Assets and Intraregional Sales

FSTS = Foreign Sales to Total Sales

Industry = Industry Dummy (0 = manufacturing, 1 = service)

Firm Size = \ln (number of employees)

Firm Age = \ln (number of years since incorporation)

Table 2. Correlations of Variables

	Intraregional Assets	Intraregional Sales	New Regionalism	New Economic Geography /Knowledge Economy	Psychic Distance	Escalating Commitment I	Escalating Commitment II	Population Ecology I	Population Ecology II	Neoinstitutional I	Neoinstitutional II	Path Dependence	Industry	Firm Size	Firm Age
Intraregional Assets	1.00														
Intraregional Sales	.69**	1.00													
New Regionalism	.28	.10	1.00												
New Economic Geography /Knowledge Economy	-.23	-.31*	.15	1.00											
Psychic Distance	.33*	.18	.53**	-.11	1.00										
Escalating Commitment I	.06	.22	-.07	-.10	-.28	1.00									
Escalating Commitment II	.61**	.51*	.11	-.51*	.31	.08	1.00								
Population Ecology I	.15	.32*	.10	-.19	.29*	-.01	.24	1.00							
Population Ecology II	.08	.11	-.24	-.07	-.14	-.43*	.39	.08	1.00						
Neoinstitutional I	.14	.11	.05	-.18	.19	-.09	-.08	.27	-.08	1.00					
Neoinstitutional II	-.08	-.03	.03	-.03	.14	.10	-.17	.08	-.17	.07	1.00				
Path Dependence	.15	.16	-.01	-.39**	.29*	-.01	.49*	.33*	.01	.30*	.02	1.00			
Industry	-.02	-.17	.22	.00	.18	-.48**	-.10	.04	.39	.23	-.03	-.12	1.00		
Firm Size	-.23	.12	-.42**	.11	-.24	.04	-.42	.21	.07	.01	-.10	-.17	-.16	1.00	
Firm Age	-.14	-.24	-.02	.14	-.09	-.07	-.21	-.02	.14	-.03	.16	-.18	.21	-.13	1.00

* Correlation is significant at .05 % level

** Correlation is significant at .01 % level

The construct of psychic distance displays a significant positive correlation with intraregional assets ($r = .33, p < .05$), even though its arguments seem to be of comparatively low relevance, represented by an average evaluation of 2.70. The positive correlation coefficient is in line with the theoretical argumentation, stating that with increased perceived psychic distance, MNCs tend to be more home-region oriented. The variable of escalating commitment I, rated at a mean value of 2.61, exhibits only a weak significant correlation with intraregional sales ($r = .22, p = .13$). However, the correlation coefficient has the predicted positive sign, at least partially supporting the expected argumentation. The second variable of escalating commitment, stating that it was more likely to happen outside the home region than within, exhibits a high mean value of 1.85, on a scale from 1 to 3, and high significant positive correlation coefficients with intraregional assets and sales ($r = .61, p < .01$ and $r = .51, p < .05$). The result is an indicator that escalating commitment does lead to a MNCs' home-region orientation. Nonetheless, results of the variable of escalating commitment II need to be treated carefully as the number of respondents who evaluated this variable is very low ($N = 20$).

Concerning the first variable of population ecology, arguing that certain MNCs' comps are more beneficial within the home region than beyond it, results exhibit a high mean value of 3.29 and a significant positive correlation coefficient with intraregional sales ($r = .32, p < .05$). This result is in line with the theoretical argumentation that MNCs' comps, more adapted and therefore more beneficial to the home region, lead to a higher home-region orientation. The second variable of population ecology, stating the ability to adapt MNCs' comps to foreign regions, even though it is of high relevance (mean value of 3.44), shows no significant correlation with the independent variables of intraregional assets and sales. The first variable of neoinstitutional theory, concerning the influence of the institutional environment, shows a low relevance to MNCs and no significant correlation with either of the two dependent variables. Unfortunately, the second variable of neoinstitutional theory, dealing with the competitive environment of MNCs, bears no significant correlation with any of the variables analyzed, even though it is of relatively higher relevance with a mean value of 3.07. The variable of path dependence shows that MNCs tend to invest in countries they have invested in the past, represented by the high mean value of 3.57. It does not correlate with any of the independent variables.

In the following section, I will further analyze these relationships by conducting a regression analysis to derive a clearer picture of the theories' potential to explain MNCs' home-region orientation.

4.2 Testing of Hypotheses

The empirical analysis of the relationships between the dependent and independent variables was conducted via standard multiple linear regression models. Table 3 reports the estimation results of the linear regressions for the two dependent variables: Intraregional assets and intraregional sales. Unfortunately, both regression models yielded no significant results at all, supporting none of the hypotheses. The adjusted R^2 are very low at levels of .013 and .075, stating that both models are not able to significantly explain MNCs' home-region orientation. The same can be said for the F-values of both models, which are not significant at the given sample size. The variance-inflation-factor (VIF), testing for problems arising from multicollinearity, reports no higher values than 1.98. This can be characterized as within its uncritical limits since if VIF-values tend towards 1, problems of multi-collinearity can be disregarded. Critical values are above 10, while values above 2 might already result in weak negative effects on regression estimates (Miles and Shevlin, 2001).

Table 3. Regression with Intraregional Assets and Sales as Dependent Variables

	Dependent Variables			
	Intraregional Assets		Intraregional Sales	
New Regionalism	.11	(.55)	.14	(.72)
New Economic Geography/Knowledge Economy	-.19	(-1.11)	-.28	(-1.73)
Psychic Distance	.25	(1.25)	.13	(.69)
Escalating Commitment I	.10	(.57)	.18	(1.04)
Population Ecology I	.10	(.54)	.21	(1.24)
Neoinstitutional I	.11	(.65)	.04	(.22)
Neoinstitutional II	-.16	(-1.03)	-.07	(-.45)
Path Dependence	-.11	(-.61)	-.08	(-.44)
Industry	-.10	(-.53)	-.12	(-.67)
Firm Size	-.19	(-1.03)	.13	(.74)
Firm Age	-.07	(-.47)	-.13	(-.82)
N	48		48	
F	1.057		1.347	
R^2	.244		.292	
Adj. R^2	.013		.075	

* $p < .05$

VIF-values < 1.98

Coefficients are followed by t-statistics in parentheses

However, these insignificant results were already partially displayed in the mostly insignificant or weakly significant correlations in table 2. A reason for this might be the rather explorative character of the research project. With the exception of psychic distance theory, none of the other theories applied had been operationalized in form of empirically testable variables

before. Even though the variables have been developed closely based on prior research, no previous operationalization could be considered to verify the appropriateness of the taken path.

4.3 Explorative Analysis

In the following, I will analyze the indicators of those theoretical constructs that consist of more than one item in order to derive a tentative picture of potential relationships between these indicators and MNCs' home-region orientation. Reason for this explorative analysis is to evaluate if some of the components' indicators of the theories' arguments show a higher statistical relationship with the dependent variables of intraregional assets and sales compared to the constructs analyzed in the regression analysis. Results of the explorative analysis might shed further light on the theoretical arguments' explanatory contribution of MNCs' home-region orientation and enhance our understanding of this phenomenon. I will focus on those indicators showing a significant correlation coefficient. The theories of escalating commitment and path dependence are disregarded in the explorative analysis since they consist of one item only and their results are already presented in chapter 4.1.

New Regionalism

The formative construct of new regionalism consists of five items. Table 4 reports means, standard deviations and correlation coefficients of these items as well as intraregional assets and sales. All items show high mean values, ranging from 3.02 to 3.69, exhibiting a high relevance to MNCs in foreign investments. However, only three out of five items exhibit significant correlation coefficients with intraregional assets or sales. The first item, customs tariffs, reflecting the reduction of customs tariffs and antidumping duties, exhibits a weak significant correlation with intraregional assets ($r = .25$, $p = .09$). The item preferential treatment significantly correlates with intraregional sales ($r = .32$, $p < .05$), while the item price distortions significantly correlates with intraregional assets and sales ($r = .34$, $p < .05$ and $r = .32$, $p < .05$). Obviously, if the importance of all three of these items is higher, MNCs' home-region orientation in terms of intraregional assets and/or sales will be higher as well. Therefore, these three arguments of the theory of new regionalism are likely to explain MNCs' home-region orientation, which is in accordance with Ethier's (2001) line of argumentation: Intraregional economic liberalization will increase intraregional FDI flows and trade (Ethier, 2001). In the light of the reduction of trade barriers, according to the argumentation of the theory of new regionalism, distance between countries becomes more important as a determinant of investment flows and trade, favoring intraregional relative to interregional activities (Ethier, 2001).

Thus, member countries of regional trade agreements, committed to the reduction of trade barriers, are more attractive locations for either investments or trade to MNCs from other member countries, enhancing MNCs' home-region orientation (Beleska-Spasova and Glaister, 2009; Ghemawat, 2005). While the facilitated realization of FDI – even though of high importance to MNCs in general – and the standardization of legal customs procedures show no relation to MNCs' home-region orientation, reduction of customs tariffs and antidumping duties, preferential treatment of trade partners' goods, and abolition of policy-induced price distortions are reasons for MNCs to increase their home-region orientation. These three indicators are specific outcomes of regional trade agreements, especially within the EU, not likely to be found between countries outside of those agreements as they involve a deeper degree of integration (Ethier, 2001). Based upon these benefits, MNCs are able to reduce their costs of FDI and international trade relative to their international business activities outside of regional trade agreements. The former two indicators, on the other hand, involve a less deep degree of integration which might already exist between developed countries outside of regional trade agreements (Cook and Kirkpatrick, 1997). Consequently, even though these indicators of economic liberalization are important to MNCs, it can be argued that they are not exclusive to regional trade agreements. Instead, they might already be included in customary international law (Elkins, Guzman, and Simmons, 2008) or standard preferential trade agreements, such as those established under the World Trade Organization (Irwin, 1995) and thus do not necessarily enhance MNCs' home-region orientation.

Table 4. Correlations of New Regionalism Variables

	Mean	Standard Deviation	Intraregional Assets	Intraregional Sales	Customs Tariffs	Facilitated FDI	Preferential Treatment	Price Distortions	Standardization Procedures
Intraregional Assets	.60	.26	1.00						
Intraregional Sales	.60	.24	.69**	1.00					
Customs Tariffs	3.08	1.33	.25	.00	1.00				
Facilitated FDI	3.69	.95	-.06	-.10	.44**	1.00			
Preferential Treatment	3.23	.93	.32*	.17	.49**	.29*	1.00		
Price Distortions	3.46	.97	.34*	.32*	.48**	.25	.38**	1.00	
Standardization Procedures	3.02	1.12	.19	.02	.70**	.33*	.41**	.62**	1.00

* Correlation is significant at .05 % level

** Correlation is significant at .01 % level

New Economic Geography and Knowledge Economy

Correlation coefficients of the formative construct of new economic geography and knowledge economy reported a negative relationship with MNCs' home-region orientation, opposing that of the theoretical reasoning. However, only two indicators exhibit significant correlations with intraregional assets and sales. Table 5 shows that availability of qualified labor exhibits a weak significant negative correlation with intraregional assets ($r = -.28$, $p = .05$) and a significant negative correlation with intraregional sales ($r = -.36$, $p < .05$). Hence, foreign regions are expected to provide a higher availability of qualified labor, leading these MNCs to rather expand to foreign regions instead of the home region. This is underlined by the high mean score of 4.00 for the importance of this item, stating that the availability of qualified labor is a relevant factor in decisions on FDI. Surprisingly, the item influences intraregional sales more significantly than intraregional assets, even though the availability of labor is, at least theoretically, more likely to be related to FDIs. On the other hand, in favor of the result, more qualified labor can be expected to yield higher income, having a positive effect on sales.

Table 5. Correlations of New Economic Geography and Knowledge Economy Variables

	Mean	Standard Deviation	Intraregional Assets	Intraregional Sales	Market Size	Qualified Labor	Knowledge Spillover	Research Institutions	Suppliers and Customers	Competitive Effects
Intraregional Assets	.60	.26	1.00							
Intraregional Sales	.60	.24	.69** (.00)	1.00						
Market Size	4.60	.77	.11 (.46)	-.05 (.74)	1.00					
Qualified Labor	4.00	.85	-.28 (.05)	-.36* (.01)	.00 (1.00)	1.00				
Knowledge Spillover	3.33	1.02	-.03 (.82)	-.17 (.26)	.26 (.08)	.52** (.00)	1.00			
Research Institutions	2.64	1.25	-.17 (.24)	-.21 (.15)	-.11 (.46)	.48** (.00)	.53** (.00)	1.00		
Suppliers and Customers	3.58	1.30	-.34* (.02)	-.24 (.11)	.17 (.26)	.49** (.00)	.36* (.01)	.41** (.00)	1.00	
Competitive Effects	4.11	.83	-.11 (.48)	-.17 (.26)	.30* (.04)	.21 (.16)	.21 (.16)	.03 (.82)	.35* (.02)	1.00

* Correlation is significant at .05 % level

** Correlation is significant at .01 % level

Correlation coefficients are followed by significance levels in parentheses

The existence of suppliers and customers that support R&D of products and technologies reveals a negative significant correlation with intraregional assets ($r = -.34$, $p < .05$) and a negative weak significant correlation with intraregional sales ($r = -.24$, $p = .11$). Therefore, if such

suppliers and customers exist in foreign regions, German MNCs are likely to invest in those regions. This is supported by the importance of the item, represented by a high mean value of 3.58. It can be argued that MNCs try to gain access to foreign knowledge clusters, composed of suppliers and customers, to increase their own knowledge base (Audretsch, 2000; Sheehan and Grewal, 2000).

In sum, all items of the construct indicate a higher probability of relevant agglomerations existing outside the home region. This does not support the assumption of hypothesis 2, expecting a positive impact of agglomerations on MNCs' home-region orientation. The opposite case is more probable, namely that German MNCs seek to gain access to relevant agglomerations in foreign regions. This way, they enhance their interregional orientation and benefit from the agglomeration forces in terms of more qualified labor and clustering of suppliers and customers. As a result, agglomeration forces are of importance to MNCs, though, given the weak results, the location of agglomerations is of little concern. This is supported by Krugman's (2007) notion that intranational, and therefore also intraregional, agglomeration forces are nowadays weakening and a "globalization component" in these forces exists (Krugman, 2007, p. 32).

Psychic Distance Theory

As shown in table 2, the construct of psychic distance exhibits a positive significant correlation with intraregional assets. Table 6 exhibits correlation coefficients of the single indicators of psychic distance and intraregional assets and sales. Significant results will be depicted in the following. Similarities in the political system show a high relevance at a mean level of 3.47 and a weak significant correlation coefficient with intraregional assets ($r = .25, p = .09$). Consequently, it is an important factor of psychic distance, having a positive effect on MNCs' home-region orientation. Supporting this result, Dow and Karunaratna (2006) discovered the negative influence of differences in political systems on trade between two countries. In the case of German MNCs, the intraregional environment can be characterized by high similarities of the political systems of the member countries of the EU due to its high level of political homogenization and economic regulation. In contrast, countries from foreign regions are less likely to have similar political systems, resulting in increased uncertainty on government-to-business communications as well as governments' policing behavior regarding interactions between business firms.

Results of geographic distance show, even though the mean value is with 2.10 relatively low, highly significant correlation coefficients with intraregional assets and sales ($r = .45, p < .01, r$

= .42, $p < .01$). Thus, the higher the importance of geographic distance to MNCs, the higher will be its home-region orientation. Dow and Karunaratna (2006) find support that geographic distance is one of the most important factors influencing international trade. Also, Ghemawat (2001) argues that geographical distance negatively influences FDI.

According to the respondents, commercial ties between Germany and a potential target country are the most important factor of psychic distance with a mean value of 3.83. It exhibits a significant correlation with intraregional assets ($r = .34$, $p < .05$). This result was expected as commercial ties increase the level of information available on a foreign country and MNCs are able to draw from own prior experiences, or experiences from other local MNCs and thereby reduce their uncertainty (Brewer, 2007). Further on, commercial ties are more likely to exist between countries within the home region than beyond it, because of the high level of economic liberalization within the EU.

Similar to the item political systems, political ties are of high importance to the MNCs under study with a mean value of 3.21. The item weakly significantly correlates with intraregional assets ($r = .28$, $p = .06$). This seems feasible as political ties within the EU can be characterized as very high, based on the high level of economic liberalization and the high cooperation of governments within the EU.

In sum, the various items used to measure the formative construct of psychic distance exhibit different levels of importance to respondents and also vary in their relation to MNCs' home-region orientation. Those items exhibiting significant correlations with either intraregional assets or sales include political systems, geographic distance, commercial ties and political ties. The differences in these psychic distance factors, especially political system and political ties, can be described as particularly low within the home region of German MNC, namely the EU. The political environment is highly harmonized within the EU through the establishment of the EU parliament and its various institutions. This harmonization reduces the uncertainty of business-to-government communication and the influence of governments on the business-to-business as well as business-to-consumer level (Dow and Karunaratna, 2006). Hence, German MNCs operating within their intraregional environment benefit from reduced costs due to lower uncertainty and a facilitation of internationalization within their home region. Additionally, commercial ties within the EU are higher compared to countries outside the EU due to its higher level of liberalization and the resulting easing of FDI and international trade within the EU. Stronger commercial ties within the EU in particular favor FDI, as can be seen by the high significant correlation coefficient of commercial ties and intraregional assets. The

close geographical proximity, which is also very specific to the EU, further enhances intraregional FDI and trade, increasing MNCs' home-region orientation. These results are supported by Ghemawat (2005), pointing out the intensification of similarities between countries within regional trade agreements, such as the EU, in the past decades.

In contrast, those items of psychic distance being less specific to the EU are also less relevant regarding German MNCs' home-region orientation, as exhibited by the insignificant correlation coefficients with intraregional assets and sales. These include e.g., level of education, culture, religion, and economic development, which are less homogeneous within the EU and exhibit greater differences (Kudina, 2012). Thus, they are less likely to enhance MNCs' home-region orientation in terms of intraregional assets and sales.

Concluding, especially those factors of psychic distance specific to the EU are driving forces of German MNCs' home-region orientation. Similar to the theory of new regionalism, the effects of economic liberalization and political harmonization, and in addition the close geographic proximity between EU member countries, positively influence MNCs' home-region orientation by reducing psychic distance.

Table 6. Correlations of Psychic Distance Variables

	Mean	Standard Deviation	Intraregional Assets	Intraregional Sales	Education	Legal System	Culture	Business Practice	Political System	Religion	Language	Economic Development	Time Zone	Geographic Distance	Commercial Ties	Historic Ties	Political Ties	Information Level	
Intraregional Assets	.60	.26	1.00																
Intraregional Sales	.60	.24	.69** (.00)	1.00															
Education	2.94	1.10	-.13 (.39)	-.18 (.21)	1.00														
Legal System	3.63	.87	.22 (.14)	.10 (.52)	.11 (.46)	1.00													
Culture	2.43	.87	.15 (.32)	.20 (.18)	-.06 (.68)	.23 (.11)	1.00												
Business Practice	3.24	.88	.16 (.27)	.12 (.41)	-.01 (.97)	.17 (.25)	.29* (.05)	1.00											
Political System	3.47	1.03	.25 (.09)	.15 (.31)	.06 (.67)	.60** (.00)	.13 (.36)	.26 (.08)	1.00										
Religion	1.36	.60	.01 (.97)	.10 (.52)	.10 (.50)	.17 (.25)	.24 (.11)	.16 (.28)	.04 (.81)	1.00									
Language	1.81	.96	.09 (.55)	.01 (.96)	.09 (.55)	.33* (.02)	.17 (.24)	.24 (.11)	.18 (.23)	.31* (.04)	1.00								
Economic Development	3.83	1.23	.05 (.76)	-.08 (.57)	.28 (.06)	.42** (.00)	.09 (.55)	.21 (.15)	.33* (.02)	.03 (.86)	.17 (.25)	1.00							
Time Zone	1.19	.39	.01 (.94)	.07 (.64)	-.27 (.07)	-.05 (.75)	.32* (.03)	.30* (.04)	.09 (.53)	.25 (.09)	.04 (.78)	.02 (.87)	1.00						
Geographic Distance	2.10	1.26	.45** (.00)	.42** (.00)	-.12 (.42)	.21 (.15)	.19 (.20)	.08 (.58)	.16 (.28)	.14 (.35)	.19 (.21)	.14 (.36)	.28 (.06)	1.00					
Commercial Ties	3.83	1.20	.34* (.02)	.11 (.44)	.10 (.50)	.35* (.02)	.25 (.08)	.24 (.11)	.23 (.12)	.05 (.73)	.36* (.01)	.11 (.47)	-.06 (.69)	.27 (.07)	1.00				
Historic Ties	1.48	.74	.06 (.71)	.21 (.16)	-.09 (.53)	.15 (.30)	.37** (.01)	.05 (.74)	.09 (.54)	.13 (.39)	.07 (.63)	.11 (.45)	-.03 (.84)	.17 (.24)	.06 (.71)	1.00			
Political Ties	3.21	1.10	.28 (.06)	.04 (.79)	-.02 (.87)	.13 (.39)	.17 (.24)	.29* (.05)	.27 (.06)	.05 (.76)	.34* (.02)	-.04 (.81)	.10 (.48)	.25 (.08)	.68** (.00)	.00 (.99)	1.00		
Information Level	3.73	1.13	.12 (.43)	.03 (.84)	-.08 (.57)	.42** (.00)	.23 (.12)	.21 (.15)	.24 (.10)	.28 (.06)	.27 (.07)	.21 (.15)	.07 (.63)	.17 (.25)	.38** (.01)	.26 (.07)	.27 (.06)	1.00	

* Correlation is significant at .05 % level

** Correlation is significant at .01 % level

Correlation coefficients are followed by significance levels in parentheses

Population Ecology

Both items of population ecology show high mean values of 3.26 and 3.33 respectively. This supports the view that MNCs possess comps adapted to their home-region environment, being more beneficial within their home region than beyond it. For the first item, management skills and analytical techniques, results report a significant positive correlation with intraregional sales ($r = .34$, $p < .05$). Similarly, even though less strong, the second item, innovation processes and patterns of behavior, has a weak significant positive correlation with intraregional sales ($r = .23$, $p = .11$).

Table 7. Correlations of Population Ecology I Variables

	Mean	Standard Deviation	Intraregional Assets	Intraregional Sales	Management Skills and Analytical Techniques	Innovation Processes and Patterns of Behavior
Intraregional Assets	.60	.26	1.00			
Intraregional Sales	.60	.24	.69** (.00)	1.00		
Management Skills and Analytical Techniques	3.26	.96	.15 (.30)	.34* (.02)	1.00	
Innovation Processes and Patterns of Behavior	3.33	.99	.12 (.43)	.23 (.11)	.59** (.00)	1.00

* Correlation is significant at .05 % level

** Correlation is significant at .01 % level

Correlation coefficients are followed by significance levels in parentheses

It is interesting to notice that both sets of comps are positively related to MNCs' home-region orientation in terms of trade only. The results indicate that MNCs will be more home-region oriented the better their comps are adapted to their home region. It can be argued that these region-specific comps are of less value outside the home region due to different market and environmental conditions. Also, routines and knowledge accumulated in the home region are of little use in foreign regions (Aharoni, 1966). Accordingly, especially German MNCs' sales activities are adapted to their home region and MNCs face difficulties adjusting to the diverse requirements of foreign regions. Thus, MNCs exhibiting region-specific comps will be faced by structural inertia, resulting in a reinforcement of their successful rules, routines, and internal organizational arrangements and therefore, their home-region orientation. Likewise, they are less likely to adapt their comps (Hannan and Freeman, 1984, 1989) or to expand their sales activities to foreign regions (Guillen, 2002).

Neoinstitutional Theory

Table 8 reports the influences of the three items of the institutional environment on locations of FDI, which are relatively low with mean values ranging from 2.11 to 2.47. It seems that the institutional environment exerts only minor influence on the locations of MNCs' international expansion. This is underlined by the correlation coefficients regarding intraregional assets and sales, being insignificant at the given sample size. Obviously, MNCs are less influenced by the institutional environment when it comes to decisions on international investments and trade as opposed to e.g., organizational structures, reflecting institutionalized and legitimated rules of the institutional environment (Meyer and Rowan, 1977; Scott and Meyer, 1991).

Table 8. Correlations of Neoinstitutional I Variables

	Mean	Standard Deviation	Intraregional Assets	Intraregional Sales	Labor Unions	Trade Associations	Political Actors
Intraregional Assets	.60	.26	1.00				
Intraregional Sales	.60	.24	.69** (.00)	1.00			
Labor Unions	2.31	1.15	.16 (.29)	.09 (.53)	1.00		
Trade Associations	2.11	.97	.10 (.51)	.07 (.62)	.70** (.00)	1.00	
Political Actors	2.47	1.23	.13 (.39)	.12 (.41)	.63** (.00)	.78** (.00)	1.00

* Correlation is significant at .05 % level

** Correlation is significant at .01 % level

Correlation coefficients are followed by significance levels in parentheses

Table 9. Correlations of Neoinstitutional II Variables

	Mean	Standard Deviation	Intraregional Assets	Intraregional Sales	Customers	Suppliers	Competitors
Intraregional Assets	.60	.26	1.00				
Intraregional Sales	.60	.24	.69** (.00)	1.00			
Customers	3.58	1.35	-.06 (.71)	-.19 (.20)	1.00		
Suppliers	2.56	.98	-.13 (.39)	-.00 (.99)	.36* (.01)	1.00	
Competitors	3.09	.99	.02 (.90)	.19 (.20)	.09 (.54)	.19 (.19)	1.00

* Correlation is significant at .05 % level

** Correlation is significant at .01 % level

Correlation coefficients are followed by significance levels in parentheses

Unfortunately, correlation coefficients of the inter-item correlations of the construct of neoinstitutional II report no significant results either (table 9). Albeit the mean values are somewhat higher, exemplifying that MNCs are more likely to follow firms of their respective industry into foreign countries, their impact on MNCs' regional orientation remains unclear. Thus, the arguments of neoinstitutional theory are not related to MNCs home-region orientation.

5. Conclusion and Limitations

The target of this research project was to empirically test explanations of MNCs' home-region orientation on the grounds of economical, psychological, sociological theories, and path dependence theory, which might give supplementary insights to MNCs' focus on the home region. Prior research by Rugman (2005) and Rugman and Verbeke (2004, 2005), using arguments from transaction-cost economics, have so far been the only attempt of formulating a general theory explaining MNCs' home-region orientation (Sammartino and Osegowitsch, 2013). However, an empirical analysis of the theoretical reasoning remains missing. This research was the first to empirically test alternative theoretical explanations. Theories from various fields of research were depicted in detail, grounded on prior research by Wolf, Dune-mann, and Egelhoff (2012), and testable hypotheses were developed. The empirical analysis, based on questionnaire data from a sample of 48 German MNCs, was conducted by means of standard empirical regression models. Unfortunately, multivariate regression analysis showed no significant results. Thus, it was not possible to empirically support the influence of each theory's line of argument on MNCs' home-region orientation. Nevertheless, in an explorative analysis, the theories' individual items were analyzed to gain insights as to which arguments are of value for the explanation of MNCs' home-region orientation. These results are based on the mean values of each argument and its correlation coefficients with intraregional assets and sales.

Overall, German MNCs' tendency towards a home-region orientation is mainly based on the economic and political liberalization within the EU. Especially results on the arguments of the theories of new regionalism and psychic distance show that MNCs are more likely to invest and trade in countries that exhibit lower barriers to FDI and trade, which again are more likely to be found within the home-region of German MNCs. Such aspects as the reduction of customs tariffs and antidumping duties, preferential treatment of trade partners' goods, abolition of policy-induced price distortions, similarities in political systems, commercial ties, and political ties are very specific to regional trade agreements such as the EU. They will increase MNCs' home-region orientation by reducing costs and uncertainty of intraregional FDI and

trade and therefore the attractiveness of MNCs' home region. Additionally, the close geographic proximity to EU member countries will further facilitate intraregional FDI and trade, favoring home-region orientation relative to an interregional orientation. Also, as shown by population ecology, MNCs' comps are adapted to their home region and will reinforce MNCs' home-region orientation. They often lack the ability to adjust these comps to the requirements of foreign regions, preventing them from increasing their interregional orientation.

However, some implications of this research project can be drawn to enrich future research on the theoretical explanation of MNCs' home region orientation. Regarding the theory of new regionalism, future research might examine if regional trade agreements in foreign regions, such as NAFTA or Mercosur, characterized by less economic liberalization compared to the EU, are of equivalent relevance in explaining the home-region orientation of MNCs from the respective regions. Even though arguments of psychic distance theory partially explain MNCs' home-region orientation, the theory should be further analyzed in future research. One aspect worth investigating is the perceived psychic distance to specific countries within and beyond the home region that MNCs expand their international activities to, based on the distance factors examined in this research. Additionally, the mean values of the importance of the individual items can be used as weights in order to differentiate the importance of each psychic distance factor, as proposed by Brewer (2007). Particularly religion, language, time zone and historic ties seem to have less influence on psychic distance, compared to e.g., legal system, political system, economic development and commercial ties, and thus seem to be less relevant in determining psychic distance.

Even though arguments of the theory of escalating commitment have no consistent influence on MNCs' home-region orientation, results also show that escalating commitment is more likely to happen within the home region. This indicates that this theory might help to understand MNCs' home-region orientation. Future research therefore needs to reconsider the operationalization used in this explorative analysis and examine escalating commitment in more detail by analyzing all four conditions of escalating commitment, instead of reflecting arguments of the theory in two variables only. Additionally, secondary data on MNCs' foreign investments and their profitability need to be consulted to find out if such foreign investments have led to success in the past. If this is not the case, secondary data might enable the analysis whether additional resources were reinvested into these investment projects and if escalating commitment has occurred.

Concerning population ecology, future research should analyze if home-region oriented MNCs are more likely to be confronted with a selection rather than an assimilation process when increasing their level of interregional business activity (Hannan and Freeman, 1984; Wolf, Dunemann, and Egelhoff, 2012), since MNCs' comps are not likely to be adaptable to foreign regions in the near future. If this is the case and only few MNCs have successfully adapted their comps to interregional environments, this might be an indication why the percentage of home-region oriented MNCs has been relatively stable over time, as discovered by Rugman and Oh (2007).


Although arguments of the theory of path dependence yielded no significant results regarding the influence of past foreign investments on MNCs' home-region orientation, it can be argued that a more detailed analysis of the theory's arguments and a more differentiated operationalization, e.g., by including all four aspects of path-dependent processes (nonpredictability, nonergodicity, inflexibility, and inefficiency), would lead to different results. However, in-depth case studies would be necessary, being beyond the scope of this research project. Nonetheless, the persistence of MNCs' home-region orientation over time and the negative performance effects detected in some previous studies suggest a possible path-dependence of this phenomenon. In contrast, the theories of new economic geography, knowledge economy, and neoinstitutional theory should be neglected in future research since they are not able to explain MNCs' home-region orientation.

To conclude, even though some insights can be drawn why MNCs concentrate on their home region, more thorough research is necessary. Hence, future research needs to focus on one or two of the theories analyzed in this research project only and, in return, evaluate their predictive power regarding MNCs' home-region orientation in greater detail. Curran and Thorpe (2013, p. 26) support this by arguing that the hypotheses proposed by Wolf, Dunemann, and Egelhoff (2012) are "so extensive and far reaching that a single research project could not prove or disprove them all". Instead, they concentrated on the influence of knowledge intensity on MNCs' home-region orientation and depicted the underlying relationship in greater detail. Nevertheless, as the purpose of this project was to evaluate the explanatory potential of these theories in general, a more detailed analysis of each theory was beyond the scope of this project.

The explorative nature of the study – prior empirical research on the theories in this regional context does not exist and the operationalization of the theories' arguments might be debatable – can be seen as a starting point for future research on the explanation of home-region

orientation. Thus, it was supposed to indicate which of the analyzed theories are worthy of further and more detailed analysis and to formulate a more multifaceted theory of MNCs' home-region orientation. A greater differentiation between the individual MNCs' under study, regarding e.g., industry effects, country effects, and international experience, might further lead to more precise results with respect to the theories' explanatory power of home-region orientation. Even though industry, firm size, and age were applied as control variables, they yielded no significant influence. However, it can be expected that each theory's explanatory power varies for MNCs with different industry background, size, age, and international experience as well as for MNCs from other regions that are less economically liberalized compared to the EU. Unfortunately, due to the limited sample size and the focus on German MNCs, more differentiated conclusions could not be drawn but are likely to extend our understanding of MNCs home-region orientation. Henceforth, future research should take up on these results and analyze the studied theories in more detail in order to comprise a richer, more complete picture of this well-known phenomenon and, thus, extend the transaction cost-based line of argumentation by Rugman (2005) and Rugman and Verbeke (2004, 2005).

Appendix A. Questionnaire

	Wirtschafts- und Sozialwissenschaftliche Fakultät Christian-Albrechts-Universität zu Kiel
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Sehr geehrte Damen und Herren,

der Lehrstuhl für Organisation am Institut für Betriebswirtschaftslehre der Christian-Albrechts-Universität zu Kiel führt aktuell ein Forschungsprojekt über die Geschäftstätigkeit multinationaler Unternehmen in ihrem Heimatkontinent durch (man spricht in diesem Zusammenhang von einer "Heimatregionorientierung"). Im Vordergrund der Untersuchung stehen deutsche multinationale Unternehmen.

Obwohl häufig eine globale Ausrichtung der Geschäftstätigkeiten von Unternehmen vermutet wird, weist die Mehrheit der Unternehmen eine Konzentration ihres Umsatzes und ihrer Investitionen innerhalb des Heimatkontinents auf. Ziel dieser Studie ist es, Erklärungsansätze für diesen Gegensatz zu finden und auf dieser Basis konkrete Empfehlungen für Unternehmen zu entwickeln, die sich mit Fragen der internationalen Ausrichtung der Geschäftstätigkeit befassen.

In diesem Zusammenhang bitten wir Sie höflich um Ihre Unterstützung und wären über die Beantwortung unseres Fragebogens bis zum 31.01.2013 dankbar. Die Befragung dauert ca. 12 Minuten. Sie haben die Möglichkeit, die Befragung zu unterbrechen und zu gegebener Zeit fortzuführen.

Der Fragebogen zielt nicht auf wettbewerbssensitive Aspekte der internationalen Strategie Ihres Unternehmens ab. Alle von Ihnen bereitgestellten Informationen finden ausschließlich für die anonyme Auswertung innerhalb dieser Untersuchung Verwendung und werden nicht an Dritte weitergegeben.

Bei Fragen zu dem Projekt und den benötigten Informationen steht Ihnen Herr Dipl.-Kfm. Till Dunemann in seiner Eigenschaft als Leiter dieses Projekts gerne persönlich zur Verfügung. Die Kontaktdaten können Sie dem Einladungsschreiben entnehmen.

Mit freundlichen Grüßen

Professor Dr. Dr. h.c. Joachim Wolf

[Weiter](#)

Der Fragebogen beinhaltet potentielle Gründe, die eine mögliche Heimatregionorientierung Ihres Unternehmens bewirkt haben.

Sie haben die Möglichkeit, die Beantwortung des Fragebogens zu unterbrechen und zu gegebener Zeit fortzuführen.

Mit "weiter" gelangen Sie zur Befragung.

[Zurück](#) [Weiter](#)

Wenn Ihr Unternehmen zu entscheiden hat, in welchen Ländern es Investitionen tätigt, wie bedeutsam ist hierbei, dass verlässliche Informationen über das Zielland wirtschaftlich zu beschaffen und zu verarbeiten sind?

**sehr geringe
Bedeutung**



**sehr hohe
Bedeutung**



keine Angabe



Optional können Sie hier Ihre obige Einschätzung weiter begründen.

Zurück

Weiter

Inwieweit existieren in Ihrem Unternehmen bedeutsame Managementfähigkeiten und Analysetechniken, die innerhalb der EU einen höheren Nutzen stiften als außerhalb?

**überhaupt
nicht**



**in sehr
hohem Maße**



keine Angabe



Optional können Sie hier Ihre obige Einschätzung weiter begründen.

Zurück

Weiter

Wie leicht würde es Ihrem Unternehmen fallen, diese Managementfähigkeiten und Analysetechniken so anzupassen, dass diese auch außerhalb von Europa einen vergleichbaren Nutzen stiften?

sehr leicht

sehr schwer

keine Angabe

Optional können Sie hier Ihre obige Einschätzung weiter begründen.

Zurück

Weiter

Inwieweit existieren in Ihrem Unternehmen bedeutsame Innovationsprozesse und Verhaltensweisen, die innerhalb der EU einen höheren Nutzen stiften als außerhalb?

**überhaupt
nicht**

**in sehr
hohem Maße**

keine Angabe

Optional können Sie hier Ihre obige Einschätzung weiter begründen.

Zurück

Weiter

Wie leicht würde es Ihrem Unternehmen fallen, diese Innovationsprozesse und Verhaltensweisen so anzupassen, dass diese auch außerhalb von Europa einen vergleichbaren Nutzen stiften?

sehr leicht

sehr schwer

keine Angabe

Optional können Sie hier Ihre obige Einschätzung weiter begründen.

Zurück

Weiter

Inwieweit neigt Ihr Unternehmen dazu, weiter auf bestimmten Kontinenten zu investieren, weil es dort zuvor schon investiert hat?

**überhaupt
nicht**

**in sehr
hohem Maße**

keine Angabe

Optional können Sie hier Ihre obige Einschätzung weiter begründen.

Zurück

Weiter

Wenn Ihr Unternehmen zu entscheiden hat, in welchen Ländern es Investitionen tätigt, wie bedeutsam ist bei der Länderwahl, dass sich das Zielland und Deutschland in Bezug auf die folgenden Faktoren gleichen bzw. ähneln?

	sehr geringe Bedeutung				sehr hohe Bedeutung		keine Angabe
Bildungsgrad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gesetzgebung	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kultur	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managementverhalten	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Politisches System	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Religion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sprache	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wirtschaftliche Entwicklung	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Zeitzone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Zurück Weiter

Wenn Ihr Unternehmen zu entscheiden hat, in welchen Ländern es Investitionen tätigt, wie bedeutsam ist bei der Länderwahl, dass in Bezug auf das Zielland und Deutschland die folgenden Merkmale vorhanden sind?

	sehr geringe Bedeutung				sehr hohe Bedeutung		keine Angabe
Geographische Nähe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kommerzielle Verbindungen (z.B. Importe, Exporte, Auslandsdirektinvestitionen)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Historische Verbindungen (z.B. Kolonialbeziehungen, Verbündete in Kriegen)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Politische Verbindungen (z.B. Handelsabkommen, wirtschaftliche und soziale Hilfsprogramme, Handelskammern)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hoher Informationsstand über das Zielland (z.B. sozialer Austausch zwischen Ländern, Publikationen über das Zielland, Migration und Besuche aus und in das Zielland)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Zurück Weiter

Wenn Ihr Unternehmen zu entscheiden hat, in welchen Ländern es Investitionen tätigt, wie bedeutsam ist bei der Länderwahl, dass zwischen dem Zielland und Deutschland niedrige wirtschaftlich relevante Barrieren in Form der folgenden Aspekte bestehen?

	sehr geringe Bedeutung				sehr hohe Bedeutung		keine Angabe
Niedrige Zolltarife und Antidumpingzölle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Erleichterte Realisierung von Auslandsinvestitionen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Präferierte Behandlung von Waren der Handelspartner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Abschaffung politisch induzierter Preisverzerrungen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Standardisierung der gesetzlichen Zollverfahren	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Zurück Weiter

Wenn Ihr Unternehmen zu entscheiden hat, in welchen Ländern es Investitionen tätigt, wie bedeutsam sind bei der Länderwahl die folgenden Charakteristika der Region (z.B. EU oder NAFTA), zu der das Zielland gehört?

Bitte führen Sie sich vor Augen, dass sich die unten aufgeführten Charakteristika auf die Region (z.B. EU oder NAFTA) beziehen und nicht auf ein spezielles Land.

	sehr geringe Bedeutung				sehr hohe Bedeutung		keine Angabe
Marktgröße	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vorhandensein qualifizierter Arbeitskräfte	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Niedrige Transportkosten	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Möglichkeit reibungsloser Wissens- und Technologietransfers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Existenz relevanter Universitäten und Forschungseinrichtungen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Existenz von Lieferanten und Kunden, die die Entwicklung von Produkten und Technologien fördern	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Positive Wettbewerbseffekte (z.B. durch Kostensenkungseffekte, höhere Innovationsintensität, mehr Differenzierung, höhere Investitionen in intangible Ressourcen, Knowledge Spillover)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Zurück Weiter

In welchem Maße steht Ihr Unternehmen bei ausländischen Standortentscheidungen unter dem Einfluss externer Interessengruppen?

	überhaupt nicht				in sehr hohem Maße		keine Angabe
Gewerkschaften	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Verbände	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
politische Akteure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Optional können Sie hier Ihre obige Einschätzung weiter begründen.

Zurück
Weiter

Inwieweit investiert Ihr Unternehmen in Ländern, weil dort zuvor schon andere Unternehmen der gleichen Branche investiert haben?

	überhaupt nicht				in sehr hohem Maße		keine Angabe
Kunden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lieferanten	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wettbewerber	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Optional können Sie hier Ihre obige Einschätzung weiter begründen.

Zurück
Weiter

Wie häufig ist es in der Vergangenheit in Ihrem Unternehmen vorgekommen, dass weiterhin in einen bestimmten ausländischen Standort investiert wurde, obwohl deutliche Anzeichen bestanden, dass dieser nicht den versprochenen Erfolg erbringen wird?

nie

sehr oft

keine Angabe

Optional können Sie hier Ihre obige Einschätzung weiter begründen.

Zurück

Weiter

Bitte füllen Sie die Lücke, die durch drei Punkte gekennzeichnet ist, mit Hilfe einer der Antwortmöglichkeiten aus.

Investitionen, die trotz deutlicher Anzeichen des Misserfolgs fortgeführt wurden, sind im Zusammenhang mit außerhalb von der EU liegenden Standorten . . .

**häufiger
vorgekommen**

**gleich häufig
vorgekommen**

**weniger häufig
vorgekommen**

keine Angabe

... als im Zusammenhang mit Standorten innerhalb der EU.

Optional können Sie hier Ihre obige Einschätzung weiter begründen.

Zurück

Weiter

Bitte geben Sie einen ganzzahligen Prozentwert an.

Wie hoch war der durchschnittliche Anteil der in der EU getätigten Investitionen Ihres Unternehmens, gemessen am weltweiten Investitionsvolumen Ihres Unternehmens?

Bitte beantworten Sie die Frage unter Berücksichtigung der Investitionstätigkeiten der Geschäftsjahre 2009-2011.

Wie hoch war der durchschnittliche Anteil des in der EU erzielten Umsatzes Ihres Unternehmens, gemessen am weltweiten Umsatzvolumen Ihres Unternehmens?

Bitte beantworten Sie die Frage unter Berücksichtigung der Umsatzvolumina der Geschäftsjahre 2009-2011.

[Zurück](#)[Weiter](#)

Wie wahrscheinlich ist es Ihrer Meinung nach, dass mittelfristig (hier: 2 - 5 Jahre) der Anteil des Umsatzes Ihres Unternehmens, der außerhalb der EU erzielt wird, dem europäischen Umsatz entspricht oder diesen übersteigt?

**sehr
unwahrscheinlich**

**sehr
wahrscheinlich**

keine Angabe

Wie wahrscheinlich ist es Ihrer Meinung nach, dass langfristig (hier: 5 - 10 Jahre) der Anteil des Umsatzes Ihres Unternehmens, der außerhalb der EU erzielt wird, dem europäischen Umsatz entspricht oder diesen übersteigt?

**sehr
unwahrscheinlich**

**sehr
wahrscheinlich**

keine Angabe

[Zurück](#)[Weiter](#)

Wie wahrscheinlich ist es Ihrer Meinung nach, dass mittelfristig (hier: 2 - 5 Jahre) der Anteil der Investitionen Ihres Unternehmens, die außerhalb der EU getätigt werden, dem europäischen Investitionsvolumen entspricht oder dieses übersteigt?

sehr unwahrscheinlich **sehr wahrscheinlich** **keine Angabe**

Wie wahrscheinlich ist es Ihrer Meinung nach, dass langfristig (hier: 5 - 10 Jahre) der Anteil der Investitionen Ihres Unternehmens, die außerhalb der EU getätigt werden, dem europäischen Investitionsvolumen entspricht oder dieses übersteigt?

sehr unwahrscheinlich **sehr wahrscheinlich** **keine Angabe**

Zurück

Weiter

Wie stark ist der Zusammenhang zwischen Investitionen Ihres Unternehmens in EU-Standorte einerseits und dem Umsatz Ihres Unternehmens in der EU andererseits?

sehr schwach **sehr stark** **keine Angabe**

Zurück

Weiter

Nachfolgend haben Sie noch die Möglichkeit, weitere in Ihrem Unternehmen bedeutsame Gründe für Investitionsentscheidungen zugunsten europäischer Standorte zu nennen.

Zurück

Weiter

Welcher Branche gehört Ihr Unternehmen an?

Mehrfachnennungen sind möglich.

- Baugewerbe
- Chemie/Pharmazie
- Einzelhandel
- Fahrzeugbau
- Finanzdienstleistungen
- Großhandel
- Maschinenbau
- Rohstoffe/Energie
- Technologie
- Transport und Logistik
- Sonstiges

[Zurück](#)[Weiter](#)**Für welches Unternehmen sind Sie tätig?****Sind Sie an der Strategieentwicklung Ihres Unternehmens beteiligt?**

- Ja Nein

Wie lange sind Sie schon für Ihr Unternehmen tätig?

- weniger als 2 Jahre
 zwischen 2 und 5 Jahren
 mehr als 5 Jahre

[Zurück](#)[Weiter](#)

Gerne bieten wir Ihnen an, dass Sie zu den Ergebnissen der Studie ein Executive Summary erhalten. Das Angebot ist selbstverständlich unentgeltlich.

Möchten Sie, dass Ihnen nach Abschluss der Studie ein Executive Summary zugeschickt wird?

- Ja Nein

Zusätzlich kann nach Absprache eine persönliche Präsentation der Ergebnisse dieser Studie erfolgen.

[Zurück](#)[Weiter](#)


Anrede

Herr Frau

Name

Kontaktadresse (optional)

E-Mail-Adresse



Bei weiteren Fragen zu dem Projekt stehen wir Ihnen gerne persönlich zur Verfügung. Die Kontaktdaten können Sie dem Einladungsschreiben entnehmen.

Vielen Dank für Ihre Kooperation!

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C The Influence of Upper Echelons on MNCs' Home-region Orientation

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Abstract

This study investigates the influence of Upper Echelons on Multinational Corporations' home-region orientation. The central argument of this theory is that there exists a directional relationship between Upper Echelons demographic characteristics and the home-region orientation of Multinational Corporations (MNCs). While significant relationships between top management team (TMT) characteristics and internationalization have been demonstrated previously, we postulate that TMT characteristics also have a significant impact on the decision on where a MNC will internationalize. The research analysis is based on lagged, longitudinal data on 38 German stock listed MNCs over a period of 11 consecutive years, resulting in a final sample of 380 observations per variable. Results indicate that with increasing average TMT age, decreasing average TMT company tenure, decreasing average TMT education level and decreasing average TMT international experience, MNCs exhibit an increasing home-region orientation.

Keywords: Longitudinal, Upper Echelon Theory, Top Management Teams, Regional Strategies, Regional Orientation

1. Introduction

Over more than a decade, International Business (IB) and International Management (IM) scholars have been debating, whether MNCs are becoming more global, or whether they are still mainly to be considered home-region oriented and might also stay at that level in the future.

Some researchers claim that the thesis introduced by Bartlett and Ghoshal's (1989) archetypal work of the transnational solution is still up to date. Bartlett and Ghoshal (1989) state that most industries have become global and that many MNCs compete on a worldwide basis. As a consequence of this, they continue to argue that in order to be successful, MNCs have to implement what they call the 'transnational solution' – an organizational form where the MNC establishes highly interdependent worldwide units in order to react to the challenges of firms caused by the dispersion of sales and assets throughout the world (Bartlett, Ghoshal, and Birkinshaw, 2004).

In contrast, other researchers (e.g., Delios and Beamish, 2005; Dunning, Fujita, and Yokova, 2007; Grosse, 2005; Yin and Choi, 2005) support a concept introduced by Rugman (2000, 2005) and Rugman and Verbeke (2004, 2005) of the regional orientation of MNCs. Studying Fortune Global 500 firms, Rugman and Verbeke (2004, 2005) identified an increasing orientation on the home region by the analyzed firms, opposing an expected even global distribution of activities as assumed previously (cf., Bartlett and Ghoshal, 1989; Bartlett, Ghoshal, and Birkinshaw, 2004; Egelhoff, 1988). Rugman and Verbeke (2004, 2005) demonstrated that the majority of large Multinational Corporations (MNCs) pursue home-regional rather than global strategies and found that the typical MNC achieves 70 % of its overall sales in its home region of the broad Triad, and less than 20 % of its overall sales in each of the two other Triad regions. Among others, the recently introduced regionalization theory, as well as the concept of regional liability of foreignness, as one of this theory's main elements, are expected to be partially responsible for regional orientation of MNCs (Miller and Richards, 2002; Rugman and Verbeke, 2004, 2007; Wolf, Dunemann, and Egelhoff, 2008). Still, no fully satisfying explanation for this home-region orientation has been found to date.

Extending the concept of dominant coalition (Cyert and March, 1963) and based on Hambrick and Mason's (1984) renowned article on the influences of demographic characteristics of top managers on organizational outcomes, we expect that reasons for home-region orientation can be found in Upper Echelons demographics and Top Management Team orientation, which itself correlates with TMT characteristics. This concept follows the reasoning that experiences

made in an executive's career have a direct influence on the executive's values, beliefs and reasoning and therefore ultimately also on his or her decision-making. For the past quarter of a century scholars have consequently suggested that the aforementioned Upper Echelons' demographics are a sensible proxy to determine the influence of a company's strategic leadership (Finkelstein, Hambrick, and Cannella, 2009) on a company's strategic orientation (Finkelstein and Hambrick, 1990; Gabarro, 2007; Wiersema and Bantel, 1992). Still, and although there exist convincing reasons for a possible existence, the link between Upper Echelons and home-region orientation of MNCs remains unresearched. Existing TMT research on MNC internationalization has so far focused on explanations of why MNCs will generally be more active in foreign countries than in their home country (e.g., Devinney, Midgley, and Venaik, 2000) or why MNCs will be more internationally diversified with regard to the total number of countries they are active in (e.g., Hitt et al., 2006). Still, in order to develop a more holistic understanding and in light of the introduction of the concept of the home-regional orientation of MNCs, the impact of TMT characteristics on the internationalization of MNCs per se needs to be readdressed by testing the respective influence of TMT characteristics on the regional orientation of MNCs. In our view, a differentiation must be made between international diversification and the regional orientation of MNCs. International diversification simply focuses on the amount of countries a MNC internationalizes to or the extensity of any such diversification. In contrast, regional orientation theory concentrates on the selection of countries and/or regions a MNC expands its international activities to, i.e., whether these countries are mainly within the home region or rather beyond it. Therefore, by focusing on the regional aspects of internationalization, namely whether MNCs will internationalize within the home region or beyond, this research furthers TMT research by adding a new dimension from a previously unconnected stem of theory. We expect that TMT characteristics not only influence the decision to internationalize in general, as argued in prior research, but also influence the decision of where, and in particular in which region, an MNC internationalizes. We therefore expect that a TMT's values, experiences and beliefs ultimately have a direct influence on its decision-making. As further elaborated in section 3, TMT risk-aversion, information-processing capability, willingness to adapt to foreign environments, understanding of foreign regions and cultures, and perception of psychic distance are argued to have a major influence on whether MNCs internationalize within or beyond their home region. As a consequence, normative conclusions can be drawn as to which characteristics MNCs' TMTs require to successfully expand their business activities into foreign regions. Equally, our research provides additional reasons as to why most MNCs focus their international activities on their

respective home region and thereby significantly extends research on the concept of home region orientation of MNCs.

In consequence, we will first introduce the existing concept of home-region orientation, as well as past and current Upper Echelons research in more detail, before developing hypotheses and discussing the reasoning behind our expectations. Following, research design and method will be depicted. Ultimately, we will present the research results and their discussion, before concluding with resulting implications for future research and an overview of encountered and constraining research limitations.

2. Background

The TMT's significant role in the internationalization process of MNCs has long been suggested in IB/IM research and has proven important for both academics, as well as practitioners, to better understand the determinants of internationalization (Herrmann and Datta, 2005; Lee and Park, 2006). The idea that TMTs impact strategic decision-making goes back to Cyert and March (1963), who introduced the concept of dominant coalition. Cyert and March argued that organizational goals are largely set by a negotiation process among members of dominant coalitions and not just by a single person like, e.g., the CEO. Furthermore, the focus on a top team, rather than single top managers, leads to the inclusion of most relevant decision makers, such as e.g., the CFO, CIO, and COO, as demonstrated by previous studies on the effects of TMTs on organizational-level outcomes (c.f., Finkelstein, Hambrick, and Cannella, 2009, p. 122). Contrary to the aforementioned, Hambrick (1994) argues that some TMTs might not interact at all. He therefore continues to suggest that in these cases, single top managers prove the better focus to predict organizational outcomes. This line of argumentation appears logical when looking at family owned businesses or companies run by autocratic, or patriarchal CEOs, who might not provide the grounds for open decisions or team decision making (c.f., Finkelstein, Hambrick, and Cannella, 2009, pp. 122-123), but less logical for stock listed corporations.

Following the reasoning of dominant coalition, Hambrick and Mason's 1984 article on Upper Echelons is considered the first basic framework demonstrating that "organizations are reflections of the values and cognitive bases of powerful actors" and that therefore internationalization can be "partially predicted by managerial background characteristics" (Hambrick and Mason, 1984, p. 193). This concept received further proof when Hitt and Tyler (1991) confirmed a significant impact of executive characteristics on strategic decision-making.

Similarly and based on Resource-Based View (RBV) (Barney, 1991), TMTs can be understood as an asset, accumulating and sharing tacit knowledge about the MNC's international activities and hence as one of the main components for the success of the internationalization process (Athanassiou and Nigh, 1999). The higher a firm's internationalization extent, the more complex the knowledge stock and the capabilities of the top management team need to be in order to manage the complex requirements of heterogeneous markets. The resulting challenges have an impact on the cognitive abilities, orientation, and competencies of the TMT involved in this process, which are argued to be mainly influenced by their demographic characteristics (Herrmann and Datta, 2005; Sanders and Carpenter, 1998; Singh, Gaur, and Schmid, 2010; Tihanyi et al., 2000). In summary, the backgrounds of TMTs have a major influence on their competencies and preferences and hence either support or impede the internationalization process and the underlying strategy formulation and implementation of MNCs (Peyrefitte, Fadil, and Thomas, 2002).

Concluding and similar to RBV research, Upper Echelons theory argues that the TMT and the TMT's experiences are essential in strategy creation and hence essential on firm outcomes, such as overall performance and internationalization (Hambrick and Mason, 1984; Wiersema and Bantel, 1992). This should be equally true with regards to the home-region orientation of MNCs. When trying to understand why TMT members make the decisions they make, Upper Echelons research argues that the influence of top executives on firms depends on the executives' lifetime experiences (Carpenter and Fredrickson, 2001). For any analysis, these experiences would ideally have to be measured as psychological factors such as values, cognitive style, cognitive content, or receptivity to innovation (Finkelstein, Hambrick, and Cannella, 2009) to understand each executive's values, beliefs, and the overall decision-making process. It is for operational reasons though that researchers have so far mainly relied on more easily observable experiences such as demographic characteristics as proxies for a TMT's experiences.

Rugman (2005, 2000) as well as Rugman and Verbeke (2005, 2004) have introduced the concept of home region orientation to IB research at the beginning of this millennium. They analyzed the dispersion of sales and assets of Fortune Global 500 firms throughout the world. In doing so, they used the Triad concept introduced by Ohmae (1985) to classify the world into three regions, namely North America, Asia/Pacific, and Europe. A key observation was that most of the analyzed firms were not able to establish an even allocation of sales and assets and thereby were not able to reach a considerable market position in all three regions of the world. Even more so, most of the observed Fortune Global 500 corporations were also short

of achieving a major market share in two regions of the Triad. On the contrary, at least 320 of the 380 firms analyzed derived at least 50 % of their sales within their respective home region, with an average of 80.3 % of sales in the home region.

The tendency of MNCs to prefer internationalization into home regions over internationalization into foreign regions has been partly explained by the regionalization theory introduced by Rugman and Verbeke (2007, 2004). Accordingly, the underlying issues developed to explain the home-region orientation of MNCs are, among others, the lack of accessibility and attractiveness of products to consumers throughout all regions of the Triad, as shown in the uneven distribution of sales; the insufficient replication of a MNC's firm-specific advantages, such as technology, reputation, etc. into foreign regions resulting in a market performance short of that in the home region; and the need for different competitive strategies required in various regions. Additional reasons for a home-region orientation can be drawn from the concept of liability of foreignness introduced by Hymer (1960) and refined by Zaheer (1995) and the recently developed concept of liability of regional foreignness (Miller and Richards, 2002; Rugman and Verbeke, 2004), wherein MNCs active in foreign regions are expected to face higher costs in the process of attaining familiarity and legitimacy than MNCs headquartered in the respective region. Further explanations were introduced by Wolf, Dunemann, and Egelhoff (2008), using economic, psychological, as well as sociological theories. From these theoretical approaches, various reasons for the explanation of a home-region orientation of MNCs can be drawn. They include, among others, the existence of regional integration agreements along with high levels of economic liberalization, increased agglomeration forces and the existence of relevant knowledge clusters within the home region as well as increased psychic distances between home and host region (Wolf, Dunemann, and Egelhoff, 2008). Here, the psychological arguments seem to be most interesting, since they indicate that MNCs' home-region orientation are somehow related to the personal characteristics of their decision makers.

Rugman and Verbeke (2008) stated various implications resulting from the abovementioned causes leading to a MNC's home-region orientation. Concluding from these implications, a high percentage of MNCs seem to be incapable of deriving the same level of sales in other regions of the Triad as they are in their home region. This difference in market presence is furthermore argued to be due to differences in the managerial attention paid to other regions (Rugman and Verbeke, 2008). One aspect Rugman and Verbeke (2008) mention in order to achieve a significant market share in other regions, is to implement "region-based components in the MNC's coordination and control structure" (p. 307). MNCs are recommended to adjust

their market strategy approach to the requirements of the host region to address the challenges arising within and from within these regions.

In contrast to Rugman and Verbeke (2008), we expect that TMTs will rather limit their focus on foreign regions with increased age and company tenure, as well as low education and international experience and instead will pay more attention to their home region. As a consequence, we suggest that the restriction to the home region is not so much explained by an absence of capabilities of the MNC, but rather by the characteristics and the decision of the TMT to concentrate on the home region.

3. Theory and Hypotheses

Based on the previously introduced theories and assumptions, we will elaborate the TMT characteristics of age, education, company tenure, and international experience and derive hypotheses in order to better understand why MNCs opt for a home-region orientation as opposed to global internationalization. These four TMT characteristics were chosen from prior research and found to be the driving forces in TMT decision-making (e.g., Herrmann and Datta, 2005; Sambharya, 1996; Tihanyi et al., 2000; Wiersema and Bantel, 1992). Each hypothesis will be subjected to a critical acclaim of potential relationships with home-region orientation.

3.1 Age

With regard to the effect of average TMT age on the regional orientation of MNCs, we expect that younger managers prefer a more global orientation, while older managers prefer a more home-regional orientation. This argumentation draws on Dow and Karunaratna (2006) and the notion that host-regional orientation confronts MNCs with culturally, institutionally, and economically more distant countries than those confronted with as consequence of a home-regional orientation. In line with information-processing theory, uncertainty and equivocality increase with growing unanalyzability and variety of the environment of MNCs, as well as growing interdependencies and differentiation within MNCs. These again increase the information-processing requirements of MNCs (Daft and Lengel, 1986; Tushman and Nadler, 1978). Taking home-region orientation of MNCs as the common situation, host-region markets are less known to MNCs due to the greater geographic distance. They are therefore less analyzable and vary from the home-region environment, thereby increasing uncertainty and equivocality. Additionally, extending operations to host-regions will involve greater interdependencies and differentiation within the MNC, again having an incremental effect on uncer-

tainty and equivocality. Concluding, the information-processing requirements of a MNC will increase with rising global orientation. As to the average age of TMTs, it can be argued that younger managers are able to process relevant information quicker and are therefore willing to take a, in their perspective, predictable higher risk by shifting regional focus toward host regions. Older TMT members, on the other hand, are characterized by a decreased information-processing capacity (Carlsson and Karlsson, 1970; Child, 1974; Tihanyi et al., 2000; Wiersema and Bantel, 1992). They do not have the ability to process relevant information as easily. Due to this fact, older TMTs prefer a home-region orientation since it requires, as mentioned above, less information-processing capacity and is more attuned to the already known and experienced strategic orientation.

Further on, younger TMTs are more willing to adapt their behavior in case of environmental or strategic change and to learn new behavioral patterns in order to align their course of action to the challenges arising in foreign regions (cf., Child, 1974; Hart and Mellors, 1993; Tihanyi et al., 2000). On the other hand, older TMTs can be associated with a higher conservatism and can be expected to be less willing to adapt to in their opinion unnecessary or increased environmental or strategic change. Older TMTs will show mental barriers against change and are more attracted to keeping the status quo (cf., Hambrick and Mason, 1984; Stevens, Beyer, and Trice, 1978). Since the majority of Fortune Global 500 MNCs are home-region oriented and the expansion to foreign regions not marketed before goes along with greater strategic change and the adoption of new behavioral patterns, it can be expected that, while younger TMTs are more willing to adapt to a more global orientation of the MNC, older TMTs will be more likely to show an inertial behavior and endeavour to stick to a certain status quo of the MNC by remaining within the home region. Older TMTs can further rely on the experiences made within the home region in the past and a greater accumulated amount of experiences in general, supporting their view of the perceived advantages of a continuing home-region orientation. Even if the idea to expand to foreign regions is introduced within a TMT, it will take a longer time and meet stronger resistance within older TMTs before a final decision is made, as older managers tend to seek more information, evaluate any information more thoroughly and consequently take longer to make a decision (cf., Taylor, 1975) in order to overcome their mental barriers and inertial behavior. In addition to this argument, it can also be expected that older TMTs will not have the physical and mental endurance to meet the increased challenges of an expansion to foreign regions and the accompanying rising workload.

Additionally, MNCs, and TMTs in particular, have accumulated certain competencies, techniques and behavioral patterns in the time they have been operational in a certain place or

region (Hannan and Freeman, 1984). Again taking the assumption of prevailing home-region orientation as the basis, these competencies will be focused on the home region, and are not necessarily of a similar value in other regional settings. Relating to the average age of TMTs, it can be argued that older TMTs have relied on these competencies in their decision-making for a longer period of time, compared to younger TMTs, and have internalized them more thoroughly. They face a considerable risk that these competencies will not be as fitting in foreign regions, therefore fostering a home-region orientation. Oppositely, younger TMTs have not yet internalized these competencies as much and are better able to adapt them to new regional settings.

Younger TMTs also are expected to prefer host-region orientation due to the higher potential gains, accepting the equally more elevated risks. Younger managers can be expected to stand relatively closer to the beginning of their careers than older TMTs, therefore perceiving a greater need to establish themselves within the MNC. One possible opportunity to do this could be the expansion of business activities to further away, and hence new, foreign regions, thereby accepting the above mentioned elevated risks and uncertainties in the hope of proving their superior capabilities in managing these. Older managers on the other hand, seek more financial stability, being closer to the end of their career, which is more easily accomplished by remaining within the home region due to the aforementioned elevated risks in foreign regions (cf., Carlsson and Karlsson, 1970; Tihanyi et al., 2000; Wiersema and Bantel, 1992). They feel more accustomed and therefore comfortable with their home region. In addition, it can be argued that older TMT members are closer toward the end of their career and hence have an increased likelihood of not experiencing the results of any strategic change initiated. They can therefore be expected to show increased reluctance to move away from home-region toward host-region orientation, if they perceive the possibility of not being able to outlive the results or receive the corresponding credit for it in time. Equally, it can be expected that younger managers have a higher affinity to new communication channels such as the internet, email, and video conferences, thereby reducing the perceived geographical distance to business units in foreign regions as compared to older managers.

Finally, we refer to sociological studies showing that cohorts of younger people tend to have higher global travelling experience than cohorts of older people (cf., Lohmann and Danielsson, 2001). Consequently the younger generation can be argued to be more experienced with respect to geographically and culturally very distant countries, which are typically located outside the home region providing them with more confidence when dealing with these regions than older TMTs which might not possess the same experience. Besides, the younger

generation also shows higher willingness to travel globally and to more diverse destinations. Based on the above line of argumentation, we therefore derive the following hypothesis:

H1. Average top management team age is positively related to the home-region orientation of a MNC.

3.2 Company Tenure

Past Upper Echelons research has found opposing results concerning the general relationship of average tenure and the internationalization level of firms: Both a positive as well as a negative relationship between average tenure of the TMT and international diversification have been tested and both directions of relationships found significant support (cf., Herrmann and Datta, 2005; Simeon, 2001; Tihanyi et al., 2000; Wally and Becerra, 2001). This ambiguity is particularly interesting as it appears logical that a high tenure will unlikely be associated with low age. Rather to the contrary, a positive correlation between age and tenure appears logical as with increasing tenure it can be expected that age increases as well.

With regard to the influence of TMT average tenure in general and average company tenure on the home-region orientation of MNCs in particular, we expect that increased TMT company tenure leads to a less host-regional orientation, but rather an increased focus on the home region of the firm. A main aspect in this line of argumentation is the development of groupthink, as well as a common mindset within TMTs with higher company tenure. It appears reasonable to assume that higher company tenured TMTs have by definition worked together in the same MNC for a longer period of time and therefore have a greater probability of developing groupthink and common mindset. First of all, groupthink can be understood as a "mode of thinking which people engage in when the members' strivings for unanimity override their motivation to realistically appraise alternative courses of action" (Janis, 1982, p. 9), resulting in adherence to and self-enforcement of the groups' behavior. Second, with increased company tenure, the possibility of the development of a common mindset within teams rises. In general, common mindset within groups limits its openness to information and alternative ways of doing things, resulting in a collective blindness with regard to change (Janis, 1982; Perrow, 1984; Turner, 1976). Also, common mindset increases the homogeneity within the TMT with respect to values and knowledge, further limiting the innovative potential of higher company tenured TMTs. These aspects result in stronger adhesion to the status quo of higher company tenured TMTs (c.f., Dichtl, Koeglmayr, and Mueller, 1990; Finkelstein, Hambrick, and Cannella, 2009; Grimm and Smith, 1991), reducing the required flexibility to expand into foreign regions and leading to defensive attitudes within the team towards change and increased de-

mands. The need to react to possible political or economical instability and the increased uncertainties of foreign, less-known markets in potential host regions require openness and a move away from status-quo, which higher company tenured TMTs will be reluctant to voluntarily submit to. Instead, higher company tenured TMTs are expected to prefer repetition and routine in strategic decision making. In doing so, they experience less challenge and possess more experience and perceived control to, in their opinion, successfully deal with markets and countries, which are better known to them, i.e., the home region of the respective MNC. Host-regional orientation, on the other hand, is associated with strategic change and therefore requires a break of repetition and routine. Additionally, and based on Hambrick and Fukutomi (1991), task interest of longer company tenured TMTs is expected to decline over time, further minimizing the required effort and extended 'task interest' of searching for new information sources when shifting their home-region orientation toward new, foreign regions.

Another line of reasoning supporting the positive influence of average TMT company tenure on the home-region orientation of MNCs is the development of emotional and economic ties, which longer company tenured TMT members develop with their MNC. These ties will evolve during the years working for a MNC and result in higher risk-aversion and hence reduced willingness to expand into foreign regions. Contrarily, lower company tenured TMTs will have weaker emotional and economic ties or potentially none at all toward the MNC and therefore should be more willing to support a more global, but riskier strategy. As for emotional ties, higher company tenured TMTs can also be argued to be less willing to subject their MNC to instability and potential losses, both being potential consequences of a move away from the home toward a host-region orientation. TMTs with higher company tenure will rather want to secure prosperity and stability within the MNC. As for the economic ties, higher company tenured TMTs are expected to possess increased stock-ownership of the MNC as well as more elevated company pensions and retirement compensation as opposed to their less company tenured counterparts. As a consequence, longer company tenured TMTs will show higher reluctance toward increases in host-region orientation, preferring the perceived higher financial security and stability of the home-region orientation.

Based on the observation by Rugman (2005, 2000) and Rugman and Verbeke (2005, 2004) of the regional orientation of MNCs, longer company tenured TMTs will further have built up their social and business networks within their home region and therefore exhibit an increased integration into these networks within the home region. They will hence have had longer contact to the MNCs' home-region network partners, possibly resulting in more trustful relationships and closer collaboration. We associate these strong ties with advantages in production,

research and development, as well as marketing of the company. On the opposite, lower company tenured TMTs are less integrated into existing home-region social and business networks of the MNC and are more open to potentially new network partners in foreign regions. They will not have had the time to develop such strong relationships as their longer company tenured counterparts.

Additionally, and due to their seniority and corresponding increased power base within the MNC and TMT, those TMT members with a higher average company tenure are also in the position of convincing other lower company tenured TMT members of their own positive views on the above described perceived advantages of a home-region orientation. Drawing on the above arguments and past research, we consequently expect that higher company tenure leads to increased home-region orientation of MNCs. We therefore propose the following hypothesis:

H2. Average top management team company tenure is positively related to the home-region orientation of a MNC.

3.3 Education

Another important dimension which is expected to influence the cognitive basis and knowledge of the TMT (Hambrick and Mason, 1984), and hence the relationship between TMT characteristics and the home-region orientation of MNCs, is education. We argue that a move toward a more host-regional orientation signifies increased administrative complexity and a high level of information processing needs. Equally, a move toward host-region orientation requires changes and adjustments to the existing strategy. Based on their ability to better cope with these changes, increased administrative complexity and increased information processing requirements, we expect that TMTs with a higher average education level are more likely to pursue a host-region orientation than TMTs with a low average education level, who in turn will prefer a home-region orientation.

The prevailing home-region orientation of MNCs, as demonstrated by Rugman (2000, 2005) as well as Rugman and Verbeke (2004, 2005), implies that increases in host-region orientation require strategic adjustment to adapt to the new, more host-specific markets. As higher TMT education is linked to increased levels of innovation (Bantel and Jackson, 1989; Wiersema and Bantel, 1992), this adaptation should be easier for higher educated TMTs than their less educated counterparts. It is further argued that increased host-region orientation requires increased knowledge and information on and from the respective host-region. Due to their increased amount of education, TMTs with higher education levels can be argued to have had

contact with a larger variety of other, higher educated TMTs. It is therefore assumed that higher educated TMTs generally possess more, already existing knowledge on foreign markets (cf., Patzelt, zu Knyphausen-Aufseß, and Fischer, 2009; Wally and Becerra, 2001). The higher educated TMT's access to a larger, higher educated network also increases the higher educated TMT's ability to draw upon information and knowledge on host-region markets via their network partners. As a consequence, overall assessment of host-region markets is easier for higher educated TMTs than it is for their less educated counterparts. This effect is further strengthened by the higher educated TMTs' tendency to feel more at ease with travelling to foreign regions as well as their increased existing experience from travel into foreign regions (cf., Lohmann and Danielsson, 2001). Higher educated TMTs might hence already possess some of the information and knowledge needed in order to invest into foreign regions, leading to a reduced overall psychic distance toward host regions (cf., Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975) and a clear advantage over their less educated cohorts. Additional effects on home-region orientation merely originating from higher amounts of international education will be discussed further as part of the reasoning for the next hypothesis (H4).

In addition, a move toward host-region orientation requires more complex structures and increased budgeting detail, both of which high educated TMTs are argued to be more accustomed to than their less educated counterparts. Furthermore, host-region orientation in general can be assumed to go along with larger information processing needs and higher administrative complexity. We argue that higher educated TMTs possess a more open mind-set and higher information processing capacity (cf., Hambrick and Mason, 1984). Therefore, the potential negative effects of complexity, such as e.g., information overload, arising from increasing host-region orientation will consequently be reduced by the more educated TMT's ability to better deal with a higher degree of cognitive complexity (Hitt and Tyler, 1991; Wally and Baum, 1994). Together with access to more detailed host-region related information as described in the previous paragraph, higher educated TMTs should therefore be able to faster and better assess the thresholds, drawbacks, and risks of a move away from the home-region orientation toward a host-region orientation. Helped by this better assessment, and following Qian, Li, Li, and Qian (2008), it can be expected that the above described increased capability of assessing countries, markets, and cultures and dealing with cognitive and administrative complexity, will furthermore lead the higher educated TMTs to better establish those strategies and investments needed to overcome the distances and barriers of foreign regions. In principal, any such investment into foreign regions is expected to be accompanied by an in-

creased demand for information and knowledge about investment opportunities which are relatively more costly to obtain in foreign regions than in the home region (Hejazi, 2007). Based on the above reasoning, the cost of this information and knowledge needed for a host-region orientation will be lower within higher educated TMTs.

Concluding and based on the abovementioned reasons, highly educated TMTs appear to be relatively better equipped to extend the business activities of their MNC toward host regions than their less educated counterparts, who will prefer a home-region orientation. Therefore, we derive the following hypothesis:

H3. Average top management team education level is negatively related to the home-region orientation of a MNC.

3.4 International Experience

We expect that increases in average TMT international experience lead to a stronger host-region orientation of the TMT's MNC. It is assumed that higher international experience leads to a TMT's higher awareness of cultural, political and institutional differences between their home country and foreign countries. Based on Hofstede's (1980) study on cultural distances between IBM employees, we furthermore expect that this general experience of cultural differences by TMT members with higher amounts of international experience, can impact managerial decision-making.

When internationalizing into host-regions, it appears key to adopt strategy to the respective host-region and/or host-country. In comparison, the difference in cultural, political and institutional needs and requirements will be bigger within host-regions than within the home-region (Dow and Karunaratna, 2006). Based on this argument, increased host-region orientation will require more adaptation to existing strategy than increases in home-region orientation. Here, TMT members with higher international experience, a more global mind-set (Sambharya, 1996; Tihanyi et al., 2000) and higher awareness and understanding of any such distances, will be in a better position to analyze, judge and implement host-region specific required changes to company strategy. A good example are TMT members who are able to directly use international experience, to increase the host-regional orientation of their MNC: We argue that a non-Spanish, European TMT member with foreign experience from Spain will benefit from his experience, when increasing the company's activities in South America. Similarly, we would suggest that foreign experience from the United Kingdom will equally help a European, non-UK TMT member increase the company's activities in North America.

A further advantage of international experience is the acquisition and practice of foreign languages. It is assumed that TMTs with high levels of international experience will on the one hand speak and therefore also understand more foreign languages than TMTs without international experience. On the other hand, these TMTs with higher amounts of international experience can equally also be argued to feel more at ease when speaking these languages, based on a higher level of sophistication and knowledge of such languages spoken. As these arguments facilitate communication both within and outside the home-region, it is argued that TMTs with increased international experience will feel more at ease when dealing with host regions compared to TMTs with less, or no international experience. Equally and in line with the previous paragraph, these increased foreign language skills will furthermore improve understanding of cultural, political and institutional distances.

Contrary to the aforementioned line of arguments, it seems plausible to argue that international experience could also lead to greater awareness of risks and problems involved and associated with increased host-region orientation. This argument can be debilitated with reference to an interview by us with Jürgen Radomski (member of the board of directors, Siemens AG, 1994-2007) in which he states that “international experience, particularly from Asia, can make managers feel very humbled. While this international experience should generally be considered as positive for them, it also demonstrates to managers that they cannot always apply their home country management techniques to every country”. In principal, the broader the horizon (Athanassiou and Nigh, 2002) and the better the ability to judge foreign markets, the more will international experience help TMTs in deriving the right decisions with regard to increases in host-region orientation.

These advantages from international experience as well as the global mind-set are further underpinned by the international network, which TMTs with higher international experience can draw upon (Athanassiou and Nigh, 1999; Tihanyi et al., 2000). Whilst TMTs with no international experience are argued to primarily have networks including TMT members from the home country or home region at most, those TMT members with international experience are argued to have met and stayed in contact with more internationally diversified TMT members. As a consequence, when moving to a host-region orientation, those TMTs with higher international experience will be able to benefit from their network members' experiences through increased access to information, experience and knowledge. The latter argument further increases the already existing advantage of more internationally experienced TMTs over their less internationally experienced counterparts.

Furthermore, Neoinstitutional theory (DiMaggio and Powell, 1983) suggests that TMTs with less international experience will rely more on observation of the behavior of their interorganizational environment, such as e.g., competitors, suppliers and network partners, in order to reduce uncertainty (Henisz and Delios, 2001). We therefore argue that the less internationally experienced TMT members will also rely more on mimetic behavior with regard to decisions on the regional orientation of the MNC. With reference to the above described argument of a more home-region based network of less internationally experienced TMTs and the finding that most MNCs are home-region oriented, TMTs with less average international experience will mimic what they know and see most, i.e., a home-region orientation. More internationally experienced TMTs will, on the other hand, base their decision-making less on their direct environment and are able to rely more on their own past international experiences. This enables them to better implement new strategies such as an expansion to foreign regions not marketed before by the MNC or its interorganizational environment.

Altogether, and drawing on the above arguments, we expect that with increasing average TMT international experience, MNCs will shift their focus more toward host-regions and we therefore derive the following hypotheses:

- H4. Average top management team international experience is negatively related to the home-region orientation of a MNC

4. Method

4.1 Sample

The sample was derived from a list of top 500 German corporations in 2007 by German publishing house Axel Springer (<http://top500.welt.de/list/2007/U/>). From this initial index, we excluded those corporations, which were not listed or share based in the entire time between 1997 and 2007, as availability of information concerning sales and the composition of and information on the top management team would have been very limited. In a next step, financial institutions were excluded from the sample, due to different reporting requirements and unique capital structures (Contractor, Kundu, and Hsu, 2003; Fama and French, 1992; La Porta et al., 2002; Ruigrok, Amann, and Wagner, 2007), leaving an initial sample of 80 firms. For these 80 corporations, longitudinal sales and TMT demographic data was collected for a period of 11 years from 1997 to 2007. Equally and drawing on each corporation's annual report from 1997 to 2007, we derived a list of 843 board members, for whom to collect demographic information. In order to collect sales and TMT data for the 80 corporations from 1997 to

2007, we used a large variety of different data gathering techniques, ranging from annual reports, newspaper articles, CVs and questionnaires to telephone interviews with the respective individuals. All information was crosschecked for consistency and accuracy. Ultimately, limited availability of information on sales by (global) geographic region and limited information on TMT demographic information led to a sample of 32 corporations for which all sales and TMT data was available. Including corporations for which all sales and all but one TMT demographic data set was available; we were left with a final sample of 38 corporations, including 473 TMT members.

4.2 Dependent Variable

Home-region Orientation. Total sales (TS) and sales generated within the home region (HRS) were collected for the final sample consisting of 38 German corporations. Percentaged home-region orientation was defined as the coefficient between HRS and TS (HRS / TS). The home region of these German corporations is Europe. Rooted on Rugman (2000, 2005) and Rugman and Verbeke (2004, 2005), firms can be called home-region oriented when they exceed at least 50 % of sales within their home region. Firms with less than 50 % of their sales within their home region can be labeled host-region oriented. However, the percentage of sales within and beyond the home region is the locus of this study and less so if the MNC is home-region oriented or not based on Rugman and Verbeke's differentiation mentioned above. As an alternative measure of home-region orientation, MNC assets could be used as a suitable proxy. Nevertheless, due to data limitations and the limited availability of information concerning asset allocation throughout different global regions, we used the ratio of home region to total sales as dependent variable. Further on, results of Rugman (2000, 2005) and Rugman and Verbeke (2004, 2005) show that there is hardly any difference when using regional asset allocation instead of the home region sales to total sales ratio.

4.3 Independent Variables

Top Management Team. Equal to the Netherlands and Austria, German stock based MNCs have a two-tier governance structure consisting of the Vorstand (i.e., the board of directors) and the Aufsichtsrat (i.e., the supervisory board). While the Aufsichtsrat consists of non-executive directors, which monitor the Vorstand, the Vorstand itself is responsible for the daily management of the corporation (Semler, 1996). This clear-cut separation of responsibilities leads us to define the TMT as the board of directors, i.e., the Vorstand.

Age. In line with previous research (e.g., Herrmann and Datta, 2005; Tihanyi et al., 2000), TMT age was computed as average age of the TMT members in each year of the observation. Age was based on birth information found in the CVs and biographical information of individual TMT members.

Company Tenure. TMT average company tenure for each year of observation (t) was measured as the mean number of tenure of TMT members in the observed company in year t . A variety of measures of managerial tenure were considered, including board tenure and industry tenure. Finkelstein and Hambrick (1990) mention that age was examined as an alternative explanatory of tenure in their study, which we dismiss, due to the low correlation of age with company tenure ($r = .35$).

Education Level. Average TMT education level was defined using a six point scale, ranging from 0 = "high school" to 5 = "habilitation" ("habilitation" being the German education level equivalent to "postdoctoral lecture qualification") (Bantel and Jackson, 1989; Herrmann and Datta, 2005; Wally and Becerra, 2001).

International Experience. Average TMT international experience was measured as the mean combined number of complete years, which TMT members had spent in foreign countries after their high school diploma and up to the point of joining the board of directors. The number of years spent in foreign countries for each TMT member was calculated as the sum of complete years a TMT member had spent abroad during training / apprenticeship, education and/or international work assignments. Excluded from international experience were any foreign tasks or foreign work assignments and responsibilities, which were merely addressed from Germany and did not require permanent residency in the respective foreign country.

All TMT variables were lagged by one year (c.f., Barker and Mueller, 2002; Boone, van Olfen, van Witteloostuijn, and de Brabander, 2004; Goll, Johnson, and Rasheed, 2007; Hambrick, Cho, and Chen, 1996; Ruigrok, Peck, and Keller, 2006). Several considerations were made when deciding on the specific time lag of one year (also compare with Palmer and Wiseman, 1999, p. 1044). First and in principle, a lag appears sensible as internationalization decisions taken and hence influenced by a TMT in one year, should only be visible in the following year or years, but not the same year. Following, we expect that changes in TMT composition and the resulting changes in TMT characteristics, will not take immediate effect on sales or the regional orientation of sales of the MNC. Second, we argue that a separate time differentiation for each variable is not feasible and therefore assume a simultaneous influence of the different managerial characteristics on home-region orientation. Consequently, the

same time lag of one year has been applied for all independent variables. Third, it might appear reasonable to suggest longer time lags of two, three or even more years though any lag increase might lead to serious shortcomings (c.f., Cho, Hambrick, and Chen, 1994, p. 12). With ten years, Bhagat and Black (1999) demonstrated the longest lag known to us within TMT research. In general, when using longitudinal research design, any additional lag year leads to a substantial decrease in total number of data points. While a chosen one-year lag reduces total data points by 1/11, a two-year lag would already reduce total data points by 2/11 etc. Therefore, longer lags would lead to analysis of less data points, leading to results, which are less robust. Past researchers have furthermore demonstrated that differences in results for one-year lags vs. two-year lags appear to be minimal (c.f., Geletkanycz and Hambrick, 1997, p. 668; Westphal and Fredrickson, 2001, p. 1123). Nevertheless, we ran a sensitivity analysis as to whether a one-year or a two-year lag is more appropriate, resulting in slightly weaker results for the two-year lag. Hence, we oriented our research design on this result as well as previous, similar Upper Echelons studies (see above), consequently using a one-year lag and basing our analysis on a larger amount of data points, ultimately resulting in an increased predictability of the used model.

4.4 Control Variables

Firm Size. Drawing on previous research, firm size can be considered main control variable when testing international or regional diversification of firms as it can be assumed that larger firms possess more resources to increase international diversification (cf., Carpenter and Fredrickson, 2001; Finkelstein and Hambrick, 1990; Herrmann and Datta, 2005; Tihanyi et al., 2000). Firm size was controlled for by the total number of employees at end of year as stated in each corporation's annual report for the respective year.

Export outside Europe. To control for effects related to general changes in export to non-European regions, we introduced export outside Europe as second control variable. This variable was defined as absolute annual export by all German corporations outside Europe in billion Euros, based on statistical economic data from national income and expenditure calculations by Statistisches Bundesamt Deutschland (Statistisches Bundesamt Wiesbaden, 2010, Statistisches Bundesamt Wiesbaden, 2007).

TMT Size. We measured TMT size as average total number of board members in year t (cf., Finkelstein and Hambrick, 1990). TMT Size was also lagged by one year according to the reasons mentioned above.

5. Results and Discussion

The hypotheses have been tested using the previously described eleven lagged, longitudinal data panels for 38 corporations from 1997 to 2007 with a total of 380 data points per variable. Similar to Carpenter and Fredrickson (2001), this study has used ordinary least squares (OLS) fixed-effects regression analysis to control for unobserved differences between corporations. The use of random-effects regression analysis was rejected, as no theoretical evidence was established for why variance in TMT demographic characteristics should be related to or dependent on specific corporation characteristics (cf., Greene, 2005; Greene, 2008; Hausman, 1978). The fixed-effects model can further be considered the "preferable model" (Greene, 2005; Greene, 2008) due to it being a more conservative test, generating a multiple squared correlation coefficient (R^2) which is interpretable, whereas that generated by e.g., a generalized least squares (GLS) random-effects regression is not (cf., Carpenter and Fredrickson, 2001).

Table 1. includes means, standard deviations, and correlations for the analyzed dependent variable (Home Region Orientation) and the analyzed control (End of Year Employees, Export outside Europe and Board Size) and independent (TMT average age, TMT average company tenure, TMT average education level and TMT average international experience) variables.

Table 1. Descriptive Statistics and Correlations

Variables	Mean	Standard Deviation	1	2	3	4	5	6	7	8
1. Home Region Orientation	0.68	0.18	1.00							
2. EoY Employees	89861.35	116308.03	-.04	1.00						
3. Export outside Europe	458.47	128.12	-.05	.01	1.00					
4. Board Size (lagged)	6.02	2.51	-.19	.65	-.15	1.00				
5. Age (lagged)	52.96	3.54	.10	.27	-.09	.27	1.00			
6. Company Tenure (lagged)	15.80	6.32	-.21	.14	-.05	.30	.35	1.00		
7. Education Level (lagged)	2.70	0.69	-.16	.20	-.02	.22	.38	.11	1.00	
8. International Experience from Work, Education and Training in years (lagged)	3.54	3.41	-.26	.22	.14	.34	.00	.29	.06	1.00

Table 1 shows that on average, 67.7 % of sales are generated within the home region, namely Europe. This result is comparable to Rugman and Verbeke's (2004) results on a sample of the Fortune Global 500 corporations, who found that on average, sales within the respective home region of the corporations in their study represent 71.9 %. These results state that German corporations home-region orientation is comparable to that of the worlds' 500 largest corporations studied by Rugman and Verbeke (2004).

To test our four hypotheses, we ran two sets of OLS regression models on the dependent variable (Home Region Orientation). Model I included the control variables only (End of Year Employees, Export outside Europe and one-year-lagged average Board Size). In Model II we again included the control variables, but further added the hypothesized independent variables of TMT demographic characteristics, each lagged by one year (average age, average company tenure, average education level and average international experience). The results (Table 2.) indicate an increase in adjusted R² between Model I and Model II of .105, suggesting that the combined TMT demographic characteristics used in our regression explain part of the overall variance in internationalization. The following discussion is based on the complete and fully specified Model II.

Table 2. Results of OLS Regression: TMT Characteristics and Regional Orientation

Variables	Model I (Control Variables)		Model II (Full Model)	
EoY Employees	.000*	(.000)	.000 [†]	(.000)
Export outside Europe	.000 [†]	(.000)	.000	(.000)
Board Size (lagged)	-.022***	(.005)	-.013***	(.005)
Age (lagged)			-.013***	(.003)
Company Tenure (lagged)			-.006***	(.001)
Education Level			-.052***	(.013)
International Experience from Work, Education and Training in years (lagged)			-.007***	(.003)
Constant	.842***	(.044)	.341*	(.138)
F	7.781***		11.045***	
R ²	.058		.172	
Adj. R ²	.051		.156	
N	380		380	

[†] p < .1; * p < .05; ** p < .01; *** p < .001

Standard errors in parentheses

Our first hypothesis (H1) predicted a positive correlation between average TMT age and home-region orientation. We found strong support for this hypothesis (p < .001), indicating that with higher average TMT age, MNCs become more home-region oriented, whereas with younger average TMT age, MNCs become more host-region oriented. This outcome suggests that older managers are indeed less willing to internationalize beyond the home region due to their decreased ability and willingness to adapt to foreign regions. Higher aged TMTs appear to focus their activities on the home region, thereby avoiding the increased uncertainty and equivocality of foreign regions. They are less willing to adapt to environmental change, or

learn new behavioral patterns. Instead, older TMTs prefer repetition and therefore have the tendency to concentrate their accumulated competencies on the home region.

Contrarily, we could not find support for our second hypothesis (H2), which predicted a positive relationship between average TMT company tenure and home-region orientation. Instead, we found an opposing, highly significant negative correlation between company tenure and the home-region orientation of MNCs ($p < .001$). As a consequence, it appears as if with increasing average company tenure, TMTs will rather orientate themselves away from the home region and toward foreign regions. Therefore, and following the reasoning of scholars mentioned in the introduction to this paper (e.g., Michel and Hambrick, 1992; Tihanyi et al., 2000), higher tenured TMTs can be argued to exhibit superior competencies, which are necessary to evaluate the MNC's capabilities when internationalizing into foreign regions. Apparently, the development of groupthink, common mindset, and emotional and economic ties, as well as the increased integration in home-regional networks, of higher tenured TMTs play an inferior role in the decision-making process on regional orientation of MNCs. Based on the results of this study, it can be contrarily reasoned that with increasing company tenure, TMT members will rather develop those competencies necessary to evaluate their respective MNC's requirements for an orientation beyond the home region and into host regions.

With regard to average TMT education (H3), we found support for our hypothesis. The results depict a significant negative relationship between average TMT education level and the home-region orientation of MNCs ($p < .001$), supporting the notion that higher educated TMTs are in a better, more qualified position to pursue host-regional orientation than their less educated counterparts. This suggests that higher education indeed provides managers with the competencies needed to follow a more host-region oriented strategy. As laid out before, these managers can be expected to exhibit a more open mind-set, as well as a higher awareness and better understanding of foreign cultures and regions compared to their less educated counterparts.

Ultimately, our fourth hypothesis (H4) was also corroborated, on the basis of a significant negative relationship between average TMT international experience and home-region orientation of MNCs ($p < .001$). Compared to their less internationally experienced counterparts, TMTs with higher average international experience are more willing to apply a host-region orientation. Similar to higher educated top managers, TMTs with higher average international experience are better capable to adapt to new and different environments in foreign regions. With regard to the perceived psychic distance, the results of this study can be related to Jo-

hanson and Vahlne's (1977) internationalization process model: TMT members with less international experience perceive a greater psychic distance to foreign regions and its consequential increased uncertainty in contrast to the home region. With greater average international experience, average psychic distance will decline and TMTs will extend their international activities more to countries beyond the home region.

6. Implications

The main objective of this study was to extend existing Upper Echelons research on the internationalization of MNCs by adding the concept of regional orientation. The overall aim was an improvement of the at times ambiguous findings on the relationship between TMT characteristics and the internationalization process of MNCs. This refinement of Upper Echelons research has been suggested by previous scholars (e.g., Tihanyi et al., 2000), but to our knowledge, no research exists to-date, which furthers Upper Echelons research into regionalization of MNCs. Going forward and based on the significant results of this study, it appears necessary to include the aspect of regional orientation to any TMT research on internationalization.

Based on Upper Echelons theory, TMT characteristics serve as a proxy for the TMT members' values, norms, and beliefs with regard to strategic decision-making. Therefore, considering the above depicted findings, it is now possible to define those TMT specific attributes (proxied by TMT characteristics) which a MNC requires for the strategically desired regional orientation. The results indicate that aspects such as e.g., information-processing capacity, conservatism, risk-aversion, international networks of TMT members, as well as individual experience in general, have a fundamental influence on the regional expansion of MNCs. Based on our study, it can be argued that when diversifying into host regions, MNCs require managers with increased average information-processing requirements to deal with increased uncertainty and equivocality of foreign regions. Further, MNCs require TMTs with less average conservatism and higher adaptability to new organizational and environmental settings. Additionally, access to international networks supports the reduction of uncertainty and equivocality of TMTs. Work and education-related experiences, as well as international experiences further can be expected to support the TMT capabilities needed for a host-region orientation of MNCs as they promote the awareness of diversity of foreign markets.

Considering the analysis of the hypothesized relationships in the present study, the usage of longitudinal data has led to qualitative results on directional relationships between TMT characteristics and their influence on the home-region orientation of MNCs. Based on a sample

size of 38 German stock listed MNCs and 473 observed TMT members over a period of 11 years this longitudinal study was able to draw on a relatively large number of observations, also in comparison to previous TMT research (e.g., Carpenter and Fredrickson, 2001; Herrmann and Datta, 2005; Tihanyi et al., 2000). Therefore, using longitudinal data, the results on the relationships between TMT characteristics and regional orientation of MNCs presented above, should be robust and resilient.

The significant results of this study further demonstrated that future studies should equally intend to operationalize average TMT international experience by using the number of years of international experience instead of using a purely binary variable (cf., Herrmann and Datta, 2005; Sambharya, 1996; Tihanyi et al., 2000; Wally and Becerra, 2001). Measuring the sum of complete years a TMT member has spent abroad during training / apprenticeship, education and / or international work assignments, we have managed to include a far larger amount of possible international experience than the binary studies mentioned above. As we were able to corroborate our hypothesis, it can further be argued that it is recommendable to follow the operationalization approach that managers accumulate their international experience not only through work experience, but additionally through their training, apprenticeship and / or education in foreign countries.

With regard to the practical implications of this study, results demonstrate that TMT characteristics have significant impact on the regional orientation of MNCs. In the future, practitioners might therefore want to consider the composition of the TMT depending on the regional focus desired as part of their strategy. E.g., should MNCs intending to expand their activities into foreign regions seek to unify young, highly educated and internationally experienced TMT members with elevated company tenure.

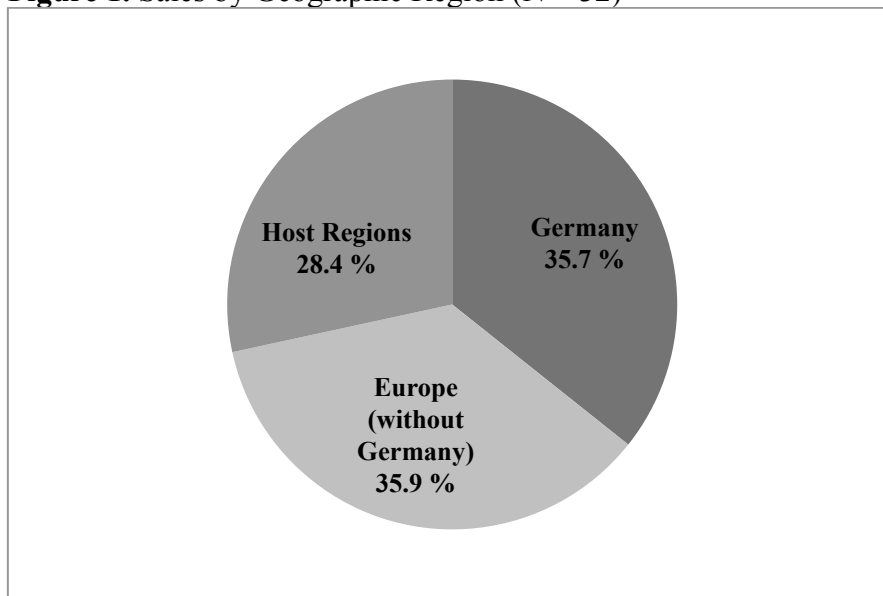
7. Limitations

One of the main limitations of the home-region orientation framework as introduced by Rugman (2000, 2005) and Rugman and Verbeke (2004, 2005) is the missing recognition of solely domestic firms, when measuring home-region orientation (cf., Osegowitsch and Sammartino, 2008).

Based upon this criticism, it remains unclear whether MNCs with a high home-region orientation actually internationalize within their home region, or rather are to a high degree domestic, with most or all of their sales originating from within their home country. Concerns related to this limitation could in theory equally be raised with regard to this study, especially when

considering that an average of 71.6 % of total sales were generated within the home-region (Figure 1.). However, when looking at the distribution of sales between Germany, Europe without Germany and host regions of the tested MNCs (Figure 1.), 35.7 % of sales were generated within Germany, 35,9 % of sales were generated within the rest of Europe excluding Germany and 28.4 % of sales were generated in host regions. Therefore, of the 64.3 % of foreign sales generated, 55.8 % stem from within the home region excluding Germany. Based on this well-balanced split in average sales, we argue that the hypothesized relationships on home-region orientation withstand the criticism raised by e.g., Osegowitsch and Sammartino (2008). Additionally, we are thus able to differentiate our research results from prior work on the relationship of TMT characteristics and internationalization, as we are able to demonstrate that higher age, lower company tenure, less education and less international experience do not necessarily lead to a solely domestic focus of MNCs, as shown in previous research (e.g., Tihanyi et al., 2000). In contrast, these TMTs might internationalize their business activities, but rather within the home region.

Figure 1. Sales by Geographic Region (N = 32)



Key outcome of this study is the result that TMT characteristics are related to the regional orientation of MNCs. Future research should extend this research by further looking into the relationship between TMT characteristics and the actual destination of regional expansion. As an example could further research analyze data on the origin of a TMT member's international experiences and consequently develop assumptions regarding the experience's influence on the actual destination of regional expansion. In general, we would expect that, e.g., European managers with experiences from Northern America will be more likely to expand to North

American countries compared to European managers with experiences from South East Asia, who in turn will be more likely to expand to South East Asian countries. Further, and along this line of argumentation, it might also be worth testing whether a good fit between TMT characteristics and home-region orientation, as predicted in the study on hand, results in greater performance.

A third limitation of the present study concerns the type of data analyzed. Focusing on German stock listed MNCs built the foundation of this study. It has been argued previously (cf., Palmer and Varner, 2007) that there exist significant differences between international experience of TMT members based on the geographic region the respective MNC is headquartered in. The smaller amount of international experience of Northern American TMTs compared to their European counterparts (Palmer and Varner, 2007) can lead to differences in the results when comparing studies from different geographic regions. Still, as most current TMT research has been based on Northern American MNCs, the use of German MNCs also provides an additional angle and leaves opportunities for future scholars to test the hypothesized arguments on e.g., Asian and Northern American MNCs.

A further limitation of this study is related to the use of TMT characteristics as proxy for the influence of executive's values, norms and beliefs on strategic decision-making. Future research might analyze the impact of psychological effects of TMTs on the home-region orientation of MNCs by e.g., conducting interviews with TMT members. While this was not the aim of the present study, inductive testing of the researched hypotheses could lead to the discovery of additional influences, which TMTs might have on regional orientation of MNCs not covered before.

Furthermore, the study has exclusively focused on the *Vorstand* as TMT, while excluding the possible impact of lower level managers on decisions concerning the regional orientation of MNCs or the *Aufsichtsrat*. The *Aufsichtsrat*, as well as e.g., regional managers might have an impact on decision-making with regard to expanding operations within regions marketed by the MNC. Even though we expect that the driving force in the internationalization process of MNCs is the board of directors, i.e., in the case of German MNCs the *Vorstand*, it should be of interest in what way, e.g., the *Aufsichtsrat*, or regional managers, are able to influence decision-making processes within the TMT. Due to data limitations, this aspect could not be tested in this study but might prove further opportunity for future research.

As demonstrated above, this study has both contributed to previous and current research, but also set the ground for further research on the influence of TMT characteristics on regional

orientation of MNCs. Providing the first extension of Upper Echelons theory as introduced by Hambrick and Mason (1984) into the concept of home-region orientation as introduced by Rugman, (2000, 2005) and Rugman and Verbeke (2004, 2005), this study was neither able to reduce all limitations, nor fully corroborate all hypothesized questions. This research rather takes theory one step further and gives an alternative explanation on the mechanisms working within MNCs when deciding on regional orientation of MNCs and why TMTs do matter.

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D The Influence of Intra- and Interregional Orientation on the Performance of German Stock Corporations

Till Dunemann

Abstract

This study investigates the influence of intra- and interregional orientation on multinational enterprises' (MNE) performance. The central argument of the paper is that there exists an inverted sigmoid relationship between the interplay of intra- and interregional orientation and performance. Therefore, a three-stage theory of interregional orientation is developed and empirically tested. It is postulated that high levels of intraregional and low levels of interregional orientation have a positive, medium levels of intra- and interregional orientation a negative and low levels of intraregional and high levels interregional orientation a positive effect on MNE performance. Additionally, it is hypothesized that this relationship is influenced by the business climate of the respective intraregional environment. The research analysis is based on longitudinal data on 53 of the largest German stock corporations in the period 2002-2010, resulting in a final sample of 477 observations. Results support the postulated inverted sigmoid relationship. Further on, in times of recession within the home region, highly interregionally oriented MNEs show higher performance levels opposed to more intraregionally oriented MNEs.

Keywords: Regional Orientation, Regional Strategies, MNE Performance, Longitudinal Analysis, Business Climate

1. Introduction

Recent empirical evidence indicates that the world's largest multinational enterprises (MNEs) follow a regional rather than a global strategy of international diversification (e.g., Delios and Beamish, 2005; Dunning, Fujita, and Yokova, 2007; Grosse, 2005; Rugman, 2000; Rugman and Verbeke, 2004, 2005; Yin and Choi, 2005). This research shows that MNEs tend to concentrate their international activities on the respective home region and show little activity outside it. The home region is thereby characterized as the part of the Triad (Europe, North America or Asia), where the MNE has located its headquarters (Rugman, 2000; Ohmae, 1985). However, our understanding of the implications on MNE performance of an intraregional (home-regional) versus interregional orientation is still limited. To date, the concept of regional orientation and its influence on MNE performance has only been acknowledged by few researchers (Banalieva and Santoro, 2009; Beleska-Spasova and Glaister, 2010; Chen, 2007; Li, 2005; Lee and Marvel, 2009; Qian et al., 2008; Richter, 2007; Rugman, Kudina, and Yip, 2007; Rugman and Oh, 2010). Research has mainly dealt with the influence of intraregional orientation on performance and has neglected the interplay of intraregional and interregional orientation. As a result, the major concern of this study is to understand whether an intraregional or interregional orientation results in a higher performance level for MNEs. Hence, a three-stage theory of interregional orientation is developed and empirically tested. In this three-stage theory, the interregional orientation is divided into three stages with low, medium and high levels of interregional orientation and its respective level of intraregional orientation (high, medium, and low) and each stage is tested with regard to its impact on MNE performance.

A second aspect of this study is to analyze how this relationship is affected by phases of recession or expansion of the business cycle. This is in line with Navarro, Bromiley, and Sottile (2010), stating that "the relationship between business cycle management and firm performance represents one of the most important but arguably least developed research streams in all of management scholarship." (p. 50). Since World War II, economic recessions occur about every five years (Latham and Braun, 2011). So far, prior research has stated that MNEs should diversify their activities internationally during times of recessions in order to spread risk to various markets and countries and reduce the negative impact on returns. Whether this international diversification should be intraregionally or interregionally has not been dealt with and is the second concern of this study.

This study is, to my knowledge, the first research to analyze the direct relationship of intraregional to interregional sales on performance of German MNEs and to test the impact of the business climate on the relationship of regional orientation and performance. Therefore, data on the largest German stock-based MNEs was collected over the period from 2002-2010. This approach has two advantages: First of all, by studying MNEs from one country, country effects can be excluded (Glaum and Oesterle, 2007) and the regional orientation and performance relationship is tested on MNEs from a smaller local market, whereas prior research mainly focused on US-based MNEs, having a much larger home-market base compared to German MNEs and therefore showing different patterns of international and interregional orientation (e.g., Buhner, 1987; Capar and Kotabe, 2003). Second, the time period allows for testing the effects of one major expansion phase following the 2001 financial crisis as well as a phase of recession starting in 2008. As to the empirical analysis, a method to test for cross-sectional dependencies, which can be expected in most studies based on financial panel data on firms, is employed. This method has not been applied before in research on the MP-relationship.

In consequence, the current paper is structured as follows: First, prior research on the MP-relationship is introduced before the hypotheses on the three-stage theory of interregional orientation are developed. Next, research design and method will be depicted. Ultimately, I will present the research results and their discussion, before concluding with resulting implications for future research and management as well as an overview of encountered and constraining research limitations.

2. Prior Research

In the past 40 years of International Business (IB) research, the relationship between performance of MNEs and their degree of internationalization has become one of the most researched linkages in the field. Nonetheless, homogeneous conclusions have so far been missing. In contrast, findings are still considered as inconsistent and contradictory (e.g., Contractor, Kundu, and Hsu, 2003; Lu and Beamish, 2004). These contradictory findings rest on different perceived relationships ranging from linear to quadratic and, in the last decade, cubic or sigmoid. In the following, I will present a short overview of multinationality and performance (MP) research of the past decades to underline this inconsistency. The approach seems reasonable to derive a clearer picture of prior research on the MP-relationship and to underline its shortcomings, partly explained by a missing differentiation of internationalization between

intra- and interregional internationalization. Further on, this prior research can be seen as a starting point for the development of a three-stage theory of interregional orientation.

In the first years of MP-research, mainly linear relationships between multinationality and performance were tested. These findings either showed a positive (e.g., Buhner, 1987; Daniels and Bracker, 1989; Grant, 1987; Sullivan, 1994; Tallman and Li, 1996), a negative (e.g., Brewer, 1981; Denis, Denis, and Yost, 2002), or no relationship at all (e.g., Buckley, Dunning, and Pearce, 1978; Kumar, 1984). Further extending this research stream, later studies expected a quadratic or curve-linear relationship. Some researchers found a u-shaped relationship with an initial decline of performance at low levels of internationalization and an increased performance for high levels (e.g., Capar and Kotabe, 2003; Dragun, 2002; Eden and Thomas, 2000; Lu and Beamish, 2001; Mathur, Singh, and Gleason, 2001; Qian, 1996; Ruigrok and Wagner, 2003). In contrast, others supported an inverted u-shaped relationship between the degree of internationalization and performance (e.g., Elango, 2006; Geringer, Beamish, and daCosta, 1989; Gomes and Ramaswamy, 1999; Hitt, Hoskisson, and Kim, 1997; Ramaswamy, 1995). These researchers expected that performance is enhanced at low levels of internationalization and will eventually decline when a certain optimum level of internationalization is reached and the costs outweigh the benefits of internationalization.

In recent years, researchers developed a cubic or s-shaped relationship of the degree of internationalization and performance, dividing it into three stages (e.g., Contractor, Kundu, and Hsu, 2003; Kudina, Rugman, and Yip, 2009; Lu and Beamish, 2004; Ruigrok, Amann, and Wagner, 2007; Thomas and Eden, 2004). Again, results regarding the influence of different stages of internationalization on performance are contradictory. While some researchers (Kudina, Rugman, and Yip, 2009; Lu and Beamish, 2004; Thomas and Eden, 2004) expect a negative impact in the first, a positive in the second and again a negative in the last stage of internationalization, others found, at least partly, an inverted s-shaped relationship (Contractor, Kundu, and Hsu, 2003; Ruigrok, Amann, and Wagner, 2007).

Several reasons for these inconsistent and at times contradictory results have been identified. A number of these reasons are mentioned by Contractor, Kundu, and Hsu (2003), who expected a s-shaped relationship between the degree of internationalization and performance and introduced a three-stage theory of international expansion. The authors mention that in case of the observed linear and quadratic findings, a simple reason might be that a quadratic or cubic term has not been integrated in those studies, even though they might have shed further light on the respective relationships. With regard to the contrary results of the established relation-

ships, a reason might be found in the underlying data used in those studies. Some might have captured only the first stage of internationalization, leading to a negative relationship between the degree of internationalization and performance, while others captured data on firms mainly at the second stage with a positive linear slope. The same can be applied to those studies that determined a u-shaped or inverted u-shaped relationship (see also Oh and Contractor, 2013). Thus, an analysis of MNEs representing the whole range of internationalization, exhibiting low, medium, and high levels of internationalization, is called for. Another reason might be shortcomings in the theoretical framework (Gomes and Ramaswamy, 1999) as well as differences in the methodology used in the respective studies (Bausch and Krist, 2007). Especially differences in the operationalization of internationalization and performance as well as various control and moderator variables used by some researchers led to contradictory results (i.e., Grant, 1987; Glaum and Oesterle, 2007; Ruigrok and Wagner, 2003). Particularly the operationalization of internationalization and the missing differentiation of the foreign countries and regions a MNE internationalizes to are major causes resulting in inconsistent findings (Qian et al., 2008), although this might be necessary in order to get more robust results concerning the MP-relationship.

Of course, MNEs active in foreign countries within their respective home region (i.e., EU, North America, Asia) will show a different performance development compared to firms operating in countries outside their home region. Mostly all research mentioned above has focused on the degree of internationalization per se, not recognizing different kinds of international orientation by differentiating between the destinations of the international operations (Oh and Contractor, 2013; Richter, 2007; Rugman, Kudina, and Yip, 2007). Another argument is the origin of the MNEs studied. The home country of a MNE and its market size has an important impact on internationalization behavior. MNEs from large countries, such as the USA, have less reason to internationalize because they already serve a large market in comparison to MNEs from smaller countries such as Germany or Switzerland (Glaum and Oesterle, 2007; Elango and Sethi, 2007; Ruigrok and Wagner, 2003; Yang and Driffield, 2012). Not recognizing these differences in the origin of MNEs and the destination of sales and/or FDI can result in contradictory and inconsistent findings.

A new attempt to shed more light on the MP-relationship has been the introduction of the regionalization debate first implemented by Rugman (2000) and Rugman and Verbeke (2004, 2005). To date, few researchers have explored the value of regional metrics in the analysis of multinationality and performance. An overview as well as further literature on the relationship between regional orientation and performance and its results are shown in Table 1. Li (2005)

analyzed the moderating influence of intraregional sales on the MP-relationship and discovered a positive moderating effect of a firms' intraregional orientation. Rugman, Kudina, and Yip (2007) were the first to research the direct relationship between regional orientation and firm performance. They analyzed the influence of European to total sales of British MNEs on firm performance, measured as return on foreign assets (ROFA) and return on total assets (ROTA), and found an inverted u-shaped relationship for ROFA as well as a linear relationship for ROTA as best fitting. Nevertheless, also a u-shaped and a cubic relationship for ROTA yielded significant results, with a slightly weaker fit. The authors concluded that highly regionalized and highly internationalized firms show a higher performance level than firms showing medium levels of regionalization. Additionally, a low level of regionalization and a high level of internationalization, namely global firms, led to a positive impact on performance (Rugman, Kudina, and Yip, 2007). One limitation of the study, though, is the missing differentiation between intraregional sales and domestic sales. Their measure of intraregional sales was operationalized as European sales to total sales. It is therefore not possible to clearly distinguish between intraregional and domestic sales.

Another study by Rugman and Oh (2010) also analyzed the relationship of intraregional orientation and performance of the largest US MNEs. With regard to ROA and ROS as performance measures, the authors found a s-curve relationship with a negative impact of low and high levels and a positive influence of medium levels of intraregional orientation. Contradictory, using Tobin's Q as a performance measure, they found an inverted s-curve relationship with a positive impact at low and high levels and a negative influence at medium levels of intraregional orientation. Even though the R^2 is at .43 slightly higher for ROA than for the model using Tobin's Q (.37) as performance measure, the authors disregarded ROA as a dependent variable since Tobin's Q, in their opinion, better fits their theoretical framework by exhibiting a positive impact of high levels of intraregional orientation on MNE performance. This disregard concerning the significant empirical results of ROA is further underlined by the following quote: "However, (R/T) is significant but with the wrong signs for the s-curve fit using conventional accounting performance, such as ROA and ROS" (Rugman and Oh, 2010, p. 486). It seems questionable whether it is appropriate to interpret the signs of the s-curve fit to be wrong and to largely ignore these results in the following discussion of their results. Additionally, Rugman and Oh (2010) also neglected to distinguish between domestic and foreign sales within the home region, reducing the accuracy of their interpretation.

Table 1. Prior Studies on the Relationship between Regional Orientation and Performance

Author	Data	Performance Indicator	Regional Orientation	Results
Li (2005)	US service MNEs from 1997 to 2001	ROS	Ratio of intraregional sales (excl. home country) to foreign sales	S-curve MP-relationship, intraregional sales has positive moderating effect
Rugman/Kudina/Yip (2007)	UK MNEs in 2001	Return on foreign assets (ROFA), return on total assets (ROTA)	Ratio of European (incl. domestic sales) to total sales	Positive linear relationship; quadratic and cubic relation less significant
Sukpanich (2007)	Fortune Global 500 firms in 2001	ROE, ROA, ROS	Ratio of intraregional (incl. domestic sales) to total sales	Positive linear relationship for ROE; no significant results for ROA and ROS
Chen (2007)	Asian MNEs from 2001 to 2005	ROA	Ratio of intraregional (incl. domestic sales) to total sales, ratio of interregional sales to total sales	U-shaped relationship between intraregional sales and ROA; positive linear relationship between interregional sales and ROA
Richter (2007)	Worldwide, most internationalized non-financial firms from 2001 to 2003	ROA	Ratio of rest of home-region sales to total sales	No significant results
Qian et al. (2008)	Largest US firms in Fortune 500 list from 1996-2000	ROA, ROS	Entropy measure of regional diversification considering the number of regions a firm operates in and the relative importance of each region to all market regions	Positive linear relationship between low and moderate levels of regional diversification and performance; inverted u-shaped relationship between medium and high levels of regional diversification and performance
Lee/Marvel (2009)	Korean international SMEs in 2002	ROA	Ratio of intraregional (incl. domestic sales) to total sales	Inverted s-curve relationship between firm-specific advantages and performance, intraregional sales has a positive moderating effect
Banalieva/Santoro (2009)	Emerging markets MNEs from 2000-2006	ROA	Ratio of intraregional (excl. domestic sales) to total sales, ratio of global to total sales	Positive linear relationship between intraregional sales and performance only when global sales are low
Beleska-Spasova/Glaister (2010)	UK exporting firms in 2007	Perceptual measures of export performance (questionnaire)	Home-regional, host-regional, bi-regional, and global orientation	Bi-regional and global orientation has positive influence on export performance
Rugman/Oh (2010)	US MNEs of world's 500 largest firms in 2001	Tobin's Q, ROA, ROS	Ratio of intraregional sales to total sales	S-curve relationship between intraregional sales and ROA and ROS, inverted s-curve relationship for Tobin's Q

Qian et al. (2008) analyzed the impact of regional diversification on performance of the largest US firms by using an entropy measure, which takes into account the number of regions a firm operates in and the relative importance of each region to all market regions. Results

showed that low to medium levels of regional diversification had a positive linear influence on performance while medium to high levels exhibited an inverted u-shaped relationship with performance declining at high levels of regional diversification. Two further studies to be mentioned here are those by Banalieva and Santoro (2009) and Beleska-Spasova and Glaister (2010). The former analyzed the relationship between intraregional orientation and performance of emerging market MNEs from 2000 to 2006. The result was a positive linear relationship. Tests of a quadratic or cubic relationship were not conducted. Beleska-Spasova and Glaister (2010) tested the performance of home-region, host-region, bi-regional and global British SMEs, according to Rugman's (2000) and Rugman and Verbeke's (2004, 2005) classification of international firms. Results demonstrated that bi-regional and global exporters were more likely to exhibit a high export performance compared to home- and host-region oriented exporters, having a positive linear effect on performance. Again, tests of a quadratic or cubic relationship were not conducted.

In sum, prior research on the relationship of regional orientation and performance demonstrates various shortcomings that need to be prevented in future research and will be dealt with in this paper. First of all, there needs to be a clear differentiation between domestic and intraregional sales to test the influence of intra- and/or interregional orientation on performance. Including domestic sales in the intraregional sales measure biases the results with regard to highly domestic MNEs, as was done in research by e.g., Rugman, Kudina, and Yip (2007) and Rugman and Oh (2010). Second, the interplay between intra- and interregional orientation needs to be looked upon to derive a clearer understanding as to which kinds of regional orientation improve MNE performance and whether a purely intraregional orientation really accelerates performance in contrast to a more interregional orientation. And third, linear, quadratic and cubic relationships should be tested to further understand the underlying relationship and not to repeat mistakes made in prior MP-research. However, past research demonstrates that there is a need to analyze the relationship between intra- and interregional sales in order to derive better, and hopefully less conflicting results in the MP-debate.

3. A Three-stage Theory of Interregional Orientation

According to Rugman (2000) and Rugman and Verbeke (2004, 2005), most of the world's largest MNEs can be characterized by an intraregional focus, having most of their sales within their home region. Prior research found a positive effect of an intraregional focus on performance (i.e., Banalieva and Santoro, 2009; Chen, 2007; Rugman, Kudina, and Yip, 2007; Rugman and Oh, 2010; Sukpanich, 2007). Even though MNEs are able to increase perfor-

mance by a higher degree of intraregional internationalization, higher levels of interregional orientation might result in higher performance levels. By focusing mainly on intraregional orientation, prior research disregarded the fact that most MNEs exhibit a significant share of their total sales interregionally. Besides the home region, foreign regions constitute a major aspect of internationalization strategy. This argument in favor of analyzing intra- as well as interregional orientation is further underlined by the fact that e.g., German MNEs, according to the dataset underlying this research, have on average 29 % of their total sales interregionally and 36 % intraregionally. These numbers accentuate that MNEs' interregional orientation significantly contributes to their total sales. Therefore, research needs to focus on the question whether an intra- or interregional orientation leads to greater performance. Since a purely intra- or interregional orientation of MNEs seems unrealistic and, in contrast, a mix of intra- and interregional internationalization more probable, research on the ratio of intra- to interregional orientation and its impact on performance is called for. By studying this ratio, it is possible to draw conclusions as to which ratio will positively influence MNE performance the most and whether MNEs should put more focus on their home region or foreign regions when operating internationally.

Before depicting the benefits and costs of an interregional orientation in greater detail, I will describe the reasoning for a low level of firms' internationalization. It can be expected that firms will rather operate intraregionally than interregionally at low levels of internationalization. Based on Johanson and Vahlne (1977) and the concept of psychic distance chain, MNEs will first be active in countries culturally and/or geographically similar to its home country due to the following reasoning: Countries within the home region exhibit fairly similar administrative mechanism, comparable consumer tastes and distribution systems, resulting in greater market familiarity (Davidson, 1983; Gomes and Ramaswamy, 1999; Li, 2005; Rugman and Verbeke, 2004). Based upon this, MNEs are able to use existing home-based skills, resources and organizational structures in these geographically and culturally close countries (Contractor, 2007; Kogut, 1985; Sukpanich, 2007) enabling them to achieve economies of scale and/or scope without significant cost increases (Davidson, 1980, 1983; Erramilli, 1991; Gomes and Ramaswamy, 1999; Papadopoulos and Denis, 1988; Ruigrok and Wagner, 2003). Further on, they face similar location advantages critical to successful market-seeking investment (Rugman and Verbeke, 2005). With regard to political requirements, regional cooperative agreements such as the NAFTA, ASEAN, and the EU are becoming increasingly important (Li, 2005; Rugman and Verbeke, 2004). MNEs located within regional trading zones, e.g., Ger-

man or US MNEs, are able to profit from the advantages of trade liberalization within their respective free trade agreements (Ethier, 1998).

According to Johanson and Vahlne (1977), MNEs will eventually operate in countries less culturally and/or geographically similar to their home country once they have accumulated a significant amount of international experience. At this point, it can be expected that MNEs exhibit low levels of interregional orientation defined as the first stage of the three-stage theory of interregional orientation depicted in the following.

3.1 First Stage of Interregional Orientation

In general, based on the intraregional focus of MNEs and the accumulated experiences and knowledge, MNEs are in a position of generating increased profits at the first stage of interregional orientation, which is characterized by a high level of intraregional and low level of interregional orientation. The benefits mainly rely on the accumulated international experiences within the home region mentioned above (Contractor, 2007; Contractor, Kundu, and Hsu, 2003; Gomes and Ramaswamy, 1999; Johanson and Vahlne, 1977, Lu and Beamish, 2001; Ruigrok and Wagner, 2003; Sukpanich, 2007; Sullivan, 1994), the possession of proprietary knowledge that is internationally transferable and exploitable within the home-region (Rugman and Verbeke, 2005) and the advantages of trade liberalization within the respective free trade agreements (Ethier, 1998). Another aspect in favor of high intraregional orientation and its positive impact on performance, especially for MNEs within the EU, is the same time zone within the region, reducing coordination activities and therefore costs arising when operating across regions with different time zones (Chen, 2007). However, additional positive effects on returns can be gained by a low level of interregional orientation, putting MNEs in a position to operate in selected, most promising markets outside the home region that are culturally, institutionally, and geographically similar to the home region in order to reduce complexity (Barkema, Bell, and Pennings, 1996; Chang, 1995; Cyert and March, 1963; Johanson and Vahlne, 1977). Thereby, MNEs gain access to cheaper and better inputs, such as lower cost of labor or knowledge (Contractor, 2007; Dunning, 2002) and are able to exploit idiosyncratic and mobile firm-specific assets (Contractor, Kundu, and Hsu, 2003; Contractor, 2007; Jung, 1991; Porter, 1990).

According to this line of argumentation, I derive the first hypothesis:

- H1. If intraregional MNEs exhibit low levels of interregional orientation, their performance is higher compared to purely intraregional MNEs.

3.2 Second Stage of Interregional Orientation

At the second stage of interregional orientation, MNEs exhibit higher levels of interregional orientation. It can be assumed that, in general, interregional locations show a greater cultural, institutional, and geographical distance to the home region (Cyert and March, 1963; Johanson and Vahlne, 1977). Therefore, by operating at a higher degree of interregional orientation with medium levels of intraregional and interregional orientation, disadvantages of the greater diversification exceed the advantages and lead to a diminishing performance. Based on the liabilities of interregional foreignness (Goerzen and Asmussen, 2007; Rugman and Brain, 2003; Rugman and Verbeke, 2004; Sukpanich, 2007), the costs of a further interregional focus can be categorized into two types: internal and external costs.

Considering the internal costs, such as higher coordination and control costs (Rugman and Verbeke, 2004; Sukpanich, 2007), the ensuing arguments play a major role: First of all, MNEs characterized by medium levels of interregional orientation face increased complexity of organization and structure, resulting in higher coordination costs (Contractor, 2007; Geringer, Beamish, and daCosta, 1989; Hitt, Hoskisson, and Kim, 1997; Lu and Beamish, 2004; Michel and Shaked, 1986; Sukpanich, 2007) and a possible information overload (Contractor, 2007; Hitt, Hoskisson, and Kim, 1997). One reason for these increased costs is the unfamiliarity with markets beyond the home region (Johanson and Vahlne, 1977; Richter, 2007), resulting in increased learning costs (Contractor, 2007; Doz, Santos, and Williamson, 2001). Whilst markets within the home region tend to be more similar to the home country and MNEs are able to better and faster adapt to their requirements, interregional markets are less familiar resulting in a greater misalignment of external environments and internal capabilities. The number of different cultural and institutional environments a MNE has to cope with increases with greater interregional orientation and thereby increases cross-border administration costs (Contractor, Kundu, and Hsu, 2003; Gomes and Ramaswamy, 1999). Due to this higher cultural diversity, a more complex organizational structure is necessary and costs might escalate (Geringer, Beamish, and daCosta, 1989; Sukpanich, 2007). Based on population ecology (Hannan and Freeman, 1977; McKelvey, 1982), MNEs will have developed their competencies, such as management skills, innovation processes, analytical techniques and patterns of behavior according to the requirements of their home region and it will take them a major effort, in association with higher costs, and a long time to adjust these competencies to foreign, interregional environments (Wolf, Dunemann, and Egelhoff, 2012). With regard to transaction cost theory in general and firm-specific advantages in particular, this is especially true for the downstream end of a MNEs value chain (e.g., marketing and sales) (Rugman and

Verbeke, 2005, 2007). While the firm-specific advantages of a MNE can be more easily exploited intraregionally due to their location-specific nature, MNEs need to further adjust these advantages to demands of markets outside the home region, resulting in higher transaction, coordination, and learning costs. Especially if regional trading agreements, such as the EU or NAFTA, exist and promote administrative and political harmonization, adaption investments within the home region are low. On the other hand, on an interregional base, this harmonization is less likely to exist and higher location-specific adaption investments are necessary to merge existing firm-specific advantages with location-specific advantages, having a negative effect on firm performance. Further on, agency costs increase when operating interregionally (Doukas and Travlos, 1988; Morck and Yeung, 1992; Reeb, Kwok, and Baek, 1998; Roth and O'Donnell, 1996; Ruigrok and Wagner, 2003) since with higher interregional orientation, principals and agents within the MNE are more geographically dispersed compared to an intraregional concentration. Additionally, with greater geographical and thereby interregional dispersion, transportation and traveling costs will be higher (Ruigrok and Wagner, 2003). While distances within the home region are comparably small, they are significantly higher at a higher degree of interregional orientation. Along with greater geographical distance, cultural distance is likely to increase as well when operating interregionally, resulting in higher cultural and linguistic demands, leading to increased information-processing requirements of the MNE (Ruigrok and Wagner, 2003). A similar line of argumentation is the augmented stress of coordinating, configuring, communicating, and motivating, exhausting managerial capacity (Hofstede, 1980; Ramaswamy, 1992; Ruigrok and Wagner, 2003; Siddhartan and Lall, 1982; Qian, 2002). Managerial complexity rises with greater geographic and cultural distance between the home country of the MNE and its foreign operations, assumed to be even greater with an interregional focus.

With regard to the external costs, such aspects as financial risks, political risks, and market-related hazards have a negative effect on MNE performance (Rugman and Verbeke, 2004; Sukpanich, 2007). These external costs include higher financial risks, such as exchange-rate fluctuation and inflation (Reeb, Kwok, and Baek, 1998; Ruigrok and Wagner, 2003; Solnik, 1974) faced by the MNE exhibiting a medium level of interregional orientation. These might offset the profit made through interregional operations derived from portfolio diversification. While, especially for European MNEs, regional trading agreements and in particular a common currency lower or even prevent the risk of exchange-rate fluctuations, activities outside of these agreements will expose MNEs to higher risks. Additionally, government imposed barriers to entry, e.g., governments' differential treatment of internationalizing and native

firms (Brewer, 1992; Boddewyn, 1988; Ruigrok and Wagner, 2003), might increase investment costs when operating interregionally (Rugman and Verbeke, 2005). While regional trading agreements promote home-regional MNEs and therefore reduce these barriers, this is not the case on an interregional base.

Besides financial and political risk, market-related hazards are another cause of cost inflation when operating interregionally. These hazards include, according to Ruigrok (2004), consumer ethnocentricity, consumer taste divergence, and lower purchasing power compared to intraregional markets. While these hazards might not be time steady and diminish once a certain level of interregional orientation is reached, they have significant impact at low to medium levels of interregional orientation. Overcoming these hazards, MNEs are confronted with significant cost increases when seeking legitimacy and acceptance of their products in different institutional environments (Kostova and Zaheer, 1999).

In sum, at medium levels of intraregional and interregional orientation, costs escalate compared to lower levels of interregional orientation, leading to decreased returns. Based on this line of reasoning, I derive the following hypothesis:

H2. In the second stage of interregional orientation, MNEs' performance will be lower compared to MNEs in the first stage of interregional orientation.

3.3 Third Stage of Interregional Orientation

Low levels of intraregional and high levels of interregional trade characterize the third stage of interregional orientation. In general, MNEs show a high level of adaptation to the higher requirements of a strong interregional orientation and have greater interregional experience, putting them in a position to deal with demands of this greater diversification. As a result, the benefits exceed the costs at this stage and performance is enhanced.

The reasoning at this third stage includes a greater accumulation of international and especially interregional experience (Contractor, 2007; Contractor, Kundu, and Hsu, 2003; Gomes and Ramaswamy, 1999; Johanson and Vahlne, 1977; Lu and Beamish, 2001; Ruigrok and Wagner, 2003; Sukpanich, 2007; Sullivan, 1994). It can be assumed that MNEs need a significant amount of time to reach a high level of interregional orientation and to learn to minimize the significant costs associated with foreign expansion (Capar and Kotabe, 2003; Johanson and Vahlne, 1977; Lu and Beamish, 2001; Mathur, Singh, and Gleason, 2001; Ruigrok and Wagner, 2003). They will have accumulated more interregional experience and adjusted their organization and structures. As mentioned in stage 2, MNEs are faced by a greater misalign-

ment of external environments and internal capabilities with greater interregional orientation. According to Ruigrok and Wagner (2003), in order to restore increases in profitability, “organizational learning sets in and firms begin to reconfigure internal systems, mechanisms, and processes to match their new global [interregional] environment” (p. 71). This organizational and structural change is likely to have evolved once a high interregional level is reached by MNEs and costs can be reduced, enhancing profitability.

Additionally, MNEs are able to diversify on a worldwide scale and distribute their business operations according to their respective requirements. MNEs with a high level of interregional orientation are therefore able to disaggregate their value chain over different nations and regions according to the comparative advantage of each location and exploit national and regional differences (Buhner, 1987; Contractor, 2007; Kogut, 1985; Sukpanich, 2007). For instance, MNEs are able to move their labor-intensive operations to countries characterized by low labor costs, while locating their knowledge-intensive operations to countries with a higher knowledge base (e.g., Ghoshal, 1987). Exhibiting a high interregional level, exploitation of idiosyncratic and mobile firm-specific assets is easier for MNEs (Contractor, Kundu, and Hsu, 2003; Contractor, 2007; Jung, 1991; Porter, 1990). Jung (1991) mentions that MNEs are able to exploit their knowledge and firm-specific advantages on more markets with high international diversification, with, at the same time, little cost increases, positively affecting their profitability. Additionally, interregional MNEs are able to distribute their production costs across a wider selection of markets, further enhancing performance (Banalieva and Dhanaraj, 2013; Capar and Kotabe, 2003). Especially on a high interregional level, MNEs have a greater selection of foreign markets fitting to their firm-specific advantages, generating higher monopoly rents for the MNE.

According to Kogut (1985), greater international diversification and therefore also a higher interregional orientation also leads to an increase of a MNEs’ international market power, since they have access to a larger number of consumers (see also Banalieva and Dhanaraj, 2013). This leverage on the behavior of rival MNEs can be separated into price differentiation as well as gaining market power by establishing foreign coalitions with suppliers and competitors. In order to gain international market power, MNEs must have reached a significantly high interregional orientation and high market shares abroad, whereas less interregionalized and more intraregionalized MNEs by definition have lower interregional market shares and therefore less influence on foreign competitors.

Another advantage of a high interregional orientation is the superiority of having manifold national market bases from which MNEs can react to aggressive moves made by competitors (Hamel and Prahalad, 1985; Kim, Hwang, and Burgers, 1993; Kim and Mauborgne, 1988). Following this line of reasoning, MNEs are able to lower product prices in order to increase sales in certain regions characterized by strong competition in order to gain market power (Hamel and Prahalad, 1985). This so-called cross-subsidization was introduced by Hamel and Prahalad (1985) and is characterized in the following way: “when a company faces a large competitor in a key foreign market, it may make sense for it to funnel global resources into the local market share battle, especially when the competitor lacks the international reach to fight back” (Hamel and Prahalad, 1985, p. 144). Highly interregionalized MNEs are better able to fund cross-subsidization since they can use their financial resources accrued in other regions to finance this behavior.

As a result of this line of argumentation, the benefits outweigh the costs at this stage and a high interregional orientation enhances MNEs’ performance. Therefore, I derive the following hypothesis:

H3. In the third stage of interregional orientation, MNEs’ performance will be higher compared to MNEs in stage 2 of interregional orientation.

3.4 The Influence of Business Cycles and Regional Orientation on MNE Performance

Various researchers have analyzed the impact of business cycles on MNE performance in general so far (i.e., Ghemawat, 1993, 2009; Johnson, 1999; Kim, Hwang, and Burgers, 1993; Mascarenhas and Aaker, 1989; Navarro, Bromiley, and Sottile, 2010; Richardson, Kane, and Lobingier, 1998). A good overview on research concerning the effect of business cycles on MNEs’ strategy and performance can be found in Latham and Braun (2011). MNE performance is influenced by the stage of the business cycle of the country or region the MNE operates in. Johnson (1999) analyzed the earnings-returns relationship at different stages of the business cycle and found earnings to be higher in times of expansion than in times of recession. In order to successfully navigate through recessions, Navarro, Bromiley, and Sottile (2010) as well as Bromiley (1986) recommend increased investments of MNEs during recessions in order to meet increased demand as soon as the economy stabilizes and sales increase again. Ghemawat (1993, 2009) came to a similar conclusion in his seminal work on investment behavior during recessions, recommending enhancing investments during recessions to gain and maintain competitive advantages as long as these can be achieved cost effectively. However, so far, even though the influence of various stages of the business cycle on MNE

strategy and performance has been researched, the relationship between business cycles and the degree of internationalization or regional orientation in particular, and its influence on MNE performance has been neglected in IB/IM literature. Nonetheless, finer grained models with regard to the MP-relationship have been called for to draw more detailed information “on the conditions under which internationalization might be fruitful” (Bausch and Krist, 2007, p. 341). Nevertheless, it can be assumed that the relationship of regional orientation and performance is affected by the respective stage of the business cycle. Since the world’s regions differ in their stages of the business cycle, e.g., North America might be in a stage of recession while Asia’s economy is expanding (Hirsch and Lev, 1971; Levy and Sarnat, 1970; Pearce and Michael, 2006), this asynchronous behavior of the business cycle is expected to also have an influence on the relationship between regional orientation and performance of MNEs. As a general assumption, it is expected that interregional markets are less integrated than intraregional markets, and therefore exhibit more asynchronous business cycles. In the following, I will focus on the interaction of the business climate and the regional orientation of MNEs and its impact on performance.

Theoretically, I expect that there exists a negative influence between the interaction of business climate and regional orientation on MNE performance. Based on this assumption and according to portfolio diversification theory (Agmon and Lessard, 1977; Bai and Green, 2010; Levy and Sarnat, 1970; Lloyd, 1975; Markowitz, 1952, 1959; Shapiro, 1978; Solnik, 1973), MNEs with a high interregional focus will show greater performance in times of a negative business climate within their home region since they are, in comparison to intraregionalized MNEs, characterized by a higher dispersion of their business operations across the world and are thereby able to reduce their risks (Banalieva and Dhanaraj, 2013). In the following, I will depict this expected relationship in more detail, referring to prior research on risk reduction strategies and business cycles and applying these arguments to the regional framework.

First of all, research has stated that MNEs having activities located in a portfolio of not economically integrated countries experience lower risk at any given level of returns (Fatemi, 1984; Hennart, 2007; Hughes, Logue, and Sweeney, 1975; Lloyd, 1975; Rugman, 1976, 1977; Shapiro, 1978). From a financial perspective, it is possible to reduce the risk of a portfolio of securities by investing in assets whose returns are uncorrelated (e.g., Bai and Green, 2010; Markowitz, 1952, 1959). Applying this aspect of financial theory to the underlying context, it can be expected that MNEs being interregionally diversified will be less prone to economic instabilities such as recessions within their home region. Since foreign regions, in comparison to countries within a region, are less economically integrated, risk will be reduced

for interregionally oriented MNEs (Qian, 1996; Rugman, 1976; Sukpanich, 2007). This risk reduction requires investments and activities in countries with different business cycles, which are more likely to be found in foreign regions (Hennart, 2007; Jacquillat and Solnik, 1978; Madura and Rose, 1989; Shapiro, 1978). It can be reasoned that international diversification increases the stabilization of profits due to imperfections in product markets (product differentiation, volume economies, marketing skills, and administered prices) and real factor markets (proprietary technology, managerial skills, intelligence gathering, operational flexibility and stability, tax arbitrage, and discriminatory access to capital) (e.g., Agmon and Lessard, 1977; Buhner, 1987; Capar and Kotabe, 2003; Fatemi, 1984; Lessard, 1976; Levy and Sarnat, 1970; Lloyd, 1975; Morck and Yeung, 1991; Qian, 1996; Ruigrok and Wagner, 2003; Rugman, 1977) and additionally leads to more diverse investment opportunities (Grant, 1987; Ruigrok and Wagner, 2003). As a result, MNEs characterized by high interregional market diversification gain market power by profiting from fluctuations in the respective economies of each region and from differences in demand and supply variations between regional markets, reducing risk and increasing, or at least stabilizing, their performance (Qian, 1996). This is especially the case on a high interregional level, when MNEs have expanded to all three regions of the Triad, since business cycles show greater asynchronous behavior between Asia and North America as well as Asia and Europe, compared to Europe and North America (Levy and Sarnat, 1970; Pearce and Michael, 2006). On the opposite, MNEs operating in one region only are dependent on the respective intraregional economy and its demand and supply conditions and are therefore more vulnerable during recessions in that region. Additionally, MNEs characterized by a greater international and interregional diversification are able to minimize the effect of adverse changes in a country's or region's interest rates, wage rates, and commodity and raw material prices by providing the possibility to shift operations to other more favorable national or regional markets, which are less affected by possible economic downturns (Kim, Hwang, and Burgers, 1993; Rugman, 1977). These adverse changes in the interregional environment will be less correlated to domestic or home-regional markets, giving interregional MNEs the opportunity to focus their activities on foreign regions. Even though this argument can also be seen as a disadvantage at medium levels of interregional diversification, caused by greater financial risk, as mentioned in stage 2, Kim, Hwang, and Burgers (1993) as well as Kogut (1985) see it as an advantage: Highly interregionalized MNEs are more flexible in shifting their operations to more favorable markets as soon as interest rates, wage rates, commodity and raw material prices deteriorate on a market, especially once a significant market share is reached in foreign regions. The same line of argumentation

can be applied to supply and demand conditions of any one national or regional market (Kim, Hwang, and Burgers, 1993). A higher interregional diversification provides an MNE with the option of a release from supply and demand fluctuations within the home region, which might develop during the business cycle, and smooth the peaks and troughs of MNEs' performance stream.

As a result, a high interregional orientation of MNEs during a negative business climate within the home region leads to increased returns while decreasing risk at the same time. Therefore, I derived the following hypothesis:

- H4. MNEs characterized by high levels of interregional orientation will show a higher performance during recessions in their home region compared to MNEs characterized by high levels of intraregional orientation.

4. Methodology

4.1 Sample

The sample is derived from a list of top 500 German companies in 2010 (<http://top500.welt.de/list/2010/U/>), ranked by total sales. I focused the analysis on German companies in order not to have to control for home country effects and thereby to reduce problems arising when analyzing data from various countries with regard to the MP-relationship. As mentioned by Glaum and Oesterle (2007): "Firms face different incentives and opportunities to internationalize depending on the size of their home market. Consequently, firms' degrees of internationalization, if measured with conventional flow or stock data (foreign sales, foreign assets, etc.) will depend on the size of their home markets" (p. 311). Concentrating on German MNEs therefore has the benefit of setting a common starting point in terms of home country environment and its characteristics, such as cultural values, institutional norms, country economic and physical resources, and national government's economic policies (Elango and Sethi, 2007; Ruigrok, Amann, and Wagner, 2007). Additionally, most research on the MP-relationship is based on US MNEs, which have a much larger home-market base compared to German MNEs and therefore will show different degrees of international and interregional orientation (e.g., Buhner, 1987; Capar and Kotabe, 2003). Analyzing German MNEs might therefore give new insights with regard to their degree of internationalization and its impact on performance.

From this initial index of the largest German companies, I excluded those MNCs not listed or share based in the entire time between 2002 and 2010, as availability of information concern-

ing sales and performance would have been very limited. In a next step, financial institutions were excluded from the sample due to different reporting requirements and unique capital structures (Contractor, Kundu, and Hsu, 2003; Fama and French, 1992; deSilanes et al., 2002; Ruigrok, Amann, and Wagner, 2007). Further on, in order to analyze MNEs and neglect purely domestic companies, a threshold of a minimum of 10 % of international sales on average over the whole time period from 2002-2010 was set, which is in line with prior research (e.g., Banalieva and Santoro, 2009; Gomes and Ramaswamy, 1999). Hence, even though MNCs might exhibit a lower degree of international sales in a single year, over the whole time period, the degree had to exceed 10 % on average. For these companies, performance data was collected for a period of 9 years from 2002 to 2010 from the DAFNE database provided by Bureau van Dijk. The DAFNE database contains annual reports data on 800.000 German and Austrian companies and reports financial data for individual companies, similar to the OSIRIS database, which is the equivalent on a worldwide base. Regional sales data as well as missing data was collected from annual reports of the studied MNEs, since they were not available in any known database. All information was cross-checked for consistency and accuracy. Ultimately, limited availability of information on sales by geographic region and performance led to a sample of 53 companies for which data was available for at least five out of all six variables for the time period from 2002-2010, with a total of 474 observations.

4.2 Variables

4.2.1 Dependent Variable

As a measure of firm performance I used Return on Sales (ROS), an established accounting-based performance indicator often used in prior research (e.g., Contractor, Kundu, and Hsu, 2003; Geringer, Beamish, and daCosta, 1989; Goll and Rasheed, 1997; Hsu and Pereira, 2008; Li, 2005; Rugman and Oh, 2010). Besides, in contrast to asset-based accounting measures, ROS is generally expressed in more recent monetary terms. Assets, on the other hand, have usually been acquired over a longer time period and are carried at book values. Furthermore, Return on Assets impedes the comparison between various MNEs since asset-based measures exhibit greater distortion in contrast to operating-based measures such as ROS, due to dissimilar methods of depreciation, local tax regulations, domestic inflation, and foreign exchange fluctuation (Contractor, Kundu, and Hsu, 2003; Geringer, Beamish, and daCosta, 1989). Additionally, ROS is better able to reflect a MNE's market operating efficiency (Li, 2005).

4.2.2 Independent Variables

Since a key aspect of my paper is to analyze the impact of regional orientation of MNEs on performance, it is necessary to create an independent variable that reflects both the intraregional as well as the interregional orientation of an MNE in one variable. By intraregional orientation, the ratio of intraregional sales (sales within the home region, namely Europe, excluding domestic sales) to total sales is meant (INTRA). Interregional orientation is characterized as sales in the rest of the world and operationalized as the ratio of sales acquired outside the home region to total sales (INTER). In contrast to most prior research on regional orientation (Lee and Marvel, 2009; Rugman 2000, 2005; Rugman and Verbeke, 2004, 2005; Rugman, Kudina, and Yip, 2007; Sukpanich, 2007), I excluded domestic sales from the INTRA variable as not to distort results by high volumes of domestic sales (Beleska-Spasova and Glaister, 2010; Osegowitsch and Sammartino, 2008; Westney, 2006). Based on INTRA and INTER, I developed an index variable that integrates both, the regional orientation and the degree of internationalization (DOI) in one variable. Thus, the index variable takes the following form:

$$RO = \left(\frac{INTER}{INTRA} \right) \times (INTER + INTRA)$$

with RO as the regional orientation of the MNE, INTER as the ratio of interregional to total sales and INTRA as the ratio of intraregional to total sales. The first term $\left(\frac{INTER}{INTRA} \right)$ measures the ratio of INTER to INTRA, showing the degree of regional orientation. A high value of this first term illustrates a high level of interregional orientation of an MNE, having a higher degree of sales outside the home region than within it. A low value, on the opposite, demonstrates a high intraregional orientation. In order to include the degree of internationalization (DOI), the second term $(INTER + INTRA)$ is included, which basically is the ratio of foreign sales to total sales (FSTS). FSTS has been used in a wide array of prior publications as an indicator for DOI, such as Beleska-Spasova and Glaister (2010), Capar and Kotabe (2003), Geringer, Beamish, and daCosta (1989), Kim and Lyn (1986), Reeb, Kwok, and Baek (1998), and Ruigrok, Amann, and Wagner (2007). The ratio of foreign sales to total sales as a second factor is necessary to weigh the impact of the regional orientation index on MNE performance in general and to reduce a possible bias resulting from MNEs characterized by a very low DOI but with most of their foreign sales outside the home region. Accordingly, a low (high) level of INTER and INTRA is equatable to a lower (higher) FSTS and, as a result, reduces (increases) the value of the regional orientation index variable. Therefore, a MNE character-

ized by a lower (higher) DOI will have a lesser (stronger) influence in the following empirical analyses compared to MNEs with a higher (lower) DOI.

The main advantage of this regional orientation index variable is that it is possible to measure the ratio of intraregional to interregional orientation and its impact on MNE performance in one variable only. Prior research has either concentrated on the effect of intraregional or of interregional orientation on performance (Banalieva and Santoro, 2009; Li, 2005; Richter, 2007; Rugman, Kudina, and Yip, 2007; Rugman and Oh, 2010; Sukpanich, 2007) or has separated the analysis into two models, measuring the influence of intraregional orientation on performance in one model and the influence of interregional orientation on performance in a second and compared both results with each other (Chen, 2007). Beleska-Spasova and Glaister (2010) and Qian et al. (2008) are the only exception, the former analyzed the impact of home, host, bi-regional and global oriented firms, according to Rugman's (2000, 2005) and Rugman and Verbeke's (2004, 2005) categorization, on firm performance while the latter used an entropy measure of regional diversification.

4.2.3 Control Variables

I included controls for several variables, which have been identified in prior research to influence firm performance. Financial leverage was included as a ratio calculated as total debt to equity. It controls for differences in capital structure across firms, which is likely to affect performance (Banalieva and Santoro, 2009; Buhner, 1987; Goerzen and Beamish, 2003; Jensen, 1989; Lee and Marvel, 2009; Lu and Beamish, 2004; Qian et al. 2008; Thomas and Eden, 2004) and reflects MNEs' risk (Buhner, 1987; Hsu, 2006).

A second variable controlled for is MNE size, calculated as the natural logarithm of the number of employees of a MNE, as it reflects the financial and physical resources of a MNE and was shown to accelerate performance (Chang and Thomas, 1989; Goerzen and Beamish, 2003; Qian et al., 2008). It further accounts for economies and diseconomies of scale (Banalieva and Santoro, 2009; Contractor, Kundu, and Hsu, 2003; Hsu, 2006; Hitt, Hoskisson, and Kim, 1997; Thomas and Eden, 2004).

Additionally, I used annual EU GDP growth data in order to control for differences in the economic environment within the home region and the impact of recessions and expansions of the regional economy on performance (i.e., Elango, 2006; Steenkamp and Fang, 2011; Stock and Watson, 1999). EU GDP data is provided by the World Bank (<http://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG>). GDP growth rates have been identified in previous re-

search to affect firm performance (Elango, 2006) and should therefore be included in the analysis as a control variable.

At last, I included an interaction variable into the analysis concerning the relationship of the regional orientation index variable and EU GDP growth rate in order to test its impact on firm performance. Based on this interaction variable, it is possible to test whether firms with a greater interregional orientation will show higher levels of performance in times of recessions or expansions within their home region compared to intraregionally oriented MNEs. The variable is operationalized as the product of the regional orientation index variable and EU GDP growth rate. Low values of the interaction variable imply low growth rates combined with low interregional orientation, while high values imply higher growth rates in combination with a high interregional orientation of the MNE.

4.3 Method

Data was analyzed using panel data analysis techniques, which will be described in greater detail below. One advantage of working with panel data is that it allows taking account of firm-level heterogeneity, which is likely to be existent in the MP-relationship (Bowen, 2007). Another virtue, especially in case of the underlying MP-relationship, is that it is possible to model dynamic elements and overcome the methodological limitations of cross-sectional studies (Bowen, 2007; Contractor, Kundu, and Hsu, 2003; Contractor, 2007; Gomes and Ramaswamy, 1999; Ruigrok, Annan, and Wagner, 2007). Further, pooling time-series and cross-sectional data points increases the degrees of freedom by enlarging the number of observations of the panel. This leads to an improvement of the reliability and stability of parameter estimates (Contractor, Kundu, and Hsu, 2003; Gomes and Ramaswamy, 1999; Ruigrok, Annan, and Wagner, 2007).

Nevertheless, one aspect needs to be considered which has been neglected in prior panel data analyses when choosing the correct empirical model to test the MP-relationship using panel data: Even though it is well known that cross-sectional correlation of residuals might adversely affect the reliability of inference in panel models by biasing conventional t- and F-statistics based upon standard variance-covariance estimators (Andrews, 2005; Bai and Kao, 2006), prior studies have neglected the existence of cross-sectional dependence in their data and assumed cross-sectional independence (e.g., Banalieva and Santoro, 2009; Hsu, 2006; Kumar and Gaur, 2007; Thomas and Eden, 2004). A main source of cross-sectional correlation in macroeconomic data is common market shocks, such as oil price shocks or international financial crises. Even in microeconomic data, cross-sectional correlation exists due to herd be-

havior (Bai and Kao, 2006), especially when dealing with financial market data, such as return on sales (Driscoll and Kraay, 1998). Common techniques that neglect to take cross-sectional dependence into account will result in inconsistently estimated standard errors (Driscoll and Kraay, 1998). These problems especially arise with common methods when N is large compared to T , which is often the case in international business studies using panel data. In order to deal with cross-sectional dependence, Driscoll and Kraay (1998) proposed a regression model which standard errors are robust to very general forms of spatial and temporal dependence. Its consistency results hold for any value of N , even if N is much larger than T (Driscoll and Kraay, 1998; Hoechle, 2007). Methods such as the feasible generalized least squares (FGLS) model proposed by Parks (1967) and popularized by Kmenta (1986), which accounts for temporal and spatial dependence in the residuals of time-series cross-section models, is usually inappropriate for use with medium- to large-scale microeconomic panels with $N > T$ and results in unacceptable small standard error estimates that lead to extreme overconfidence (Beck and Katz, 1995; Hoechle, 2007). The same basically applies to the OLS coefficient estimates with panel corrected standard errors (PCSE) introduced by Beck and Katz (1995) (Hoechle, 2007). Both methods have been used in former research in the internationalization and performance debate (e.g., Contractor, Kundu, and Hsu, 2003; Chen, 2007; Gomes and Ramaswamy, 1999; Kudina, Rugman, and Yip, 2009; Li, 2005) and therefore the robustness of their results need to be questioned.

In order to test whether or not the residuals from a fixed effects model specification are spatially independent and if the use of Driscoll and Kraay's approach is appropriate, Pesaran's (2004) CD test must be performed (Hoechle, 2007). The null hypothesis of the CD test states that the residuals are cross-sectionally uncorrelated. Correspondingly, the test's alternative hypothesis presumes that spatial dependence is present. Results of the Pesaran CD test showed that estimating the model with fixed effects gives rise to cross-sectionally correlated regression residuals. On average, the (absolute) residual correlation across distinct firms is .328. According to Pesaran's CD test statistic, therefore, the null hypothesis of spatial independence can be rejected at conventional significance levels. For inference, therefore, Driscoll-Kraay standard errors are used since they are robust to cross-sectional and temporal dependence (Driscoll and Kraay, 1998; Hoechle, 2007).

In order to test whether fixed effects or random effects estimation is more appropriate, Wooldridge's (2002) suggestion is followed to perform a Hausman Test, which is robust to very general forms of spatial and temporal dependence. The result of the Hausman Test shows

that the null hypothesis can be rejected at conventional significance levels. For estimation, therefore, I rely on the fixed-effects model.

5. Results

In Table 2 and 3, I report the descriptive statistics and correlations for all variables, including those used to compute the Regional Orientation Index. Results show that the average German MNE operated at a 65 % FSTS ratio over the investigated period. In contrast to prior studies, which mainly analyze MNEs exhibiting low DOIs of 0-50 %, and along with Ruigrok, Amann, and Wagner (2007), who also analyzed a wide range of DOI, Table 2 shows that the analyzed MNEs vary in their degree of internationalization between 2-92 %, representing the whole DOI continuum from very low to high levels of internationalization. With regard to the regional orientation, the MNEs under study have on average 36 % of their sales within the home region and around 29 % beyond it. Including domestic sales, MNEs have on average 71 % of sales within their home region, which is comparable to Rugman's (2000, 2005) result on the worlds' largest Fortune 500 firms, who on average have 72 % of sales within their home region. Table 3 exhibits the correlations of those variables tested in the empirical analysis. There is a moderate degree of correlation between ROS and Financial Leverage that is statistically significant at $p < .05$. Also, EU GDP growth and ROS as well as Size and RO show low degrees of correlation, which in both cases can be neglected due to its low level. However, in most cases, correlation coefficients are of low magnitude and, moreover, insignificant at the given sample size.

Table 2. Descriptive Statistics of all Variables

	Observations	Mean	S.D.	Minimum	Maximum
ROS	477	3.70	7.42	-45.27	79.49
FSTS	477	.66	.20	.02	.92
Intra	477	.36	.14	.02	.78
Inter	477	.29	.19	0	.87
RO	477	.877	1.81	0	16.48
EU GDP growth	477	-.00	2.12	-5.67	1.97
RO x EU GDP growth	477	.01	3.54	-61.18	22.81
Financial Leverage	474	183.32	196.31	-934.23	2723.06
Firm Size	477	10.34	1.40	6.97	13.13

Table 3. Correlations of Variables

	ROS	RO	EU GDP growth	RO x EU GDP growth	Financial Leverage	Firm Size
ROS	1.00					
RO	-.03	1.00				
EU GDP growth	.17*	.00	1.00			
RO x EU GDP growth	-.01	.06	-.01	1.00		
Financial Leverage	-.33*	-.05	.01	-.01	1.00	
Firm Size	-.03	.12*	-.03	.00	.08	1.00

* Correlation is significant at .05 % level

ROS = Return on Sales

FSTS = Foreign Sales to Total Sales

Intra = Intra-regional Sales to Total Sales (excluding Domestic Sales)

Inter = Inter-regional Sales to Total Sales

RO = (Inter / Intra)*(Inter + Intra)

EU GDP growth = EU Gross Domestic Product annual growth rate (in %)

RO x EU GDP growth = RO*EU GDP growth

Financial Leverage = Total Debt to Equity

Firm Size = (ln (number of employees))

Table 4 reports the estimation results of the Driskoll-Kraay fixed-effects regression for the regional orientation index variable as well as the interaction (RO × EU GDP growth) on ROS. Because of missing values concerning financial leverage, the total sample was reduced from 477 to 474 observations. In model 1, the impact of the control variables on ROS was tested. Results show that EU GDP growth has a highly significant positive, while financial leverage has a high significant negative influence on MNE performance. Firm size, on the other hand, has no significant influence on ROS. Model 2 included the interaction term RO × EU GDP growth, bearing a negative significant relationship to ROS. Models 3-5 examine the proposed inverted sigmoid shape developed in hypotheses 1 through 3. In Model 3, RO is included in the regression in order to test for a linear relationship between the regional orientation of MNEs and performance. It shows that the regional orientation has a significant positive impact on MNE performance. Adjusted R^2 is .161 in Model 3, which can be interpreted as satisfying for the economic explanation of volatile financial data (Contractor, Kundu, and Hsu, 2003; Rugman, 1976). While Model 4, which further included a quadratic term for regional orientation, showed an additional negative significant impact for the added quadratic term, Model 5 presents significant results for a sigmoid shape of the relationship between regional orientation and MNE performance, with a significance of $p < .05$ for the linear, quadratic, and sigmoid term of RO. Further on, the linear and sigmoid term show a positive sign, whereas the quadratic term exhibits a negative sign, giving support to all three hypotheses. With regard to the adjusted R^2 , the value changes from .1610 for Model 3 to .1612 for Model 4, and .1607 for Model 5. Even though the adjusted R^2 is slightly lower in Model 5, differences are minimal and can be neglected due to the higher level of significance of the RO index variables in Model 5. Concluding, low and high levels of interregional sales have a posi-

tive impact on MNE performance, while medium levels have a negative effect. This result goes along with Yang and Driffield (2012), discovering a u-shaped relationship between multinationality and performance of non-US based firms in their meta analysis. Additionally, Outreville (2012) discovered an inverted s-shaped relationship between multinationality and performance in a sample of the largest reinsurance firms, with a positive impact of low and high levels of multinationality on firm performance, further supporting the present results. With regard to the influence of the interaction term of the regional orientation index and EU GDP growth on MNE performance, the coefficient is negative and significant at $p < .01$. Therefore, a negative business climate within the home region, explained by a negative EU GDP growth, along with a high regional orientation index (which again illustrates a high interregional focus), leads to increased performance compared to MNEs exhibiting a low regional orientation index. In contrast, Yang and Driffield (2012) – analyzing the influence of financial crisis on the MP-relationship – doubt the effect of financial crisis on this relationship, based on their contradictory results. Nevertheless, their results at least partially support a positive effect on performance in times of financial crisis if MNEs diversify away from their home country. Hence, the present analysis sheds some more light on this relationship by discovering a positive impact of a high interregional orientation on performance during recessions. The control variables remain the same throughout the models and show the same level of significance. Model 6 also tested the sigmoid relationship of the regional orientation index and ROS, leaving out the interaction term. Results are basically the same as in model 5, even though the adjusted R^2 is with .1619 slightly higher.

The relationship between the regional orientation index and ROS is depicted in Figure 1. It can be seen that, starting from a relatively high level of performance at a purely intraregional focus of MNE sales, performance increases as soon as interregional sales are higher. The inflexion point at this first stage of interregional orientation is reached when the RO index variable reaches a value of around 4.1, with a ROS of 33.53. Higher levels of interregional orientation result in lower performance up to the second inflexion point, which is reached at a level of around 10.5 for the RO variable, when ROS is at the lowest with a value of 30.89 (stage 2). MNEs at stage 3, exhibiting an even higher level of interregional orientation, are able to profit again from higher performance levels, even higher than those MNEs exhibiting a high intraregional orientation. Since the maximum level of the regional orientation index variable is reached at around 16.48 in the data sample, it remains unclear if extremely high levels of interregional orientation above 16.48 will lead to even higher performance or if it will decline again. The calculation of the composition of the regional orientation index at its inflexion

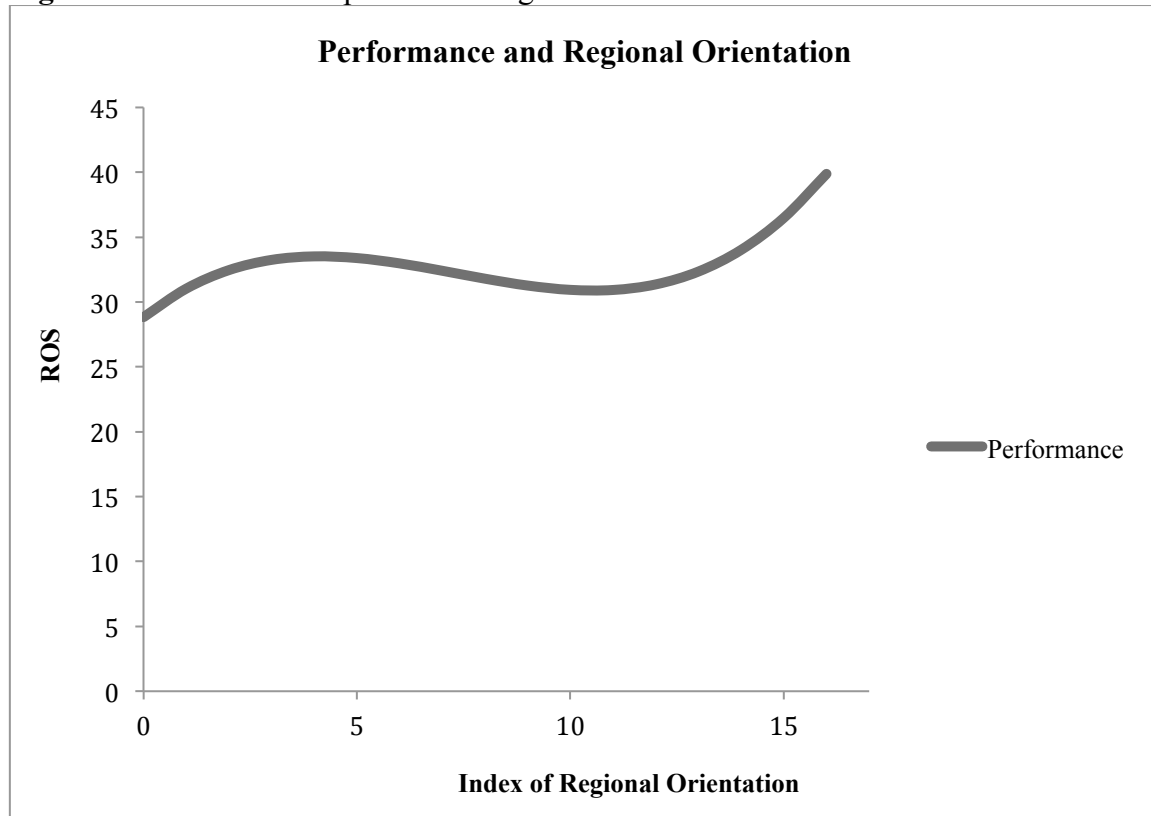
points shows that the first inflexion point of the run of the sigmoid curve, up to which performance increases, is reached at around 9.1 % of intraregional sales and 56.9 % of interregional sales to total sales. The second inflexion point is reached at 3.9 % of intraregional sales and 62.1 % of interregional sales to total sales. Even lower levels of intraregional sales in combination with higher levels of interregional sales will again result in increased performance of MNEs. These results demonstrate that there is a rather small margin during stage 2 at which performance is lower, while most combinations of intraregional and interregional orientation lead to positive effects on performance. Further on, at stage 1, MNEs are able to significantly expand their interregional operations up to 56.9 % of interregional sales to total sales before stage 2, at which performance declines, is reached.

Table 4. Regression Results of Driskoll-Kraay Standard Errors

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
RO					.59*	(2.50)	1.64*	(2.78)	2.61*	(2.95)	2.58*	(3.04)
RO ²							-.06*	(-2.52)	-.44*	(-2.84)	-.43*	(-2.89)
RO ³									.02*	(2.87)	.02*	(2.87)
Interaction RO x GDP			-.01*	(-2.86)	-.05*	(-2.20)	-.04	(-2.27)	-.04**	(-5.37)		
EU GDP growth	.55***	(5.65)	.55***	(5.64)	.55***	(5.45)	.55***	(5.56)	.55***	(5.60)	.56***	(5.64)
Financial Leverage	-.01**	(-4.45)	-.01**	(-4.45)	-.01**	(-4.45)	-.01**	(-4.44)	-.01**	(-4.42)	-.01**	(-4.41)
Firm Size	-2.37	(-1.08)	-2.39	(-1.09)	-2.36	(-1.08)	-2.35	(-1.11)	-2.37	(-1.12)	-2.35	(-1.12)
cons	30.18	(1.32)	30.31	(1.32)	29.57	(1.30)	28.80	(1.30)	28.84	(1.32)	28.73	(1.32)
N	474		474		474		474		474		474	
F	28.21		42.03		42.89		410.23		1829.16		74.29	
R ²	.1680		.1685		.1699		.1719		.1731		.1725	
adj. R ²	.1627		.1614		.1610		.1612		.1607		.1619	

* p < .05 ** p < .01 *** p < .001

Coefficients are followed by t-statistics in parentheses

Figure 1. The Relationship between Regional Orientation and Performance

6. Discussion

In this research, the relationship between different stages of regional orientation, starting at a solely intraregional focus and moving on to a high interregional orientation along with reduced levels of intraregional orientation, and MNE performance was tested. The hypothesized inverted sigmoid relationship developed in hypotheses 1 through 3 was supported in the empirical analysis. On the basis of these results, it can be determined that the relationship can be differentiated into three stages. At the first stage, with high intraregional and low interregional sales, MNEs are able to realize higher profits compared to a purely intraregional focus. Reasons for this are the increased international experience MNEs have accumulated within the home region and which can be adopted to foreign regions as well. As long as these foreign regions and countries are characterized as culturally, institutionally, and geographically close to the home region, it can be expected that arising challenges can be dealt with on the grounds of these prior experiences. As seen in the composition of the first inflexion point of the sigmoid curve, MNEs exhibiting a level of interregional sales of up to 56.9 % realize higher performance. Obviously, home regional experiences should not be underestimated when dealing with foreign regions and can be applied to foreign environments as well. This underlines the argument that worldwide markets are becoming more homogeneous (Qian et al., 2008), ena-

bling MNEs to exploit their idiosyncratic and mobile firm-specific assets on an interregional scale.

The second stage, characterized by medium levels of intraregional and interregional orientation, displays a negative impact on MNE performance. Accordingly, from a certain level on, a medium interregional orientation increases internal and external costs of the MNE, resulting in a reduction of profits. At this stage, organizational and structural complexity become too excessive due to greater unfamiliarity with markets beyond the home region showing less parallels to the home market. Additionally, agency costs might escalate as the number of agents as well as the geographic distance between principals and agents is higher. Further on, as MNEs focus on regions significantly different from their home region with regard to consumer characteristics, consumer taste, purchasing power, and market-related hazards, costs increase at this stage of regional orientation.

Finally, at the third stage, results show that MNE performance increases with high levels interregional orientation. This outcome is in line with prior research, such as Contractor, Kundu, and Hsu (2003), who found a positive effect of high internationalization on performance in a subsample of capital-intensive MNEs in their analysis. Accordingly, most MNEs do not overly internationalize their operations and stay at optimal levels of internationalization with regard to MNE performance (Contractor, Kundu, and Hsu, 2003; Thomas and Eden, 2004). Ruigrok, Amann, and Wagner (2007) come to a similar conclusion: Only few MNEs stray into the suboptimal zone of very high degrees of internationalization, which result in a deterioration of performance. Therefore, German MNEs within this sample might still exhibit ideal levels of interregional orientation and have not yet reached their optimum degree. Additionally, in contrast to US MNEs, mainly engaged in culturally related expansion strategies, German MNEs expand early on into other European, North American or Asian countries and are obliged to pursue culturally unrelated expansion strategies already at the outset of their foreign expansion (Ruigrok and Wagner, 2003). Based on this reasoning, at the third stage, MNEs have accumulated a vast amount of interregional experience to cope with increased demands of such an orientation. They have aligned their internal capabilities to the external environments of the various regions earlier on in their internationalization and are therefore able to restore their profitability by reconfiguring their corporate structures, mechanisms, and processes to the various external business environments in each foreign region. Further on, highly interregionalized MNEs are able to diversify on a truly worldwide scale and achieve greater economies of scale. Another reason for the elevated profitability at this stage is the increased ability to reduce risk through diversification, since more than 62.1 % of their inter-

national sales are beyond the home region. These advantages include the greater strategic flexibility in responding to nonparallel business cycles as well as disruptions of the value chain, since MNEs benefit from a greater selection of suppliers and increased market power.

The reasoning of a higher risk reduction is in accordance with the result of the interaction variable and its impact on MNE performance. During recessions, or a reduction of GDP growth in general within the home region, higher interregional orientation leads to increased performance. Obviously, by dispersing business operations across a wider selection of regions and foreign markets, MNEs profit from risk reduction through geographic differentiation. As a result, profits are more stable throughout the business cycle and MNEs are less dependent upon the respective intraregional economy.

Comparing these results to prior research, some parallels can be found. First of all, the positive effect on performance by concentrating solely on the home region is not new. Research by Li (2005), Rugman, Kudina, and Yip (2007), Rugman and Oh (2010), Chen (2007), and Lee and Marvel (2009) found a positive effect of high levels of intraregional orientation on MNE performance. However, due to former research's limitations with regard to the missing comparison between intraregional and interregional orientation, hardly any parallels can be drawn to the effect of high interregional and low intraregional orientation on performance. Rugman, Kudina, and Yip (2007) as well as Beleska-Spasova and Glaister (2010) were the only ones analyzing the effect of interregional orientation on performance. Rugman, Kudina, and Yip (2007) found a positive impact of global firms, exhibiting a high interregional orientation, on performance. The same applies to results by Beleska-Spasova and Glaister (2010), who concluded that bi-regional and global exporters (high interregional orientation) show higher performance measures opposed to home-region oriented exporters (high intraregional orientation). The two results support the notion of my results that high levels of interregional orientation positively effect MNE performance.

7. Implications and Conclusion

Research on regional orientation and its impact on performance is still at its beginning. However, some managerial implications can be drawn from the results. Managers should be aware of the stage of interregional orientation of their respective MNE and should act accordingly. Exhibiting a low level of interregional orientation, a decline of MNE performance is not likely. However, a decline of performance is probable at medium levels of intraregional and interregional orientation. Additionally, managers should focus on the structure and organization of the MNE and adapt these to the environmental requirements of the high level of interregional

orientation in order to boost performance. Eventually, organizational learning will set in and result in positive returns. As to the impact of business cycles, managers also need to adapt their regional orientation strategies to the economic environment. Once the business climate declines within the home region, a higher interregional focus puts the MNE in the position of stabilizing its profits and reducing risks in contrast to intraregionally oriented MNEs.

With regard to the theoretical implications, future research needs a more fine-grained analysis of the different influences on MNE performance, such as marketing and R&D intensity, as was done in prior MP-research. However, data limitations limited the amount of control variables taken into account and leaves room for future research. Additionally, since this study was based on German MNEs, future research should extend the framework to other countries such as the USA or Asian countries. Thus, it can be tested if the results are country-specific or can be applied to MNEs from other countries as well. Another aspect worth analyzing in future research is a possible fourth stage with very high levels of interregional orientation and its impact on performance. Yet, it remains open if performance might decrease again once a desirable optimum level of interregional orientation is reached (see also Outreville, 2012). Unfortunately, due to the limited number of highly interregionalized MNEs, the present study is not able to analyze the impact of extremely high levels of interregional orientation on performance.

Further on, hardly any research on the influence of business cycles on the MP-relationship in general has been published. Especially by focusing on the regional orientation, more research is necessary to further understand the impact of recession and expansion phases of the business cycle on performance. In this paper, EU GDP growth was used as a variable in order to test for the influence of the business cycle. In future research, other measures such as real income, employment, industrial production, and wholesale-retail sales should be analyzed when studying the influence of business cycles on the MP-relationship.

Interregional orientation has been measured as the relationship of intraregional sales to interregional sales. Additionally, future research might also analyze the number of countries a MNE operates in or the number of foreign subsidiaries to derive a clearer picture of the actual interregional orientation and its impact on performance. Such entropy measures rate the interregional or international dispersion of foreign activities of MNEs (e.g., Vachani, 1991; Qian, 1996). Due to data limitations, this paper had to rely on sales data. Nonetheless, Qian (1996) found no differences in performance when testing for the effect of multinationality based on

sales data or entropy measures. As a result, research based solely on sales data as an indicator of multinationality still leads to robust results.

In conclusion, this paper demonstrates that research on the MP-relationship needs to be more fine-grained with regard to the degree of internationalization. Instead of solely analyzing either the impact of intraregional orientation or internationalization per se on performance, the interplay between intraregional and interregional orientation as well as the influence of the business climate need to be considered in future research on the MP-relationship.

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