RESEARCH

Edith Olejnik

International Small and Medium-Sized Enterprises

Internationalization Patterns,
Mode Changes, Configurations
and Success Factors

Springer Gabler

Handel und Internationales Marketing / Retailing and International Marketing

Professur für
Marketing und Handel
der Universität Trier
Prof. Dr. Prof. h.c. B. Swoboda

INSTITUT FÜR MARKETING
Vorstand: Univ.-Prof. Dr. Thomas Foscht

Edited by
Professor Dr. Prof. h.c. Bernhard Swoboda
Professor Dr. Thomas Foscht

The book series focuses on the fields of Retailing and International Marketing. These two areas represent the research fields of the editors—each of them as a single research area, but also in combination.

Both of these research areas are widely understood. Consequently, the series provides a platform for the publication of doctoral theses and habilitations, conference proceedings and edited books, as well as related methodological issues that encompass the focus of the series. The series is broad in the sense that it covers academic works in the area of consumer-oriented marketing as well as the area of market-oriented management.

In addition to academic works recommended by the editors, the book series also welcomes other academic contributions. These may be submitted to the editors and will be published in the book series after a positive assessment.

Edited By
Professor Dr. Prof. h.c. Bernhard Swoboda,
Universität Trier, Germany

Professor Dr. Thomas Foscht,
Karl-Franzens-Universität Graz, Austria

Edith Olejnik

International Small and Medium-Sized Enterprises

Internationalization Patterns, Mode Changes, Configurations and Success Factors

With a foreword by
Prof. Dr. Prof. h.c. Bernhard Swoboda

Springer Gabler

Edith Olejnik
Trier, Germany

Foreword

There are many reasons to study internationalizing small and medium-sized enter-
prises (SMEs), e.g. their smaller size compared to large multinational enterprises,
their considerable importance for the German economy, their ability to rapidly and
flexibly react to different circumstances but also the challenges that many SMEs still
face during their internationalization process. Hence, it is advantageous and im-
portant to analyze how SMEs develop new capabilities and new knowledge to suc-
ceed abroad. The objective of Dr. Edith Olejnik's thesis is to advance the knowledge
on internationally active SMEs and their internationalization processes. Addressing
these issues the dissertation of Dr. Olejnik includes four studies:

- *SMEs' Internationalization Patterns: Descriptives, Dynamics and Determinants:*
  This study identifies internationalization patterns of SMEs and discusses the de-
  terminants of these patterns. Based on a cross-sectional survey of German SMEs
  and a latent class clustering approach the findings suggest three internationaliza-
  tion patterns: traditionals, born globals and born-again globals. Comparing modern
  SMEs with the same SMEs from ten years ago, it is found that firms may change
  their patterns. Moreover, the patterns are determined by international orientation,
  growth orientation, communication capability, intelligence generation capability,
  and international marketing strategy.

- *Changes in Foreign Operation Modes: Stimuli for Increases versus Reductions:*
  This study explores the reasons leading executives to change their firm's foreign
  operation mode by contrasting mode increases and reductions. Based on a survey
  of 320 mode changes the results show that executives recognize a wide range of
  reasons for mode change, but the importance and magnitude of those stimuli differ
  for mode increases and reductions. This study contributes to the knowledge on the
  reasons for mode changes in a specific way because it provides empirical results
  on the under-researched but highly relevant phenomenon of mode increases and
  reductions.

- *A Taxonomy of Small and Medium-sized International Family Firms:* This study
  develops a taxonomy of smaller family firms that internationalize and discusses
  the different configurations of these firms based on firm culture (in terms of organ-
  izational orientations), firm strategy (in terms of differentiation, cost leadership and
  marketing standardization) and firm structure (in terms of integration, centralization
  and specialization). Based on a survey of family firms the empirical findings sug-
  gest that there are four groups of firms: Domestic-focussed Traditionalists, Global

Standardisers, Multinational Adapters and Transnational Entrepreneurs. These configurations are distinctive in terms of their structure, orientations and performance but differ less in terms of their strategies.

- *Linking Processes and Dynamic Capabilities of International SMEs:* The Mediating Effect of International Entrepreneurial Orientation: This study examines the link between foreign market scanning and planning processes with international entrepreneurial orientation and performance. Based on a dynamic capability perspective and a sample of 604 SMEs the study finds that international entrepreneurial orientation completely mediates the relationship between scanning and planning and international performance. Further, the results imply a bi-directional relationship between processes and international entrepreneurial orientation.

With her work Dr. Edith Olejnik makes a significant contribution to international management and international marketing research. She advances the knowledge on internationally active smaller firms and provides invaluable insights into SMEs internationalization processes, both for researchers and executives. Her work impresses with the extent of attention paid to the conceptualization but also the combination of different types of studies and methodologies. I am particularly happy with her work because Dr. Olejnik presents the eleventh dissertation at my chair for Marketing & Retailing at the University of Trier. Moreover, she is the first research associate who managed to develop four studies for her dissertation and publish all of them in refereed international journals.

Not only in her dissertation, Dr. Olejnik has shown the remarkable ability to combine research and practice and always to go the extra mile. She never hesitated to participate in other projects and to help improving other research studies. I thank Dr. Olejnik for her commitment and I regard her as a very honourable, hardworking and always kind-minded person. I thank Dr. Edith Olejnik for working as a research associate at my chair and I wish her all the best for her future endeavours.

Professor Dr. Prof. h.c. Bernhard Swoboda

Trier, November 2013

Acknowledgments

The mission is accomplished! I am glad that I completed this doctoral thesis within the given timescale and I am proud that I was able to get all of my papers accepted in refereed journals. Three papers have already been published and one has been accepted for publication at the time this thesis was prepared. Although the copyrights for the articles are with the four publishers, the author retains the right to use the papers for her scientific career by including them in her doctoral thesis provided acknowledgement is given to the original publication. But before I state the original sources of publication, I would like to express my appreciation to several people who helped me to achieve this aim and who accompanied me during this journey.

First of all, I have to thank my supervisor, Prof. Dr. Prof. h.c. Bernhard Swoboda, for convincing me to accept the post as research associate at his chair and to pursue the doctoral degree. He has supported me ever since and trusted me enough to give me the amount of freedom I needed. Professor Swoboda has always supported my work and encouraged me to present my research at renowned conferences such as the Academy of International Business Annual Conference (in Rio de Janeiro, Nagoya and Washington DC), the European Academy of International Business Conference (in Porto and Bucharest) and several other national and international conferences.

Moreover, I thank Prof. Dr. Jörn Hendrich Block for evaluating my work as a second advisor. I appreciate that Prof. Dr. Lutz Richter agreed to chair the defense committee.

I would also like to thank the editors and anonymous reviewers that have contributed to the development of my research. I would like to thank Prof. Dr. Jorma Larimo, Prof. Dr. Klaus Meyer, Dr. Richard Owusu and Prof. Dr. Sami Saarenketo for their valuable feedback at the Doctoral Tutorial in Vaasa, and Prof. Dr. Breda Kenny, Prof. Dr. Jim Love and Prof. Dr. Glenn Richey for their comments at the Doctoral Colloquium of the AIB UK and Ireland-Chapter Conference in Edinburgh. Thank you for your input and for considering my work for the best dissertation proposal awards. I would also like to express my gratitude to Prof. Dr. Allen McCutcheon for his excellent course on latent class modelling at the Essex Summer School and for taking the time to talk about my research. Also Prof. Dr. Matthias Baum, Prof. Dr. Dirk Morschett and Prof. Dr. Christian Schwens contributed at some stage to the successful completion of this thesis.

I am indebted to our students and student assistants who also helped in developing my papers. I would like to thank Ines Armbruster, Irina Bayer, Madeleine Boos, Sarah Liesenfeld, David Said and Max Rosenthal for many fruitful, challenging and inspiring

Table of Contents

List of Figures and Tables

List of Abbreviations

AIC ....Akaike information criterion
ANOVA............................analysis of variance
AVE ....average variance extracted
B ....unstandardized coefficient
BAG................................born-again global
BG ....born global
BIC ....Bayesian information criterion
CFA ....confirmatory factor analysis
CFI..................................comparative fit index
CR ....composite reliability
df ....degrees of freedom
Diff ....difference
EFA ....exploratory factor analysis
e.g. ....exempli gratia/for example
EM ....expectation maximization
et al. ....et alia/and others
EUR.................................Euro
Exp(B) ....exponentiated logistic coefficient
F ....F-statistic
FDI..................................foreign direct investment
FIML ....full information maximum-likelihood
FL ....factor loading (EFA)
FSR ....foreign sales ratio (i.e. foreign sales to current total sales)
i.a. ....inter alia/among others
i.e. ....id est/that is
IEO ....international entrepreneurial orientation
IJV ....international joint venture
INV ....international new venture
ItTC..................................item-to-total correlation
JV ....joint venture
KMO ....Kaiser-Meyer-Olkin criterion
LC.....................................latent class
LMR..................................Lo-Mendell-Rubin (likelihood ratio)
LCA ....latent class analysis
log.....................................logarithm

m	million
Misc.	miscellaneous
ML	maximum likelihood
MNE	multinational enterprise
MV	mean value
N	number of sample size
n	number of subgroup
ns	not significant
p	significance level
p.	page
pp.	range of pages
PLAN	planning
R^2	R-squared (coefficient of determination)
RBV	resource-based view
RMSEA	root mean square error of approximation
ROI	return on investment
R&D	research and development
SCAN	scanning
SEM	structural equation model
SME	small and medium-sized enterprise
STD	standard deviation
t	t-value
TLI	Tucker Lewis index
Trad.	traditional
UK	United Kingdom
USA	United States of America
VLMR	Vuong-Lo-Mendell-Rubin (likelihood ratio)
vs.	versus
WOS	wholly owned subsidiary
WOPS	wholly owned production subsidiaries
α	Cronbach's alpha
ß	standardized coefficient
χ^2	Chi-squared
Δ	delta
%	percent
λ	standardized factor loadings (CFA)

A.   Introduction

1.   Focus

This study focuses on international small and medium-sized enterprises (SMEs) and their internationalization process. This field of research has gained prominence since the end of the twentieth century. With the internationalization of markets and the expansion of the trade environment, SMEs have been faced with increased competition, but also with increased opportunities. This changed reality has opened up many interesting research fields analyzing international SME.

When researching international SMEs one has to note first that SMEs cannot be compared to large multinational enterprises (MNEs) because size has many organizational effects (Lu and Beamish 2001). It is well known that SMEs are not smaller versions of large firms (Shuman and Seeger 1986). SMEs face different challenges with regard to internationalization, they employ different processes, differ with regards to their ownership and culture and exhibit different decision-making structures (Coviello and McAuley 1999). Hence, it is important to distinguish the internationalization process of SMEs from the one of MNEs.

There are several other reasons to particularly focus on SMEs. First, SMEs are the main providers of innovation and entrepreneurship (Keng and Jiuan 1989). Smaller firms are able to adapt rapidly and flexibly to different circumstances. They are able to respond to market conditions more quickly than MNEs (Lee et al. 2012). Second, SMEs have an immense relevance for the economy. In Germany, 99.6% of all firms were classified as SMEs in 2010. They accounted for 36.9% of all sales and employed 60.0% of all employees (Institut für Mittelstandsforschung 2012). Third, internationalization offers a great potential for firm growth, especially for SMEs (Barringer and Greening 1998). SMEs have been long regarded as being resource constrained, little experienced, domestically focussed with a limited geographic scope (Lu and Beamish 2001). But Calof (1993a) showed that size does not necessarily mean to be a barrier. Internationalization can open up opportunities and provide benefits to firms. SMEs can enlarge their market for selling their products, expand their customer base, shift competitive dynamics and reach an internationally renowned position.

However, despite the firms' positive characteristics and the potential advantages of internationalization, many SMEs do not appear to be exploiting their potential gains from international activities (Keng and Jiuan 1989). Indeed, internationalization is still

a challenge for SMEs (Jones and Coviello 2005; Lee et al. 2012). Smaller firms face a higher risk of failure because they face the liability of foreignness (Hymer 1976), the liability of smallness (Lee et al. 2012) and the liability of newness if they plan on opening subsidiaries abroad (Lu and Beamish 2001). The firms enter unfamiliar markets with high competitive intensity although they are small, resource constraint and often young (Lu and Beamish 2001; Mudambi and Zahra 2007). The knowledge and the capabilities that were developed in the home market are often not suitable for the new markets entered. The firms have to develop new capabilities and new knowledge to succeed abroad (Lu and Beamish 2001). As McDougall, Oviatt and Shrader (2003) put it: "It is an academic challenge to explain why a business already confronting the risks of young age and relatively small size would seek out the additional risk of being international" (p. 59).

Hence, in this research we focus on internationally active SMEs and how they approach internationalization. Thereby, we understand the term internationalization as "the process of adapting firms' operations (strategy, structure, resource, etc.) to international environments" (Calof and Beamish 1995, p. 116). By employing this definition we highlight three important aspects of internationalization: First, internationalization can be understood as a process. This implies a dynamic and evolutionary nature of internationalization. Due to the constant development and change of the international involvement, no decision is written in stone. Second, the word "adapting" refers to the behavioural aspect of internationalization. The firm learns from international dealings, from experience and from objective information. Third, internationalization has organizational effects. Hence, international decisions are not isolated from the firm's operations, but have important internal consequences. Based on this definition and the relevant literature in the field, which we will review in the following section, we will derive a holistic model of SME internationalization. This model summarizes important findings from the literature on the internationalization process and provides an overview of and overall framework to this doctoral thesis.

2.   Research Gaps

2.1.   Introduction

With increased international business SMEs have gained more importance in international markets. This changed reality produced much research on SME internationalization focussing on international business, international entrepreneurship and international marketing-related issues. Despite the many studies covering SME interna-

tionalization there are many questions left unanswered. In the following we will briefly sketch the existing knowledge in the field and the areas requiring more research.

At first, the international business literature focused primarily on SMEs' export activities analyzing the differences between exporters and non-exporters, the determinants of exporting and export performance as well as export development and stage models (for reviews see Andersen 1993; Leonidou 1995; Leonidou and Katsikeas 1996; Leonidou, Katsikeas and Piercy 1998). Especially the stage models of internationalization gained popularity. The research attention then also turned to networks and other operation modes (apart from exporting) such as foreign direct investment (FDI) (for a review see Coviello and McAuley 1999). More recently, the literature considered the degree of internationalization and its performance consequences (e.g. Pangarkar 2007), the geographic expansion pattern (e.g. Hashai 2011) and strategic configurations (e.g. Hagen et al. 2012) as well as the entrepreneurial orientation determining small firm performance (e.g. Lu et al. 2010; Su, Xie and Li 2011).

The entrepreneurial characteristics of small firm internationalization led entrepreneurship scholars to pay attention to small firms entering foreign markets. Research realized that entrepreneurship can be found not only in new venture creation, but also in extending the sphere of activity to overseas markets (Lumpkin and Dess 1996). In general, this stream of research concentrates on international new ventures, i.e. enterprises that are international from inception. These firms are often called "born globals" by international business and international marketing scholars (e.g. Knight and Cavusgil 1996). Within this field of research the focus has been put on the facilitators and antecedents of early internationalization (McDougall, Shane and Oviatt 1994; Oviatt and McDougall 1994) and to a lesser extent on the outcomes of early internationalization (Autio, Sapienza and Almeida 2000; Zahra and Garvis 2000). More recently, there has been a shift towards analyzing the cognitive side of internationalization (Zahra, Korri and Yu 2005; Acedo and Jones 2007).

But the field of international entrepreneurship is still growing and can be described as an intersection of the two research paths of international business and entrepreneurship (McDougall and Oviatt 2000). In this context, McDougall and Oviatt (2000) defined international entrepreneurship as "a combination of innovative, proactive and risk-seeking behaviour that crosses national borders and is intended to create value in organizations" (p. 903). International entrepreneurship research hence summarizes not only the research on international new ventures, but also on the internationalization of established SMEs (Lu and Beamish 2001). While the entrepreneurial behaviour of MNEs (Birkinshaw 1997) can also be considered as a part of international

entrepreneurship literature, the unique territory of international entrepreneurship is early internationalization and its motivators (Zahra, Korri and Yu 2005).

In this dissertation we focus on established SME that extend their activities across national borders at some point in their history. Thereby we refer to international business and to international entrepreneurship research. Although the two research paths have different traditions, both paths are multidisciplinary in nature and at the same time have their own rich models, ideas and theories which are helpful in analyzing SME internationalization. Already Coviello and McAuley (1999) put forward that a broader integrative perspective is needed to advance the understanding of SMEs' internationalization process. This is echoed by Jones and Coviello (2005) who described the theoretical developments in international business and entrepreneurship literature to be intersecting. According to the authors, the research streams can be well combined in order to analyze entrepreneurial internationalization.

In the following we will, hence, review the international business and international entrepreneurship literature, summarize the most important findings and then derive our research questions. Thereby we will proceed by explaining the Uppsala internationalization model and related stage models first. Then we will address the more recent literature on born globals to highlight the developments and the shift of attention within the literature on SME internationalization. Although both streams of literature describe different internationalization patterns, they share the common feature of being based on behavioural considerations. In addition, they both try to explain factors influencing internationalization. Moreover, we will highlight a third internationalization pattern as well as studies that try to combine the thoughts into more integrative frameworks of SME internationalization.

2.2.   Literature Review

Much of the foundation of the international business literature on SME internationalization is based on the Uppsala internationalization stage model. The Uppsala Model can be traced back to the behavioural theory of the firm (Cyert and March 1963; later applied to international investment by Aharoni 1966) and the theory of growth (Penrose 1959). Also the reasoning of Carlson (1966) is considered influential, whose research was concerned with the manner in which firms handle uncertainty due to the lack of knowledge about how to conduct business in a foreign market. The internationalization stage model by Johanson and Wiedersheim-Paul (1975) proposing a progressive development of firms along the four stages of the so called "establishment chain" (p. 307): (1) no regular export activities, (2) export via independent representatives/ agents, (3) sales subsidiary and (4) production/manufacturing. The

internationalization stage model hence assumes that internationalization is the consequence of a series of incremental decisions, which reduce the given uncertainty (Hadjikhani 1997). Moreover, firms enter new markets with successively greater psychic distance (Hadjikhani 1997).

The internationalization stage model is further advanced by the dynamic internationalization process model (Johanson and Vahlne 1977; Johanson and Vahlne 1990) replacing the clear expression of stages by successive and incremental commitment. Basic assumptions of the Uppsala model are the lack of knowledge about foreign markets being a major obstacle in international operations and commitment decisions being made incrementally due to market uncertainty (Forsgren 2002). The model thus postulates an incremental interplay between market commitment and market knowledge development (Eriksson et al. 1997). It is considered dynamic, as the outcome of one cycle of events constitutes the input for the next one (Andersen 1993). Furthermore, the model builds on the distinction between state and change aspects of the internationalization process (Johanson and Vahlne 1977). Johanson and Vahlne (1977) consider market commitment and knowledge about foreign markets to be the state aspects. The change aspects constitute the decisions to commit resources and the current business activities. Market knowledge and market commitment are said to influence "both commitment decisions and the way current activities are performed. These, in turn, change market knowledge and commitment" (Johanson and Vahlne 1977, p. 27).

Similar to the Uppsala internationalization process model innovation-related internationalization models are rooted in the behavioural theory of the firm. Viewing the internationalization decision as an innovation to the firm, they combine the adoption of an innovation with learning sequences. Derived from Rogers' (1962) stages of the adoption process, the innovation-related models make out distinct stages in the internationalization process. Therefore, these models are often called stage models or export stage models with export being the most common foreign entry mode especially among SMEs (Young et al. 1989). A comprehensive review of stage models is provided by Andersen (1993) and Leonidou and Katsikeas (1996). While the models have much in common, they distinguish themselves mainly by the number of stages and the description of each stage. Another point of differentiation is the interpretation of the triggers to export. While Bilkey and Tesar (1977) and Czinkota (1982) assumed that the firm is not interested in exporting in the first stage and export is initiated by some push mechanism or external change, the models of Cavusgil (1980) and Reid (1981) showed a more active firm in the initial stages being directed by a pull mechanism or internal change.

The factors causing early and rapid internationalization are of central importance in the research on born globals. It has been shown that firms can be international shortly after establishment or even from inception (Oviatt and McDougall 1994). Observing rapid, revolutionary and dedicated internationalization, born global research challenges the assumption of incremental and gradual internationalization (i.e. mainly the Uppsala model) both conceptually and empirically (McNaughton 2003; Knight and Cavusgil 2004; Freeman and Cavusgil 2007). However, it has to be noted that research on born globals is also based, at least implicitly, on behavioural considerations (Madsen and Servais 1997). Comprehensive reviews on born global research are presented by Rialp, Rialp and Knight (2005), Aspelund, Madsen and Moen (2007), Keupp and Gassmann (2009) and Jones, Coviello and Tang (2011).

The phenomenon of revolutionary internationalization has been studied under different names: Born global (e.g. Rennie 1993; Madsen and Servais 1997; Autio, Sapienza and Almeida 2000; Moen and Servais 2002; Knight and Cavusgil 2004; Freeman and Cavusgil 2007), international new venture (Oviatt and McDougall 1994), committed internationalist (Bonaccorsi 1992) and instant exporter (McAuley 1999).

In general, born globals were described as "small, technology-oriented companies that operate in international markets from the earliest days of their establishment" (Knight and Cavusgil 1996) (p.11). Similarly, an INV was referred to as "a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries" (Oviatt and McDougall 1994, p. 49). As Coviello, McDougal and Oviatt (2011) pointed out the terms have often been used interchangeably although they do not exactly refer to the same phenomenon. There are two points of differentiation between born globals and international new ventures (INV). First, INVs operate in some overseas countries, not necessarily on a global scale. That is why Oviatt and McDougal (1994) distinguished between the global start-up and the geographically-focussed start-up within their types of international new ventures. Second, there is a commonality between the terms "new" and "born". While both types of ventures should be relatively young at age, the term INV exclusively refers to new firms intending to internationalize. However, this distinction is not always clearly found in the literature (Jones, Coviello and Tang 2011). Although the term born global has received some criticism due to the overstatement of the attribute global (Hordes, Clancy and Baddaley 1995), it is the most frequently used concept. It may be applicable to established firms as well and hence will be employed in this dissertation in the context of rapid internationalization.

Born global research highlights non-incremental internationalization processes implying that firms do not have to pass through certain stages successively (e.g. Moen and Servais 2002). According to this approach, both simultaneous entries to multiple markets and deliberately skipping over several operation modes in the establishment chain is possible (Jones and Coviello 2005). This kind of behaviour was described as being entrepreneurial, implying the significance of entrepreneurial orientation and entrepreneurial behaviour (Bloodgood, Sapienza and Almeida 1996; McAuley 1999; Knight 2001; Andersson and Evangelista 2006).

Born globals' source of competitive advantage is said to be related to a sophisticated knowledge base (Autio, Sapienza and Almeida 2000; Bell et al. 2003; Weerawardena et al. 2007). This knowledge advantage is often combined with the use of advanced technology. Other factors enflaming early internationalization are the experience and international orientation of the entrepreneur, the substantive value-adding character of the product and several external factors such as the increasing role of niche markets, the need for customized products and advances in process-technology (Knight and Cavusgil 1996).

Another pattern of rapid SME internationalization is described by Bell, McNaughton and Young (2001) who found companies which, after being well established in the domestic market, suddenly embrace dedicated internationalization. These are the so-called "born-again global" firms. The reason for this sudden internationalization is to be seen in critical events that provide additional resources to the firm and therefore facilitate it (Bell et al. 2003).

Although the literature has recognized the three main patterns of SME internationalization being traditional, born global and born-again global (Tuppura et al. 2008; for family-owned SMEs Kontinen and Ojala 2012), other patterns such as born regionals have been regarded as well (Lopez, Kundu and Ciravegna 2008). Detailed results on the characteristics and differences of those patterns are lacking. Moreover, the empirical research is based on different conceptualizations and hinders comparability (Kuivalainen, Sundqvist and Servais 2007; Keupp and Gassmann 2009). Especially the operational definitions used in empirical research are fragmented (Madsen 2013). Little is known about whether the patterns apply to young and/or established firms and how the patterns develop over time (Kuivalainen et al. 2012). The one longitudinal study in the field showed that the traditional pattern still prevails and that there are less born globals out there than is claimed by research studies (Sui, Yu and Baum 2012). Other authors argued that even though some firms seemingly internationalize in a different manner, it does not mean that they do not follow the traditional

internationalization process overall (Madsen and Servais 1997). It can be concluded that firms seem to follow different internationalization patterns, but there is a lack of empirical results and little comparability between studies.

Moreover, both Jones and Coviello (2005) and McDougall and Oviatt (2000) raised the concern that international entrepreneurship research still lacks a clear theoretical framework. Also, more recent research calls for a cohesive conceptual framework (e.g. Rialp, Rialp and Knight 2005; Kuivalainen, Sundqvist and Servais 2007; Keupp and Gassmann 2009). In this context, Buckley (2002) advised to integrate concepts of international business with neighbouring areas in order to advance research. Jones and Coviello (2005) followed his call in an attempt to conceptualize internationalization as an entrepreneurial process of behaviour. Based on behavioural approaches, the authors combined organizational learning and export stage development with entrepreneurial findings and conceptualized a simple, a general and a precise model of internationalization as entrepreneurial process. In their precise internationalization model the authors regard the entrepreneur as key antecedent factor influencing the structure of the firm. The structure then shapes the internationalization behaviour and ultimately the firm's performance.

Other integrative approaches were attempted, to some extent, for example by Welch and Luostarinen (1988), Benito and Welch (1997), Li, Li and Dalgic (2004) and Bell et al. (2003). While Welch and Luostarinen's (1988) model tried to provide a first broader framework and capture the diversity of the internationalization process suggesting that firms can leapfrog stages, Benito and Welch (1997) discussed a conceptual model of de-internationalization where internationalization and de-internationalization are modelled as consequences of past international operations and current developments within the firm and the environment. Regarding de-internationalization, Calof and Beamish (1995) raised the issue that firms change their operation mode after servicing that market for some time. While much is known on mode choice in general (Morschett, Schramm-Klein and Swoboda 2010) and mode choice of SMEs in particular (Nakos and Brouthers 2002; Brouthers and Nakos 2004), this form of change in internationalization lacks theoretical explanation and empirical results on how and why firms change operation modes (Pedersen, Petersen and Benito 2002). Petersen and Welch (2002) as well as Calof and Beamish (1995) call for more research on mode changes to improve the understanding of the internationalization process. While most studies focus on mode increases, i.e. changes from an initial mode into a mode with a higher market commitment (Pedersen and Petersen 1998), mode reductions are seldom analyzed. Within mode increases scholars focus on concrete mode changes, whereas reductions are viewed

more broadly within divestment or de-internationalization decisions (Mata and Portugal 2000; Belderbos and Zou 2009; Morschett et al. 2009). Studies that combine both perspectives are lacking.

Another integrative model of small firm internationalization was introduced by Li, Li and Dalgic (2004). The authors derived a hybrid model of the SME internationalization process based on the Uppsala school, innovation-related models, the systematic planning approach and contingency theory. Li, Li and Dalgic argued that motivations and competences are antecedents to the market planning process which consists of market research, market selection and mode choice. This process does not necessarily incorporate systematic phases – on the contrary, it may involve back loop effects. The planning process then influences the execution, resulting in different levels of international involvement and risks.

Finally, Bell et al. (2003) proposed an eclectic, normative and integrative model of SME internationalization trying to include the different international pathways that small firms may take. They considered the traditional, the born global and the born-again global pathway. Expressed in simple terms, being influenced by the external and internal environment the manager has to decide on the firm's internationalization. This decisions result in one of those pathways. With progressing time and further decisions the state of internationalization enlarges, giving room to de-internationalize or change pathways through increased commitment, which results in a growing knowledge base.

Whatever internationalization pattern the SME follows, diverse organizational and managerial skills and competences are needed to compete in the global arena (Oviatt and McDougall 1994). Jones, Coviello and Tang (2011) stated in their comprehensive review of the international entrepreneurship literature that organizational issues in the context of entrepreneurial internationalization are an important field of research. According to the authors this stream of research analyzed performance antecedents such as product differentiation (Bloodgood, Sapienza and Almeida 1996), formal export planning and technological sophistication (Zahra, Neubaum and Huse 1997), attitudes toward foreign markets (Preece, Miles and Baetz 1999), entrepreneurial orientation (Jantunen et al. 2005) and organizational structure (Kocak and Abimbola 2009). However, Jones, Coviello and Tang (2011) highlighted that the studies exhibited inconsistent results. The relevance of organizational issues within the course of the SMEs' internationalization process has also been recognized by the international business domain. There are several managerial factors that influence both the extent of exporting and the export performance (Dichtl, Koeglmayr and

Mueller 1990; Leonidou, Katsikeas and Piercy 1998). Barringer and Greening (1998) highlighted the role of planning for the expansion performance of smaller firms. Other studies showed that collecting information about foreign markets is a success factor of smaller internationalizing firms (Armario, Ruiz and Armario 2008). This would fit well with the perspective of knowledge and learning being important factors in the internationalization process of SMEs (Johanson and Vahlne 1977). However, Li, Li and Dalgic (2004) showed that SMEs tend to follow an unsystematic decision-making process. Similarly, Crick and Spence (2005) found that internationalization strategies may be unplanned. It is apparent that results on the role of organizational factors in the course of SME internationalization are inconclusive. More research is needed on how international SMEs create value. In particular it seems that little is known about how international SMEs capitalize on knowledge generating processes and capabilities to achieve superior performance.

Furthermore, it has been shown that several differences between international medium-sized firms exist which are likely to results in different performance levels (Roth 1992; Beamish et al. 1999). Hence, researching configurations of international SMEs was said to advance entrepreneurship research by explicitly taking into account interdependencies between multiple contextual domains such as internationalization, organization and performance (Harms, Kraus and Reschke 2007). Knight and Cavusgil (2005) for example developed a taxonomy of born global firms and found that superior international performance tends to be driven by entrepreneurial orientation, technological leadership and a differentiation strategy. Aspelund and Moen (2005) derived four types of international new firms and exemplified that they differ with regard to international strategy, operation mode, number and importance of foreign markets and several other organizational characteristics, but less with regards to performance (with the exception of perceived growth and international performance). Hagen et al. (2012) argued that there is a gap with regards to strategic orientations, related strategic behaviours and the subsequent international performance of SMEs in the international business literature. Accordingly, they formed strategic international SME clusters and showed that a clear and proactive strategic orientation and a fit with business strategy lead to improved international performance. We see that the analysis of configurations opens up interesting avenues for research combining internationalization, organizational design and performance. Moreover, it offers a more holistic perspective on different types of international SME and their outcomes.

Regarding the organizational configuration in the context of the internationalization process one type of SME has received special research attention: The family firm. Many SMEs are family owned (Jager 2010). Kontinen and Ojala (2012) highlighted

that family owned SME make up the largest part of all businesses in the EU and USA. Family firms have also an enormous relevance for the German economy (Spiegel and Block 2011). Moreover, family firms are a particularly interesting and distinctive group to research because these firms often combine ownership and management (Gallo and Sveen 1991) whereas family ownership and family management have distinct organizational effects (Block 2010; Block, Jaskiewicz and Miller 2011) and influence the firms' internationalization pattern (Kontinen and Ojala 2012; Sciascia et al. 2012). Family businesses have a strong organizational culture that fosters trust and tradition (Aronoff and Ward 1995) and differ from non-family firms in several regards (Swoboda 2002; Fernández and Nieto 2006; Block 2009). Thus far, the research on international family firms has mostly focussed on the internationalization process in general (Tsang 2001; Claver, Rienda and Quer 2007), the determinants of internationalization (Gallo and Sveen 1991; Fernández and Nieto 2005; Graves and Thomas 2008) and the differences between family and non-family firms with regard to managerial issues (Pinho 2007; Claver, Rienda and Quer 2008). Scholars have shown that family firms tend to follow a slow and unstructured internationalization pattern because of their risk-averse organizational culture and their fear of losing family wealth (Claver, Rienda and Quer 2007). Hence, family firms tend to implement conservative strategies and do not aggressively pursue internationalization (Zahra 2003). However, little is known about how exactly family firms adapt to international environments and how their risk avoidance influences the configuration of strategies and structures during internationalization.

The literature review revealed several areas that need further research. In the following we will summarize the gaps in literature and develop our research objectives that result thereof.

2.3.   Research Objectives

The first literature gap refers to internationalization patterns of SMEs. The international business and international entrepreneurship literature discussed different types of international ventures and different patterns of internationalization, but there are several drawbacks: (1) Different conceptualizations and operational definitions are used, (2) the results are barely comparable, (3) several empirical studies compare patterns based on conceptual definitions instead of empirical distinctions, (4) firm-specific differences between patterns are not fully established and (5) the development of internationalization patterns over time is under researched. Hence, our aim is to identify SME internationalization patterns empirically based on an integrative conceptualization and a quantitative approach, to explain the variations in those interna-

tionalization patterns over time and to test the firm-specific determinants that lead a SME to choose a particular internationalization pattern.

The second identified gap in the literature on SME internationalization refers to changes with regards to the constituents of internationalization patterns. It has been highlighted that little is known on why firms change their foreign operation mode. However, the foreign operation mode is an essential part of how to conduct international business and it is one of the most important decisions and most researched issues. To close this knowledge gap we intend to analyze which factors are perceived by executives to be important within the context of mode increases and mode reductions. It is relevant to learn how decision-makers perceive change inducing factors in terms of their magnitude and relevance for mode changes. But it seems especially intriguing to distinguish between mode increases, i.e. increasing commitment, and mode reductions. In this context it is worthwhile to test the determinants of the likelihood of a mode increase relative to a reduction.

A third area needing more research attention is the internationalization of family firms. Although research on family firms is growing and much is known on the characteristics of family firms, little is known on how family firms internationalize and what determines their international success. This is why we aim to take a closer look at family firms that are internationally active and derive configurations of international family firms. We chose to focus on family firm configurations, because this is a promising research area that offers a combined description of organizational design, strategy and performance in the context of internationalization. Hence, we will derive different configurations of international family firms in terms of firm culture, strategy and structure. In doing this we want to find out which combinations of strategies, structures and firm orientations promise success for family firms in international markets and which firm-level factors differentiate between the different groups of firms. Thereby we hope to learn more about the internationalization process of family firms and at the same time extend our knowledge on the interplay between strategy, structure and culture with performance in internationally active smaller firms.

The final research need has been established as an inconsistency in empirical studies on the organizational design of international SMEs and the outcome of it. Although the literature has imparted much knowledge on success factors of SMEs' internationalization, there are examples of inconsistencies in empirical results. We addressed the issue of scanning and planning processes and their value in SMEs. Although it is theoretically reasonable that foreign market scanning and planning processes contribute to the knowledge of SMEs and therefore provide a performance dif-

ferentiating factor, empirical results have shown differing effects. It seems necessary and adequate to research why and how scanning and planning processes contribute to the international performance of internationally active SMEs, since these sorts of processes are cost-intensive and many SMEs tend to give up on them easily. Moreover, we argue that international entrepreneurial orientation, a construct that has been highlighted in international business and the international entrepreneurship studies, plays a major role in internationally established SMEs.

To shed light on these complex issues, four studies have been designed to answer four major research objectives:

- The first objective is to explore the internationalization patterns that SMEs take by including the determining factors and the dynamic developments of the patterns.
- The second objective is to explore the changes in foreign operation modes and the reasons leading towards mode increase or mode reduction as perceived by the decision makers.
- The third objective is to explore configurations of international small and medium-sized family firms by taking a closer look at their culture, strategy and structure.
- The fourth objective is to explore how SMEs capitalize on their processes and capabilities and to analyze the interplay between processes and capabilities in determining the international performance of SMEs.

These research objectives have something important in common: They try to improve the understanding of international SMEs and SMEs' internationalization process. And this actually is another gap in research. There is no unifying framework, no single agreed model of SME internationalization. Although we summarized some integrative models in the field, none offers an overall description and explanation of the complete internationalization process apart from Jones and Coviello (2005). Although the models derived by the authors are very comprehensive and well-grounded in theory, we argue that they need one important addition because the role of the organization is underestimated. Therefore, we will discuss the internationalization process of SME in the following in order to develop an overall model which will simultaneously pose as overall framework to this dissertation.

3.   Overall Framework

3.1.   Introduction

According to Jones and Coviello (2005), international business theories have been used to describe different aspects of the internationalization process. They point out that the export stage models focussed on explaining the factors influencing internationalization, while behavioural-based learning approaches incorporated the explanation of the underlying behavioural processes. The combination of both has been examined in studies on INV and born globals. Jones and Coviello (2005) argued that this stream of research explained early and/or rapid internationalization by emphasizing both the firm-level process of internationalization and the internal and external factors leading towards it. Since this is a young field of research there has been no unifying framework developed yet, but the theory seems to converge and to move in a holistic, pluralistic and multifaceted direction by integrating multiple theoretical perspectives (Jones and Coviello 2005; Jones, Coviello and Tang 2011).

Examining the nature of the internationalization process, we need to find a way of describing and modelling the nature of the process. Van de Ven (1992) illustrates three ways process can be perceived: (1) a logic that explains a causal relationship between independent and dependent variables, (2) a category of concepts or variables that refers to actions of individuals or organizations and (3) a sequence of events that describes how things change over time (cf. p. 169).

In this dissertation, we follow this understanding of Van de Ven (1992) and derive the overall framework of this work as relationships between different concepts of SME internationalization. These concepts relate in a causal way to one another and result in entrepreneurial events that may change over time. Accordingly, in the following section we will derive the overall understanding of internationalization and its constituents. Thereby, we will explain the concepts and relationships that built the essence of SMEs' internationalization process.

3.2.   Summarizing Model

The term internationalization has been often used to portray the outward movement in a firm's international operations (e.g. Turnbull 1987). It has been described as the geographical expansion of economic activities over a national country's border (Ruzzier, Hisrich and Antoncic 2006). Others defined it as "the process of increasing involvement in international operations" (Welch and Luostarinen 1988, p. 36). Calof and Beamish (1995) came to the conclusion that most definitions imply that "internationalization is associated with increasing involvement in foreign markets" (p. 116).

Certainly, a firm may also divest a division, sell a foreign plant, or lay off employees involved in international operation due to several reasons. Therefore, it has to be assumed that de-investment is part of the internationalization process as well (Calof and Beamish 1995). Hence, internationalization can generally be understood as firm-level activity that crosses national borders (Wright and Ricks 1994). It becomes apparent that internationalization is not static in nature, it is rather dynamic, complex and multidimensional (Leonidou and Katsikeas 1996). It is based on individual and collective decisions at different points in time, which in turn are determined by various contextual factors leading to evolutionary or revolutionary development of the firm's internationalization (Foscht, Swoboda and Morschett 2006). Thus, we sympathize with Calof and Beamish's (1995) broad definition of a firm's internationalization as "the process of adapting firm's operations (strategy, structure, resource, etc.) to international environments" (p. 116). This definition has three implications: First, internationalization can be understood as a process. This implies a dynamic and evolutionary nature of internationalization. Second, the word "adapting" refers to the behavioural aspect of internationalization. Third, internationalization has organizational effects.

Melin (1992) perceived internationalization as part of the ongoing strategy process. According to Andersen (1997) and Bradley (1995) there are two main differences between internationalization and other types of strategy processes. Firstly, when the firm decides to transfer products, services or resources to international markets, the firm has to select the country where the transaction has to be performed. Secondly, the firm has to decide on the transaction mode itself, meaning that a foreign market entry mode has to be chosen. "The strategy process determines the ongoing development and change in the international firm in terms of scope, business idea, action orientation, organizing principles, nature of managerial work, dominating values and converging norms" (Melin 1992, p. 101). Thus, internationalization has an impact on organizational coordination dimensions and includes information about change.

Both the definition by Calof and Beamish (1995) and the understanding of Melin (1992) emphasize that internationalization has to be perceived as a process and that this process involves decisions on international matters that in turn determine organizational dimensions and lead to their adaptation.

However, also factors influencing internationalization have to be taken into account. In early export stage models and innovation-related internationalization research several push- and pull-factors causing internationalization were considered. While push mechanisms can be described as external determinants of environmental

change, pull-factors are internal determinants. External factors that push rapid inter-
nationalization are the increase in information and communication technology and
the homogenization of markets (Knight and Cavusgil 2004). Internal forces are, for
example, the technological knowledge and the international orientation that enable
the firms to serve global niche markets and capitalize on their capabilities by leverag-
ing their international presence (Oviatt and McDougall 1994; Knight and Cavusgil
2004). Recently, Torkelli et al. (2012) demonstrated the relevance of competences,
but also of environmental hostility, on SME internationalization. Therefore, it is rea-
sonable to conclude that internal and external determinants lead to the internationali-
zation event (Jones and Coviello 2005), which has been understood as innovation
(Knight and Cavusgil 2004) or as entrepreneurial action (Lu and Beamish 2001). We
conceptualize the entrepreneurial internationalization event as the internationalization
pattern. To clarify the terms, we briefly explain how internationalization, internation-
alization pattern and internationalization stages (as described in stage models for
example) relate to one another.

According to Calof and Beamish's (1995) definition, the term internationalization
process describes the time-based development of firms' internationalization.
Thereby, internationalization stages refer to different typical internationalization levels
within the internationalization process (Swoboda and Jager 2009). They can be cap-
tured as the range of operation modes that a firm employs and the range of countries
that a firm serves. Hence, internationalization stages are different from internationali-
zation patterns. Internationalization patterns capture the internationalization behav-
iour of one firm in a specific point in time. The term combines the internationalization
stage with how fast and how successful the firm increases its internationalization
level (Hashai 2011).

This understanding is consistent with Oviatt and McDougal (1994), Jones and
Coviello (2005) and Hashai (2011). The expansion along the geographic dimension
and also the increasing commitment of foreign operations is a central theme in sev-
eral internationalization theories. In behavioural-based stage models, such as the
Uppsala model, the firm increases international involvement because of a learning
processes that is based on the interplay between market knowledge and foreign
market commitment (Johanson and Wiedersheim-Paul 1975; Johanson and Vahlne
1977). The notion of foreign market commitment refers to the spread of foreign coun-
try markets based on the concept of psychic distance and the extent of resources
committed to foreign markets based on the concept of the establishment chain
(Johanson and Wiedersheim-Paul 1975). Whereas the operation modes have been
discussed as a structural scale measure of internationalization in the literature, the

countries dimension has been addressed as a geographical or market scope meas-ure (Kuivalainen, Sundqvist and Servais 2007). Also, more recent studies view the geographic expansion and the scale of foreign operations as major elements that describe the extent of internationalization. For example, Jones and Coviello (2005) claimed that mode and place of transference are the main evidence for internationali-zation. Similarly, Zahra, Ireland and Hitt (2000) viewed the international diversity and the foreign entry mode as the two main dimensions of internationalization. But schol-ars must add the time dimension to a conceptualization of internationalization pat-terns (Kuivalainen, Sundqvist and Servais 2007). The time dimension is one key element that has been used to differentiate born globals from traditional SMEs. This dimension is also important for identifying born-again globals, which differ from born globals by beginning the internationalization process much later (Bell, McNaughton and Young 2001). Moreover, the foreign sales ratio has often been used as perform-ance-related scale indicator of the degree of internationalization (Kuivalainen, Sundqvist and Servais 2007). Obviously, firms with similar foreign sales ratios can employ different operation modes in different countries or follow different internation-alization patterns (Kuivalainen, Sundqvist and Servais 2007). Thus, it seems neces-sary to integrate and combine the indicators to achieve a multifaceted and objective view of internationalization patterns.

Following the reasoning of Jones and Coviello (2005), the entrepreneurial event is coupled with organizational learning and knowledge development which may lead to adopting more risky foreign operation modes or enter into more distant countries. Hence, changes in operation modes are considered as a part of the internationaliza-tion process (Calof and Beamish 1995). We argue that internationalization patterns are open to change, given that firms develop over time. Thereby we refer to Jones and Coviello (2005) who distinguished between fingerprint patterns and profiles of the firm's internationalization behaviour. In our study, the internationalization patterns can be captured as the timing of cross-border firm-level activities, the range of opera-tion modes and countries as well as the extent of foreign sales, at a specific point in time. However, the changes in the composition of these indicators describe the dy-namic profiles of SME's internationalization behaviour.

According to Zahra (1993), international entrepreneurship includes not only the study of firms' behaviour as they expand into international markets, but also the conse-quences thereof. In a next step we, therefore, assume based on the aforementioned understanding of internationalization that the internationalization pattern has conse-quences for the organization and the corresponding coordination dimensions. Coor-dination dimensions refer to mechanisms and organizational instruments that help to

achieve integration among different units within a firm (Martinez and Jarillo 1989). Within the MNE context, studies highlighted the significance of coordination dimensions for internationally active firms (Martinez and Jarillo 1989; Martinez and Jarillo 1991). Martinez and Jarillo (1989) distinguished between structural and formal dimensions (formal structure, centralization, planning, control) and informal dimensions (relations, communication and socialization). Roth, Schweiger and Morrison (1991) also demonstrated that the international strategy has consequences for the organizational design which effects the company's effectiveness. However, linking different activities of a firm is not only relevant to large corporations but also to medium-sized firms (Roth 1992). Swoboda (2002), Swoboda and Jager (2009) and Jager (2010) showed that coordination dimensions have a differing impact on SMEs' international performance at different stages in the internationalization process. Depending on the internationalization stage, different organizational factors gain in importance. Moreover, Swoboda et al. (2009) found that internationalization is related to changes in firm processes, structures and to a lesser extent firm culture. The authors argued that changes in internationalization, i.e. both upstream and downstream changes of operation modes and countries, have implications for the design of the coordination dimensions.

We argue that the internationalization decision triggers the internationalization pattern and that this change can be part of the adaptation process (Calof and Beamish 1995). Through operating in different countries, different strategic approaches may become necessary (Benito and Welch 1997). Already Welch and Luostarinen (1988) highlighted that internationalization is related to the firm's organizational capacity. The extension of the geographic scope of operations may necessitate other structures and processes. Moreover, Beamish et al. (1999) showed that organizational structure has implications for export performance of medium to large sized successful Australian exporters. In general, structural and procedural variables are of paramount importance in understanding international firms. Structure, processes and culture can be understood as coordination mechanisms that help firms to align business activities to the strategic goals and aims of the firm and to manage the resource base across different countries (Martinez and Jarillo 1991).

Furthermore, the notion of contingency theory states that a fit among a firm's internal dimensions, but also between organizational elements and its external context in a given situation, is critical to survive and perform (Galbraith 1973). Miller (1992) highlighted that "environmental fit demands that organizations match their structures and processes to their external setting" (p. 159). Yeoh and Yeong (1995), for instance, discussed the fit between environment, export channel structure and entrepreneur-

ship. However, the external setting may demand different combinations of coordination dimensions. Roth (1992) showed that considerable differences in the coordination and configuration of medium-sized firms exist. For example, environmental uncertainty may require delegation of authority (Burns and Stalker 1961), specialization (Galbraith 1973), scanning of markets and flexible decision-making (Miller and Friesen 1982). Roth and Morrison (1992) further showed that internationalization is an important contingency variable, i.e. firms use different strategic positioning when they are confronted with internationalization. In the same vein, Fletcher (2001) conceptualized that international activities are influenced by organizational factors, but at the same time also influence the organization. Moreover, many studies showed that there are several internal factors affecting the performance of smaller firms in international markets. Following the resource-based view and the dynamic capabilities approach, we recognize that organizational factors may determine performance. This is the main aspect that differentiates our internationalization model from the general one by Jones and Coviello (2005). We do not see performance as a direct consequence of the internationalization behaviour of the firm. We argue that internationalization impacts firms' organizational coordination dimensions and that these in turn have performance consequences. Furthermore, we argue that a fit between both leads to international success.

In summary, internationalization patterns are based on individual and collective decisions on countries, foreign operation modes and timing. These decisions in turn are determined by internal and external contextual factors leading to the development of firms' internationalization patterns. These result in different configurations of organizational coordination dimensions affecting international performance. Performance also influences the contextual factors, which creates a dynamic process capable of change. These summarized conclusions can be seen in Figure A–1.
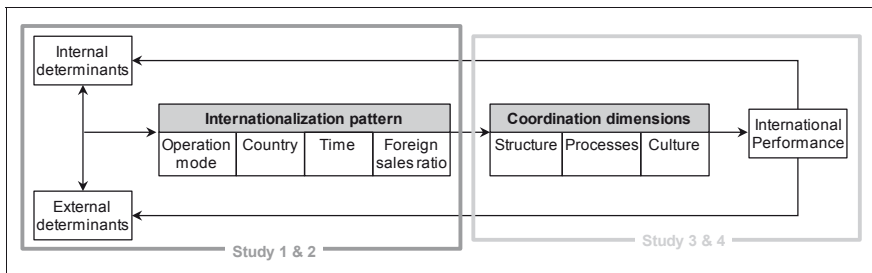
Figure A–1:   Overall Framework of the Doctoral Thesis
Source: Own creation.

The overall framework of SME internationalization serves two functions in this disser-
tation. On the one hand, it conceptualizes a general model of SMEs' internationaliza-
tion process. On the other hand, it gives an overview over the studies to follow.
Therefore, the model structures this work and puts the four studies in an overall con-
text. We see that the studies are closely tied together. The first study deals with the
internationalization patterns of SMEs and develops different internal factors that de-
termine the choice of the pattern. Moreover, the study discusses how the patterns
may change and develop over time. The second study deals with a selected change
within the dimensions that build the patterns. It researches why firms change their
foreign operation mode. The third study considers that there are different configura-
tions of internationally active firms in terms of organizational coordination dimen-
sions. These may differ because of different internationalization patterns and result in
different performance levels. The fourth and final study addresses a special question
within the context of performance outcomes of organizational dimensions. In this
study, we analyze the complex interplay between processes and a dynamic capabil-
ity in influencing international performance.

In conclusion, the following section will describe the structure of the studies in more
detail and state how each of them contributes to the literature and the knowledge on
SME internationalization.

3.3.   Structure of and Contribution by the Studies

3.3.1   Determinants and Development of Internationalization Patterns

The aim of the first paper is to identify the internationalization patterns of SMEs quan-
titatively, to describe SMEs as they follow different patterns over time and to discuss
the determinants of these patterns through empirical study.

We proceed in that we discuss the internationalization patterns known from the litera-
ture and the different conceptualizations that exist. Based on arguments borrowed
from the Uppsala model, but also from born global research we conceptualize inter-
nationalization patterns and derive the factors that differentiate among them.

We test the hypotheses with a sample of mature German SMEs (n=674). To identify
the internationalization patterns, we apply a latent class clustering approach. Then,
we use a multinomial logistic regression analysis to analyze the factors influencing
these patterns. We empirically find three internationalization patterns: traditionals,
born globals and born-again globals. Comparing modern SMEs with the same SMEs
from ten years ago, we find that firms may change their patterns. Moreover, the pat-

terns are determined by international orientation, growth orientation, communication capability, intelligence generation capability and marketing-mix standardization.

We contribute to the research on SMEs' internationalization patterns by combining elements of the Uppsala model and born global research. Instead of applying "arbitrary" thresholds, we provide a quantitative approach to identifying internationalization patterns. These patterns confirm the three main internationalization pathways discussed in the literature. We further advance the field by describing the patterns, showing evidence that the patterns may cross over time and providing information on the factors that influence the patterns.

3.3.2   Change of Foreign Operation Modes

The aim of the second study is to explore the reasons leading executives to change their firm's foreign operation mode by contrasting mode increases and reductions.

After explaining the relevance of mode changes and the lack of theoretical explanation for them, we review the literature on mode changes. Thereby we distinguish between mode increases, i.e. changes from an initial mode into a mode with a higher market commitment, and mode reductions. Our study is based on the change stimuli identified through in-depth interviews by Calof and Beamish (1995). We discuss how these factors should impact the decision to change a mode both from behavioural-based process perspective and from economic-strategic reasoning.

We analyze data from 265 German firms on 320 mode changes. The results show that executives recognize a wide range of reasons for mode change, but the stimuli differ in importance and magnitude regarding mode increases and reductions. While performance and external environment increase the likelihood of mode reductions, internal environment and managerial attitudes induce mode increases. Moreover, stimuli for incremental and radical mode changes differ as well.

This study contributes to the knowledge on the reasons for mode changes in a specific way because it provides empirical results on the under-researched but highly relevant phenomenon of mode increases and reductions. Thereby, we highlight the necessity to consider both directions of mode change and provide new implications as well as contrast our results with the ones by Calof and Beamish (1995).

3.3.3   Configuration of International Family Firms

The third study develops a taxonomy of small and medium-sized family firms that internationalize and discusses the different configurations of these firms based on firm culture (in terms of organizational orientations), firm strategy (in terms of differen-

tiation, cost leadership and marketing standardization) and firm structure (in terms of integration, centralization and specialization).

After discussing and reviewing the literature on family firm internationalization, we derive a conceptual model based on the configuration approach. We conceptualize culture, strategy and structure in the context of family firm internationalization and argument on the relationships between those constructs.

To examine the interplay of international family firm culture, strategy and structure, we employ a quantitative taxonomic approach that is rooted in configurational theory, analyzing 504 Germany-based small and medium-sized family firms. Our empirical findings suggest that there are four groups of firms: Domestic-focussed Traditional-ists, Global Standardisers, Multinational Adapters and Transnational Entrepreneurs. These configurations are clearly distinctive in terms of their structure, orientations and performance but differ less in terms of their strategies. Superior international per-formance tends to be driven by a decentralized entrepreneurial approach.

We contribute to the literature by discussing different combinations of strategy, struc-ture and culture that lead to diverse configurations of family firms. The configurations result in different levels of performance. In considering these configurations, we aim to determine which combinations of strategies, structures and firm orientations are primarily applied by international family firms and whether these organizational con-figurations are successful. Thereby we advance the knowledge on organizational configurations and on the successful internationalization of smaller family firms.

3.3.4   Processes, Dynamic Capabilities and International Performance

The fourth and final study focuses on the link between foreign market scanning and planning processes with international entrepreneurial orientation and performance. We explore how SME create value from firm processes and discuss the nature of the relationship.

Following the dynamic capability perspective, we argue that SMEs can capitalize on scanning and planning processes because of their international entrepreneurial ori-entation. We derive a mediation model and discuss alternative conceptualizations.

We test the hypotheses with a sample of 604 established SMEs and find that interna-tional entrepreneurial orientation completely mediates the relationship between scanning and planning and international performance. Further, the results imply a bi-directional relationship between processes and entrepreneurial orientation.

Overall, this study contributes to the research on the performance effects of processes and dynamic capabilities within established international SMEs. We advance theory by modelling international entrepreneurial orientation as dynamic capability that intervenes in the process-performance relationship. Thereby, we explain why SMEs can capitalize on processes and show that international entrepreneurial orientation does not only initiate and impact processes of SMEs – international entrepreneurial orientation is also influenced by the very same processes.

4.　　Further Remarks

The four studies this dissertation consists of explore the previously mentioned research issues with regards to international SMEs. Each study is clearly organized according to the following general structure:

- Introduction
- Literature Review and Theory
- Conceptual Framework and Hypotheses
- Empirical Study, including Sample Design, Measurement, Method
- Results
- Discussion and Conclusions
- Limitations and Directions for Further Research

This structure is given, independent of whether the research question is explored within a causal research design (i.e. Study 1 and Study 4), a descriptive research design (i.e. Study 3), or a mixed approach (i.e. Study 2).

The structure is also independent of the methods applied, which are latent class analysis in Study 1, multinomial logistic regression analysis in Study 1 and Study 2, two-step cluster analysis in Study 3 and non-recursive structural equation modelling in Study 4. Although all studies focus on international SMEs, the particular research questions require an individual methodological approach using different data sets and using different theoretical approaches. The research questions are explored on the basis of behavioural-based process models of internationalization, the Uppsala model in particular (i.e. Study 1 and Study 2), economic-strategic approaches (i.e. Study 2), configuration theory (i.e. Study 3), the resource-based view and the dynamic capability perspective (i.e. Study 4).

After exploring the specific research questions in the four studies, Chapter F summarizes the implications of all these studies in response to the general research questions. In addition, further research issues are outlined.

B. Study 1: SMEs' Internationalization Patterns: Descriptives, Dynamics and Determinants

1. Introduction

Since the middle of the twentieth century, the world has witnessed a rapid internationalization of markets, industries and firms. This development has been reflected by the growing number of conceptual and empirical studies on international marketing and international entrepreneurship, among other areas. Although many theoretical frameworks exist, internationalization still poses a critical challenge, particularly for SMEs (Moen 2002; Jones and Coviello 2005).

Despite the considerable research on the internationalization of SMEs, no comprehensive framework has yet emerged (Leonidou and Katsikeas 1996). Research has tended to focus either on traditional SMEs and their rather incremental internationalization patterns or on born globals and international new ventures and their rapid internationalization. Although gradual internationalization models have been criticized for being too deterministic, the field of born global research has been largely fragmented and has provided different theoretical and methodological approaches (McDougall and Oviatt 2000). Hence, scholars call for more systematic research on the internationalization process (Rialp, Rialp and Knight 2005).

We aim to contribute by providing an integrative perspective and a multivariate empirical approach to SMEs' internationalization patterns. Our study responds to Bell et al.'s (2003) and McNaughton's (2003) calls for research on this regard. Following former research, we believe that SMEs follow different internationalization patterns. Our aim is to identify these patterns empirically, to explain the variations in those internationalization patterns over time and to test the firm-specific determinants that lead a SME to choose a particular internationalization pattern. By doing so, we hope to develop a deeper understanding of SMEs' internationalization process.

The remainder of this paper is structured as follows. First, we discuss internationalization patterns according to the Uppsala model, the born global research and other empirical studies. We then expand upon the former studies and discuss the factors that might determine internationalization patterns. Second, we test these assumptions and propose a multivariate model for analyzing internationalization patterns. Third, we discuss our findings and propose the implications for future research.

2.   Conceptualization and Hypotheses Development

2.1.   *Literature Review on Internationalization Patterns*

In general, internationalization can be understood as firm-level activity that crosses national borders (Wright and Ricks 1994). According to Jones and Coviello (2005) internationalization can be captured as "patterns of behaviour, formed by an accumulation of evidence manifest as events at specific reference points in time" (p. 292). Hence, we define internationalization patterns in line with Jones and Coviello (2005) and Kuivalainen, Saarenketo and Puumalainen (2012) as firm-level behaviour that crosses national borders and can be evidenced at specific points in time. Prior research on SME internationalization has discussed three major internationalization patterns: gradual internationalization as proposed by the Uppsala model, radical internationalization as proposed by past research on born globals and international new ventures and radical but late internationalization as evidenced by the so-called born-again global firms.

Describing gradual internationalization patterns, the Uppsala model has been applied both in the MNE and the SME context. The Uppsala model describes internationalization as a self-reinforced and incremental learning process in which firms gradually acquire knowledge about foreign markets and increase their commitment towards those markets (Johanson and Vahlne 1977; Johanson and Vahlne 1990). The Uppsala model builds on an earlier study that observed a progressive development of firms along the so-called "establishment chain": (1) no regular export activities, (2) export via independent representatives/agents, (3) sales subsidiary and (4) production/manufacturing (Johanson and Wiedersheim-Paul 1975). Moreover, firms are found to enter new markets with successively greater psychic distance. The Uppsala model assumes that a lack of knowledge about foreign markets is a major obstacle in international operations and that commitment decisions are made incrementally because of uncertainty. Although the gradual internationalization pattern has enjoyed much popularity, the model has also been largely criticized (Andersen 1993; Forsgren 2002). Apart from criticism regarding the lack of measurability and the limited explanatory horizon, the interplay between knowledge development and increasing market commitment has not been fully tested (Johanson and Vahlne 2009). Nevertheless, there is also empirical evidence that many firms, especially those from large economies, have internationalized gradually (Bell et al. 2003).

The emerging body of born global research has shown that firms can become international shortly after or even from their inception. Observing the phenomenon of rapid, revolutionary and dedicated internationalization, born global research chal-

lenges the assumption of gradual internationalization from both conceptual and empirical standpoints (Knight and Cavusgil 2004). In general, a born global firm is referred to as "a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries" (Oviatt and McDougall 1994, p.49). The source of competitive advantage is often said to be related to a sophisticated knowledge base (Weerawardena et al. 2007). These knowledge-intensive small firms perceive the world as one marketplace and start internationalizing from the outset. Born globals may even enter domestic and foreign markets concurrently and expand into markets regardless of psychic distance (Bell et al. 2003). Therefore, born global research highlights a non-incremental, radical and committed internationalization pattern (e.g. Moen and Servais 2002). In analyzing born globals, most definitions employ both the time lag from the founding of the firm to its first international activities and the foreign sales ratio. According to Knight and Cavusgil (2004), born globals internationalize within three years of firm inception and reach a foreign sales ratio of more than 25%. However, Acedo and Jones (2007) stated that conceptualizations range from 20% of total turnover in 2 years to approximately 80% within 6 years. Moreover, Kuivalainen, Sundqvist and Servais (2007) showed that born globals classified according to the foreign sales ratio can include firms whose internationalization strategies differ in terms of their degree of internationalization and the markets served. This finding was supported by recent studies on the differences between international new ventures and born globals (Crick 2009) or the differences between born regionals and born globals (Lopez, Kundu and Ciravegna 2008).

Another empirical phenomenon describing a different pattern of SME internationalization is found by Bell, McNaughton and Young (2001). They showed that after becoming well established in the domestic market, certain companies suddenly embrace dedicated internationalization. The firms had no particular interest in foreign operations until a critical incident occurred. The sudden internationalization is due to significant events that provide additional resources to the firm and therefore facilitate a committed internationalization process (Bell et al. 2003). The authors named these firms born-again globals, probably because the most common critical incident that spurred rapid internationalization was a change in ownership and/or management. Therefore, one could argue that those late internationalizing firms were re-born as global firms that embrace worldwide markets. The born-again global firms differ from born globals in the following respects: born-again globals start internationalizing much later, are well-established in their home markets and have developed tangible resources that they can use for their international expansion (Tuppura et al. 2008).

	Traditional	Born Global	Born-Again Global
Typical description	- Older firms - Traditional manufacturing industries - Successive entry in and commitment to foreign markets - No global focus - Reactive - Gradual internationalization	- Young firms - Knowledge-intensive industries, global niche markets - Simultaneous entry into foreign markets - Global from inception - Proactive - Radical and committed internationalization	- Older firms - Traditional manufacturing and service-intensive industries (e.g. retailing) - Internationalization triggered by critical incident - No initial global focus - Reactive - Radical and committed internationalization
Countries (geographic scope)	- Domestic expansion first - Successive international expansion in psychically and/or geographically close markets - Single market at a time	- Concurrent domestic and international expansion - Worldwide operations focusing on lead markets - Several markets at a time	- Domestic expansion first - Worldwide operations - Several markets at the same time
FSR (performance scale)	- Not the main characteristic - Small to medium share of foreign sales	- Large share of foreign sales - Different definitions, usually more than 25% (in small economies even more than 50%)	- Large share of foreign sales
Foreign operation modes (structure scale)	- Commitment increase along establishment chain: no regular export activities, exports via agent, sales subsidiary, production/manufacturing	- Flexible choice of entry modes - No defined sequence - Varies from exports to collaborative modes and FDI	- Flexible choice of modes - No defined sequence - More committed modes because of strong resource base
Time lag (commencement)	- Late	- Early - Different definitions, from three to ten years after inception	- Late

Figure B–1:   Characteristics of Traditional, Born Global and Born-again Global Internationalization Patterns

Source: Own creation based on Bell et al. (2003), pp. 346/347.

We summarize the main characteristics of the three patterns in Figure B–1. The patterns have common characteristics but differ with regard to the main dimensions of internationalization. Although both traditional and born-again global firms are assumed to be rather old SMEs that start internationalizing late, they differ mainly with regard to the foreign operation modes employed and the sequence of markets entered once the born-again global firms start to embrace foreign activities. Furthermore, we believe that their shares of foreign sales differ. Similar to born-again global firms, born global firms are assumed to have high foreign sales ratios, even though the latter internationalize early. Both born-again global firms and born globals target markets regardless of their psychic distance. However, born-again global firms accumulate more tangible resources that they can use for more committed modes.

In summary, three aspects must be highlighted: (1) three distinct patterns are discussed in the empirical literature on SME internationalization (i.e. traditional, born global and born-again global); (2) empirical studies use different variables and employ different thresholds to classify international SMEs, especially born global firms; and (3) different conceptualizations may lead to different conclusions.

Accordingly, recent research called for a cohesive conceptual framework (Rialp, Rialp and Knight 2005; Kuivalainen, Sundqvist and Servais 2007), as comprehensive integrative approaches have only been provided by Bell et al. (2003) and Jones and Coviello (2005) to date. In particular, we want to emphasize Bell et al.'s (2003) study, as it outlines a normative and integrative model of SME internationalization that seeks to accommodate the diverse pathways that SMEs may take. The authors considered the traditional, the born global and the born-again global patterns. Expressed in simple terms, the manager, who is mainly influenced by the external and internal environments, has to decide on the firm's internationalization. This decision results in one of the three aforementioned patterns. With the progression of time and other relevant decisions, the state of internationalization increases, giving room to de-internationalize or change pathways through increased commitment. This process results in a growing knowledge base.

2.2.   Identifying Internationalization Patterns

In the literature review, we discussed the three main internationalization patterns proposed by the Uppsala model, born global research and the empirical research on born-again globals. To capture the complexity of internationalization, we propose enriching the conceptualization of patterns by integrating the three perspectives.

The two variables emphasized by the Uppsala model are the foreign operation modes and the countries based on the concept of psychic distance. According to the Uppsala model, firms lack knowledge on foreign markets and associate those markets with uncertainty, which causes traditional firms to start expanding into psychically and/or geographically close markets that are similar to the home market. Because of these firms' aversion to risk and lack of knowledge on foreign markets, the firms also start internationalizing by using low-risk and low-commitment entry modes, such as exporting via agents. Although this reasoning is reasonable for the traditional firms, who adopt a slower path because they want to avoid excessive risks and investments, born global and born-again global firms must also decide on where and how to enter. Whereas the operation modes have been discussed as a structural scale measure of internationalization in the literature, the countries dimension has been addressed as a geographical or market scope measure (Kuivalainen et al., 2007). We propose that both dimensions enrich the understanding of born globals' and born-again globals' internationalization patterns. This finding is consistent with Jones and Coviello (2005) and Andersen (1993), who claimed that the mode and place of transference are the main evidence for internationalization. This measure provides support for the usefulness of the named dimensions in objectively capturing SMEs' internationalization patterns.

With respect to the research on born globals and born-again globals, the following two variables are emphasized: time lag and foreign sales ratio. To account for the time dimension of internationalization, scholars must include the time lag in a conceptualization of internationalization patterns (2007). The time dimension is one key element that has been used to differentiate born globals from traditional SMEs. This dimension is also important for identifying born-again globals, which differ from born globals by beginning the internationalization process much later (Bell, McNaughton and Young 2001). A second important characteristic is the foreign sales ratio. The foreign sales ratio has often been used as performance-related scale indicator of the degree of internationalization (Kuivalainen, Sundqvist and Servais 2007). Obviously, firms with similar foreign sales ratios can employ different operation modes in different countries or follow different internationalization paths (Kuivalainen, Sundqvist and Servais 2007). Thus, it seems necessary to integrate and combine the indicators to achieve a multifaceted view of internationalization patterns.

By considering different possible combinations of the four major dimensions of internationalization, as proposed previously, we expect there to be early and late internationalizing firms that have a certain level of commitment (in terms of scale and scope) towards foreign markets. That is, we expect to find early committed internationalizers, late committed internationalizers and non-committed internationalizers. According to the literature review, these types resemble the born global, the born-again global and the traditional internationalization pattern. Coming to a similar conclusion, Madsen and Servais (1997) claimed that the three main categories of internationalization patterns are the traditional exporting SMEs, the late internationalizing firms and the born globals. However, research on early internationalizing firms also discussed several sub-patterns (Kuivalainen, Saarenketo and Puumalainen 2012) as well as variations of patterns. For example, Crick (2009) highlighted that the main difference between born globals and international new ventures is their country scope. Other studies differentiated between born globals and born regionals based on the geographical expansion of the firms (Lopez, Kundu and Ciravegna 2008). Since country scope is a dimension of internationalization patterns in our study and former research tended to use different variables and employ different thresholds to classify international SMEs, we need to test, whether there are three internationalization patterns as expected.

H1.   Three distinct internationalization patterns based on the foreign operation mode, countries, time lag and foreign sales ratio best represent the empirical data on SME internationalization.

2.3.   Discussing the Determinants of Internationalization Patterns

In the born global literature, scholars addressed how and why the born global firm actually differs from a traditional SME. In the following section, we will draw upon the reasoning of those studies to discuss the factors that may influence the firms' belonging to one of the three internationalization patterns. Therefore, we assume that the factors that are intended to differentiate born globals, born-again globals and traditionals should be capable of discriminating empirically found patterns. We specifically focus on internal firm factors, as prior research has mainly highlighted the external factors leading to the emergence of born global firms (Knight and Cavusgil 1996) and born-again global firms (Bell, McNaughton and Young 2001). Following Vermeulen and Barkema (2002), we suggest that the extent to which firms can realize rapid internationalization is constrained by their capabilities.

Research has shown that international orientation is extremely important to born global firms. We define international orientation as a managerial capability that describes the positive attitude of managers towards exporting, international activities and stays abroad (Dichtl, Koeglmayr and Mueller 1990; Acedo and Jones 2007). International orientation includes the international outlook, which is connected to the perceived psychic distance and also the manager's global mindset (Nummela, Saarenketo and Puumalainen 2004). Scholars assumed that the global mindset is characteristic of born global firms (Oviatt and McDougall 1994). The distinguishing feature of born globals has been suggested to be their international origin, which is demonstrated by the global focus of the management (Knight and Cavusgil 2004). Knight and Cavusgil (1996) further showed that born global firms perceive the world as one marketplace from their inception. The authors added, "Unlike traditional companies, they do not see foreign markets as simple adjuncts to the domestic market" (p. 18). Traditional SMEs do not focus on international markets from firm inception; rather, these firms exploit the domestic market and start international activities because of a decreasing demand in the home market, unsolicited orders or other external factors. Similar to born-again global firms, traditional internationalizing SMEs are reactive in their internationalization efforts (Bell et al. 2003). Although born-again globals do not develop a global mindset from the outset, they differ from traditionals with regard to their international orientation. The firms embrace sudden and dedicated internationalization that is often led by new management with international experience or a global perspective (Bell et al. 2003).

H2.   SME that have a higher international orientation are more likely to follow (a) a born global rather than a traditional and (b) a born-again global rather than a traditional internationalization pattern.

Similarly, we propose that the growth orientation influences the internationalization pattern of SMEs. Although SMEs are generally not assumed to be very growth oriented, growth orientation is a precondition for growth and was found to influence international growth (Yli-Renko, Autio and Tontti 2002; Nummela, Puumalainen and Saarenketo 2005). Growth orientation is a "construct meant to differentiate companies according to their motivation to seek growth in international markets" (Tuppura et al. 2008). If management seeks growth – especially abroad – this growth should also be manifested in the scale and scope of the firm's internationalization. We expect growth orientation to lead firms to seek country market expansion and to penetrate foreign markets to reach higher foreign sales ratios. However, Tuppura et al. (2008) found that international growth orientation could not distinguish between born globals, born-again globals and traditionals, though it significantly affected the country scope of foreign market operations, which is one of the conceptualized dimensions that reflect internationalization patterns. Born globals and born-again globals seek growth by entering worldwide markets simultaneously. Therefore, we contend that growth orientation is connected to the born global and the born-again global patterns but not to the traditional pattern. This is supported by Nummela, Puumalainen and Saarenketo (2005) who found that Finnish knowledge-intensive SMEs that are growth oriented were more internationalized (in terms of having international activities in general and having a larger customer base, larger turnover and more target countries) than firms that are not growth oriented. Emphasizing the difference between born global and traditional firms, Bell, McNaughton and Young (2001) stated that "'traditional' firms tended to adopt a more ad hoc, reactive and opportunistic approach to internationalization" (p. 178). In contrast, Oviatt and McDougal (1994) showed that a proactive strategy is important for born global firms. We view growth orientation as a precursor to the implementation of a proactive strategy and assume that firms internationalizing proactively are driven by their growth orientation. Hence, we expect growth-oriented firms to follow a born global or a born-again global pattern over a traditional path.

> **H3.**   SME that have a higher growth orientation are more likely to follow (a) a born global rather than a traditional and (b) a born-again global rather than a traditional internationalization pattern.

Apart from managerial capabilities, such as international growth orientation, we propose that organizational capabilities differentiate the internationalization patterns (Kuivalainen et al. 2010). One organizational capability refers to communication at the organizational level. We understand communication capability as an organization's capacity to encourage its members to communicate effectively, to be creative

and to share and develop ideas. This definition is in line with the understanding of social capital provided by Yli-Renko, Autio and Tontti (2002). The authors argued that firm-internal communication increases learning and facilitates the build-up of organizational knowledge. Yli-Renko, Autio and Tontti (2002), moreover, showed that international social capital is positively related to knowledge-intensity and ultimately to international sales growth. Since born global firms are knowledge-intensive firms, one could argue that organizational capabilities such as internal communication are important to these entrepreneurial firms. On the one hand, born globals may use the organization's potential to communicate and develop ideas to enlarge their knowledge base, learn effectively and serve customers on a global level. On the other hand, born globals have a solid knowledge base that facilitates faster organizational learning through communication and idea development (Chetty and Campbell-Hunt 2004). Forms of internal communication within the organization promote creativity and innovation (Amabile et al. 1996). Therefore, we assume that the communication capability differentiates born global firms from traditional and born-again global firms.

> **H4.**   SME that have a higher communication capability are more likely to follow (a) a born global rather than a traditional and (b) a born global rather than a born-again global internationalization pattern.

Another organizational capability is the intelligence generation capability, which refers to the collection and evaluation of data on foreign activities, customers and markets (Cadogan, Cui and Li 2003). It helps the firm to better understand the international activities and to translate its experiential knowledge into figures and numbers. Therefore, intelligence generation provides the firm with information about its international situation (Cadogan, Cui and Li 2003). By using reports and figures, the firm obtains room to plan further steps and to create and implement inter-national strategies. We further assume that intelligence generation reduces uncertainty. Born-again globals are re-active firms that have a structured approach towards internationalization (Bell et al. 2003). These firms are well-established in their home markets and have clear routines and goals. The firms initiate dedicated internationalization to exploit new resources. Because of the solid tangible resource base, the firms can commit more resources, but they cannot waste the resources on ineffective operations or unprofitable markets. The born global firm differs considerably in this regard. Born globals try to stay sufficiently flexible and agile to discover and pursue unforeseen opportunities (Knight and Cavusgil 1996). Born globals have fewer financial resources to invest into intelligence generation activities and are more entrepreneurial and risk-taking than born-again globals (Knight and Cavusgil 2004; Knight, Madsen and Servais 2004). Similarly, Crick and Spence (2005) highlighted the un-

planned and serendipitous nature of high-performing, innovative high-tech SMEs. Therefore, the capability to collect information and control international activities should distinguish between born-again globals and born globals. Furthermore, traditional internationalizing firms acquire knowledge on foreign markets with experience. Hence, intelligence generation capabilities should assist the firms in learning.

H5.   SME that have a higher intelligence generation capability are more likely to follow (a) a born-again global rather than a born global and (b) a traditional rather than a born global internationalization pattern.

We further assume that marketing capabilities refer to the organization's understanding of the customers' needs which are important to position the marketing program appropriately. We view the standardization of the marketing mix as the extent to which the marketing programs are identical across countries (as opposed to an adaptation of the marketing mix to the single country markets). Although Rennie (1993) proposed that born globals are highly flexible firms that adapt to customer preferences, Jolly, Alahuhta and Jeannet (1992) concluded that high-tech start-ups choose homogenous customer segments that require less adaptation of the marketing mix. The global small firm introduces and sells its product in global niches in lead markets. Because born global firms are knowledge-intensive, they can better identify global niches and similarities across countries (Solberg 2002). The firms learn quickly about foreign markets and make adjustments only if they are necessary. This description is consistent with the findings of Cavusgil, Zou and Naidu (1993), who found that the firms from technology-intensive industries adapt their marketing instruments to a lesser extent. Applying a standardized marketing mix facilitates the transfer of offers from the home market to foreign markets (Samiee and Roth 1992). Conversely, the traditional SME lacks those intangible knowledge resources needed to identify similarities across markets and also lacks knowledge on the particularities and needs of those markets. Given that traditional firms must build up experiential knowledge, we assume that they also standardize their marketing programs in foreign markets. However, they may adapt certain marketing-mix elements post-entry as they learn and increase their knowledge. This assumption is supported by the results of Cavusgil, Zou and Naidu (1993), who showed that firms' international experiences have positive effects on the adaptation of products post-entry. Prior research has also found evidence that the level of marketing-mix standardization depends on the operation mode. Whereas exporting modes relate to standardization, direct modes of entry tend to favour adaptation (Griffith, Chandra and Ryans Jr 2003). As born-again globals are more flexible regarding the use of direct forms of foreign entry, we as-

sume that they more strongly adapt their marketing mix to local preferences than born global firms do.

H6.   SME that stronger standardize their marketing mix are more likely to follow (a) a born global rather than a traditional and (b) a born global rather than a born-again global internationalization pattern.

3.   Empirical Study

3.1.   Empirical Design

We conducted a survey among German SMEs. To develop the sample, we selected every fifth SME from highly internationalized industries in a German online address database ("Hoppenstedt"). We tried to ensure that the selected firms were not linked to any multinational cooperation, were not diversified and had a maximum of 500 employees, which is consistent with the German definition of an SME. This information was obtained from the database and cross-checked with the homepages of the firms whenever possible. Through this procedure, we identified 3,500 international SMEs. We sent questionnaires to the senior executives of these firms through both ordinary mail and email. We received notice that 123 questionnaires were not deliverable. The questionnaire could be completed in writing or electronically, depending on the executive's preference. We also sent two follow-up emails as reminders and made telephone calls to the non-responsive firms. We received a total of 855 responses, which equals a response rate of 25.3%. However, we had to exclude 181 questionnaires from further analysis for the following reasons: the questionnaire contained too many missing values; the firm engaged in national activities only; the firm had more than 500 employees; or the questionnaire was not filled out by the owner or managing director of the SME. To control for the latter, we conducted additional telephone calls for each questionnaire returned and asked for the position of the interviewee in the corresponding SME. In the end, we had 674 questionnaires suitable for the final analysis. This number equalled an effective response rate of 19.3%, which is appropriate in this international research context (Harzing 1997). The SMEs represented four major industries with sales of 41.9 million EUR and an average of 152.6 employees, who, in turn, were 56 years old on average (see Table B–1). We questioned mature SMEs that were founded at different points in time. We did not limit the sample to young or recently established firms, as other authors have done (for examples see Kuivalainen, Saarenketo and Puumalainen 2012). As a result, we hope to obtain insights into the internationalization patterns and profiles of estab-

lished SMEs. However, we have to be careful in comparing our results to the ones of studies on early internationalizing firms.

Industries	N	%	Employ-ees	N	%	Total sales (m EUR)	N	%	Age (years)	N	%
Mechanical engineer-ing	231	34.3	1-19	85	12.6	1-4.9	99	14.7	1-19	138	20.5
Chemicals	137	20.3	20-49	116	17.2	5-9.9	97	14.4	20-49	206	30.6
Textile	119	17.7	50-99	133	19.7	10-19.9	117	17.4	50-74	131	19.4
Polymer processing	103	15.3	100-249	186	27.6	20-49.9	146	21.7	75-99	93	13.8
Misc.	84	12.5	250+	119	17.7	50+	146	21.7	100+	100	14.8
Missing	0	0	Missing	35	0.1	Missing	69	10.2	Missing	6	0.9
Total	674	100	Total	674	100	Total	674	100	Total	674	100
			Average: 153			Average: 42			Average: 56		

Table B–1:   Sample Statistics

Source: Own creation.

Considering the possibility of non-response bias, we compared the early and late respondents in terms of secondary data with respect to size and age (Armstrong and Overton 1977) and found no significant differences. Although SME managers usually have broad knowledge of their firms' activities and decisions, common method variance should be considered, as we had to rely on the executives' self-reports. We tried to avoid common method bias a priori through appropriate questionnaire design, and we tested the validity of the design ex-post by using Harman's single factor test (Podsakoff et al. 2003). As the first factor accounts for only 18.83% of the total variance explained in the exploratory factor analysis, common method bias can be assumed to be negligible (Spector 2006). Given that we focus on the perceptions of the actual decision maker, who is the most competent person to answer the questionnaire, single response bias can generally assumed to be limited (Hughes and Garrett 1990). Following Kumar, Stern and Anderson's (1993) suggestion, we tried to obtain a second respondent to validate the owners' data by asking the senior executives for a second person with appropriate knowledge. This procedure resulted in 41 contact partners, most of whom were export and sales managers. To test for inter-rater congruence (Slater 1995), we sent a shorter questionnaire to these executives, and 29 responses were returned. We found significant inter-rater correlations and insignificant mean differences with no bias in a particular direction. These findings support the validity of the executives' data.

3.2.   Measurement

The measures were derived from the SME literature and pre-tested with ten firm owners to assess face validity. The pre-tests resulted in some adjustments to the items, as described below.

To measure the internationalization patterns, we believe that internationalization is a latent construct that cannot be measured directly but can be observed through manifest indicators. Following Sullivan (1994) and Kuivalainen, Sundqvist and Servais (2007), we argue that multi-criteria measures should be used to describe internationalization patterns. We thereby advance the understanding of internationalization patterns, as this research field has been dominated by different classifications based solely on rationale rather than on multivariate methods. We employ latent class analysis to identify different internationalization patterns, and we use four established measures for the indicators of internationalization.

First, to measure countries, we asked the respondents to identify the countries in which they operate. We then categorized the answers into three categories: neighbouring countries, Europe and worldwide. According to the Uppsala model, as firms gain experience, they incrementally move from the home market to neighbouring countries, then to other European countries and then to the worldwide arena. Second, to capture operation mode, we asked the respondents to provide the dominating mode of foreign operation and classified the answers into export (low-control modes, such as indirect and direct exports) and foreign direct investments (high-control modes, such as joint ventures and own subsidiaries). Here, the Uppsala model suggests that firms initially use export modes and commit more resources only after gaining experience from their international operations. Third, to measure time lag, we use the time span in years from firm founding to the initiation of international activities (McNaughton 2003). Because latent class analysis uses multi-way contingency tables, the metrical indicators must be expressed in categories to reduce the number of empty cells in the contingency table (McNaughton 2003). We differentiate the following categories: 0-3, 4-10, 11-25, 26-50, and more than 50 years. The first two categories are often used in born global studies (Knight and Cavusgil 2004; Knight, Madsen and Servais 2004). Finally, we measured the foreign sales ratio as the ratio of foreign sales to total sales. Again, we had to create the following categories: 0-10%, 11-25%, 26-50% and 50-100%. Here, most studies assume that born global firms have at least a foreign sales ratio of 25% (Knight and Cavusgil 1996; Knight and Cavusgil 2004).

To account for possible changes in these indicators over time, we followed Fletcher's (2001) procedure and asked the respondents to indicate their firm's international involvement today and ten years ago. In other words, the respondents had to mark the country markets, the modes and the foreign sales ratio for two time points. We acknowledge that asking the respondents to recall a situation both at the time of completing the questionnaire and at an earlier time may bias the results by inducing the

respondents to exaggerate their present performance compared with their past performance (Fletcher 2001).

Indicator	MV/ STD	ItTC (≥0.5)	α (≥0.7)	FL (EFA) (≥0.5)	KMO (≥0.5)	λ (CFA) (≥0.3)	CR (≥0.7)	Source
International orientation			0.81		0.75		0.80	
We encourage our employees' international orientation.	4.49 1.48	0.62		0.71		0.80		Adapted from Acedo and Jones (2007)
We believe that the future of the firm lies in international markets.	5.37 1.19	0.55		0.63		0.72		
We travel abroad to learn about cultures.	4.50 1.47	0.52		0.58		0.55		
We do not perceive different mentalities to be strange.	4.30 1.42	0.58		0.65		0.57		
We believe that geographic distance to overseas markets is not problematic at all.	4.45 1.60	0.71		0.82		0.70		
Growth orientation			0.70		0.51		0.71	
We have a consistent growth and profit orientation.	5.05 1.13	0.54		0.76		0.78		Adapted from Nummela, Puumalainen and Saarenketo (2005)
We consistently trust in our own strengths.	5.03 0.96	0.54		0.76		0.70		
Communication capability			0.76		0.77		0.76	
Our employees maintain private contacts.	4.45 1.51	0.52		0.62		0.65		Adapted from Yli-Renko, Autio and Tontti (2002)
The enforcement of unconventional ideas and the acceptance of creative thinkers are important to us.	4.33 1.51	0.59		0.72		0.70		
Group decisions take priority over individual decisions.	4.18 1.62	0.53		0.63		0.63		
We have active communication across departments.	4.89 1.48	0.58		0.69		0.68		
Intelligence generation capability			0.90		0.72		0.91	
Controlling foreign operations is a relevant task for us.	4.38 1.83	0.77		0.96		0.83		Own measure based on Cadogan, Cui and Li (2003)
Regular reports from abroad are important.	4.56 1.84	0.87		0.83		0.94		
We prepare reports on market developments.	4.57 1.51	0.78		0.82		0.84		
Marketing mix standardization			0.83		0.86		0.76	
Our marketing program is standardized globally.	4.49 1.75	0.65		0.72		0.72		Adapted from Samiee and Roth (1992)
We try to reach a similar positioning of our product.	4.42 1.80	0.52		0.58		0.59		
We standardize the price as compared to competitors.	4.18 1.75	0.59		0.65		0.65		
We have the same advertisement across countries.	3.68 1.82	0.64		0.72		0.72		
Our distribution systems are similar worldwide.	4.20 1.74	0.64		0.72		0.71		
Customer needs in our industry are similar worldwide.	4.10 1.81	0.55		0.62		0.61		

Note: The items were measured on five-point Likert-type scales ranging from 1=not at all to 7=to an extremely high extent.

Table B–2:   Reliability and Validity of Latent Constructs

Source: Own creation.

We use multi-item measures on seven-point, Likert-type scales to measure the determining factors. The measurements are based on the established literature and were adapted to our context within the pre-test. The details of the measurement are shown in Table B–2. We performed a principal component exploratory factor analysis (EFA), calculated the Cronbach's Alphas and the item-to-total correlations in SPSS. Then we performed a confirmatory factor analysis (CFA) in Mplus to assess the factor loadings, the composite reliability (CR) and the average variance extracted (AVE). We see that all measurement instruments exhibit satisfactory reliability and validity indicators. Moreover, the squared multiple correlations are all below the respective AVE supporting the discriminant validity of the latent constructs (see Table B–3).

	(1)	(2)	(3)	(4)	(5)
(1) International orientation	**0.55**	0.54	0.58	0.57	0.11
(2) Growth orientation	0.29	**0.62**	0.56	0.46	0.16
(3) Communication capability	0.34	0.31	**0.54**	0.46	0.14
(4) Intelligence generation capability	0.32	0.22	0.21	**0.79**	0.20
(5) Marketing mix standardization	0.01	0.02	0.02	0.04	**0.55**

Note: Shown are squared multiple correlations below the diagonal and multiple correlations between latent constructs above the diagonal. Bold numbers indicate the AVE.

Table B–3:   Discriminant Validity of Latent Constructs
Source: Own creation.

3.3.   Method

Having established the reliability and validity of our measurement instruments, we turn to the analysis of the proposed hypotheses. Our analysis consists of three major steps.

First, we use the latent class analysis to identify the internationalization patterns. We choose to apply a latent class analysis as the classification approach for several reasons. Classical hierarchical cluster algorithms are not applicable because they require metrical distance matrices among all case pairings. As we measured the countries and modes categorically, the hierarchical cluster approach is not appropriate and would lead to biased results. For this reason, we cannot use factor analysis to model the internationalization patterns. More importantly, latent class analysis assumes that different response profiles and hence associations among manifest variables can be explained through a latent variable (i.e. the latent class) (Vermunt and Magidson 2002). This assumption is highly important, as a firm's observable internationalization behaviour (in terms of country scope, operation mode, time lag and foreign sales ratio) is explained by the firm's latent internationalization pattern. This interpretation is consistent with our understanding of internationalization patterns. Although internationalization patterns themselves cannot be directly observed, we can

observe that international SMEs employ different modes to serve foreign countries, that they start internationalizing at different points in time and that they differ with regard to the scale and scope of their foreign market activities. The covariation among these variables may be caused by different unobserved internationalization patterns (McCutcheon 1987) (refer to Appendix 1 for more detailed information on latent class analysis). Therefore, we believe that the interrelationship among the observed indicators helps us to understand and describe the latent construct (i.e. the internationalization patterns). As our aim is to identify internationalization patterns and to describe them over time, we questioned each firm regarding two points in time. Therefore, each firm had to indicate the countries, the modes and the foreign sales ratios in reference to the situation today and to the situation ten years ago. To receive identical classes for both time periods, we used the company data for the latent class analysis twice: once for the indicators of the modern context and once for the indicators of the context ten years ago.

Second, we describe the empirically found latent classes (i.e. internationalization patterns) based on conditional probabilities and t-tests. Using a simple cross-tabulation, we demonstrate that, whereas most firms stick to their internationalization patterns over the ten-year period, some firms change their internationalization behaviour. We discuss the ways in which those firms change their patterns, and we provide some empirical evidence.

Third, we test the hypotheses on the determining factors by using multinomial regression analysis with the categorical latent class membership as the dependent variable. By doing so, we test whether the determinants distinguish between the three groups.

4.   Results

4.1.   Internationalization Patterns

We use latent class analysis to identify the internationalization patterns and to test H1. To decide on the number of classes, we conduct a step-wise analysis. That is, we compute several latent class models first and then compare them with each other. Beginning with the independence model (all firms classified as one class), we successively add classes. To evaluate the models, we use the Akaike and Baysian information criteria (AIC and BIC) as well as parametric tests (VLMR and LMR) (Nylund, Asparouhov and Muthén 2007). In Table B–4, we see that a three-class solution best represents the empirical data because the AIC, VLMR and LMR support a

three-class model whereas only the BIC supports a two-class solution. The significance of the VLMR and LMR indicates that the three-class model is significantly better than the two-class model. For the four-class model, both the VLMR and LMR are not significant, which indicates that a four-class solution does not represent the data better than a three-class solution. Therefore, we conclude that the best latent class solution is a three-class model, which supports H1.

	AIC	BIC	VLMR*	LMR*
1 Class	10748.33	10800.39	-**	-**
2 Class	10645.55	**10754.89**	0.069	0.071
3 Class	**10627.90**	10794.50	**0.001**	**0.001**
4 Class	10631.04	10854.91	0.411	0.417
5 Class	10641.90	10923.04	0.417	0.753

* p-value.
** not available for the one class solution.

Table B–4:   Comparison of Latent Class Solutions
Source: Own creation.

The characteristics of the three-class model based on conditional probabilities are shown in Table B–5. For example, if a firm is a member of class 3, the firm has a 99% probability of operating on a worldwide level. We use the conditional probabilities to interpret the classes.

	Countries	Operation modes	Time lag	Foreign sales ratio
Class 1 **(Traditional SME)** LC probability* = 0.47	**Neighbours:** **0.26** **Europe: 0.37** Worldwide: 0.37	**Export: 0.65** FDI: 0.35	0-3 years: 0.19 3-10 years: 0.20 10-25 years: 0.15 25-50 years: 0.21 50+ years: 0.25	0-10%: 0.18 **10-25%: 0.38** **25-50%: 0.40** 50+%: 0.04
Class 2 **(Born global)** LC probability * = 0.36	**Neighbours:** **0.04** **Europe: 0.15** **Worldwide: 0.81**	**Export: 0.53** **FDI: 0.47**	**0-3 years: 0.60** 3-10 years: 0.03 10-25 years: 0.22 25-50 years: 0.15 50+ years: 0.00	0-10%: 0.01 10-25%: 0.10 25-50%: 0.41 50+%: 0.48
Class 3 **(Born-again global)** LC probability * = 0.17	Neighbours: 0.00 Europe: 0.01 **Worldwide: 0.99**	Export: 0.24 **FDI: 0.76**	0-3 years: 0.00 3-10 years: 0.26 10-25 years: 0.19 25-50 years: 0.12 **50+ years: 0.43**	0-10%: 0.04 10-25%: 0.15 **25-50%: 0.46** **50+%: 0.35**

* Latent class probability, i.e. a firm has a probability of 47% to belong to Class 1.
Note: Shown are the conditional probabilities, i.e. a firm that belongs to Class 1 has a probability of 26% to operate in neighbouring countries only. Bold numbers are characteristic for the respective class.

Table B–5:   Characteristics of the three Class Solution based on Conditional Probabilities
Source: Own creation.

Class 1 contains the firms that have a 26% probability of only operating in neighbouring countries, which distinguishes them from the other classes. Class 1 firms predominantly use export modes to serve foreign markets. Given the conditional probabilities,

they have no clear profile regarding the time lag. Although the firms exhibit a solid share of foreign sales, ratios above 50% are not characteristic of this group. Therefore, we name this class the "traditional SME".

Firms that are classified as class 2 operate primarily on a worldwide basis. They use export modes and FDI to serve foreign markets. The time lag is particularly characteristic, as there is a high probability that the firms have started international activities within the first three years after their establishment. Finally, these firms have high foreign sales ratios (i.e. there is an 81% probability that the foreign sales of a firm that belongs to Class 2 account for more than 25% of its total sales). We believe that these firms' internationalization pattern resembles the behaviour of initial early, rapid and intense internationalization of born globals. Hence, we decide to call this class "born globals" although one could also call the firms early committed internationalizers.

Class 3 is somewhat similar to the class of "born globals", but this class distinguishes itself in one particular regard. These firms started international activities late (i.e. after 50 years of domestic operations). Moreover, these firms predominantly use FDI to serve foreign markets. As these distinctions fit well into the established reasoning, we label this class "born-again global". However, one could also label this class as late committed internationalizers.

4.2.   Description of the three Patterns and the Changes over Time

We empirically identified three classes by describing their distinct internationalization patterns based on four major indicators of internationalization. In the following, we will discuss additional characteristics of the internationalization patterns and then turn to possible changes in these patterns over time.

We conduct several t-tests to further describe the classes and differentiate between them (see Table B–6). We find that the three classes significantly differ from one another in terms of age, time lag, foreign sales ratio and number of production subsidiaries. Born globals are the youngest firms, they have internationalized in the shortest period of time, and they have the highest foreign sales ratios. However, these firms are larger than traditional SMEs and have more international experience. Although we analyzed established firms, we see that the firms significantly differ from one another with respect to these dimensions, as is often discussed in the literature. Moreover, born-again global firms serve 38 countries on average whereas traditional SMEs only operate in 15 countries on average. Furthermore, born-again global firms have significantly more production subsidiaries (two, on average) than both of the other classes. With regard to perceived technology orientation and subjective per-

formance, born-again globals show the highest mean values, which significantly differ from those of traditional SMEs.

	(1) Traditionals	(2) Born Globals	(3) Born-again Globals	T-Test
Age (number of years)	58.74	42.06	72.73	(1) vs (2) *** (1) vs (3) ** (2) vs (3) ***
Time lag (number of years until initial international activity)	35.00	14.03	46.55	(1) vs (2) *** (1) vs (3) ** (2) vs (3) ***
International experience (number of years of international activity)	25.70	32.44	31.16	(1) vs (2) *** (1) vs (3) ** (2) vs (3) ns
Size (number of employees)	99.95	181.00	197.50	(1) vs (2) *** (1) vs (3) *** (2) vs (3) ns
Foreign sales ratio (foreign sales to total sales)	25.69	54.86	46.26	(1) vs (2) *** (1) vs (3) *** (2) vs (3) ***
Number of countries	14.88	34.94	38.18	(1) vs (2) *** (1) vs (3) *** (2) vs (3) ns
Number of production sub-sidiaries	0.61	1.18	2.01	(1) vs (2) ** (1) vs (3) *** (2) vs (3) *
Technology (single item) [1]	4.85	5.22	5.30	(1) vs (2) ** (1) vs (3) ** (2) vs (3) ns
Performance (single item) [2]	4.78	5.27	5.42	(1) vs (2) *** (1) vs (3) *** (2) vs (3) ns

Note: Shown are mean values for the time point "today". Two-tailed t-test. * $p \leq 0.05$. ** $p \leq 0.01$. *** $p \leq 0.001$.
[1] Item: "We are especially technology-oriented (as compared to our competitors)", measured on a seven-point, Likert-type scale ranging from 1=not at all to 7=to an extremely high extent.
[2] Item: "According to your own evaluation, how successful is your firm?", measured on a seven-point, Likert-type scale ranging from 1=not successful at all to 7= extremely successful.

Table B–6:   Description of the Three Internationalization Patterns
Source: Own creation.

Although we identified distinct patterns, we believe that the patterns are open to change given that firms develop over time. Thereby we refer to Jones and Coviello (2005) who distinguished between fingerprint patterns and profiles of the firm's internationalization behaviour. In our study, the internationalization patterns can be captured as the timing of cross-border firm-level activities, the range of operation modes and countries as well as the extent of foreign sales, at a specific point in time. However, the changes in the composition of these indicators describe the dynamic profiles of SME's internationalization behaviour. Hence, internationalizations profiles describe longer periods of internationalization behaviour accommodating different patterns. Firms make strategic decisions with respect to country markets and operation modes, which may result in different foreign sales ratios. On the basis of these vari-

ables, we performed the latent class analysis. Comparing the class membership for both points in time provides interesting results regarding internationalization profiles (see Table B–7).

Class 2008	Traditional SME	Born global	Born-again global	Total
Class 1998				
Traditional SME	**224** $_a$	81 $_b$	57 $_c$	362
Born global	27 $_a$	**181** $_b$	11 $_a$	219
Born-again global	17 $_a$	5 $_b$	**71** $_c$	93
Total	268	267	139	674

Note: Each superscript letter indicates a subset of Class 2008 categories whose cell proportions do not differ on the 0.05 level.
Contingency coefficient = 0.621 ***; Cramer's V = 0.561 ***; *** p ≤ 0.001.

Table B–7:   Dynamics of Internationalization Patterns
Source: Own creation.

Different firms develop differently. Although most firms stay in the same class, some firms change classes over time. This means that firms may change their internationalization pattern. This change in turn implies a change in at least one of the defining internationalization scale and scope measures (apart from time lag, as this variable is time-invariant). Given that three variables may change in two directions (increase vs. decrease) and that the variables may also remain static, we obtain $3^3 = 27$ possible combinations of changes. As this matrix is complex, we attempt to simplify it. If firms reduce, do not change or increase their country scope and modes, we obtain a 3x3 matrix. If we discuss all of the possible combinations of changes between these two variables, we can reduce the matrix to five combinations (see Figure B–2).
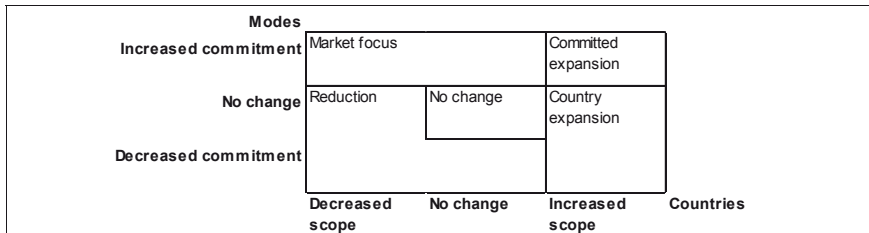
Figure B–2:   Two-dimensional Change Matrix
Source: Own creation.

In a first step, consider that a firm decreases its country scope while decreasing modes. We label this change a reduction. If the firm decreases its scope and does not change its scale, this change will still be a reduction. Similarly, decreasing commitment without changing country scope results in an overall reduction. If neither indicator changes, we have no overall change. However, if we have a decrease (or no

change) in country scope and an increase in scale (i.e. modes) at the same time, the firm will commit more resources to the same or fewer countries. This strategy results in a focused approach. If a firm increases its country scope without changing or reducing its commitment, we have a one-dimensional country expansion (or geographical diversification). Finally, the increased scope may be combined with an increased scale dimension, which results in a committed two-dimensional expansion.

In a second step, we must remember that we have a third change category: the foreign sales ratio. Firms not only change countries and modes but also change the foreign sales ratio. Therefore, we combine the ideas shown in Figure B–2 with the three possible changes in the foreign sales ratio. We obtain a 3x5 matrix, which can again be reduced to five meaningful squares (see Figure B–3) under the assumption of unchanged total sales. We first discuss the field of "no change" (i.e. no change in scale and scope, as shown in Figure B–3) combined with an increase in the foreign sales ratio. If the scale and scope stay unchanged and only the foreign sales ratio increases, the firm focuses on the existing countries and penetrates them with the existing modes. Therefore, this square is labelled "penetration". No change in all three dimensions results in no change overall. Ceteris paribus, no change in the scale and scope combined with a decrease in the foreign sales ratio implies a "home market focus". If the total sales remain unchanged but the foreign sales ratio is reduced, then the sales in the home market must increase. We now consider the matrix with the second column, reduction (i.e. a decrease or a lack of change in country scope and/or a decrease in modes). If a firm maintains the same foreign sales ratio or increases this ratio while decreasing its scale and/or scope of foreign market operations, we assume that the firm penetrates the existing markets. The same applies for the third column, market focus (i.e. a decrease/no change in scope and an increase in scale). If the focal firm decreases its foreign sales ratio, we have another form of home market focus. Finally, the two forms of expansion in columns 4 and 5 must be combined with a change in the foreign sales ratio. As the foreign sales ratio is often referred to as a performance-related scale measure of internationalization, a corresponding interpretation is applied. Thus, if the firms expand their country scope and/or the scale of their foreign operation modes (country expansion and committed expansion) while increasing their foreign sales ratio, we consider the firms to be expanding effectively. However, if the firms expand in countries or modes but do not increase their foreign sales ratios (i.e. the foreign sales ratio is unchanged or decreases), we consider the firms to be expanding ineffectively.

	No change	Reduction	Focus	Country expansion	Committed expansion
Foreign sales ratio increase	Penetration			Effective expansion	
Foreign sales ratio no change	No change			Ineffective expansion	
Foreign sales ratio decrease	Home market focus				

Figure B–3:   Three-dimensional Change Matrix
Source: Own creation.

What does this reasoning imply for the internationalization patterns? To answer this question, we refer to our sample data and the changes observed (see Table B–8). We found 81 firms that changed their patterns from traditional to born global (i.e. the first column in Table B–8). These firms have mostly increased their country scope to the worldwide level. Moreover, the firms have increased their foreign sales ratios while also focusing on the same mode that they focused on ten years prior. According to Figure B–3, this form of change is based on an effective expansion strategy. The firms have expanded tremendously along the country axis while increasing their foreign sales ratios to more than 50%. Hence, a firm exhibited a traditional internationalizing pattern in one point in time and a different more committed pattern in another point in time. It seems that traditionals can change their internationalization patterns and become committed internationalizers (i.e. born globals, as we previously called them). Another change pattern is observed with traditional internationalizing firms changing to born-again globals (i.e. the second column). These firms have increased their scope (mostly to the worldwide level) and scale (one-third increase their foreign sales ratio to more than 50%, and half of the firms increase their dominating mode to FDI). This form of change represents another effective expansion strategy. The firms that change from born global to traditional internationalizing firms (see third column) focus on the home market. These firms reduce their country scope and their foreign sales ratio while employing the same dominant mode. Hence, committed internationalizing firms may slow down their internationalization and focus on their home market. Thus, these firms become traditional SMEs over time. Three different types of penetration strategies are demonstrated by the last three changes that we observed in our sample. Born globals may change to born-again globals by increasing their dominant modes from export to FDI. The firms penetrate the existing markets with more committed modes while keeping the foreign sales ratio at a constant level. Born-again globals may become traditional because of a reduced country scope (from worldwide to Europe). These firms manage to achieve a similar share of

foreign sales while reducing their geographical scope. Hence, the firms penetrate a reduced set of countries with their existing modes to maintain their foreign sales levels. The last category of change shows that a few born-again globals may change to the born global category in that they increase their foreign sales ratios while not changing the other dimensions. Here, the firms penetrate the existing countries with their established modes to achieve a higher share of foreign sales.

		Change of Class					
		From Trad. to BG (n=81)	From Trad. to BAG (n=57)	From BG to Trad. (n=27)	From BG to BAG (n=11)	From BAG to Trad. (n=17)	From BAG to BG (n=5)
Country	Reduction	1.3%	0.0%	**80.0%**	0.0%	**84.6%**	0.0%
	No change	36.0%	46.2%	20.0%	**100.0%**	15.4%	**100.0%**
	Increase	**62.7%**	**53.8%**	0.0%	0.0%	0.0%	0.0%
Foreign Sales	Reduction	0.0%	2.3%	**76.9%**	0.0%	33.3%	0.0%
	No change	18.6%	22.7%	23.1%	**100.0%**	**41.7%**	0.0%
	Increase	**81.4%**	**75.0%**	0.0%	0.0%	25.0%	**100.0%**
Modes	Reduction	0.0%	0.0%	16.7%	0.0%	35.7%	0.0%
	No change	**77.9%**	49.1%	**75.0%**	27.3%	**64.3%**	**100.0%**
	Increase	22.1%	**50.9%**	8.3%	**72.7%**	0.0%	0.0%

Note: Shown are the frequencies of the sampled firms for the time point "today". Bold numbers represent the mode.

Table B–8:   Major Changes in Internationalization Patterns

Source: Own creation.

4.3.   Determinants of Internationalization Patterns

To test for the factors that determine class membership, we applied multinomial logistic regression models with the categorical class as the dependent variable (see Table B–9). The results show support for H2 and H3. Thus, international orientation and growth orientation significantly influence the internationalization patterns of SMEs. Contrary to our expectations, communication capability is significantly related to the traditional internationalization pattern instead of the born global or the born-again global pattern. Therefore, H4 is rejected. The intelligence generation capability is related to the born-again global pattern. This finding supports H5. Finally, because marketing-mix standardization does not differentiate between born globals and traditional, we reject H6(a). However, marketing-mix standardization is significantly related to the born global pattern but not the born-again global pattern. This finding lends support to H6(b).

The results suggest that the more internationally oriented a firm is, the more likely it is to follow a born global or a born-again global pattern rather than a traditional SME internationalization pattern. The odds ratio suggests that a firm is 2.64 times more

likely to be classified as a born global rather than a traditional if the international ori-
entation increases by one unit.

	Born global vs traditional SME		Born-again global vs traditional SME		Born-again global vs born global	
	B	Odds	B	Odds	B	Odds
International orientation	0.97 ***	2.64	0.90 ***	2.46	-0.07 ns	0.93
Growth orientation	0.59 *	1.80	1.22 ***	3.37	0.63 *	1.88
Communication capability	-0.67 **	0.50	-0.94 ***	0.39	-0.24 ns	0.78
Intelligence generation capability	0.11 ns	1.12	0.35 **	1.41	0.23 *	1.26
Marketing mix standardization	0.10 ns	1.11	-0.10 ns	0.90	-0.21 *	0.81
* $p \leq 0.05$. ** $p \leq 0.01$. *** $p \leq 0.001$.						

Table B–9:   Factors Determining Internationalization Patterns

Source: Own creation.

Similarly, the more growth-oriented a firm is, the more likely it is to follow a born-
global rather than a traditional pattern. However, we see that the born-again global
pattern becomes even more likely with increasing growth orientation. When a firm's
growth orientation increases one unit, it becomes 3.37 times more likely to choose a
born-again global pattern over a traditional pattern. Growth orientation also distin-
guishes between born globals and born-again globals. This finding implies that the
more growth-oriented a firm is, the more likely it is to be classified as a born-again
global firm. Born-again global firms seem to be especially growth-oriented, as they
have matured in their home markets and now aim to exploit foreign markets. Growth
orientation is the only factor that differentiates all three classes from each other.

We further find that the communication capability is significantly related to the tradi-
tional pattern. Firms with high internal communication favour the traditional pattern
over the two other patterns. The traditional firms seem to learn from experience, and
the experience probably involves many members of the organization who are re-
quired to communicate and share ideas. Communicating and sharing experiences
can advance organizational learning. We assume that the born globals stronger rely
on their international management and external networks.

The intelligence generation capability differentiates the born-again global firms from
the other two groups. This result implies that the born-again global firms employ
strong routines to control their international activities. These firms have a structured
approach towards internationalization, which differs from the approach used by the
born globals and the traditional SMEs. Whereas the born globals have a proactive,
entrepreneurial approach towards internationalization, the traditional firms are reac-
tive and less structured than the born-again global firms.

Finally, marketing-mix standardization is connected to the born global pattern rather than the born-again global pattern. However, we note that there is no significant difference between the born globals and traditional firms. This finding implies that the traditional firms also standardize their marketing mix. The born globals are knowledge-intensive firms that know when to standardize their marketing approach. Conversely, the traditional firms generally standardize their marketing approach to reduce complexity and use foreign markets to generate additional sales. As a result, these firms may also transfer their marketing approach to foreign markets.

5.   Discussion and Conclusions

5.1.   Theoretical and Managerial Implications

The aim of this paper was to identify the internationalization patterns of SMEs quantitatively, to describe the SMEs that follow different patterns over time and to discuss the determinants of these patterns through empirical study. This under-researched area is relevant because internationalization still poses a challenge for SMEs. Researching the patterns that SMEs take may help to predict future changes and developments. The results strongly support a three pattern cluster solution and several determining factors. The empirical results enrich the understanding of internationalization patterns by integrating major streams of the literature. These observations allow two major theoretical implications to be drawn and conclusions to be made that can benefit the managers of SMEs. In this section, we will also discuss our limitations and provide some ideas for further research.

Regarding our first research aim, which was to identify and describe the internationalization patterns of SMEs in a quantitative manner, we show that SMEs follow three different internationalization patterns. On the basis of the Uppsala model and previous born global research, we derived four major dimensions of internationalization. The patterns found in this study closely resemble the born global, born-again global and traditional internationalization patterns. These patterns provide quantitative support to the findings of former studies (Bell et al. 2003) and thus respond to Bell et al.'s (2001) call to investigate the phenomenon of the born-again global firm. Whereas former studies used Bell et al.'s (2003) criteria (e.g. Tuppura et al. 2008) or other definitions and thresholds (Knight and Cavusgil 1996) to classify firms, we empirically derive three general types of internationalizations patterns that describe SME internationalization. We agree with scholars who argue that a conceptualization of internationalization patterns based on different thresholds is somewhat arbitrary (Knight,

Madsen and Servais 2004; Kuivalainen, Sundqvist and Servais 2007). Our under-standing of internationalization patterns highlights the complex nature of internation-alization and assumes that internationalization is a latent, non-observable construct. We argue that internationalization patterns are not directly observed but measured through the following four indicators: time lag, countries, modes and foreign sales ratio. As patterns are not directly observed, categorizations based on arbitrary thresholds are not appropriate. This perspective contributes to the current state of the research by advancing the conceptualization of internationalization patterns. This conceptualization requires us to apply latent class analysis to derive distinct interna-tionalization patterns empirically. Although this classification technique is highly rele-vant to International Business research (McNaughton 2003), to date, this technique has rarely been applied by the empirical studies within this field. Our results are par-ticularly interesting, as the three well-known internationalization patterns hold for es-tablished SMEs operating in traditional sectors. Thus, we contribute to Rialp et al.'s (2005) call for analyses that include other types of firms in addition to high-tech firms.

We find that the three internationalization patterns differ with regard to not only time, scope and scale but also age, international experience and number of production subsidiaries. Moreover, there are significant differences between born globals and traditionals and between traditionals and born-again globals in terms of size, number of countries served, technology orientation and perceived overall performance. We find that the three patterns are different from one another and have unique character-istics. Furthermore, our descriptive results regarding the three patterns are somewhat higher in terms of the mean values than, albeit consistent with, the findings of other studies (e.g. Tuppura et al. 2008). However, we cannot confirm the findings of past empirical studies that differentiate among different types of born globals. For exam-ple, Crick (2009) shows that the main difference between born globals and interna-tional new ventures is the country scope of the firm. The difference in scope between born globals and born regionals has been addressed in the literature (Lopez, Kundu and Ciravegna 2008). In our sample these firms are most probably classified as born globals assuming that the firms have internationalized early and have very high for-eign sales ratios.

In general, we propose that the born global definition be extended and that the la-bel/name be changed. The term born global often refers to the rapid internationaliza-tion that occurs shortly after a firm's founding (Moen and Servais 2002). Hashai (2011) posits, "In fact, the term 'born global' is somewhat misleading. These firms are not genuinely 'born' globally dispersed, but rather increase their level of internation-alization rapidly from inception" (p. 995). As our results demonstrated, the defining

characteristic, time lag, does not separate the patterns over time because this variable is time-invariant whereas the other indicators of internationalization pattern do change. The country markets that a firm serves and the firm's operation modes are essential parameters of internationalization, as each parameter is open to change. By considering these possible changes, we can account for the dynamics of a firm's decisions in foreign markets. These decisions may induce firms to pursue different internationalization patterns over time resulting in different internationalization profiles. Thus, we can show that some firms are classified as committed internationalizers (i.e. born globals, as we previously called them) after being classified as traditional firms. In recognizing that a firm may change its internationalization pattern over time, we follow Jones and Coviello (2005) in highlighting that several internationalization patterns can be summarized as the internationalization profile of this firm. Hence, a firm may have followed a slower and less committed pattern of internationalization before choosing to boost internationalization. Firms may be pushed into international markets after operating in their domestic markets for several years. These firms may first focus on neighbouring countries and export products to these countries, which results in a mediocre foreign sales ratio. However, at some point, those firms may start to embrace internationalization, pursue an international orientation and a growth orientation and expand effectively into the international arena. The common understanding of the term induces that the internationalization pattern "born global" captures only the early phase of committed internationalization in a firm's internationalization profile. Since we have seen that firms can change their pattern, we need to enlarge the knowledge on internationalization profiles of SME. In analyzing mature SME, we made some efforts towards this end and showed that older firms also follow a committed pattern. This result supports Moen's (2002) finding that "newly established global firms have similar characteristics to old, global firms" (p. 173).

Regarding the second research aim, which was to test the firm-specific determinants of internationalization patterns, we show that certain factors influence the internationalization patterns of SMEs. In particular, international orientation and growth orientation are important variables in explaining the differences between traditional, born global and born-again global firms. Generally, this result not only supports common assumptions in the born global research (Knight and Cavusgil 1996) but also extends the existing knowledge on the factors that influence the born-again global pattern. For example, we found that growth orientation is significantly related to the born-again global firms. Moreover, we extend the previous research by including communication capability, intelligence generation capability and marketing-mix standardization as the determining factors. We find that the communication capability is con-

nected to the traditional internationalization pattern whereas the intelligence genera-
tion capability increases the likelihood that a firm belongs to the born-again global
group. While the communication capability seems important to the organizational
learning of traditional firms, born-again global firms rely on intelligence generation to
coordinate their international activities. Finally, marketing-mix standardization is con-
nected to the born global pattern rather than the born-again global internationaliza-
tion pattern. Consistent with the literature, we find that born globals can effectively
identify global niches and serve them with an appropriate marketing strategy. In
summary, we show that several internal firm factors influence the internationalization
pattern followed by a firm. Thus, we support Vermeulen and Barkema (2002) in stat-
ing that the internationalization pattern depends on a set of firm-specific capabilities.

On the basis of these capabilities and on external factors (which we did not analyze
in this study), firms make strategic decisions regarding time, scope and scale. These
decisions reflect their overall internationalization patterns. Because three of these
variables are open to change, the internationalization pattern may change as well.
We discussed different strategies (penetration, home-market focus, effective and in-
effective expansion) and how these strategies lead to changes in the internationaliza-
tion patterns. However, we believe that the change in the internationalization dimen-
sions may also affect the internal firm factors. For example, a born global firm may
consider a home-market focus strategy, which would cause the firm to change to a
more traditional internationalization pattern and to develop different capabilities. In
this case, we assume that international and growth orientation becomes less relevant
while communication relevance increases. To analyze this back loop effect, we call
for more research on the dynamics of internationalization patterns and propose a
framework that can be tested with longitudinal data (see Figure B-4).

This study also provides managerial implications by highlighting the characteristics of
the different internationalization patterns that SME may take. The SME manager may
perceive the different internationalization patterns discussed in the literature to be
deterministic in nature. However, we show that these patterns are not deterministic
and that firms may make strategic decisions that change their patterns over time.
Moreover, because we show which factors influence the patterns, the SME manager
can become aware of the relevant features. More importantly, this study shows that
the managerial capabilities – in particular, international orientation and growth orien-
tation – determine the internationalization patterns most.
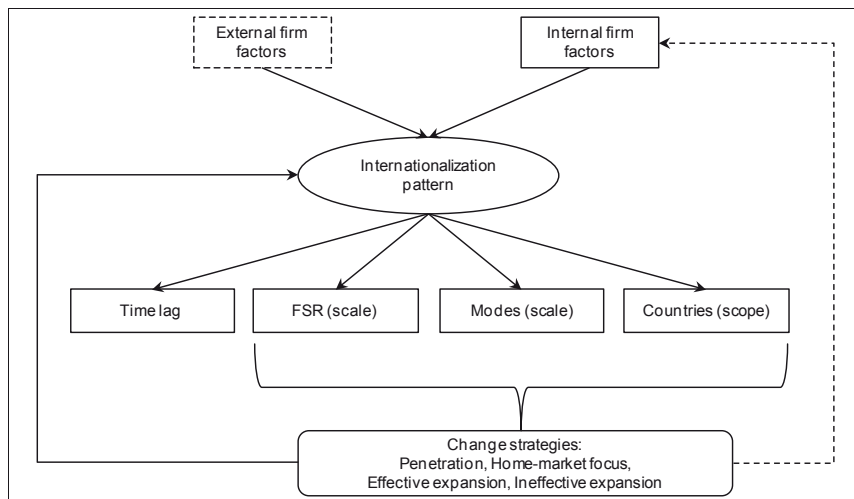
Note: Dashed lines show the areas for future research.

Figure B–4:   A Proposed Conceptual Model for Analyzing Internationalization Patterns
Source: Own creation.

5.2.   Limitations and Further Research

To understand the internationalization patterns of SMEs, further analyses are required, as this study is not without limitations. With respect to data collection, we are limited to a sample from Germany. Because Germany is a large economy, German SMEs, even born globals, may start internationalizing at a somewhat later point in time than the firms in small economies. Therefore, additional empirical validations of the SMEs originating from other economies are needed. Because we surveyed mature SMEs, our study faces two limitations. First, we may have some success bias, as those firms are well-established. This finding may also explain why we did not find a group exhibiting ineffective expansion over the ten-year period. Second, we did not limit our sample to young or early internationalizing firms as many authors have done (Moen 2002; Knight and Cavusgil 2004). Hence our results, especially regarding the "born global" group may not be fully comparable. Moreover, the retrospective design of the questions on international involvement leads to tentative rather than conclusive results regarding the dynamics of the internationalization patterns. Further research based on longitudinal data would help analyze the development of patterns and the possible varying influence of firm factors over time. With respect to the conceptual model, we did not analyze the influence of external factors on internationalization patterns. Future research should test whether the emergence of new communication

and process technologies, increased trade liberalization, regional economic integration and the growth of international networks significantly influence the internationalization of SMEs (Knight and Cavusgil 1996; Knight 2000). Future researchers should consider incorporating performance into the reasoning of internationalization patterns (Kuivalainen, Sundqvist and Servais 2007).

Despite its limitations, this study contributes to the discussion on SME internationalization patterns by empirically classifying mature SME based on latent class analysis and showing that the firms following these patterns differ in several regards, especially with regards to certain capabilities. Moreover, we show that internationalization patterns may change over time. We find that firms may follow different change strategies and thereby create internationalization profiles, i.e. longer episodes of possibly different internationalization patterns.

C.   Study 2: Changes in Foreign Operation Modes: Stimuli for Increases versus Reductions

1.   Introduction

While the choice of an appropriate entry mode is a crucial decision when companies enter a foreign country, they have no guarantee that this mode will remain the best way of servicing the particular market. Scholars showed an initial entry mode may persist (Rosson and Ford 1982), mode combinations may be build (Petersen and Welch 2002), but the initial mode may as well be replaced by another one (Pedersen, Petersen and Benito 2002). Changes of operation modes are important decisions as they concern companies' institutional arrangements that define the business framework of the activities in a country. Moreover, as we previously discussed, operation mode changes also relate to the internationalization pattern of SMEs.

Scholars have intensively focused on mode choices but less on how and why firms change operation modes (Pedersen, Petersen and Benito 2002). Petersen and Welch (2002) as well as Calof and Beamish (1995) called for more research on mode changes to improve the understanding of the internationalization process. Consequently, a growing stream of literature analyzes foreign operation mode switches, shifts or conversions. While most studies focused on mode increases, i.e. changes from an initial mode into a mode with a higher market commitment (Pedersen and Petersen 1998), mode reductions are seldom analyzed. Within mode increases scholars focused on concrete mode changes, whereas reductions were viewed more broadly within divestment or de-internationalization decisions (e.g. Mata and Portugal 2000; Belderbos and Zou 2009; for a review Morschett et al. 2009). However, it seems generally doubtful that an executive concerned about whether or not to change an operation mode would consider just one particular option. The decision to increase or reduce the commitment in a foreign market is practically relevant, especially for smaller firms because for them internationalization poses a critical challenge (Jones and Coviello 2005). Perceived reasons for mode increases in contrast to mode reductions are also interesting to executives, as they might use the experiences of others to make similar decisions. Given the high relevance, only one empirical study so far explicitly analyzed the actual decision-makers perceptions on the reasons for mode increases and reductions simultaneously (Calof and Beamish 1995). Hence, results on stimuli of mode change are barely comparable, and more research is needed. The following research questions are still unanswered: Which factors are perceived by executives to be important within the context of mode in-

creases and mode reductions? How do decision-makers perceive those factors in terms of their magnitude? And more specifically, what determines the likelihood of a mode increase relative to a mode reduction?

The present study shows that various stimuli are important for mode increases and reductions. While the magnitude of performance and external environment effects is more strongly linked to mode reductions, internal environment and executives' attitudes are stronger linked to mode increases. Responding to Petersen and Welch's (2002) call to carry out more research on mode changes as well as Benito's (1997) and Benito and Welch's (1997) calls to investigate the perceptions of the decision-makers, we analyze executives' assessments of 320 mode changes in 265 SMEs. Thereby, we refer to changes in sales-motivated foreign activities. This study contributes in a specific way to the knowledge on mode shifts because it builds on the study by Calof and Beamish (1995), who explored reasons for mode increases and reductions in in-depth interviews as "not to bias the study in the direction of any theory" (p. 118). We employ their results by measuring the stimuli in two different ways. This permits comparisons between both studies, strengthens the validity of results, and contributes to the limited empirical knowledge on both forms of mode change. For executives we denote crucial antecedences that have to be considered in order to understand the decision to change modes and accordingly to plan or anticipate such important steps.

2.   Literature Review

We carried out an extensive literature review on changes of foreign operation modes (see Figure G-1 in Appendix 2). This review led to the identification of two dominating approaches which are employed by scholars to explain the determinants of mode change. Accordingly, we summarize the economic-strategic and behavioural approaches briefly and give an extended overview of empirical studies dealing with mode change.

2.1.   Economic-strategic and Behavioural Perspectives

Referring to economic, strategic or institutional theories scholars intensively addressed entry mode choice (for reviews see e.g. Brouthers and Hennart 2007; Canabal and White 2008). Pedersen, Petersen and Benito (2002, p. 326) underlined: "The economic-strategic literature on foreign operation methods has largely taken for granted that whenever a choice is made, it will be the most suitable one given the circumstances. Thus, the firm will consider a change of mode only if drastic changes

occur." In contrast the internationalization process approach suggests that mode changes are to be expected given the dynamic nature of the internationalization process. Through operating in foreign markets executives learn, and their perceptions of risks and benefits of being involved in those markets change. This may lead to increased commitment decisions implying a movement from one type of operation mode (with a lower market commitment) to another one (with a higher market commitment). However, the process perspective does not explicitly consider reductions of modes or non-incremental changes (Pauwels and Matthyssens 2004).

2.2.   Empirical Results on Mode Changes

Focusing on mode changes, we found that empirical studies on reasons for mode shifts mostly analyze mode increases (12), rarely mode reduction (8) and hardly ever both (1). Based on these articles we point out the different sets of stimuli which significantly influence the decision to change the operation mode.

Mode increases: Regarding studies on mode increases, two groups shall be highlighted. First, studies address mode changes within foreign direct investments (FDI). Already Gomes-Casseres (1987) stressed two determinants for change, the need for greater adaptation to the market and the dissatisfaction with the previous mode. Steensma et al. (2008) showed that a power imbalance between parents and high levels of conflict increase the likelihood of a joint venture (JV) being transformed to a wholly owned production subsidiary (WOPS). Similarly, Puck, Holtbrügge and Mohr (2009) illustrated that creation of local knowledge, internal isomorphic pressures and reduction of external uncertainty increase the likelihood of a conversion. Furthermore, Buckley, Pass and Prescott (1990) highlighted that the firms respond reactively to the external environment when moving towards FDI. Finally, Björkman and Eklund (1996) found that FDI are often preceded and influenced by top-management change. Second, studies addressed distribution-oriented mode change, e.g. shifts within export modes or towards sales subsidiaries. Rosson and Ford (1982) constituted dissatisfaction with the existing agency relationship, managers' expectations and changes in the business environment as reasons for changes. Likewise, Buckley, Pass and Prescott (1990) pointed out that firms switched to more controlled modes when they found exporting through agencies to be unsatisfactory. In context of performance, Ellis (2005) argued a U-shaped relation between perception of intermediary performance and the likelihood of their termination. This termination dilemma was also supported by Petersen, Pedersen and Benito (2006). Further, Pedersen, Petersen and Benito (2002) evaluated eight motivators and costs as drivers, but on a 5% significance level only satisfaction was positively related to a mode

change, while contractual restrictions and recruitment/training costs were negatively related. Similarly, Nicholas (1983) provided empirical support for transaction costs and accumulation of market knowledge to be important in the decision to change from agents to sales subsidiaries. Asset specificity and the selection of an intermediary are, moreover, related to switching modes (Benito, Pedersen and Petersen 2005). In their study on general increasing commitment, Randoy and Dibrell (2002) found that strategic and location specific factors have a significant influence on foreign resource commitments. To sum up, mode increases tend to be preceded by internal and external factors, managerial expectations as well as performance-related influences.

Mode reductions: Viewing international divestment as "any voluntary or forced action that reduces a company's engagement in or exposure to current cross-border activities" (Benito and Welch 1997, p. 9) we focus on partial divestment, i.e. when the mode in the foreign market is only reduced. Antecedences of international divestments have rarely been analyzed. For example, Benito (1997) found an inverse relation of foreign divestment to economic growth in the host country. Conversely, Duhaime and Grant (1984) argued that internal factors such as the business unit's strength or the parent's financial position influence divestment, whereas factors such as economic conditions do not. Further, Mata and Portugal (2002) stated that subsidiary survival is determined by growth strategies, internal organization, industry characteristics and industry growth. Similarly, Li (1995) found empirical support for diversification and entry strategies as well as organizational experience to have a significant effect on divestment. However, performance plays an important role as well (Hamilton and Chow 1993). A voluntary decision may be made because of a decline in returns (Khan and Mehta 1996). Haynes, Thompson and Wright (2003) derived that divestment is a purposeful response not only to strategic but also to financial factors. Finally, Belderbos and Zou (2009) pointed out that affiliates are less likely to be divested in response to environmental change if they represent growth or switch option value to the firm. In summation, empirical divestment literature leads to similar categories of stimuli as for mode increases.

Mode increases and reductions: Besides studies analyzing internationalization patterns rather generally (e.g. Clark, Pugh and Mallory 1997; Fletcher 2001; Gemser, Brand and Sorge 2004), to the best of our knowledge, only the study by Calof and Beamish (1995) provides extended empirical insights into stimuli of mode increases and reductions. Calof and Beamish interviewed executives from 38 smaller Canadian firms, inquiring why they have changed modes in the past using open-ended questions. They observed 121 changes within the modes export, sales subsidiaries, JV

and WOPS. Fifteen stimuli of change were found and formed into four factors (performance, external and internal environmental, managerial attitudes). The frequencies of those factors were then linked to mode increases and reductions.

3.   Conceptualization and Hypotheses Development

3.1.   Conceptual Framework

The conceptual framework underlying this analysis is threefold (see Figure C-1). First, building upon economic-strategic and behavioural approaches, we consider that firms may increase and reduce their foreign commitment. Although initial entry mode choices are based on actual and anticipated circumstances as perceived by the decision-maker, internal as well as external factors may change leading to the current operation mode being subject to change. Moreover, foreign in- or divestment cannot take place unless it is decided (Boddewyn 1985). When making the decision, executives have a range of options of increasing or reducing their involvement on a scale of operation modes. Second, building particularly on empirical findings on reasons for mode changes we conceptualize specific stimuli as antecedents of mode increases and reductions. Thereby, we extend the work of Calof and Beamish (1995) and analyze direct effects of the four factors on the mode change decision. While stimuli differ in terms of their importance for mode increases and reductions (Fletcher 2001), we assume that certain stimuli determine the likelihood of mode increases rather than reductions and vice versa. We emphasize the usage of four sets of stimuli which are analyzed in terms of executives' perceived relevance of the factors causing change, but not in terms of their actual direction. Third, we control for factors that are used in recent studies on mode change, but are not conceptualized within this framework.
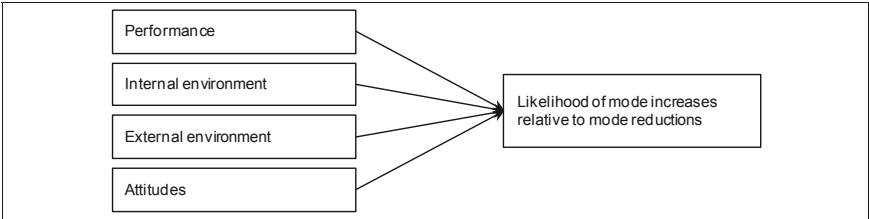
Figure C–1:   Conceptual Framework
Source: Own creation.

3.2.   Mode Increases and Mode Reductions

Following the economic-strategic and behavioural-based process approaches as well empirical findings, we consider that firms can increase or reduce their foreign market commitment by changing their foreign operation modes. According to Calof and Beamish (1995) mode increases are defined as upstream changes of modes while mode reductions are defined as downstream changes of modes. We assume the following scale of operation modes: export, sales subsidiaries, JV and WOPS. This conceptualization bears resemblance to the establishment chain (Johanson and Wiederheim-Paul 1975; Johanson and Vahlne 1977), which is applicable to SME, in spite of its shortcomings. A change of mode means that a company decides to serve a country with another mode than it did before. Additionally, we differentiate step-by-step incremental and two-step radical mode change.

3.3.   Reasons for Mode Increase and Reductions

3.3.1   Performance in the Host Market

Based on Calof and Beamish's understanding (1995), performance is defined as senior executives' evaluation of the companies' development in a country where the mode change took place.

While it seems intuitive that performance has an impact on mode change, theoretical explanations are limited. The internationalization process approach does not directly refer to performance consequences. It is mainly concerned with learning effects of firms, which incrementally increase their commitment to foreign markets. In contrast, from an economic perspective a change can be a remedy to a discrepancy between goals and performance (Boddewyn 1983). When drastic performance changes occur, a company might switch its mode. This reasoning has been empirically shown by Ellis (2005) who derived a U-shaped relationship between the likelihood of intermediaries' termination and their performance, which was again supported by Petersen, Pedersen and Benito (2006). In further theoretical reasoning, Boddewyn (1979) and Benito and Welch (1997) consider performance as a major driver of divestment decisions.

In empirical studies, Chow and Hamilton (1993) found that divestments are motivated by the need to convert unattractive assets in order to strengthen the financial standing. Similarly, Khan and Mehta (1996) suggested that firms divest when they experience a decline in the rate of return.

Accordingly, we argue that performance stimuli are perceived more importantly in the context of mode reductions (Calof and Beamish 1995). Moreover, we assume that

perceived performance change increases the likelihood of mode reductions relative to increases.

H1.   (a) Performance stimuli are perceived to be more important in the context of mode reductions than mode increases, and (b) performance stimuli are positively associated with the likelihood of mode reduction relative to mode increase.

3.3.2   Firms' Internal Environment

According to Calof and Beamish (1995), we view a firm's internal environment as consisting of factors potentially within a firm's control, such as strategy and resources.

Although the internationalization process approach does not explicitly consider strategic variables, it implicitly assumes that the firms build internal capabilities as they operate in foreign markets. Therefore, it might be argued that internal factors change as the firm learns and generates knowledge, which leads to increased market commitment. Taken the economic perspective, the industrial organization theory in particular, firms invest in foreign markets to exploit company-specific advantages (Boddewyn 1985). If decision-makers believe that the firm has gained specific management know-how and created certain advantages, they might decide to increase the current mode. This is supported by the assumption that investments are of organizational or strategic nature (Boddewyn 1983).

Findings from empirical studies lead to similar expectations with regards to the relationships at hand. Intangible assets have been shown to exert a negative influence on the probability to divest (Delios and Beamish 2001). Moreover, Gomes-Casseres (1987) concluded that as firms' capabilities grow they may no longer use agents and but rather prefer to build their own subsidiaries. Also, Puck, Holtbrügge and Mohr (2009) showed that the accumulation of local knowledge and internal isomorphic pressure significantly increases the likelihood that JV will be converted into own subsidiaries. Ford and Rosson (1997) evaluated the goal for greater effectiveness as a reason for the change from export to sales subsidiaries. Benito, Pedersen and Petersen (2005) demonstrated that asset specificity has an influence on mode shift from an intermediary to its own subsidiaries. Finally, it has been pointed out that top management change leads to mode change, both to mode increases (Björkman and Eklund 1996) as well as reductions (conceptually, Benito and Welch 1997).

Although theoretical and empirical perspectives often associate mode increase with internal factors, the importance of the internal environment is assumed to be given

for mode reductions as well (Boddewyn 1979). However, we believe internal factors to be more important in the context of mode increases, which was also implied by Calof and Beamish (1995). Accordingly, perceived internal environmental stimuli will increase the likelihood of mode increases relative to reductions.

H2.   (a) Internal environmental stimuli are perceived to be more important in the context of mode increases than reductions, and (b) internal environmental stimuli are positively associated with the likelihood of a mode increase relative to mode reduction.

3.3.3   Firms' External Environment

According to Calof and Beamish (1995), we view a firm's external environment as consisting of factors outside a firm's direct control, such as macroeconomics, government policy and competition.

The internationalization process approach does not directly consider environmental conditions, but if environmental factors are perceived to change, the firm might not have the knowledge to deal with it and would not increase its commitment (as reduction is not really an option). However, if the environment would change favourably, the firm might be able to employ its knowledge and shorten the cycle of increasing involvement. From an economic perspective, environmental factors play an important role in the in-/divestment decision. Environmental factors describe conditions and at the same time motivators to in- or divest (Boddewyn 1985). Adverse environmental conditions will rather lead to divestment while favourable environmental changes might lead to investment. Theoretically, environmental changes can lead to both, increases and reductions, depending on the direction and intensity of change.

Similar contrary findings are reported by empirical studies. Ford and Rosson (1997) argued that changes in the business environment are reasons for the mode shift from export to sales subsidiaries. This assumption was also shared by Pedersen, Petersen and Benito (2002), but they found no significant results for export market growth as switching motivator. Fletcher (2001), too, pointed out that environmental factors may act as impediments and therefore are important within de-internationalization as well internationalization. While empirical studies on mode increases tried to show the significance of the external environment, there are supplementary findings from divestment research. Belderbos and Zou (2009) found that affiliates established in countries with adverse environmental conditions were more likely to be divested. Mata and Portugal (2002) showed that subsidiaries in growing markets and industries are more likely to survive.

While adverse environmental conditions seem to generally lead to mode reduction, favourable conditions tend to lead to mode increase. As we do not analyze the directions of stimuli changes, we adhere to the findings of Calof and Beamish (1995). They showed that external environmental changes are more often mentioned as reasons for mode increases.

H3.   (a) External environmental stimuli are perceived more important in the context of mode increases than reductions, and (b) external environmental stimuli are positively associated with the likelihood of a mode increase relative to mode reduction.

3.3.4   Managerial Attitudes

According to Calof and Beamish (1995), we view attitudes as managerial intentions, beliefs and feelings about market commitment.

Our understanding is evidently related to the individual drivers of incremental change discussed in behavioural process models and thus mode increases. But there is also an economic perspective on the relevance of attitudes. It has been pointed out before that investment is brought about by an internal decision. The will or motivation to change can be put into practice when favourable conditions exist (Boddewyn 1985). Although, Boddewyn (1983) states that divestments compared to investments are less rational and rather personal a priori, and economic approaches do not directly address attitudes, it seems that decision-makers would, ceteris paribus, increase the current mode when they perceive an urge (in terms of intention, will or motivation) to do so.

Correspondingly, Ford and Rosson (1997) showed empirically that decisions to increase commitment are attributed to management characteristics, especially their intuitive expectations. Similarly, Fletcher (2001) argued that managerial characteristics are drivers of increasing foreign market commitment rather than reducing. Finally, Gemser, Brand and Sorge (2004) found that managerial learning is relevant for mode increases.

In summation, we believe that managerial attitudes are more important in the context of mode increases, which was also indicated by Calof and Beamish (1995). Accordingly, we suggest that managerial attitudes enhance likelihood of mode increases.

H4.   (a) Managerial attitudes are perceived to be more important in the context of mode increases than mode reductions, and (b) managerial attitudes are positively associated with the likelihood of a mode increase relative to mode reduction.

4.   Design of the Empirical Study

4.1.   Sample

To develop the sample, we selected every fifth international manufacturer from highly internationalized sectors listed in the Hoppenstedt database, which includes most German-speaking SME. The 2,000 chosen firms were independent, not diversified and had 500 employees at maximum. We contacted senior business executives by mail, informed them about the study and asked whether they have had increased or reduced modes in the last ten years. 150 firms had to be excluded because managers gave reasons as to why they could not support the study. Accordingly, we sent out 1,850 questionnaires which could be completed in writing or electronically. Two weeks later telephone calls were made, and ten days later e-mails were sent as a reminder. 380 firms have not changed modes and were unable to answer the questionnaire; some executives were not attainable.

325 executives returned the questionnaire. Telephone calls were made to assure that executives answered the questions. Since a person other than the main decision-maker evaluated the questionnaire or a considerable amount of missing values, 60 further questionnaires had to be excluded. Finally, information of 265 managers on 320 mode changes was included into the final analysis. This results in a response rate of 14%, which is appropriate for SME studies (Newby, Watson and Woodliff 2003), especially considering that not every company has had changed modes.

The firms represent mostly four industries, mechanical engineering, electronics, chemicals and textiles/clothing (85% of all firms). Average sales amount to 134.0 million EUR with international sales averaging 66.9 million EUR and a foreign share of sales averaged 40.9%, which is similar to Calof and Beamish (1995) (see Table C–1).

Total sales in m EUR	N	%	International sales in m EUR	N	%	Foreign share of sales	N	%
1-24	66	24.9	1-19	99	37.4	1-10	13	4.9
25-49	49	18.5	20-49	60	22.6	11-20	37	14.0
50-99	44	16.6	50-99	41	15.5	21-49	96	36.2
100-199	52	19.6	> 99	39	14.7	50-74	69	26.0
> 199	52	19.6				> 74	24	9.1
Missing	2	0.8	Missing	26	9.8	Missing	26	9.8
Total	265	100.0	Total	265	100.0	Total	265	100.0
Average: 134.0			Average: 66.9			Average: 40.9		

Table C–1:   Characteristics of the Sample

Source: Own creation.

4.2.   Measurement

4.2.1   Dependent Variable

Similar to the procedures employed by Calof and Beamish (1995) as well as Puck, Holtbrügge and Mohr (2009) we asked each executive to describe whether and why they, as main decision-makers regarding the mode change, had increased or reduced modes in a country in the last ten years. If several changes were done, we asked to choose the last change that happened. We formulated the introduction of the questionnaire as follows: "Smaller companies who sell products in a foreign country might increase (e.g. from indirect exports to sales subsidiaries) or reduce their commitment (e.g. replace own subsidiaries by indirect exports) after some time. Have you realized this kind of operation mode change(s) within the last ten years in a county where you still sell products?" Because indirect and direct forms of export are of great importance especially for SME (Pedersen, Petersen and Benito 2002) we enlarged the range of modes employed by Calof and Beamish (1995) by differentiating indirect and direct export forms (see Table C–2). We asked the executives to answer on mode increase and mode reduction separately, and controlled for the mode being carried out in a country with sales activities. Moreover, we excluded mode changes in countries with other value-chain activities than sales.

4.2.2   Independent Variables

We used Calof and Beamish's (1995) 15 stimuli of mode change, three related to performance, four to external and six to internal environment and two to managerial attitudes (see Table H–1 in Appendix 3). While the authors provide informal interviews, we chose questionnaires and two types of stimuli measurement.

First, seven point Likert-type scales were used to measure the importance (1=not important at all to 7 very important) of each of the 15 stimuli regarding a particular mode increase and mode reduction. Interpreting the stimuli as formative constructs (Diamantopoulos and Winklhofer 2001), we united them into non-weighted indices for each of the four categories: performance, internal and external environment and attitudes.

Second, three core reasons for each mode change were collected in an open question sequence. The executives had to choose (up to three) major reasons out of a list of the 15 stimuli resulting in more than 1,000 notations. Reasons not included in the list were excluded from further analysis in order to receive comparable results.

Considering literature on scale development, we conducted a pre-test with nine senior executives and two international business scholars, which lead to adaptations of four of the 15 stimuli (number 2, 11, 13, 15). We attempted to formulate each stimulus positively and negatively because both directions may be perceived as reasons for mode increases and reductions.

4.2.3   Control Variables

We included six control variables in the study. Firm size was controlled because small firms are more likely to divest then larger firms (Li 1995). It was measured using the number of employees (Bobillo, López-Iturriaga and Tejerina-Gaite 2010). Firms' age was measured using the number of years of the company's existence (Tuppura et al. 2008). It was considered because older firms may allocate resources more efficiently and hence be more likely to increase mode. Accumulation of market knowledge was measured using a firm's number of years operating in the country where the mode change took place. Over time firms gradually accumulate knowledge and, hence, reduce uncertainty, which might have an effect on mode changes (Pedersen, Petersen and Benito 2002). Combination of foreign operation modes in the particular country was employed as a dummy to control for the differences to single modes (Petersen and Welch 2002). Geographic distance was measured with the distance (in kilometre) from the capital of the country of origin to the capital of the particular country where the mode change took place (Bevan, Estrin and Meyer 2004) because it might reduce switching costs (Pedersen, Petersen and Benito 2002). We control the competition intensity in the country with a single item measure (Kwon and Hu 2000) because competition has been shown to exert an influence on mode change (Fletcher 2001).

4.3.   Method

Referring to the discussion on the usefulness of reliability assessment of formative measures, we argue with Diamantopoulos and Winklhofer (2001) that statistical reliability assessment is irrelevant. Consequently, it was even more important to use items which were developed in a former study. The validity assessment is limited as well (Diamantopoulos, Riefler and Roth 2008). We assessed face validity in the pretest and checked for multicollinearity. The correlations between the indices and the controls, VIF values and standard errors are found to be below the common thresholds and, therefore, multicollinearity is assumed not to be a serious problem within the present data (see Table H–2 in Appendix 3).

Non-response bias is assumed to be limited as the comparison of the indexes between early vs. late respondents showed (Armstrong and Overton 1977). Secondary

data on the demographics of randomly selected non-respondents were gathered in order to conduct additional tests comparing responding and non-responding firms (in terms of size, age and sales). Again, insignificant differences were found. Common method bias was tackled a-priori through appropriate questionnaire design and ex-post tested using Harman's single factor test (Podsakoff et al. 2003). As the first factor accounts for only 19.9% of the total variance explained in exploratory factor analysis, common method bias can be assumed to be reduced within our possibilities as we have to rely on self-reports of executives to access their perception (Spector 2006). With the focus on the perceptions of the actual decision-maker being the competent person to answer the questionnaire, single response bias is assumed to be limited (Hughes and Garrett 1990). Following the suggestion of Kumar, Stern and Anderson (1993), we tried to obtain a second respondent to validate the data, asking the senior executives by phone for a second person with appropriate knowledge on the particular mode changes. This resulted in only 41 further contact partners, mostly export/sales managers, as executives evaluated only themselves being able to report on the particular mode change. In order to test for inter-rater congruence (Slater 1995), telephone calls provided 29 responses. The comparison of evaluations led to significant correlations and insignificant differences in mean values. Hence, we assume that single response bias is reduced within our data, however, it cannot be solved completely.

In order to test the hypotheses, we employed t-tests, logistic regression and tested an alternative causal model. Before calculating the model, we checked for outliers by looking at standardized residuals.

5.   Results

5.1.   Types of Mode Change

Table C–2 illustrates 210 mode increases and 110 reductions. Despite the relatively wide range of modes used, an overall tendency of export-related modes can be detected. Currently, only 7.5% use JV and 21.9% WOPS, while exports dominate the operation modes of German SME. Regarding major mode increases, it can be observed that 15.0% of all changes switched from direct export to sales subsidiaries, 10.6% from indirect to direct export without own presence and 9.1% from direct export to WOPS. Regarding mode reductions, 5.9% of all changes switched from sales subsidiary to direct export, 5.6% from direct to indirect export and 3.5% from JV to

direct export. While these single changes are undoubtedly interesting, we opt to ana-
lyze aggregated changes in this study.

New mode Old mode	Indirect export (n = 35)	Direct export without own presence (n = 78)	Direct export with own presence (n = 33)	Sales subsidiary/ company (n = 82)	JV (n = 22)	WOPS (n = 70)	Total (n = 320) in %
Indirect export (n = 70)	--	10.6	2.2	5.0	1.3	2.8	21.9
Direct export (without own presence) (n = 112)	5.6	--	1.9	15.0	3.4	9.1	35.0
Direct export (with own presence/branch) (n = 39)	0.9	4.4	--	3.1	0.6	3.1	12.2
Sales subsidiary/company (n = 51)	2.8	5.9	2.8	--	0.6	3.8	15.9
JV (n = 28)	0.9	1.3	3.4	--	--	3.1	8.8
WOPS (n = 20)	0.6	2.2	--	2.5	0.9	--	6.3
Total (n = 320) in %	10.9	24.4	10.3	25.6	7.5	21.9	100

Note: Each number in this table represents the percentage of all mode change decisions accounted for by a given change/choice combination. The two types of direct exports are not used in the further analysis. 21 changes in further modes (licenses, contract manufacturing, non-sales alliances) were excluded.

Table C–2:   Change/Choice Combinations of Modes

Source: Own creation.

It is worth noting that the majority of changes are incremental varieties of steps (see
Table C–3). With regard to graduations of increase and reduction defined according
to Calof and Beamish, 39.7% of mode changes correspond to one-step increases,
24.7% one-step reduction, 9.7% two-step reductions and 25.9% a two-step increase.

	Stages	Pattern non stages (n = 193)			
Old mode	One-step increase (n = 127)	One-step reduction (n = 79)	Two-step reduction (n = 31)	Two-step increase (n = 83)	Total two steps (n = 119)
Indirect export (n = 70)	54.3	--	--	45.7	45.7
Direct export (without own presence) (n = 112)	47.3	16.1	--	36.6	36.6
Direct export (with own presence) (n = 39)	30.8	33.3	10.3	25.6	35.9
Sales subsidiary/company (n = 51)	27.5	54.9	17.6	--	17.6
JV (n = 28)	35.7	32.1	32.1	--	32.1
WOPS (n = 20)	--	55.0	45.0	--	45.0
Total (n = 320)	39.7	24.7	9.7	25.9	35.6

Note: Each number represents the percentage of mode change decisions from the particular mode accounted for by a given number of steps (defined according to Calof and Beamish 1995).

Table C–3:   Internationalization Patterns Observed

Source: Own creation.

5.2.   Importance of Stimuli for Mode Change

Regarding the importance of the stimulating factors, we both asked the executives to
name up to three most important stimuli and to rate the single stimuli on a scale (see

Table C–4 and Table H–1 in Appendix 3). Concerning mode increase, internal environment is mentioned as major reason in 53.9%, attitudes in 19.2%, performance in 15.8% and external environment in 11.1% of all increases. Concerning mode reduction, internal environment (38.7%), performance (29.1%) and external environment (24.9%) are perceived to be very important, while attitudes (7.3%) are not. However, when interpreting these results one has to consider the number of stimuli in each category. Considering the stimuli weight (percentage in relation to the number of items per factor), internal environment dominates mode increases, closely followed by attitudes. Within mode reductions performance is followed by external and internal environment. Additionally, different reasons are named for one-step and two-step changes (see Table H–1 in Appendix 3).

Mean values are significantly different between mode increases and reductions, apart from performance (see Table C–4). The highest mean within mode increases is related to attitudes, followed by internal environment, performance and external environment; within mode reductions the order is performance, internal environment, attitudes and external environment.

	Frequencies of major reasons		MV (STD) of scaled reasons			MV (STD) of scaled reasons experienced vs. non-experienced					
	Mode reduction	Mode increase	Mode reduction	Mode increase	Diff.	Exp. increase	Non-exp. increase	Diff.	Exp. reduction	Non-exp. reduction	Diff.
Performance	29.1%	15.8%	3.9 (1.2)	3.6 (1.1)		3.7 (1.0)	3.5 (1.2)		3.8 (1.3)	3.6 (1.3)	
Internal environment	38.7%	53.9%	3.6 (1.1)	4.3 (1.0)	***	4.1 (1.0)	4.4 (1.0)	*	3.7 (1.1)	3.7 (1.1)	
External environment	24.9%	11.1%	2.9 (1.3)	2.2 (0.9)	***	2.4 (1.2)	2.2 (0.9)	*	3.1 (1.4)	2.8 (1.7)	
Attitudes	7.3%	19.2%	3.4 (1.7)	5.1 (1.1)	***	5.0 (1.2)	5.0 (1.1)		3.2 (1.7)	3.4 (0.9)	
* p < 0.05, ** p < 0.01, *** p < 0.001; others not significant. Paired t-tests.											

Table C–4:   Importance of Reasons for Mode Change
Source: Own creation.

These results lead to supporting H2a and H4a while H1a and H3a are rejected. Three factors are perceived to be significantly different regarding their importance for mode increases and reductions. While internal factors and attitudes are more important in the context of mode increase, external factors are perceived to push managers into mode reduction. To sustain the findings, we have additionally tested for mean differences between executives with experience in increases and reductions and executives who have experienced only one type of change (see Table C–4). The means on the four factors do not differ significantly for both mode increases and reductions, despite internal and external environment in the context of mode increases.

5.3.   Magnitudes of Stimuli for Mode Change

Table C–5 illustrates the regression-based results. The data fit the proposed conceptual model satisfactory, exhibiting a Nagelkerke's R^2 of 0.465. Moreover, 80.9% of the observations are correctly classified. With regard to the different size of mode increases versus mode reductions, this value needs to be compared with the proportional chance criterion in order to give implications concerning the model goodness. As this value accounts for 54.9%, the classification rate of the model is 26.0% higher than the proportional chance as it is required for good predictive power.

	B	Exp(B)	B	Exp(B)	B	Exp(B)
Dependent variable	MODEL 1: Mode increase vs. mode reduction		MODEL 2a: One-step reduction vs. two-step reduction		MODEL 2b: One-step increase vs. two-step increase	
Performance	-0.439**	0.644	0.774**	2.168	0.006	1.006
Internal environment	0.468**	1.596	-0.356	0.701	-0.080	0.923
External environment	-0.482***	0.618	-0.896***	0.408	-0.642***	0.526
Attitudes	0.813***	2.255	0.844**	2.327	-0.132	0.877
Control variables						
Firms age (log)	-0.765	0.465	1.542	4.674	-0.708	0.493
Firms size (log)	-0.434	0.648	-1.471	0.230	-0.696*	0.499
Acc. of market knowledge (log)	-0.028	0.973	-3.653**	0.026	-0.503	0.604
Combination of modes	-0.289	0.749	-4.185*	0.015	-1.425*	0.240
Geographic distance (log)	0.505	1.656	2.401*	11.031	-0.380	0.684
Competition intensity	-0.123	0.885	0.202	1.224	0.082	1.086
Constant	0.269	1.309	2.679	14.569	9.674***	15.99
Model fit						
No. of observations	320		110		210	
n group 1 / n group 2	210 / 110		79 / 31		127 / 83	
Model χ^2	131.453 *** 10df		41.182 *** 10df		31.515 *** 10df	
Correctly classified	80.900		80.010		69.500	
Maximal chance	65.600		71.800		60.500	
Proportional chance	54.883		59.520		52.195	
Nagelkerke R^2	0.465		0.449		0.189	
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; others not significant.						

Table C–5:   Results of Logistic Regression
Source: Own creation.

Since one could assume, according to the process approach, that the effect of internal and external environment and performance is mediated by attitudes (Calof and Beamish 1995), we tested an alternative mediation model using structural equation modelling. We find that the total mediating model is worse ($R^2=0.26$) than the direct effects model ($R^2=0.47$), which supports our conceptual model and the results.

Hypotheses H1b, H2b and H4b are supported. Model 1 shows that changes in attitudes and internal environment are significantly linked with the likelihood of mode increases. The likelihood of mode reductions is significantly linked to performance changes. However, external environment changes are significantly linked to mode

reductions. Therefore, H3 cannot be supported. None of the control variables are significant.

Additional results on incremental and non-incremental mode changes are further shown in Table C–5. With regards to performance, managers perceive performance in general more likely to reduce instead of increase the operation mode, whereas performance is perceived as a more likely explanation for one-step than two-step reductions. Attitudes in general are rather connected with mode increase than reduction while being perceived to be an explanatory variable for one-step mode reduction when looking at reductions only. The external environment is a likely explanation for both two-step reduction and two-step increase while being in general perceived more likely to reduce the operation mode. Finally, the internal environment increases the likelihood of mode increases but shows no significant results with regards to incremental or radical steps.

6.   Discussion

6.1.   Overall Conclusions

This study contributes to the knowledge on the reasons for mode changes in a specific way because it provides empirical results on the under-researched but highly relevant phenomenon of mode increases and reductions. We have based our research design on a former study which is linked to certain limitations while being scientifically valuable. We found 210 increases and 110 reductions indicating the necessity to consider both directions of mode change. Referring to our research questions, executives perceive the importance of stimuli for mode increases and reductions differently and the magnitudes of stimuli effecting mode increases and reductions differ. These results are shown to be stable when comparing decision-makers with different change experience. In the following we will highlight the contribution in two regards: comparison with previous findings and conclusions for research and practice.

6.2.   Conclusions by Comparing Results

The results of Calof and Beamish's study (1995) are largely sustained, which is remarkable in light of the different contexts, points in time and research designs.

Concerning performance, our results draw a different picture on reductions as compared to Calof and Beamish's results. The importance of performance as a stimulus for change is not significantly more important in the context of mode reductions. Re-

garding the magnitude of effects, performance is perceived more likely to reduce instead of increase the operation mode. This finding supports Boddewyn's (1979) conceptual assumptions about the dominance of performance in divestment research and contradicts current arguments that the relevance of performance should be not overemphasized (Morschett et al., 2009). Thus, we call for more research on performance consequences, which might be analyzed through growth modelling.

Internal environment is stronger linked to mode increases, both through their importance and magnitude. Similar to Calof and Beamish's results, strategies and resources are seen as dominant reasons for mode increase but are also important antecedents of mode reductions. Referring to the most important reasons, strategic stimuli were named most often in terms of increases, while resources were perceived more important for reductions. However, new management does not occur to be an important force for SME decision-makers. Consequently, internal environment has to be included in studies on mode change, otherwise a significant level of explained variance is disclaimed.

Stimuli from the external environment increase the probability of mode reductions, which contrasts our proposition and Calof and Beamish's observation that external environmental is more often linked to mode increases. In our study external environment is also perceived as more significant in stimulating mode reduction. This is a very interesting result, since theory and empirical studies do not advise on a general relationship. In addition, we found that external environment is significantly linked to radical mode changes (two-step increase and two-step reduction). This factor seems to be a powerful discriminator, although it was not named very frequently as major reason for change. Hence, we believe that there is need for more research on the relationship between mode change and external factors.

Finally, attitudinal stimuli are even stronger linked to mode increases than in Calof and Beamish´s study. The importance and magnitude show that attitudes are relevant for mode increases, but not that much for reductions. Attitudes were not often named as major reasons for mode reductions, especially within two-step reductions. Consequently, empirical studies on mode increases disclaim explained variance when attitudinal variables are not considered.

6.3.   Conclusions for Theory and Practice

Conclusions for theory and practice are threefold. First, considering the general effect of stimuli, we provide broad implications for theory and practice. While it is intuitive to suggest that, for example, good performance leads to mode increases and bad per-

formance leads to mode reduction, we suggest that managers associated perform-ance in general with mode reduction rather than mode increase. That implies man-agers tend to perceive performance to increase the likelihood of mode reductions ex-post. Accordingly, performance factors (whether positive or negative) are especially important in the divestment decision and have to be considered and monitored by managers. However, performance has been perceived important both for increases and reductions, which implies that performance changes have to be viewed within the wide scope of stimuli, business aims and perspectives. Theoretically, it implies that performance has to be included in studies on reduction. While performance and external environment increase the likelihood of mode reductions, internal environ-ment and attitudes are associated with mode increase. Finding different stimuli as important factors for increases and reductions matches Fletcher's (2001) results. Moreover, we show that the major reasons for incremental and radical mode changes differ. While the external environment induces radical change, both up-stream and downstream, performance and attitudes are only connected with one-step reduction.

Second, the internationalization process approach does not sufficiently explain mode reductions as it is not capable to derive the direct influence of performance and ex-ternal environment on mode change. Nevertheless, the majority of movements in this study are incremental. Furthermore, managerial attitudes can hardly be explained with economic approaches, although attitudes are highly relevant for explaining mode increases. Therefore, economic reasoning has to expand its explanatory power by including attitudinal variables (Perks and Hughes 2008). Consequently, we conclude with Benito and Welch (1994) that both research streams taken separately might not be appropriate to explain all facets of mode changes. Explained variance of mode shifts can be increased when stimuli from both research streams are combined.

Third, for executives this study denotes which crucial antecedences have to be ob-served and considered when mode changes are planned or change decisions have to be made. Executives might use the experiences and findings provided in this study as an orientation towards a more rational decision-making process (Boddewyn 1979). Furthermore, it contributes to the general knowledge on the dynamics of the internationalization process and its antecedents.

7.   Limitations and Further Research

To understand the stimuli of mode increases and reductions, there is need for additional research extending the findings of this study, which is not without limitations, in two major ways:

The first major issue relates to the empirical level. We have categorized, for example, the shift from WOPS to JV identical to the shift from sales subsidiaries to indirect exports. Obviously, this is a limitation because results on concrete mode conversions (e.g. Puck, Holtbrügge and Mohr 2009) provide clear implications and context-related information but may not be generalized for other changes. Consequently, enhancing the data basis will increase the feasible aims of a study. Further implications can be drawn from a multi-country sample, comparisons to companies without mode change, longitudinal designs to model changes over time (Pedersen, Petersen and Benito 2002), or multi-level designs (Canabal and White 2008). In particular, employing both primary and secondary data might be a promising approach both to exclude common method variance and provide implications of actual environmental changes.

The second major issue for further research concerns the conceptual level. We conceptualize and measure as precisely as possible by drawing on a former study, which was explorative in nature and not biased by any theory. Although Calof and Beamish (1995) made every effort to ensure discrete categories, some overlaps may exist. This may, for example, influence the high importance of the external environment, especially if executives understand mode reductions as failures (Duhaime and Schwenk 1985). Furthermore, while relying on Calof and Beamish's items we have not measured the directions of change, and cannot make any conclusions on the effects of, for example, good or bad performance on change. Thus, further research could analyze the implications of directed stimuli. Finally, we have conceptualized direct relationships between stimuli and mode change, albeit computing one alternative model. However, further mediating effects can be thought of, e.g. the direct effects of the stimuli on mode change might be mediated by executives' evaluation of risks and benefits.

D. Study 3: A Taxonomy of Small and Medium-sized International Family Firms

1. Introduction

This study investigates the linkage between the culture of family firms in terms of the organizational orientation, their strategy in terms of differentiation, cost leadership and marketing standardization and their structure in terms of integration, centralization and specialization. We discuss these factors and develop a taxonomy of small and medium-sized internationalized family firms. Family firms are a particularly interesting and distinctive group to research because these firms combine ownership and management (Gallo and Sveen 1991), have a strong organizational culture that fosters trust and tradition (Aronoff and Ward 1995) and differ from non-family firms with regard to internationalization (Fernández and Nieto 2006). Moreover, family firms comprise most of the world's companies (Ibrahim, Angelidis and Parsa 2008). Indeed, some of the most successful and largest companies in the world are family firms. However, these large organizations cannot be compared to small family firms because size has many organizational effects. SMEs face different challenges with regard to internationalization, and they have different decision-making structures. Hence, we focus solely on small and medium-sized family firms.

Thus far, the research on international family firms has mostly focussed on the internationalization process in general (Tsang 2001; Claver, Rienda and Quer 2007), the determinants of internationalization (Gallo and Sveen 1991; Fernández and Nieto 2005; Graves and Thomas 2008) and the differences between family and non-family firms with regard to managerial issues (Pinho 2007; Claver, Rienda and Quer 2008). Scholars have shown that family firms tend to follow a slow and unstructured path toward internationalization because of their risk-averse organizational culture and their fear of losing family wealth (Claver, Rienda and Quer 2007). Hence, family firms tend to implement conservative strategies and do not aggressively pursue internationalization (Zahra 2003). However, little is known about exactly how family firms adapt to international environments and how their risk avoidance influences the configuration of strategies and structures during internationalization. In summary, the existing research on international family firms has mainly focussed on "what-questions rather than why/how-questions" (Kontinen and Ojala 2010, p. 97).

We wish to close this knowledge gap and analyze how family firms internationalize from an organizational perspective. Developing a survey-based taxonomy of family firms, we show the different groups of international family firms that exist and examine the linkage between firm culture, strategy, structure and ultimately the firm's international, i.e. non-domestic, performance. We seek to investigate how these configurations differ and which configurations appear to be most successful. In summary, we aim to analyze the following research questions. Are there different configurations of international family firms in terms of firm culture, strategy and structure? Which combinations of strategies, structures and firm orientations promise success for family firms in international markets? Which firm-level factors differentiate between the different groups of firms?

Investigating these research questions is an important task that will extend the existing research by analyzing how family firms adjust their strategy and structure to their unique culture in an international context. Following Kontinen and Ojala's (2010) call for more empirical research on family firms, we contribute rich empirical data and show which configurations of culture, strategy and structure are used by international family firms. Throughout this process, we discover "real types" (Harms, Kraus and Reschke 2007, p. 663) of international family firms, which is important in this growing field of research. Moreover, as Sciascia et al. (2012) suggested, we consider different international entrepreneurship variables and describe the configurations of family firms using supplementary variables such as countries, foreign sales ratios, time to internationalization and foreign operation modes. In addition to this theoretical contribution, we also aim to suggest managerial implications. Understanding the different types of family firms can help managers to better understand their own firms and their current situation. Managers can see which strategies and structures fit their family firm's culture. Moreover, family firm managers can learn the performance consequences of each configuration and use this information in their own configuration decisions. Thereby, managers can even advance their own firms' internationalization.

We have organized this study as follows. First, we review the literature on international family firms. Then, we introduce the theoretical background and the conceptual framework of our study. After describing the sample and the measurement of the constructs, we discuss the results of the empirical analysis, focussing on the different configurations of international family firms. To conclude the paper, we discuss the findings of the empirical study, describe the study's limitations and indicate implications for further research.

2.   Literature Review

The research on the internationalization of family firms is becoming increasingly important because these firms have realized that they can become more competitive by expanding their activities abroad (Fernández and Nieto 2005; Kontinen and Ojala 2010). Although internationalization is often understood to be a growth strategy (Claver, Rienda and Quer 2007), family firms tend to internationalize slowly and cautiously (Graves and Thomas 2008; Claver, Rienda and Quer 2009). The involvement of family members has a positive impact on international sales but a negative impact on the number of market entries (Fernández and Nieto 2006; Claver, Rienda and Quer 2009).

Although internationalization offers benefits to family firms (Pinho 2007; Claver, Rienda and Quer 2009), the risk of losing family wealth or losing control over the business can make family firms reluctant to internationalize (Claver, Rienda and Quer 2009). Similarly, Kontinen and Ojala (2010) proposed that the internationalization of family firms is primarily influenced by "long-term plans, the possibility to take quick decisions, and the fear of losing control" (p. 19). Claver, Rienda and Quer (2009) mentioned the "long-term vision" (p. 127) as distinctive characteristics of family firms (for the conditions under which family firms are more long-term oriented than other businesses refer to Block 2009). In general, family members of different generations remain true to this commitment to continuing the tradition and ensuring the survival of the company. Tradition is a specific and unique feature of family firms that plays an important role in the culture of these firms. Thus, factors such as continuation and consistency as well as control over the firm and protection of family property are important facets of the family firm culture (Claver, Rienda and Quer 2007). Continuation, consistency and control are attributes that are related to the firm's risk orientation, which, in turn, is an important dimension of entrepreneurial orientation (Naldi et al. 2007). Typically, it is assumed that family firms avoid risks but their international expansion fosters entrepreneurship because international activities are essentially focused on discovering and pursing new opportunities in new markets (Naldi et al. 2007).

Because family firms search for continuity and stability, they avoid aggressive internationalization and focus on a small number of foreign markets to generate revenues (Zahra 2003). Although it has been argued that family firms use selective and risk-avoiding strategies (Pinho 2007; Kontinen and Ojala 2010), we do not know which generic strategies or marketing strategies family firms use to penetrate foreign markets. Ibrahim, Angelidis and Parsa (2008) argued that family firms have a competitive

advantage because they are "nimbler, more customer-oriented and quality focused" (p. 95). With their emphasis on tradition and family values, family firms may be more likely to focus on quality, service and a positive image when they compete internationally.

Moreover, family firms are often said to be owner-centred and unstructured in their internationalization approach (Kontinen and Ojala 2010). The decision-making structure of internationalizing family firms has been found to be centralized and informal in China (Tsang 2001). However, it has also been shown that an orientation towards decentralized decision-making is positively related to entrepreneurship in family firms (Zahra, Hayton and Salvato 2004). Although we might assume that family firms with a risk-averse orientation will favour centralization, one could argue that internationally oriented entrepreneurial family firms will choose to decentralize their decision-making and implement clear organizational routines.

Overall, it appears that the organizational culture is special in family firms in that it influences not only the internationalization process as such but also the strategies and structures of the firm. Because family firms differ in their culture, their level of risk aversion and their attitude towards foreign markets, we suggest that there may be different types of family firms that differ in terms of their responses to and their performance in the international context.

3.   Theoretical Background and Conceptual Framework

To identify the different types of family firms, we employ the configuration approach. The configuration approach is rooted in contingency theory, which posits that there is no one best way to organize and manage firms. Hence, according to this view, multiple contextual and organizational variables should be analyzed simultaneously to determine the relationship between context, strategy and structure and discover how this relationship explains firm performance (Drazin and Van de Ven 1985). Classic contingency approaches have focussed on strategy-structure contingencies. Later research has employed a more holistic perspective, using organizational culture as an organizational variable that must fit with strategy and structure (Short, Payne and Ketchen 2008). Fit is the alignment of internal organizational forces to generate higher levels of performance. Hence, the level of international performance depends on the alignment between the organization and its context (Drazin and Van de Ven 1985). Furthermore, the configuration approach incorporates equifinality, which assumes that there are multiple organizational designs or forms that are equally effec-

tive (Drazin and Van de Ven 1985; Doty, Glick and Huber 1993). In other words, organizations can be equally viable and successful through multiple combinations of culture, strategy and structure even if they face identical contingencies (e.g. the generic strategies developed by Porter 1980). In our research context, this assumption implies that multiple combinations of family firm culture, strategy and structure can be equally effective in internationalization. Therefore, we expect to find different configurations of family firms that may differ with regards to their international performance.

Miller (1996) defined configurations as "complex systems of interdependency brought about by central orchestrating themes" (p. 506). Configurations can be addressed via typologies or taxonomies. Even though both terms are used synonymously in many studies and the term 'configurations' is often simply used, there is a major difference between a typology and a taxonomy (Dess, Newport and Rasheed 1993). Dess, Newport and Rasheed (1993) suggested that a typology "should refer only to theoretical/conceptual classification schemes", whereas a taxonomy "should refer only to empirically derived classifications" (p. 776). Thus, one way to arrive at configurations is to develop typologies, or ideal types, via theoretical reasoning. Another method involves empirically developing taxonomies, or real types (Harms, Kraus and Reschke 2007). Unlike typologies, taxonomies are empirically based and might therefore have more explanatory and predictive power. There are two taxonomic approaches: 1) using quantitative methods by identifying natural clusters in the data through cluster analysis or 2) using qualitative methods such as case studies (Dess, Newport and Rasheed 1993). In this study, we develop a taxonomy using quantitative methods. However, before we identify the configurations empirically, we discuss and conceptualize the constructs that are used to develop the taxonomy.

3.1.   Conceptual Framework of the Study

In the following sections, we introduce our conceptual model and discuss the corresponding constructs in the context of family firm internationalization. In researching family firms, we follow the literature and define a firm as a family firm when the family members own the majority of the capital of the SME and have management control of the firm (Donckels and Fröhlich 1991; Gallo and Sveen 1991). A senior executive must also regard the company as being a family firm (Crick, Bradshaw and Chaudhry 2006; Ibrahim, Angelidis and Parsa 2008). Hence, our definition requires that the family be involved in both the ownership and the management of the company. As previously mentioned, in this study, we focus solely on small and medium-sized family firms.

The conceptual model shown in Figure D–1 is the basis for the taxonomy. The frame-work consists of the constructs culture, strategy, structure and international perform-ance. The individual constructs are not explored in terms of their positive or negative influence in a taxonomic approach; rather, the primary focus is the relationships be-tween those constructs with reference to the internationalization of family firms. Thus, this study identifies features that distinguish different types of family firms and also examines whether there are any differences in the levels of performance achieved using different combinations of strategies, structures and firm orientations.
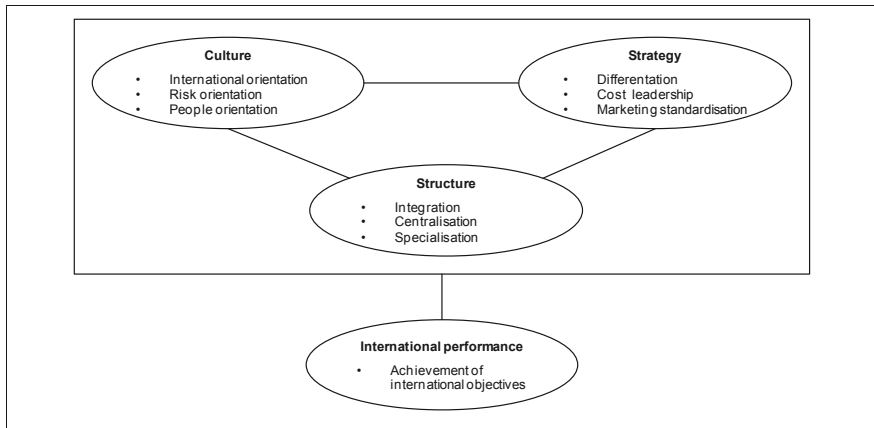
Figure D–1:   Conceptual Framework
Source: Own creation.

We suggest that international family firms can be best understood if we analyze the interplay of strategies, structures and culture. Naldi et al. (2007) mentioned that fam-ily firms can be regarded as representing a "contextual hybrid" (p. 34). They must cope with two sets of values, expectations and goals – those of the family and those of the business context. Thus, there can be different types of family firms with respect to their responses to the international business context and their performance. Hence, we suggest that organizations can respond to the international environment by developing different configurations of culture, strategy and structure. The organ-izational culture as exhibited by the firms' orientations builds the basis for their values and beliefs and therefore influences their choice of strategies and structures (Moog, Schlepphorst and Schlepphorst 2011). The strategies of a firm demonstrate its inter-national market positioning and determine its customer-oriented activities. Its struc-tures establish an organizational framework for international activities. How well the

chosen strategies, structures and orientations fit, is reflected in the international performance of the firm (Knight and Cavusgil 2005). Based on the concept of equifinality (Doty, Glick and Huber 1993), we believe that different configurations may yield equally successful firms. The configuration of strategies, structures and orientations should determine performance, but there should be different ways to combine strategies, structures and orientations to obtain success.

3.2.   Culture

In this study, culture includes a firm's risk orientation, international orientation and people orientation. These constructs are rooted in the organizational culture and are strongly influenced by the family firm's management (Jones and Coviello 2005). It has been shown that these orientations have an important influence on the development of international activities (Zahra 2003; Claver, Rienda and Quer 2009). A firm's international orientation is understood as its willingness to operate in international markets, including seeking new opportunities in international markets, and is associated with proactiveness and an innovative approach to foreign markets (Knight and Cavusgil 2005; Moog, Schlepphorst and Schlepphorst 2011). A firm's risk orientation is its willingness to take risks and engage in international activities (Pinho 2007). A firm's people orientation is its management of creativity and new ideas and is therefore closely related to firm innovativeness (Lumpkin and Dess 1996).

The cultural dimensions are closely related to the firm's entrepreneurial orientation. An entrepreneurial orientation can be defined as the pursuit of opportunities in international markets, which is reflected in proactive, risk-taking and innovative firm behaviour. In general, an entrepreneurial orientation is assumed to have positive performance implications (Kellermanns and Eddleston 2006). Prior research has offered two perspectives on the relationship between family firms and an entrepreneurial orientation (Casillas, Moreno and Barbero 2010; Zellweger, Sieger and Muehlebach 2010). Although some family businesses have been found to accept significant risk to protect family wealth, others avoid risky decisions because they fear losing control or family value. Some studies argue that family firms become conservative over time (Naldi et al. 2007). Others show that family firms do not score very high in terms of risk orientation, innovativeness and proactiveness but "score clever and stay forever" (Zellweger, Sieger and Muehlebach 2010, p. 211). We can conclude that the family culture incorporates the orientations, attitudes and beliefs of the family members (Kontinen and Ojala 2011b). These orientations guide the firm in formulating and implementing its strategies and structures (Gallo and Sveen 1991). Because the firms are expected to differ with regard to their orientation, it is likely that these differences will generate different culture-strategy-structure configurations.

3.3.   Strategy

The strategies of international family firms include the generic strategies of cost lead-ership and differentiation as well as that of marketing standardization. Differentiation involves offering unique, (usually) high-quality products that differ from the products of the firm's competitors (Porter 1980). Differentiation can be achieved by focussing on the product design or brand image, implementing advanced technology or offering superior customer service (Knight and Cavusgil 2005). Applied correctly, the differen-tiation strategy can generate a higher level of brand loyalty and higher profit margins than rival companies obtain, but it can also generate a relatively low market share. The cost leadership strategy typically involves keeping production, marketing and administrative costs low, which makes it possible to offer low-priced products (Porter 1980). The methods used to attain cost leadership are efficient scale facilities, cost reductions through experience and limitations on R&D and service costs (Knight and Cavusgil 2005). Although these strategies are considered to be alternative means of successful competitive positioning, firms in the real world feature both less defined approaches that keep them "stuck in the middle" and successful combinations of dif-ferentiation and cost leadership, which is called "outpacing" (Gilbert and Strebel 1987). Thus, the separate consideration of the two strategies (Knight and Cavusgil 2005) is advisable. In addition to the competitive strategies that guide how firms in-teract with their competitors, smaller family firms pursue market-based strategies that show how firms interact with their customers. The international marketing standardi-zation strategy has been shown to be the most applicable to SMEs (Merrilees and Tiessen 1999). A firm's marketing standardization strategy is analyzed in terms of standardization or adaptation of its marketing programme abroad (Cavusgil and Zou 1994). Hence, marketing standardization is defined as the extent of the similarity of a set of marketing program elements that a firm uses in foreign countries (Samiee and Roth 1992; Lages, Abrantes and Lages 2008; Chung, Wang and Huang 2012). An international marketing program includes four elements: product, price, place and promotion (Chung, Wang and Huang 2012). Cavusgil and Zou (1994) pointed out that the decision to either standardize a firm's marketing strategy or adapt it to for-eign markets is key in international activities.

Upton, Teal and Felan (2001) reported that the majority of rapid-growth family firms describe their business strategies as high-quality differentiation strategies rather than as low-cost strategies. These authors described fast-growth firms as companies that are willing to take risks, be innovative and act proactively, i.e. entrepreneurial firms. It appears that an entrepreneurial orientation makes it possible to identify opportunities in international markets and successfully implement differentiation strategies. How-

ever, family firms can also choose to be very conservative about their strategies due to their risk-averse organizational culture (Zahra, Hayton and Salvato 2004). This conservatism can leave firms "stuck in the middle" because neither of the generic strategies, i.e. differentiation or cost leadership, is pursued. In general, Donckels and Fröhlich (1991) suggest that family firms are likely to prefer opportunities with the potential for long-term stable outcomes over dynamic growth risk strategies. Moreover, one could argue that the international orientation of family firms influences the degree of marketing standardization. Hence, it appears that firm culture has important effects on firm strategy.

3.4.   Structure

In addressing the structure of international family firms, we focus on the structural integration of internationalization as well as the centralization and specialization of related decision-making. Structural integration is an organizational element describing practices such as international committees or project teams across functions (Miller and Friesen 1983). Structural integration helps family firms to internalize what it has learned during the internationalization process and to use this knowledge to compete effectively (Bloodgood, Sapienza and Almeida 1996; Zahra, Ireland and Hitt 2000). Centralization of decision-making is the extent of the decision-making authority that is concentrated at the headquarters (Chung, Wang and Huang 2012). In a centralized decision-making structure, most international decisions are conducted by the headquarters, whereas in a decentralized structure, the decision-making is conducted by or with a local representative (Solberg 2002; Chung, Wang and Huang 2012). In our study, specialization is indicated by whether the family firm has designated a particular individual or team as responsible for international activities, i.e. an export manager or an export department. Therefore, specialization is interrelated with role formalization because the former captures the extent to which family members focus their efforts on narrower or broader sets of tasks and the latter "relates to the formal recognition and delineation of tasks within an organization" (Sine, Mitsuhashi and Kirsch 2006, p. 124).

The decision-making structure of international family firms is said to be highly centralized, informal and unstructured (Tsang 2001). Family firms are often said to be owner-centred and unstructured in their approach to internationalization (Kontinen and Ojala 2010). Export activities often require centralized decision-making, whereas a local presence requires some form of decentralization (Claver, Rienda and Quer 2007). It is also reasonable to assume that the decision-making structure is dependent both on the firm's orientation (e.g. a risk-averse manager will tend to centralize decision-making) and on its strategy (e.g. a differentiation strategy works well with a

decentralized approach because local representatives have more knowledge of the quality and service needs of local customers). Zahra, Hayton and Salvato (2004) argue that centralization places power in the hands of the family management and "may stifle entrepreneurship by inducing rigidity within the family firm's structure" (p. 366). Hence, centralization can hinder the development of entrepreneurship and creative ideas within a firm. In contrast, a decentralized structure will indicate the firm's trust in its local representatives and will thereby enhance flexibility, creativity and new ideas (Zahra, Hayton and Salvato 2004).

3.5.   International Performance

International performance is understood as the degree to which a firm's objectives are achieved in international markets as a result of the configuration of international family firm's culture, strategy and structure. Because smaller family firms can pursue different economic targets, it is important to determine management's overall objectives and then to establish the degree to which the organization has met the objectives (Crick, Bradshaw and Chaudhry 2006). For instance, managers might only require marginal international activities to meet their objectives because of high demand in the home market. Thus, the family firm might decide to focus on the domestic market, which could result in a decreasing or stagnant international sales growth or market share (Crick, Bradshaw and Chaudhry 2006). Therefore, we follow Cavusgil and Zou (1994) and combine the importance of certain economic targets such as overseas sales growth, profitability, market share and return on investment with the degree of achievement of these goals.

The non-domestic performance of smaller family firms is still an under-researched issue. Although several family firm studies have focussed on the overall performance consequences of ownership, few studies have considered the outcome of organizational design. Most often, these studies have emphasized domestic activities and used an overall performance measure such as profits or sales growth (Naldi et al. 2007). The studies that explicitly address international family firms often consider past performance only as a control variable (Zahra 2003; Sciascia et al. 2012). Hence, Kontinen and Ojala (2010) suggested that future research consider the effects of internationalization on family firm performance. We contribute to this field of research by extending the knowledge on international performance and by providing information on the performance differences that result from different configurations of international family firms in terms of their culture, strategy and structure.

4.   Empirical Study

As a basis for our empirical study, we conducted a cross-sectional questionnaire survey among German SMEs from the manufacturing sector. We chose to focus on the manufacturing sector because in Germany, this sector consists of highly internationalized industries. We primarily addressed engineering firms and firms from the chemical, synthetics and textile industries. To select the international SMEs, we extracted the addresses of every fifth SME from the industry-based lists provided in the online address database Hoppenstedt to randomize the sample and avoid selection bias. We identified 3,500 international SMEs based in Germany through Hoppenstedt (for more information on the database see Schilke and Goerzen 2010). Furthermore, we tried to ensure that the selected firms were indigenous in that they were not part of a larger multinational firm (i.e. that they were not subsidiaries of larger firms), that they were not diversified and that they had a maximum of 500 employees. These characteristics are consistent with the German definition of an SME. We limited the sample to indigenous firms to exclude any effects that connections with multinational firms might have on small businesses in terms of resource acquisition, structuring and strategy. We chose to focus on non-diversified companies because diversified firms can face different competitive conditions depending on the division under investigation, can employ different strategic approaches based on the product category and can have different targets and different performance levels. To increase comparability, we excluded diversified firms. The different pieces of information were obtained from the database and cross-checked with the homepages of the firms whenever possible.

We sent out questionnaires to the senior managers of these firms by ordinary mail and by email. The questionnaire could be completed in writing or electronically according to the executive's preference. We sent two reminder emails and also made telephone calls to improve the response rate. Although we received notice that 123 questionnaires/emails were not deliverable, we collected 855 responses in total for a response rate of 25.3%. Next, we excluded some questionnaires from further analysis because they contained many missing values, because the firm in question had more than 500 employees or because it only reported conducting national activities. Furthermore, we excluded non-family firms, i.e. firms that are not owned and managed by families. We also controlled for whether the owner or managing director was the person who filled out the questionnaire. Hence, we conducted an additional telephone call for each questionnaire returned and asked about the position of the interviewee in question. All in all, of the 855 firms, 504 were considered to be suitable for the further empirical analysis. Descriptive statistics for the sampled firms can be seen

in Table D–1. The firms operate in four major German manufacturing industries: en-
gineering (33%), chemicals (24%), textiles (18%) and synthetics (16%).

	Minimum	Maximum	MV	STD	N
Number of employees	1.00	500.00	136.31	127.69	504
Age of firm in years	3.00	252.00	57.46	40.51	500
International experience in years	3.00	127.00	30.06	19.86	492
Time to internationalization in years	0.00	194.00	28.53	35.35	481
Foreign sales to total sales ratio	0.02	1.00	0.44	0.24	449

Table D–1:   Sample Statistics

Source: Own creation.

We compared the early and late respondents based on secondary data with respect
to size and age to test for non-response bias (Armstrong and Overton 1977) and
found no significant differences. Given that we focus on the perceptions of the actual
decision maker, who is the most qualified to answer questions regarding the strategy
and organizational design of the firm, single response bias can generally be assumed
to be limited (Hughes and Garrett 1990). Following the suggestion of Kumar, Stern
and Anderson (1993), we nevertheless tried to obtain a second respondent to vali-
date each set of responses by asking each senior executive to recommend a second
participant with appropriate knowledge. This procedure yielded 41 contact partners,
most of whom were export and sales managers. To test for inter-rater congruence
(Slater 1995), we sent a shorter questionnaire to these executives, and 29 responses
were returned. We found significant inter-rater correlations and insignificant mean
differences with no bias in a particular direction. These findings indicate the validity of
the data provided by the executives. However, because we must rely on the percep-
tions of these executives, we must also consider common method bias. Following
Podsakoff et al. (2003), we tried to avoid this problem by appropriately designing the
questionnaire. Ex post, we examined the potential bias using Harman's single factor
test. Common method variance does not appear to endanger our results, as the first
factor accounts for only 18.42% of the total variance explained in the exploratory fac-
tor analysis.

4.1.   Measurement

Family firm culture is represented using the three constructs: international orientation,
risk orientation and people orientation. Each of the constructs is measured using a
seven-point Likert-type scale. The measure for international orientation is based on the
research of Acedo and Jones (2007) and Dichtl, Koeglmayr and Mueller (1990). We
created a reflective scale for attitudes towards foreign markets and different cultures.
Risk orientation is the firm's attitude towards risk that is grounded in research on

managerial perceptions regarding risk-taking (March and Shapira 1987) In measuring the people orientation, we followed Amabile et al. (1996) in their research on how firms encourage creativity and Yli-Renko, Autio and Tontti (2002) in their research on the social capital of firms. The construct covers firm-internal communication that is said to increase learning and facilitate the accumulation of organizational knowledge.

Indicator	MV	STD	FL (EFA) (≥0.5)	ItTC (≥0.4)	α (≥0.6)	λ (CFA) (≥0.5)
International orientation					0.790	
We believe that geographic distance to overseas markets is not problematic at all.	4.45	1.62	0.911	0.710		0.853
We do not perceive different mentalities to be strange.	4.24	1.39	0.713	0.632		0.749
We travel abroad to learn about cultures.	4.50	1.44	0.624	0.564		0.656
Risk orientation					0.723	
When chances and risks are equally distributed in international decision-making situations, we refrain from the project (reverse coded)	4.03	1.03	0.755	0.566		0.886
We have a proclivity for high risk over low risk projects	4.15	1.06	0.754	0.566		0.638
People orientation					0.752	
The enforcement of unconventional ideas and the acceptance of creative thinkers are important to us.	4.31	1.48	0.688	0.517		0.684
We have an active communication across departments.	4.92	1.42	0.675	0.565		0.714
Group decisions take priority over individual decisions.	4.26	1.59	0.665	0.534		0.623
Our employees maintain private contacts.	4.43	1.48	0.613	0.579		0.609
Differentiation					0.792	
We control our product and service quality.	5.60	1.02	0.692	0.587		0.690
We try to stand out through extensive service.	5.30	1.35	0.685	0.603		0.684
The identification with the brand and with the company image is important to us.	5.48	1.26	0.676	0.592		0.667
We focus on high product quality.	5.85	1.11	0.618	0.520		0.593
We aim to provide special products and services.	4.98	1.30	0.559	0.500		0.581
We highlight a clear brand image.	5.05	1.34	0.558	0.488		0.557
Cost leadership					0.628	
We focus on efficiency.	4.72	1.65	0.818	0.460		0.766
We focus on cost reduction.	4.87	1.52	0.540	0.460		0.600
Marketing standardization					0.835	
Our marketing program is standardised globally.	4.55	1.75	0.725	0.650		0.721
Our distribution systems are similar worldwide.	4.19	1.75	0.710	0.637		0.708
We have the same advertisement across countries.	3.64	1.82	0.709	0.633		0.706
We try to reach a similar positioning of our product.	4.54	1.78	0.654	0.582		0.651
We standardise the price as compared to competitors.	4.23	1.76	0.641	0.581		0.643
Customer needs in our industry are similar worldwide.	4.10	1.82	0.629	0.567		0.632
Integration					0.883	
We have cross-national working groups.	2.71	1.82	0.883	0.799		0.872
We carry out workshops with an international composition.	2.93	1.93	0.866	0.797		0.874
We have project teams with international team members.	2.69	1.84	0.778	0.722		0.779
We have groups for internat. exchange, such as quality circles.	3.10	1.88	0.715	0.668		0.715

Note: The items were measured using seven-point Likert-type scales ranging from 1 = not at all to 7 = to an extremely high extent.
Centralization, specialization and international performance are not displayed in the table because reliability and validity testing is not appropriate for dichotomous variables and formative constructs (Diamantopoulos and Winklhofer 2001).

Table D–2:   Reliability and Validity of the Reflective Latent Constructs

Source: Own creation

Firm strategy was analyzed with reference to differentiation, cost leadership and marketing standardization. The three constructs were measured reflectively using seven-point Likert-type scales. To measure the use of the differentiation and cost leadership strategies, we created a scale based on Porter (1980) and Knight and Cavusgil (2005). Although Porter understood differentiation and cost leadership as alternative strategies, we measure them separately as did Knight and Cavusgil (2005). Because there might be firms that are stuck in the middle, it is reasonable to separate differentiation and cost leadership. Also, the possibility of an outpacing approach should be considered (Gilbert and Strebel 1987). The marketing standardization scale befitted from the research of Samiee and Roth (1992), Özsommer and Prussia (2000) and Lages, Abrantes and Lages (2008). The standardization of the marketing programme refers to the standardization of the marketing mix meaning the extent to which the marketing instruments are identical across countries (as opposed to an adaptation of the marketing mix to the single country markets). The standardization of the marketing programme is a key decision in international markets (Cavusgil and Zou 1994) and is considered a dimension of the global strategy (Zou and Cavusgil 1996). This strategy is highly relevant for SMEs because they are often sales driven in their international market approach.

We represented the structure of family firms as conceptualized using integration, centralization and specialization. We measured structural integration on a seven-point Likert-type scale. We followed Edström and Galbraith (1977) and Roth, Schweiger and Morrison (1991) and employed several items that indicated the use of international work groups and project teams. We measured centralization by asking whether international decisions such as those regarding (1) the extent of service offerings in different countries, (2) the hiring of employees in different countries, (3) the entry strategy in new countries and (4) the organization of international business are conducted in the home country by the family management or by (or together with) a foreign representative. If all of the four decision-making items were conducted in the home country, the firm was assigned a "1" for centralized structure; otherwise, a "0" was assigned. By creating this measurement we considered the research of Solberg (2002) and Chung, Wang and Huang (2012). In measuring specialization, we asked about the existence of a formal responsibility and reporting structure related to international activities (Sine, Mitsuhashi and Kirsch 2006). If the respondents indicated that there is no regular reporting process and/or that the owner is responsible for international activities, we considered the firm as not having a specialized structure and assigned a "0" to the firm. If the firm had established an export manager and/or an export department, we considered the firm to have a specialized structure and

assigned it a "1" (Beamish et al. 1999; Navarro et al. 2010). Hence, centralization and specialization were dichotomized.

All of the questions were pre-tested with ten firm owners. To assure the reliability of the multi-item measures, we performed exploratory factor analysis (principal axis EFA) using the Kaiser criterion and the Oblique rotation. We found a clear seven factor structure, as expected. We retained only the items that loaded high (≥0.5) on the factor in question. In Table D–2, we report the loadings of the single factor analyzes and the other reliability indicators of the reflective multi-item scales. In the next step, we assessed the item-to-total correlations and the Cronbach's Alpha for every latent construct. All of the constructs have satisfactory values above 0.4 for the item-to-total correlations and Cronbach's Alpha values above 0.6 (Nunnally 1967) or 0.7 (Nunnally 1978). Cost Leadership is the only construct that barely reaches the 0.6 threshold for Cronbach's Alpha. Because both items for the cost leadership construct are derived from the literature, because their content validity was checked in the pre-tests and because the other reliability and validity coefficients exhibit more than acceptable values, we decided not to exclude the construct from further analysis. As a final test of the validity of our constructs, we perform a confirmatory factor analysis (CFA) in Mplus. The CFA measurement model contains all of the latent constructs and achieved the following fit scores, which indicated adequate model fit: CFI 0.923, TLI 0.910, RMSEA 0.049.

International performance can be measured using objective data or managerial perceptions regarding financial and non-financial performance. The arguments against the use of objective scales are the reluctance of family firms to provide "hard" financial data, the fact that subjective measures usually yield more complete data, the impossibility of verifying the accuracy of any financial data on small family firms (SMEs are generally not required to publish financial data in Germany) and the industry-related effects of absolute financial scores. To assess the international performance of the sampled firms, we used the target approach and defined success as the degree to which an intended target is achieved (Cavusgil and Zou 1994). An assessment of the importance and the degree of achievement of different financial and non-financial targets considers the range of possible targets for SMEs in international markets. We used the following six targets: sales growth, productivity, ROI, profit, market share and capacity utilization. These targets were combined into one index I_{AZj} (see Formula D–1). We thereby suggest that smaller family firms can have different objectives when they pursue international activities, and hence we weight the achievement of the targets using their general importance. Our aim in this respect is to evaluate firm performance relative to the firm's international targets. The validity of

this measure is indicated by the correlation of the index value with several interna-
tional, i.e. non-domestic, performance measures: the subjectively perceived overall
satisfaction with the firm's international performance over the past five years (r=0.43),
sales growth over the past five years as compared to that of the firm's competitors
(r=0.27), return on investment over the past five years as compared to that of the
firm's competitors (ROI) (r=0.26), sales over the past five years as compared to that
of the firm's competitors (r=0.29), market share over the past five years as compared
to that of the firm's competitors (r=0.33) and capacity utilization over the past five
years as compared to that of the firm's competitors (r=0.38). All of the correlations
are statistically significant (p ≤ 0.001). We use the international performance index to
assess the performance differences between the configurations, and we supplement
the results by also considering the subjective measures.

$$I_{AZj} = \frac{\sum_{i=1}^{6} A_{ij} * Z_{ij}}{k_{ij}}$$

where:

I_{AZj}	=	Index of the international success of firm j
A_{ij}	=	Relevance of target i for firm j (seven-point Likert-type scale; 1 = not important at all to 7 = extremely important)
Z_{ij}	=	Extent of achievement of target i by firm j (seven-point Likert-type scale; 1 = not achieved at all to 7 = achieved in full)
k_{ij}	=	Number k of targets i of firm j based on condition A_{ij} > 1.

Formula D–1:   Index Value for Performance (Target Approach)

Source: Based on Cavusgil and Zou (1994) and Jager (2010).

4.2.   Method

To develop the empirical taxonomy, we used centralization, specialization and the
summated scores of the other constructs (risk orientation, international orientation,
people orientation, differentiation, cost leadership, marketing standardization and inte-
gration) to form distinct configurations. To form the intra-homogeneous and inter-
heterogeneous groups, we used a two-step cluster analysis procedure. The two-step
cluster analysis implemented in SPSS was designed to simultaneously handle mixed
variables measured on different scale levels (i.e. categorical and continuous variables).
This property is very important for our study because centralization and specialization
are binary variables and the other constructs are continuous. Moreover, the procedure
can be used to efficiently manage large samples, and it determines the number of clus-
ters automatically. The automatic determination of the appropriate number of clusters
is very useful because the identification of the "right" number of clusters can be arbi-
trary (as we know from traditional hierarchical clustering). The two-step clustering algo-
rithm includes two major steps. In the first step, cases are grouped based on a hierar-
chical algorithm. In the second step, an agglomerative clustering algorithm is used that

produces a range of different cluster solutions. Then, the number of solutions is reduced to the single best solution based on either the Bayesian information criterion (BIC) or the Akaike information criterion (AIC). Both information criteria are measures of the relative goodness of fit of the competing models. We used the BIC first and then the AIC and found that both the BIC and the AIC tend towards the four-cluster solution, which supports the validity of our clustering results. Furthermore, a combination of hierarchical and agglomerative clustering has been recommended by Ketchen and Shook (1996) for management research.

Because we used binary and continuous variables for the cluster analysis, we employed multinomial logistic regression analysis instead of discriminant analysis to validate the cluster solution. We used the cluster membership as the dependent variable and the two binary variables and the seven continuous variables for culture, strategy and structural integration as the independent variables. We obtained a perfectly fitted model with Nagelkerke $R^2 = 1.00$ and 100% correctly classified cases, which validated our cluster solution.

To confirm the stability of our cluster solution, we selected a random 50% sample and performed the exact same two-step cluster analysis again. Every firm belonged in the same group as in the extended (i.e. original) sample. This result clearly indicates the stability of our cluster solution. In addition, changing the order of the cases or changing the order of the variables does not change the cluster solution.

Subsequently, we conducted a one-way analysis of variance (ANOVA) and t-tests to assess the performance differences across the clusters. It is useful to analyze the mean values and the variances of several descriptive variables across clusters to describe the clusters in more detail. Profiling the groups using variables that are different than those entered in the cluster analysis can help us to characterize the clusters. Therefore, we used several descriptive variables, such as firm demographics and international entrepreneurship variables, to further profile the cluster solution.

5.   Results

First, we performed a two-step cluster analysis. The cluster analysis yielded a four-cluster solution that can be seen in Table D–3. As stated before, the validity and stability of the four-cluster solution was supported. We also see that all F-values apart from those for the cost leadership strategy are statistically significant, which indicates the distinctive attributes of the cluster solution. Additionally, the χ^2 statistic that measures the discrepancy between the observed and the expected cell counts shows that

there is a significant relationship between cluster membership and centralization and specialization. The strength of the relationship can be assessed using symmetric measures such as Cramer's V. The values of Cramer's V for centralization and specialization are highly significant (p ≤ 0.001) and indicate perfect strength.

Second, we supplement the cluster results by testing for performance differences between the clusters, which can be seen in Table D–4. We find that the four clusters significantly differ in their international performance as conceptualized and measured using the target approach. Cluster 4 is the top-performing group, whereas cluster 1 is the lowest performing configuration and clusters 2 and 3 exhibit equal levels of international performance in accordance with the principle of equifinality. We supplement this perspective on international performance by considering several financial and non-financial indicators of international performance as well as the firms' foreign sales ratios and their total sales. The statistically significant F-values show that the performance levels of the four configurations differ not only based on the target approach but also based on the other measures. Clearly, the cluster 4 firms are the top performers, with the highest foreign sales ratios and the highest total sales. Cluster 1 scored the lowest on nearly all performance measures, with the notable exclusion of total sales. Cluster 2 and cluster 3 are similar in terms of most measures but differ in their total sales.

Variables	Cluster 1 Domestic-focussed Traditionalists[1]	Cluster 2 Global Standard-iser	Cluster 3 Multina-tional Adapters	Cluster 4 Transna-tional Entre-preneurs	F/ χ^2 [2]	t-tests[3]
n	101	100	156	147		
International orientation	3.95	4.18	4.40	4.86	12.889 ***	1vs.3, 1vs.4, 2vs.4, 3vs.4
Risk orientation	3.80	3.99	4.13	4.31	6.730 ***	1vs.3, 1vs.4, 2vs.4
People orientation	4.10	4.36	4.58	4.72	6.909 ***	1vs.3, 1vs.4, 2vs.4
Differentiation	5.26	5.37	5.44	5.67	5.112 **	1vs.4, 2vs.4, 3vs.4
Cost leadership	4.86	4.99	4.63	4.79	1.526 ns	2vs.3
Marketing standardization	4.21	4.45	4.00	4.26	2.559 *	2vs.3
Integration	1.90	2.21	3.06	3.74	40.516 ***	1vs.3, 1vs.4, 2vs.3, 2vs.4, 3vs.4
Centralization	Centralized	Centralized	De-centralized	De-centralized	504.000 ***	--
Specialization	Not Specialized	Specialized	Not Specialized	Specialized	504.000 ***	--

[1] The cluster mean values are shown.
[2] F values are shown for the metrical variables, and the Chi-Square (χ^2) values are shown for the categorical variables (centralization and specialization).
[3] Only the significant differences are shown (p ≤ 0.05).
* = p ≤ 0.05, ** = p ≤ 0.01, *** = p ≤ 0.001, ns = not significant.

Table D–3:   Four Cluster Solution
Source: Own creation.

55>5>5>5>5>

Variables[1]	Cluster 1 Domestic-focussed Traditionalists[2]	Cluster 2 Global Standard-iser	Cluster 3 Multina-tional Adapters	Cluster 4 Transna-tional Entre-preneurs	F	t-tests[3]
n	101	100	156	147		
International performance	19.52	22.56	22.80	26.12	13.814 ***	1vs.2, 1vs.3, 1vs.4, 2vs.4, 3vs.4
Overall satisfaction[4]	4.94	4.89	5.11	5.33	5.378 ***	1vs.4, 2vs.4, 3vs.4
Sales growth[5]	5.06	5.45	5.39	5.79	8.894 ***	1 vs. 2, 1vs.3, 1vs.4, 2vs.4, 3vs.4
ROI[5]	4.36	4.64	4.66	4.85	4.278 **	1vs.3, 1vs.4
Sales[5]	4.40	4.75	4.83	5.11	8.739 ***	1 vs.2, 1vs.3, 1vs.4, 2vs.4, 3vs.4
Market share[5]	4.35	4.55	4.68	5.08	13.272 ***	1vs.3, 1vs.4, 2vs.4, 3vs.4
Capacity utilization[5]	4.68	4.90	4.87	5.18	5.323 ***	1vs.4, 2vs.4, 3vs.4
Foreign sales to total sales ratio	0.36	0.43	0.44	0.57	1.541ns	1vs.2, 1vs.3, 1vs.4
Total sales in m EUR	27.82	17.57	43.85	55.05	6.920 ***	1vs.2, 1vs.4, 2vs.3, 2vs.4

[1] All variables apart from total sales refer to international activities only.
[2] Mean values are shown.
[3] Only significant differences are shown ($p \leq 0.05$).
[4] Measured using seven-point Likert-type scales: How satisfied are you with your overall international performance?
[5] Measured using seven-point Likert-type scales: How successful have you been on average during the last five years? Please answer using one of the following categories: 1=more than a 20% decrease, 2=11-20% decrease, 3=1-10% decrease, 4=unchanged, 5=1-10% increase, 6=11-20% increase, 7=more than a 20% increase.
* = $p \leq 0.05$, ** = $p \leq 0.01$, *** = $p \leq 0.001$, ns = not significant.

Table D–4:   Performance Differences (based on ANOVA and t-tests)
Source: Own creation.

Third, we characterize and discuss the configurations using the variables entered in the cluster analysis, the resulting performance differences and additional descriptive variables. The additional variables are shown in Tables D–5 and D–6. We used the variables that indicate the internationalization of the sampled firms and those that indicate the firms' general demographics and resource base. Hence, to achieve a complete picture of the configurations, we profile the clusters based on diverse criteria. Although we always begin by describing the strategic, cultural and structural constructs, we will also consider the major differences with regard to the other dimensions to foster a comprehensive interpretation of the configurations.

The firms that belong to cluster 1 are very distinctive because they score the lowest on nearly all dimensions; cost leadership and marketing standardization are the exceptions. It appears that these firms have a limited international orientation, are rather risk averse and do not emphasize creative ideas at the firm level. Although these firms appear to favour the use of the differentiation approach to market their products, they still have the lowest mean value as compared to the other clusters. The firms also focus on costs but do so less strongly than those in cluster 2. These results could imply that these firms are "stuck in the middle". The firms in cluster 1 have a centralized interna-

tional decision-making structure and no specialized role for international activities. The responsibility for international activities lies primarily with the firm management at the headquarters. All of the international decisions are made in Germany. International work groups or product teams are not often used. This structure fits well with a rather standardized marketing approach and the traditional risk-averse and domestically fo-cussed orientations of these family firms. Internationalization is most likely perceived as a means of selling surplus production and maybe even as necessary evil. The firms appear to lack a global vision and a clear international structure or strategy. Hence, it is no wonder that these firms are clearly the weaker performers with regard to interna-tional performance. Cluster 1 includes the smallest firms in terms of their number of employees, and they have the least financial resources. Moreover, these firms score the lowest on technological and international know-how. Hence, these firms lack the resources and the capability to attain and sustain competitive advantage in international markets. Moreover, one could argue that these firms are in the beginning stages of in-ternationalization because they are primarily operating in neighbouring countries, serve the least number of markets, have the least number of production subsidiaries abroad and focus on indirect and direct export modes. Although the firms have a substantial foreign sales ratio, their ratio is lower than those of the other groups. However, contrary to what is indicated in the stage models, the firms in cluster 1 do not have the least in-ternational experience. Given that these firms have rather high total sales, they may primarily focus on penetrating the home market instead of expanding into foreign mar-kets. Based on this profile, we name this group the "Domestic-focussed Traditionalists".

The family firms that belong to cluster 2 are similar to those in cluster 3 because both groups score midrange on nearly all dimensions. What is special about the firms in cluster 2 is that they have the highest score with regard to cost leadership and market-ing standardization. This emphasis fits well with a centralized decision-making struc-ture and role specialization because centralization and specialization can decrease coordination efforts and, hence, increase efficiency (Sine, Mitsuhashi and Kirsch 2006). These firms operate in approximately 28 countries, which is considerably more than cluster 1 serves and similar to the number that cluster 3 serves. Their FSR is also very similar to that of cluster 3 and accounts for about 43%. The firms have a similar international performance, but they also differ in several respects. The family firms in cluster 2 have fewer employees abroad, but they have significantly more international experience. It appears that these firms have used the effects of experience to become more efficient in their foreign market approach. Cluster 2 firms tend to standardize their marketing and centralize their decision making to achieve global efficiency. Following Bartlett and Ghoshal (1991), we name this cluster the "Global Standardisers".

Variables	Cluster 1 Domestic-focussed Traditionalists[1]	Cluster 2 Global Standard-iser	Cluster 3 Multina-tional Adapters	Cluster 4 Transna-tional Entre-preneurs	F	t-Tests[2]
n	101	100	156	147		
Age in years	52.00	57.88	60.66	57.58	0.935 ns	
Number of employees	78.02	94.30	152.01	188.29	21.973 ***	1vs.3, 1vs.4, 2vs.3, 2vs.4, 3vs.4
Number of employees abroad	9.18	8.89	37.42	46.86	13.900 ***	1vs.3, 1vs.4, 2vs.3, 2vs.4
Financial resources[3]	3.68	4.37	4.48	4.82	11.061 ***	1vs.2, 1vs.3, 1vs.4, 2vs.4 ,3vs.4
Technological know-how[3]	4.72	5.00	5.10	5.43	5.190 **	1vs.3, 1vs.4, 2vs.4, 3vs.4
International know-how[3]	4.47	4.71	5.02	5.27	7.816 ***	1vs.3, 1vs.4, 2vs.4
Number of foreign countries	15.25	28.73	28.84	34.90	9.056 ***	1vs.2, 1vs.3, 1vs.4
Number of production subsidiaries abroad	0.51	0.75	1.29	1.20	3.984 **	1vs.3, 1vs.4
International experience in years	29.05	33.48	28.30	30.21	1.470 ns	2vs.3
Time to internationalization in years	25.43	24.55	32.30	28.19	1.226 ns	

[1] Mean values are shown.
[2] Only significant differences are shown (p ≤ 0.05).
[3] Measured using seven-point Likert-type scales ranging from 1 = not at all to 7 = to an extremely high extent: To what extent do you posses the following resources (as compared to your competitors)?
* = $p \leq 0.05$, ** = $p \leq 0.01$, *** = $p \leq 0.001$, ns = not significant.

Table D–5:   Cluster Profiles (based on ANOVA and t-tests)

Source: Own creation.

Variables		Cluster 1 Domestic-focussed Traditionalists	Cluster 2 Global Standard-iser	Cluster 3 Multina-tional Adapters	Cluster 4 Transna-tional Entre-preneurs	χ^2
n		101	100	156	147	
Dominant operation mode[1]	Indirect export	27.6	16.7	10.5	9.6	66.025 ***
	Direct export	59.6	72.9	56.9	55.5	
	JV and/or licenses	3.2	2.0	5.9	1.4	
	Sales subsidiaries	1.1	5.2	7.8	17.1	
	Production subsidiaries	8.5	3.1	19.0	16.4	
Regional expansion[2]	Neighbouring countries	96.0	99.0	98.1	99.3	4.117 ns
	Western Europe	68.3	82.0	73.1	83.0	9.971 *
	Eastern Europe	48.5	61.0	55.8	70.7	13.785 **
	Northern America	37.6	37.0	52.6	60.5	19.621 ***
	Asia	37.6	55.0	60.3	74.8	35.050 ***
	Others	20.8	16.0	32.3	33.6	13.446 ***

Note: The percentages for each cluster are shown. The modes add up to 100%, but not the regions.
[1] Which of the following is your firm's dominant operation mode? (Licenses and joint ventures were combined by the authors for this illustration.)
[2] In which regions does your firm operate? Multiple answers are possible.

Table D–6:   Cluster Profiles (based on Frequencies)

Source: Own creation.

As previously discussed, cluster 3 resembles cluster 2. However, there are a few distinctive differences between the two clusters. First of all, cluster 3 has the lowest mean value for marketing standardization, which means that this group tends to be less standardized in its marketing approach. Therefore, one can expect the adaptation of some marketing elements. Furthermore, cost leadership is less important for these firms than for the Global Standardisers. These firms increasingly see the relevance of international work groups and hence decentralize their international decision making. Thus, decisions are conducted by or with local representatives. However, there is no formal role in this respect, and family managers are responsible for foreign market activities. In addition, these firms have significantly more employees, both at home and in foreign markets. The stronger international commitment and the increased international presence of cluster 3 firms are also demonstrated by the importance of their production subsidiaries and their extended regional diversification. The firms' local presence and decentralized decision making eases local responsiveness (Chung, Wang and Huang 2012). Linking this profile with the research of Bartlett and Ghoshal (1991), we come to the conclusion that cluster 3 resembles "Multinational Adapters".

The cluster 4 firms have a very distinctive profile. Apart from the cost and marketing strategy variables, these firms score the highest on nearly all dimensions. The cluster 4 firms have the highest international orientation, are the most willing to accept risks and believe in the benefit of people and creative ideas inside the organization. These firms focus the most on product and service quality, aiming to develop a clear differentiation strategy. Cluster 4 firms see more of a need to introduce international workgroups than the other clusters do. These family firms decentralize their decision making and implement specialized roles for international business. It appears that these cluster 4 firms, which have many employees, truly embrace internationalization – and they do it successfully, obtaining the highest international performance across the clusters. This top-performing group combines a positive attitude towards international activities with a strong resource base. In particular, capabilities such as technological know-how and international know-how have high mean values in this group, which indicates that these firms are technologically oriented and have a global vision. This result somewhat supports the assumption that being successful and competitive in international markets is connected with firm-specific resources and capabilities (O'Regan, Ghobadian and Gallear 2006). These top-performing firms do not appear to have a regional focus and have more of an international presence through their sales subsidiaries than the other firms do. Referencing this top-performing profile with Bartlett and Ghoshal's (1991) framework, we decide to name this group "Transnational Entrepreneurs".

6.   Discussion

This study provides an important contribution to the research on family firm internationalization by developing a taxonomy of small international family firms. We analyzed the internationalization of family firms in more detail because little is known about the interplay of culture, strategy and structure for family firms in international markets. With this study, we responded to the call by Kontinen and Ojala (2010) to increase the research on the internationalization of family firms not only in a descriptive, but also in an empirical way. In addition, we followed these recommendations by expanding the knowledge on the strategies and structures of family firms. Moreover, we contribute to the research on internationalizing family firms by considering international, i.e. non-domestic, performance. Many studies of internationalized family firms have either disregarded performance or focussed on total sales (growth). Hence, we extend the knowledge on the performance consequences of organizational configurations outside of the home countries of family firms. Furthermore, Kontinen and Ojala (2010) called for studies on the resources that are used by family firms to balance their limited access to financial resources in the context of internationalization. Our study serves this function by characterizing the clusters based on their international and technological know-how. We found that resources such as international and technological know-how differentiate the clusters, but also that financial resources appear to differ between the clusters. International know-how is important to a company because family members with experience in international business will be internationally oriented and willing to take risks. Thus, with a better knowledge of foreign markets, these managers can decide more precisely which strategies they should pursue to gain competitive advantage and achieve success. Heeding the call by Sciascia et al. (2012) for research that takes into account the different international entrepreneurship variables, we found that the configurations did not differ significantly with regards to time to internationalization, i.e. born globalness and international experience. However, there appears to be a connection between the configurations discussed in this study and the internationalization stages discussed in the behavioural-based stage models of internationalization (Johanson and Vahlne 1977; Bilkey 1978). Although we built the taxonomy based on classic organizational variables such as culture, strategy and structure, we see that the configurations differ with regard to the number of countries in which the firms operate, the foreign operation modes and the geographical scope of their foreign market activities.

Are there different configurations of international family firms with regard to firm culture, structure and strategy?

Yes, we can conclude that there are different configurations of international family firms. Using the taxonomic approach, we discovered four distinct types of international family firms: Domestic-focussed Traditionalists, Global Standardisers, Multinational Adapters and Transnational Entrepreneurs. The configurations are best defined by their different cultures and structures. Firm culture appears to be related to firm structure: depending on their strategy, the more internationally oriented firms tended to exhibit some form of international organizational structuring in terms of decentralization and/or specialization. We can conclude that family firms can align their strategies and structures to their unique culture in different ways. If the organizational variables fit, the firm can attain and sustain competitive advantage (Knight and Cavusgil 2005).

What combination of strategies, structures and firm orientations promises success for family firms in international markets?

The top-performing firms were the Transnational Entrepreneurs – firms that are internationally oriented, people- and idea-driven, in which risk-taking within a decentralized and specialized structure facilitates efficient responses to foreign environments and provides international customers with high-quality products and services. The Transnational Entrepreneurs are the only group that have created formal positions or departments that specialize in managing international business (i.e. export managers or export departments) and these firms also share decision-making power with local representatives. Although we cannot identify a causal relationship here, we can supplement the results of Zahra, Hayton and Salvato (2004) by stating that a decentralized structure is related to certain entrepreneurial orientations and to international success. Implementing an international structure using decentralization and specialization requires an international orientation. Hence, we agree with Gallo and Sveen (1991) that implementing a culture that is favourable to internationalization and preparing the family for internationalization is beneficial when firms are adapting to foreign contexts. Furthermore, and in accordance with the equifinality principle, we found that the Global Standardisers and Multinational Adapters are similarly successful in terms of international performance.

What firm-level factors differentiate between those firms?

Here, it should be noted that we found a number of firm variables that were not included in the cluster analysis but that nevertheless clearly differentiated the groups. Firm size and firm resources distinguished the configurations from one another. However, demographic variables such as firm age, time to internationalization (sometimes referred to as born globalness) and international experience did not differ across the clusters. Although the clusters differ in their levels of regional expansion and their

dominant operation modes, it appears that the groups examined in this study are not dependent on the time lag between when each firm was founded and its first international activities, although this criterion is often used to identify born global firms.

The findings of this study also have several practical implications for family firm managers. First, the top-performing group of family firms are the transnational entrepreneurs. This configuration can serve as a benchmark for other family firms. Although we discussed real types and not ideal types, firm managers can learn from this successful group. However, small family firm managers might also want to analyze their own organizational cultures first and then compare their firms with the groups discussed in our study. It appears that a certain degree of international orientation, risk orientation and people orientation is necessary for success in foreign markets. If this level is not achieved, then a home-market focus might be the best approach. If the firm wants to grow internationally, then those orientations must be enhanced. The firm must believe in the potential of international business and be willing to pursue (uncertain) international opportunities. Second, firm managers can learn that there are different configurations of family firms in terms of their chosen orientations and how these orientations fit with the firm strategies and structures. Although the Transnational Entrepreneurs were the most successful firms, both the Global Standardisers and the Multinational Adapters exhibited sound configurations of orientations, strategies and structures that resulted in solid international performance. Third, there appears to be a connection between the configurations discussed in this study and the internationalization of family firms. It might be worthwhile for managers to consider their firms' level of internationalization and how compatible it is with the firm's organizational culture, structure and strategy. If family firms aim to successfully expand internationally, then their managers might want to consider the configurations Global Standardiser, Multinational Adapter or Transnational Entrepreneur. Depending on the level of international activity sought, i.e. the degree of internationalization in terms of the firm's operation modes and countries served, the manager can use the configurations described in this study as an orientation or even a target.

7.   Limitations and Further Research

This study has several limitations, which we will describe in the following. In this section, we will also discuss avenues for further research. We focussed on German firms, which might limit the generalizability of our findings. Further research on the internationalization of family SMEs should attempt to include firms from different countries. We believe that the culture of the home country could have an impact on

the firm's culture. A second limitation of the study is that only manufacturing firms were investigated. The results cannot be generalized to family firms in the service sector. Kontinen and Ojala (2010) called for more research on family firms from the high-tech or service industry. We only focused on family SMEs because we expect the larger family firms to have different characteristics with regard to internationalization. Therefore, future research might consider firms from different industries and larger firms. Furthermore, the use of perceptual data in our study appears to be another limitation. Although German firms are not required to publish financial data, it would have been beneficial to collect objective data on performance to validate and supplement our data. Moreover, future research could employ more fine-grained measures of centralization because family firms can select different levels of centralization in their international decision-making structures.

Regarding our conceptual model, it is important to note that firm orientations, structures and strategies are reasonable and useful factors to consider but that other factors might also be relevant. Several other internal factors, such as the personality and attitudes of the executives or the relationships between the family members and the employees, play an important role in the internationalization of family firms and should be investigated in the future. Further research on international family firms should also focus on how the internationalization process or its different stages influence organizational configurations over time. There may be ideal types for each stage of internationalization. Indeed, our results led us to believe that there might be a relationship between the configurations of family firms and their stages in the internationalization process. We imagine that certain types of family firms may be more successful during certain stages of the process. Given that we found that the groups differ with regard to their international expansion and their operation modes, the connections between the successful organizational design of family firms and their particular international stage, profile or pattern should be researched (Jones and Coviello 2005).

Finally, we used cluster analysis (which is an exploratory technique) to identify relationships. This method is an appropriate one for developing a taxonomy (Ketchen and Shook 1996; Knight and Cavusgil 2005), and the findings are consistent with our conceptualizations and with the theory in the field. However, in further research, it would be interesting to use confirmatory methods such as structural equation modelling to test the direct causal effects of culture, strategy and structure on international performance. Moreover, longitudinal data would be extraordinarily helpful to researchers analyzing not only how firm factors influence performance during internationalization but also how internationalization affects family firms' culture, strategy and structure.

E.   Study 4: Linking Processes and Dynamic Capabilities of International SMEs: The Mediating Effect of International Entrepreneurial Orientation

1.   Introduction

Internationalization research has highlighted the role of knowledge and learning in the internationalization process of both multinational enterprises and small and medium-sized enterprises (Johanson and Vahlne 1977). Exploring, analyzing and planning international activities can create knowledge and therefore serve as a critical factor in successfully internationalizing firms (Knight and Liesch 2002; McGee and Sawyerr 2003). While this argumentation is theoretically reasonable, empirical studies have shown inconsistent results. Seringhaus (1993) stressed the importance of information for SMEs, whereas Li, Li and Dalgic (2004) showed that SMEs tend to follow an unsystematic decision-making process. Similarly, Crick and Spence (2005) found that internationalization strategies may be unplanned. Armario, Ruiz and Armario (2008) demonstrated that SMEs must spend more time seeking sources of export information to stay competitive. In another recent study, however, it was shown that market orientation (which includes information acquisition) has no significant influence of the international performance of SMEs (Frishammar and Andersson 2009). As results are inconclusive, it seems that little is known about how SMEs capitalize on foreign market scanning and planning processes to achieve superior performance. We extend the knowledge on this relationship by including international entrepreneurial orientation as a dynamic capability into our reasoning. Thereby, we aim to examine the mediating influence of a capability on the relationship between scanning and planning processes and the international performance of SMEs.

Consequently, we intend to contribute to this field by analyzing the following research questions. First, why and how do scanning and planning processes contribute to the international performance of established international SMEs? Second, what role does international entrepreneurial orientation play in mature international SMEs?

It is theoretically and practically relevant to study whether and why scanning and planning exerts an influence on the international performance of SMEs. As these processes may have direct or indirect performance effects, managers should know whether investing scarce resources into these processes makes sense. As Cadogan et al. (2006) noted, SMEs tend to reduce information collection in foreign markets if

they lack the necessary resources, which is often the case. Responding to the calls of Jones and Coviello (2005) and Jantunen et al. (2005) to analyze entrepreneurial orientation in studies on international SMEs, we include international entrepreneurial orientation as an intervening factor and dynamic capability in our reasoning. Thereby, we enhance the knowledge on how SMEs make use of processes leading to competitive advantage. In doing so, we discuss the central role of international entrepreneurial orientation as a dynamic firm capability in established international SMEs.

The remainder of this manuscript is organized as follows. We use resource-based logic and the dynamic capability perspective to highlight the significance of processes and capabilities. Then, we discuss the literature on entrepreneurial orientation, scanning and planning, as well as the respective implications concerning performance. The hypotheses are empirically tested using several structural equation models. Finally, the results are discussed, followed by limitations and directions for further research.

2.   Theoretical Background

The resource-based view suggests that a firm can attain and sustain competitive advantage only if the firm creates an idiosyncratic pool of resources (Dhanaraj and Beamish 2003; Lu et al. 2010). However, the literature presents different definitions of resources. Barney (1991) classified resources broadly as "all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc." (p. 101). This definition partly resulted in a synonymous usage of the terms. We follow the perspective that resources, processes and capabilities clearly differ from one another.

Processes are actions in which firms engage to accomplish a business purpose or objective (Ray, Barney and Muhanna 2004). Scanning processes, on the one hand, are implemented to create knowledge about foreign markets and customers (Knight and Liesch 2002). Planning processes, on the other hand, intend to guide the activities of the firm and create adaptive thinking (Martinez and Jarillo 1991; Miller and Cardinal 1994). The implementation of processes to systematically explore, analyze, and plan international activities is not only an important management task but also a critical factor for success (McGee and Sawyerr 2003). Hence, processes are viewed as a way to exploit a firm's resources to create competitive advantage, as resources cannot be a source of competitive advantage by themselves (Ray, Barney and Muhanna 2004). However, not all processes will be a source of competitive advantage for a firm (Ray, Barney and Muhanna 2004). The resource-based view suggests

that processes that exploit intangible firm resources are more likely to be a source of competitive advantage than processes that exploit tangible firm resources (Barney 1991). Of course, intangible and tangible resources must often be combined to enable the implementation of a particular process.

Capabilities refer to a firm's competence to make use of resources and processes and combine them with other processes and intangible resources such as knowledge (Lu et al. 2010). Amit and Schoemaker (1993) defined capabilities as "a firm's capacity to deploy resources, usually in combination, using organizational processes, to effect a desired end" (p. 35). From the dynamic capability perspective, capabilities can be understood as a firm's orientation to integrate and reconfigure its resources and processes and, even more importantly, transform its processes in response to foreign environments to achieve sustainable competitive advantage (Wang and Ahmed 2007). Thereby, the term dynamic refers to the capacity of adapting to changing environments and finding innovative solutions to new problems through the adaptation, integration and reconfiguration of resources and processes (Teece, Pisano and Shuen 1997). Wang and Ahmed (2007) described the nature of dynamic capabilities as behavioural orientation, whereas Teece, Pisano and Shuen (1997) considered dynamic capabilities to be an ability, or a capacity (Teece 2007). As Barreto (2010) pointed out more recently, there are many different conceptualizations and definitions of what dynamic capabilities are. Hence he suggested a definition of dynamic capabilities that accommodates important ideas within the field: "A dynamic capability is the firm's potential to systematically solve problems, formed by its propensity to sense opportunities and threats, to make timely and market-oriented decisions, and to change its resource base." (p. 271). The author viewed dynamic capabilities as a multidimensional composite construct that highlights the following main thoughts on dynamic capabilities: (a) the propensity to sense opportunity and threats (Gilbert 2006), (b) the propensity to make timely decisions in order to be ahead of competitors (Teece, Pisano and Shuen 1997), (c) the potential to systematically solve problems as compared to trial and error learning and (d) the propensity to reconfigure the resource base of the firm (Eisenhardt and Martin 2000). Although Eisenhardt and Martin (2000) defined dynamic capabilities as processes, there is a general difference between dynamic capabilities and processes in that dynamic capabilities cannot be bought or transferred (Makadok 2001). Processes, however, are often explicit combinations of tangible and intangible resources and can thus be transferred. Following a hierarchical perspective (Winter 2003; Wang and Ahmed 2007), we argue that resources build the zero-order or base element. Processes are first order because they are based on tangible and intangible resources. Capabilities are

third-order elements because they combine resources and processes to achieve a desired end. Dynamic capabilities build on (mere) capabilities because they combine resources and processes in response to changing environments.

We interpret entrepreneurial orientation as an essential dynamic capability of SMEs to reconfigure scanning and planning processes to match the requirements of changing environments by identifying and exploiting international opportunities. Thereby, we refer to the above stated definition of dynamic capabilities and the capability-building mechanism that affects economic profit after the acquisition of a resource (Makadok 2001). Teece, Pisano and Shuen (1997) suggested a similar distinction, arguing that sustainable competitive advantage involves not only the resources owned by a firm but also how the firm integrates, combines and transforms these resources through dynamic capabilities. Hence, dynamic capabilities are directly linked to firm performance (Teece, Pisano and Shuen 1997). Moreover, scanning and planning processes are closely connected to entrepreneurship and the discovery of opportunities (Teece 2007). The constructs are strongly related to SME learning (Baker and Sinkula 2009). Zahra, Zapienza and Davidsson (2006) noted that the creation and use of dynamic capabilities corresponds to the perception of opportunities by the entrepreneur or the principal decision maker(s). Consequently, we propose that scanning and planning are processes that combine tangible and intangible resources within a firm to achieve a certain purpose that often contributes to a small firm's knowledge development and learning. As these processes are potentially transferrable, we argue that the processes must be transformed through the entrepreneurial orientation of small firms to create and sustain a competitive advantage. The entrepreneurial orientation is viewed as a dynamic capability that has the propensity to sense and seize international opportunities in an innovative, market-oriented and timely manner. By applying the capability-building perspective, we enrich the understanding of the role of entrepreneurial orientation as a key dynamic capability of international SMEs.

However, we must acknowledge an additional but different role of international entrepreneurial orientation. It has been argued that entrepreneurs have unique insights into the value of resources and processes and hence influence the extent to which scanning and planning processes are carried out. Therefore, entrepreneurial orientation as dynamic capability could be viewed as antecedent factor. This reversed causality fits well with the discussion on dynamic capabilities led by Eisenhardt and Martin (2000). Eisenhardt and Martin (2000) defined dynamic capabilities as specific firm processes and strategic routines by with firms achieve new resource combinations. Hence, the authors stated: "Dynamic capabilities are the antecedent organizational

and strategic routines by with managers alter their resource base" (p. 1107). Also Barreto (2010) argued that this view is consistent with previous research. Although many studies have assumed a direct link between dynamic capabilities and performance, the relationship may as well be of indirect nature. Following this theoretical argument, entrepreneurial orientation could be understood as an antecedent factor that influences resource acquisition through scanning and planning. Given that former research has found entrepreneurial orientation to be an antecedent factor to market orientation (Matsuno, Mentzer and Özsomer 2002) and different business processes (Knight and Cavusgil 2004), we must consider that entrepreneurial orientation also influences business processes. Covin and Slevin (1991) argued in their seminal work that the entrepreneurial posture (i.e. the propensity to innovate, be proactive and take risks) both influences and is influenced by organizational resources and competences. The authors elaborated not only that resources and processes build the basis for entrepreneurship but also that entrepreneurship influences how resources are used. In their conceptual model, Covin and Slevin (1991) already introduced the idea of a possibly reciprocal relationship assuming that capabilities and resources have a stronger effect on entrepreneurial orientation than the other way around. The authors also stressed performance as dependent variable.

Consequently, we aim to research the mediating effect of international entrepreneurial orientation on the process-performance relationship. Extending this line of thought, we test the reciprocal relationship between processes and international entrepreneurial orientation as a dynamic capability (see Figure E–1).
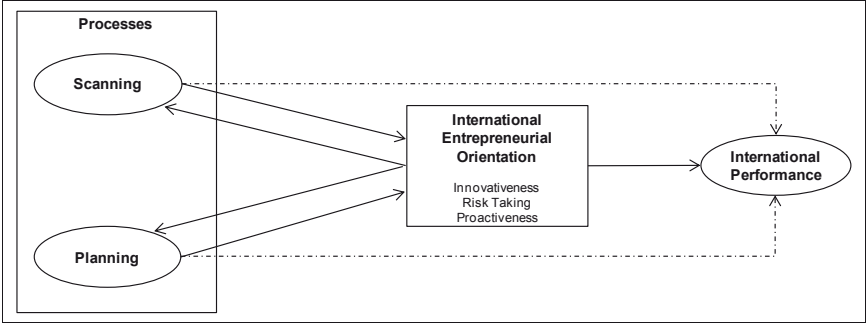

Figure E–1:   Conceptual Framework
Source: Own creation.

3.   Hypothesis Development

3.1.   *International Entrepreneurial Orientation*

There are several termini to describe entrepreneurial firms (e.g. entrepreneurship, entrepreneurial orientation, entrepreneurial posture and entrepreneurial management), which are often used interchangeably. However, some general definitions have found common acceptance. Stevenson and Jarillo (1990), for example, described entrepreneurship as pursuing opportunities. These opportunities exist in domestic and international markets (Zahra and Garvis 2000; Kontinen and Ojala 2011a). Hence, entrepreneurship can be found not only in new venture creation but also in entering and penetrating foreign markets (Lumpkin and Dess 1996). In this study, we focus on international entrepreneurial orientation, which can be viewed as a precursor to entrepreneurship and entrepreneurial behaviour (Jantunen et al. 2005). The construct is fundamentally based in entrepreneurship research and applied to international firms. According to Knight and Cavusgil (2004), international entrepreneurial orientation is characterized by the "firm's overall innovativeness and proactiveness in the pursuit of international markets" (p. 129). Hence, international entrepreneurial orientation is associated with risk taking, innovativeness and proactiveness (Miller 1983; Covin and Slevin 1989) and reflects a firm's propensity to engage in innovative and risk-taking behaviour to achieve its strategic objectives in international markets (Knight 2001).

Entrepreneurial orientation has been acknowledged to promote corporate competitiveness. Lumpkin and Dess (1996) and Naman and Slevin (1993), for example, noted that entrepreneurship can be used to improve competitive positioning and create value through the recognition and pursuit of opportunities. While several studies suggested that the association between entrepreneurship and performance might not be positive (Zahra 1993), most researchers argued that entrepreneurship leads to the increased performance of SMEs in both domestic (Zahra 1991) and international contexts (Covin and Slevin 1991; Robertson and Chetty 2000; Balabanis and Katsikea 2003; Dimitratos, Lioukas and Carter 2004). Recent empirical evidence showed that the relationship between entrepreneurial orientation and performance is inversely U-shaped in new ventures but linear positive in established ventures (Su, Xie and Li 2011), which explains the variance in former studies. As we aim at analyzing established SMEs, we propose:

> **H1.**   International entrepreneurial orientation has a direct positive effect on international performance.

3.2.   Scanning Processes

We define scanning as processes that intend to generate information relevant for decision making in international markets (Zahra 1991), which may also be labelled as information acquisition (Williams 2003), intelligence generation as part of the market orientation construct (Jaworski and Kohli 1993) and acquisition of international market information as part of the export market orientation construct (Cadogan and Diamantopoulos 1995). Information acquisition relates to the process of searching and obtaining relevant information on customers, competitors and environmental trends. While Williams (2003) also considered information sources as a part of information acquisition, we focus on the active part of the information-gathering process. Therefore, scanning refers to efforts to collect, analyze and interpret data about a firm's external environment and competition and encompasses elements such as market research and analysis (Zahra 1991). Particularly for the small international firm, it is essential to gain appropriate information by market research and objective data (Brouthers and Nakos 2005). Scanning processes provide a firm with objective information and hence contribute to a firm's learning about foreign markets (Johanson and Vahlne 1977). Information-gathering processes are based on intangible knowledge resources within the firm. Using those resources to scan the environment and generate information on foreign markets can be viewed as rare and valuable intangible process. In general, scanning processes have been analyzed under a variety of names, from different perspectives and in different contexts. Empirical research, however, provides differing results. While some authors argue that scanning processes are irrelevant for small firms, other studies claim a positive relationship. According to the literature review of Julien and Ramangalahy (2003), scanning processes can generate competitive advantage. Seringhaus (1993) found that export marketing expertise (that is, information-related skills concerned with the segmentation of foreign markets) has a significant impact on performance, while results on market research behaviour have been inconclusive. Information acquisition and planning activities are significant export success factors, claimed Walters and Samiee (1990). Similarly, Yeoh (2000) found that global start-ups that actively search for information are also more likely to have higher export performance. McGee and Sawyerr (2003) showed that the extent of environmental scanning depends on the age of the small firm and the perceived strategic uncertainty surrounding the firm.

Scanning helps the international SMEs to acquire relevant information on markets, customers, competitors and the industry on time. Thereby, scanning processes facilitate the accumulation of information that may be of interest to the firm. "Scanning also alerts senior executives to threats and opportunities in their firms' environment"

(Zahra 1991, p. 266). Through systematic environmental scanning processes, opportunities can be identified, which impacts the international entrepreneurial orientation. Knowledge created through scanning can reveal innovative ideas and lead to the proactive pursuit of international expansion opportunities. In a similar vein, scanning can be viewed as a process of uncertainty absorption (Barringer and Bluedorn 1999). Information generated through scanning can help small firm managers to reduce the uncertainty connected to foreign market operations. Yeoh (2000) claimed that "even modest additions to their databases can lead to dramatic shifts in their risk perceptions" (p. 54). Less uncertain actions can then be proactively pursued, as the risk may be perceived assessable. Hence, we argue that scanning processes have a positive influence on entrepreneurial orientation. The empirical literature has provided some support for this relationship. In a national study of large established firms, Zahra (1991) showed that environmental scanning is positively associated with corporate entrepreneurship. Similarly, Barringer and Bluedorn (1999) supported the effect of environmental scanning on corporate entrepreneurship. Miocevic and Crnjak-Karanovic (2011) found that the effect of export market orientation on export performance is partly mediated through the global vision of the small firm manager. Moreover, we argue that resources and processes are a basic condition of entrepreneurship (Covin and Slevin 1991). Scanning is a process aimed at creating knowledge of foreign markets. Without scanning, entrepreneurs would be faced with trade-offs in undermining existing activities to pursue uncertain international opportunities (Perks and Hughes 2008). Firms possess and acquire different stocks of information, and these stocks of information influence their ability to recognize particular opportunities (Shane and Venkataraman 2000; Kontinen and Ojala 2011a), which is an essential entrepreneurial act. Cooper, Folta and Woo (1995) claimed that gathering information for decision-making is a critical activity for entrepreneurs as it helps them to identify opportunities. As entrepreneurial orientation is a precursor to entrepreneurship, supporting opportunity recognition in international markets (Jantunen et al. 2005), we have reason to argue that scanning processes are associated with entrepreneurial orientation.

Consequently, we propose that scanning is positively associated with entrepreneurial orientation. To be precise, we believe that the effect of scanning on performance is mediated by entrepreneurial orientation. The acquisition of information itself does not necessarily lead to effective use of this information (Teece 2007). As the outcome of scanning processes depends on the firm's capability to coordinate, configure and transform the knowledge generated through scanning, we argue that the nature of the relationship is indirect. Entrepreneurial orientation does not simply magnify the

relation; it creates it. Therefore, we argue that economic rent is created after the acquisition of the resource, which is essentially the capability-building perspective. Hence, we suggest that international entrepreneurial orientation provides a filter through which firms can direct processes to lead to superior performance and conclude the following:

H2.   Scanning has a direct positive effect on international entrepreneurial orientation such that international entrepreneurial orientation mediates the relationship between scanning and international performance.

3.3.   Planning Processes

We define planning as processes that intend to guide the activities of the firm (Martinez and Jarillo 1991). This definition includes processes such as strategic planning, budgeting and formal planning. Hence, planning is aimed at creating adaptive thinking and integrating and controlling various parts of the firm (Miller and Cardinal 1994). In the strategic management literature especially, the formality of planning has been focused. While Crick and Spence (2005) highlighted the unplanned internationalization behaviour of SMEs, other studies demonstrated a positive association between planning and performance. Both Schwenk and Shrader (1993) and Miller and Cardinal (1994) found a positive and significant relationship between planning and performance in their meta study. However, both studies did not focus on international SMEs. Walters (1993) showed, however, that both size and environmental complexity influence planning activity. Baird, Lyles and Orris (1994) found that internationally oriented small firms have more formal planning systems than those who are not. Yip, Biscarri and Monti (2000) found that firms that systematically plan internationalization steps achieve better performance. Although SMEs might follow fewer formal planning processes compared to large corporations, planning might separate successful from non-successful international SMEs. According to resource-based logic, firms use information and knowledge resources to plan future steps, which implies that planning is based on intangible resources and carried out to guide and control the development of the firm.

Researchers have argued either for or against the usefulness of planning for entrepreneurial activity (Gruber 2007). Covin, Green and Slevin (2006), for example, proposed that entrepreneurial orientation has more of a positive effect on the sales growth rate when strategies emerge than when they are planned. However, earlier research argued that planning helps people to overcome the limits of their cognitive capacities (Simon 1976). Human-beings have limited information-processing capacities that can be exceeded by the complexity of foreign activities in uncertain envi-

ronments (Gruber 2007). Planning processes can simplify task complexity and therefore serve as facilitator for entrepreneurial orientation (Covin and Slevin 1991). Barringer and Bluedorn (1999) showed that planning flexibility, the locus of planning and strategic control, have a significant positive influence on corporate entrepreneurship. Planning provides a framework that guides individuals in their understanding of their environment and relevant strategic issues and helps them to seize opportunities (Teece 2007). In other words, planning processes provide SME managers with complexity reduction and the ability to pursue entrepreneurial activities. Similarly, Delmar and Shane (2003) argued that planning helps entrepreneurs to make decisions more quickly than trial-and-error learning. Planning is also supposed to be useful in managing resource supply and demand in ways that minimize "time-consuming bottlenecks" and more efficiently turning abstract goals into concrete operational activities (Delmar and Shane 2003, p. 1166). Consequently, we propose that planning processes are positively associated with international entrepreneurial orientation. We further believe that the effect of planning on performance is mediated by entrepreneurial orientation. SMEs capitalize on planning processes through their entrepreneurial capability. If we image two firms with similar planning processes, which firm has the competitive advantage? It will be the firm that has the capability to deploy and reconfigure scanning and planning processes such that international opportunities can be recognized and exploited. This dynamic capability is given by the international entrepreneurial orientation. Through entrepreneurial orientation, firms can make use of knowledge-generating processes. Moreover, Schwenk and Shrader (1993) assumed an intervening variable to explain the variance of effect sizes reported in the literature on the performance effects of planning. We propose the intervening variable to be international entrepreneurial orientation and conclude the following:

H3.   Planning has a direct positive effect on international entrepreneurial orientation such that international entrepreneurial orientation mediates the relationship between planning and international performance.

3.4.   *Reciprocity of Processes and International Entrepreneurial Orientation*

So far, we have deduced that scanning and planning processes influence international entrepreneurial orientation. However, previous research has shown that entrepreneurial orientation may as well impact scanning and planning processes. Empirical studies showed entrepreneurial orientation to be an antecedent factor to market orientation (Matsuno, Mentzer and Özsomer 2002) and different business processes (Knight and Cavusgil 2004). Baker and Sinkula (2009) demonstrated that entrepreneurial orientation has a significantly positive influence on market orientation, which

is understood as customer-oriented market intelligence. Knight (2001) found that international entrepreneurial orientation promotes the development of strategic competence, internationalization preparation and the acquisition of technology. In general, international entrepreneurial orientation, understood as the propensity to engage in innovative, proactive and risk-taking behaviours, seems to function as a dynamic capability that not only transforms business processes, leading to higher returns, but also influences and designs processes. Following this perspective, international entrepreneurial orientation helps firms to make decisions on the extent of resources and processes that must be invested to achieve a desired end. While managerial decisions and international behaviour can be based on processes, processes may in turn be based on entrepreneurial behaviours. Jones and Coviello (2005) argued that innovativeness, proactiveness and risk taking will influence organizational level factors. This argument is supported by the general conceptual model of entrepreneurship as introduced by Covin and Slevin (1991). Hence, we conclude the following:

H4.   International entrepreneurial orientation has a simultaneous direct positive effect on (a) scanning processes and (b) planning processes.

4.   Empirical Study

4.1.   Sample

The cross-sectional empirical study is based on managerial perceptions. This approach is – in spite of its methodological shortcomings – widespread in internationalization research (Jones and Coviello 2005; Acedo and Jones 2007). Furthermore, primary data using a key-informant survey design has been considered due to a lack of secondary data on German SMEs, which are usually not subject to external publication requirements.

Aiming to research the role of foreign market scanning and planning in conjunction with the international entrepreneurial orientation for the international performance of SMEs, we define our population as SMEs based in Germany that exhibited some form of international selling activity. To develop the sample, we used the Hoppenstedt database. The Hoppenstedt database is a commercial online database containing several thousand addresses of firms in Germany. This database has been used by several authors researching German firms (Schilke and Goerzen 2010; Maekelburger, Schwens and Kabst 2012). We focused on highly internationalized manufacturing industries such as mechanical engineering, textile, chemicals and polymer processing to reach internationally active SMEs. We extracted the ad-

dresses of every fifth firm from industry-based lists provided by the Hoppenstedt da-
tabase to randomize the selection procedure. Through this procedure, we identified
3,500 SMEs. We disseminated questionnaires by ordinary mail and email to the sen-
ior managers of these firms. We received notice that 123 questionnaires/emails were
not deliverable. The questionnaire could be completed in writing or electronically, de-
pending on the executive's preference. We sent two re-minder emails and made
telephone calls two weeks later. We received 855 responses in total, which equals a
response rate of 25.3%. However, we had to exclude 251 questionnaires from further
analysis due to at least one of the following reasons: frequent missing values, no
regular international activities, firm reported international production only, the firm
was no SME based on the number of employees (250 is recommended by the Euro-
pean Commission), the questionnaire was not filled out by an SME owner or manag-
ing director. All in all, we recovered 604 questionnaires suitable for the final analysis,
which equals an effective response rate of 17.7%. This figure is in line with former
research on international SMEs (Dhanaraj and Beamish 2003; Baum, Schwens and
Kabst 2011). Finally, the questioned decision makers represent internationally active
SMEs from four major German manufacturing industries with average sales of
20.419 million EUR and 84 employees on average (see Table E–1).

Industries	N	%	Employees	N	%	Total sales in m EUR	N	%	Foreign sales in m EUR	N	%
Mechanical engineering	198	32.8	1-19	103	17.1	1-4.9	121	20.0	0-0.9	84	13.9
Chemicals	126	20.9	20-49	126	20.9	5-9.9	131	21.7	1-4.9	223	36.9
Textile	116	19.2	50-99	179	29.6	10-19.9	142	23.5	5-9.9	110	18.2
Polymer proc-essing	87	14.4	100-199	141	23.3	20-49.9	127	21.0	10-19.9	69	11.4
Misc.	77	12.7	200-250	55	9.1	50+	42	7.0	20+	63	10.5
Missing	0	0	Missing	0	0	Missing	41	6.8	Missing	55	9.1
Total	604	100	Total	604	100	Total	718	100	Total	604	100
			Average: 83.6			Average: 20.419			Average: 0.491		

Table E–1:   Sample Statistics

Source: Own creation.

To account for non-response bias, we compared early and late respondents and
gathered secondary data on the demographics of randomly selected non-
respondents to compare responding and non-responding firms (in terms of size, age
and sales) (Armstrong and Overton 1977). In both cases, insignificant differences
were found. As we must rely on the perceptions of SME owner-managers, we must
consider common method variance. We tried to apprehend the possible bias a priori
through the design of the questionnaire and ex-post through Harman's single factor
test (Podsakoff et al. 2003). As the first factor accounts for only 26.17% of the total

variance explained in exploratory factor analysis, common method bias can be assumed to be reduced within our possibilities as we must rely on self-reports of executives (Spector 2006). With the focus on the perceptions of the actual decision-maker being the competent person to answer the questionnaire, single response bias is assumed to be limited (Hughes and Garrett 1990). Following the suggestion of Kumar, Stern and Anderson (1993), we attempted to obtain a second respondent to validate the data and asked the senior executives by phone for a second person with appropriate knowledge. This resulted in 41 further contact partners, mostly export/sales managers, out of whom we could reach 29 by phone. Testing for inter-rater congruence, we received significant correlations; thus, the chance for bias is limited. Another threat to the quality of survey data is sample selection bias. As we sampled internationalized firms only, we omitted SMEs that are not yet international but employ some scanning and planning processes regarding international markets potentially affecting performance through entrepreneurial orientation. As we defined our population to be internationally active firms only, we cannot claim anything about the relationship between the scanning, planning and performance of non-internationalized firms. Nevertheless, we tested whether there are significant differences in the performance of recently internationalized firms and the rest. We did not find any significant differences. Because our study focuses on internationalized SMEs from Germany and there is only information available regarding the structural characteristics of all SMEs in Germany and structural data on internationally active SMEs is lacking, it is difficult to statistically evaluate the representativeness of our sample. However, since we randomized the sample selection procedure and could show that non-response bias is not a serious threat, we can assume that we have a good approximation of the population (Yang, Wang and Su 2006). Moreover, the sample design corresponds with our research aim and with the procedure applied by other studies in a similar context (Maekelburger, Schwens and Kabst 2012).

4.2.   Measurements

Considering the literature on scale development and modification, we derived the measures for our survey from entrepreneurship and SME literature. To assess the face validity of the scaled items, we conducted pre-tests with ten firm owners. Our pre-test resulted in adjustments of the used scales, which we describe below. The items used in the questionnaire and their respective indicators of reliability and validity are displayed in Table E–2.

Item	ItTC (≥ 0.3)	α (≥ 0.7)	λ (CFA) (≥ 0.3)	AVE (CFA) (≥ 0.5)	CR (CFA) (≥ 0.7)	Operationali-zation source
			Model constructs			
Scanning[1]		0.912		0.675	0.912	Apadpted from Miller and Friesen (1982), Beal (2000)
Systematic foreign market research	0.745		0.790			
Analysis of the foreign market structure	0.797		0.835			
Analysis of market opportunities	0.822		0.870			
Analysis of customer developments	0.784		0.837			
Analysis of local competition	0.736		0.780			
Planning[1]		0.841		0.575	0.843	Own measure based on Robinson and Pearce (1983)
Scheduling, i.e. we have mandatory deadlines	0.610		0.679			
Strategic planning, i.e. we plan our international engagement well in advance	0.725		0.830			
We have a written strategic plan	0.700		0.763			
We have medium-term plans for our international engagement (3 years)	0.671		0.749			
International entrepreneurial orientation[2]		0.760		0.276	0.775	Own measure based on Miller and Friesen (1982), Covin and Slevin (1989), Knight and Cavusgil (2004)
When chances and risks are equally distributed in international decision-making situations, we refrain from the project (reverse coded)	0.309		0.384			
We have a proclivity for high risk over low risk projects	0.332		0.429			
Technology is our special strength	0.467		0.417			
Flexibility and customer focus are important to us	0.306		0.321			
We focus on the development of new products and innovations	0.468		0.487			
The enforcement of unconventional ideas and the acceptance of creative thinkers are important to us	0.495		0.506			
We are proactively growth and profit oriented	0.438		0.578			
We act based on the belief that our firm's future lies in international markets	0.437		0.649			
We actively encourage the international orientation of our employees	0.520		0.725			
We consistently trust in our own strengths	0.459		0.493			
International Performance[3]		0.852		0.676	0.861	Adapted from Cavusgil and Zou (1994), Evans and Mavondo (2002)
Sales growth	0.616		0.655			
ROI	0.760		0.864			
Profit	0.808		0.953			
			Instrumental constructs			
Foreign market reporting relevance[4]		0.905		0.773	0.911	Own measure based on Cadogan, Cui and Li (2003)
Foreign market controlling in general	0.769		0.832			
Receiving foreign market reports regularly	0.873		0.930			
Receiving reports on market developments	0.795		0.872			
Foreign market controlling figures[5]		0.769		0.558	0.788	Own measure based on Walters (1993)
Sales	0.587		0.734			
Turnover/profits	0.719		0.862			
Personnel	0.556		0.669			

Table E–2 continued

Perceived distance[2]		0.781		0.559	0.789	Own measure
We consciously travel abroad to learn about countries and cultures	0.586		0.735			based on Dichtl, Koeglmayr and
Asian cultures seem very distant to us (revers coded)	0.590		0.663			Mueller (1990)
The geographic distance to overseas markets does not pose a problem	0.691		0.869			

Confirmatory model fit: χ^2 = 1629.245, df = 413, RMSEA = 0.070, CFI = 0.872.
Confirmatory model fit (IEO measured by three parcels): χ^2 = 693.770, df = 231, RMSEA = 0.059, CFI = 0.942.

[1] Measured with seven-point Likert-type scales: To what extend does your firm carry out the following scanning/planning processes? Please answer on a scale between 1=not at all and 7=to a very high extend.

[2] Measured with seven-point Likert-type scales: To what extend do you agree to the following statements? Please answer on a scale between 1=completely disagree and 7= completely agree.

[3] Measured with seven-point Likert-type scales: How successful have you been on average during the last five years? Please answer using one of the following categories: 1=more than 20% decrease, 2=11-20% decrease, 3=1-10% decrease, 4=unchanged, 5=1-10% increase, 6=11-20% increase, 7=more than 20% increase.

[4] Measured with seven-point Likert-type scales: How important are the following activities for your firm? Please answer on a scale between 1=completely unimportant and 7= extremely important.

[5] Measured with seven-point Likert-type scales: To what extend does your firm have monthly information on the following figures abroad? Please answer on a scale between 1=not at all and 7=to a very high extend.

Table E–2:   Reliability and Validity of the Measurements

Source: Own creation.

For the measurement of scanning, we referred to Seringhaus (1993) and focused on market research and different forms of foreign market analyses. Thereby, we adapted several items of Miller and Friesen's (1982) scale on environmental scanning and Beal's (2000) extended scale on the scope of scanning in terms of customers and competitors in the task environment. For the measurement of planning, we created a new scale based on the research of Robinson and Pearce (1983), Bracker, Keats and Pearson (1988) and Lyles et al. (1993). Previous research has often classified firms based on different dimensions of planning such as use of different planning instruments (e.g. financial and personnel planning), the planning horizon and the extent of planning (Bracker, Keats and Pearson 1988; Walters 1993). Following the research on strategic planning, we measured planning in terms of planning formality (Robinson and Pearce 1983; Lyles et al. 1993). Both planning and scanning exhibit satisfactory results on reliability and validity. Although scanning and planning are highly correlated, the VIF values are below 2.0, which indicates that multicollinearity is not present. Following the procedure by Anderson and Gerbing (1988), we also ensure that discriminant validity is given between scanning and planning processes (see Table E–3).

International entrepreneurial orientation was measured with several items on the constituent dimensions of risk taking, innovativeness and proactiveness (Covin and Slevin 1989). In the pre-tests, we adapted several items of the original scales of Miller and Friesen (1982) and Covin and Slevin (1989) in terms of the wording and

the international focus of our study (Knight and Cavusgil 2004). Because Rauch et al. (2009) found in their meta-study that different entrepreneurial orientation measurements did not significantly differ in their performance implications, we accepted the necessary changes to the scales. Another important aspect of the discussion and analysis of entrepreneurial orientation is the dimensionality of the construct. Previous research has highlighted that although the constructs represent different aspects of the entrepreneurial attitude, they are empirically related and must be combined to model entrepreneurial orientation properly (Robertson and Chetty 2000; Ibeh 2003). Moreover, early entrepreneurship studies have defined the entrepreneurial orientation construct as a composite measure because entrepreneurial firms must score high on all three dimensions (Miller 1983). In their comprehensive discussion of the dimensionality of the entrepreneurial orientation construct, Covin, Green and Slevin (2006) further highlight that entrepreneurship research does not question whether the sub-dimensions exist as distinct constructs in reality but whether they must vary independently. As we follow the conceptualization of Miller (1983), we assume that entrepreneurial firms are firms that score rather high on all three dimensions (Mostafa, Wheeler and Jones 2005). Therefore, we associate the ten items measuring the three sub-dimensions of risk taking, innovativeness and proactiveness with one latent construct. The items used in this study yield an adequate Cronbach's Alpha (0.760) and exhibit modest but still acceptable factor loadings in confirmatory factor analysis. While the composite reliability shows reasonable values, the AVE is below common thresholds, implying that the latent construct does not sufficiently explain its items. This circumstance is most likely due to the dimensionality issue. Hence, we performed a principal component factor analysis with Oblique rotation and found that three factors were extracted based on the Kaiser criterion. One factor for the first two items (risk taking), one factor for the following four items (innovativeness) and one factor for the last four items (proactiveness) (the items are shown in Table E–2). We maintain our conceptualization of the construct and follow recent studies on entrepreneurial orientation (Ripollés-Meliá, Menguzzato-Boulard and Sánchez-Peinado 2007; Moreno and Casillas 2008) in using three parcels instead of ten items to represent the construct (i.e. we use one summed score for each sub-dimension). Thereby, we account of the three constituents of international entrepreneurial orientation and improve the CFA model fit. Finally, discriminant validity between international entrepreneurial orientation and the other constructs can be established. The results of alternative conceptualizations of international entrepreneurial orientation can be found in Tables H–3 and H–4 in Appendix 4.

International performance was measured using a combination of financial and non-financial indicators, as well as strategic effectiveness. Respondents were asked to indicate the extent to which a number of financial and non-financial indicators had changed in the last 5-year period (Cavusgil and Zou 1994; Evans and Mavondo 2002). As entrepreneurial orientation is said to mostly relate to financial performance (Rauch et al. 2009), we use financial indicators to model international performance in this study only.

	(1)	(2)	(3).	(4)	(5)	(6)	(7)
(1) Scanning	**0.675**	0.803	0.733	0.202	0.710	0.578	0.518
(2) Planning	0.645[1]	**0.575**	0.772	0.234	0.783	0.716	0.473
(3) IEO	0.537[1]	0.596[1]	**0.356**	0.302	0.687	0.652	0.794
(4) Performance	0.041	0.055	0.091	**0.676**	0.147	0.238	0.108
(5) Reporting	0.504	0.613[1]	0.472[1]	0.022	**0.773**	0.698	0.373
(6) Controlling	0.334	0.513	0.425[1]	0.057	0.487	**0.558**	0.333
(7) Distance	0.268	0.224	0.630[1]	0.012	0.139	0.111	**0.559**
CFA model fit	χ^2 (231) = 693.770, RMSEA = 0.059, CFI = 0.942						
Correlation (1) with (2) fixed	χ^2 (232) = 924.643, RMSEA = 0.071, CFI = 0.914				$\Delta\chi^2$ (1) = 230.873, $p \le 0.001$		
Correlation (1) with (3) fixed	χ^2 (232) = 755.998, RMSEA = 0.062, CFI = 0.935				$\Delta\chi^2$ (1) = 62.228, $p \le 0.001$		
Correlation (2) with (3) fixed	χ^2 (232) = 742.028, RMSEA = 0.061, CFI = 0.936				$\Delta\chi^2$ (1) = 48.258, $p \le 0.001$		
Correlation (2) with (5) fixed	χ^2 (232) = 941.588, RMSEA = 0.072, CFI = 0.912				$\Delta\chi^2$ (1) = 247.818, $p \le 0.001$		
Correlation (3) with (5) fixed	χ^2 (232) = 768.458, RMSEA = 0.063, CFI = 0.933				$\Delta\chi^2$ (1) = 74.688, $p \le 0.001$		
Correlation (3) with (6) fixed	χ^2 (232) = 771.706, RMSEA = 0.063, CFI = 0.933				$\Delta\chi^2$ (1) = 77.936, $p \le 0.001$		
Correlation (3) with (7) fixed	χ^2 (232) = 724.928, RMSEA = 0.060, CFI = 0.939				$\Delta\chi^2$ (1) = 31.158, $p \le 0.001$		

Correlations are shown above the diagonal; bold numbers on diagonal are AVE; squared correlations are shown below the diagonal.

International entrepreneurial orientation is measured with three parcels as described.

[1] For each violated case in which the criterion of Fornell and Larcker (1981) was not met, we also checked the discriminant validity using a χ^2 difference test by following the approach of Anderson and Gerbing (1988). This procedure demands the comparison of the χ^2 of a nested model and the proposed comparison model. The nested model is a more restrictive model with more degrees of freedom, as one correlation is fixed at the value one, which means a perfect correlation between two constructs and thus no discriminatory power. But each successively conducted comparison test yielded satisfactory results because the nested model fits significantly worse (p ≤ 0.001) than the proposed model.

Table E–3:   Discriminant Validity

Source: Own creation.

To model the bi-directional relationship between processes and entrepreneurial orientation, we had to include three latent instrumental construct (see Kline 2011b for methodological requirements in non-recursive models). We used the relevance of foreign market reporting as an antecedent of scanning processes, as general attitudes often pose as determinants of behaviour (Ajzen 1991). Similarly, we used the foreign market controlling figures as determinants of planning processes. Thereby, we assumed that a firm that has information on key foreign figures would also be more formal in its planning efforts. Moreover, we propose that the perceived psychic distance to overseas markets is an important determinant of the international entrepreneurial orientation (Dichtl, Koeglmayr and Mueller 1990). Based on former research (Nummela, Saarenketo and Puumalainen 2004; Freeman and Cavusgil 2007), we believe that the

less distance the SME manager perceives, the more entrepreneurial and global his mindset will be, which also influences the international entrepreneurial orientation. Furthermore, discriminant validity is shown for all constructs.

We included six control variables in the study. Considering the efficient allocation of resources, firms' age was measured using the number of years of the company's existence. Firm size was measured using the number of employees. International experience was considered because a higher level of international experience could result in a more successful implementation of processes caused by learning effects. We measured international experience using the number of years a firm had been operating in foreign countries. The time lag between firm founding and first international activity has been of special interest in recent years (Acedo and Jones 2007). In testing for its performance implications, we measured time lag using the time span in years from founding to the initiation of internationalization (Baum, Schwens and Kabst 2011). Using Country as a proxy for geographical distance, it was coded as a dummy variable with 1=EU and 0=non-EU (Pedersen, Petersen and Benito 2002). Lower distance (e.g. within the EU) is supposed to reduce uncertainty and might therefore increase performance. Foreign sales ratio, that is, the ratio of foreign sales to current total sales, was utilized as a proxy for the degree of internationalization (Baum, Schwens and Kabst 2011), which may be performance related (Dhanaraj and Beamish 2003).

4.3.   Method

The hypotheses are tested with several structural equation models (SEM) computed with the statistical program Mplus. Mplus provides maximum likelihood estimation and weighted least squares estimation for categorical data. Moreover, robust estimation of standard errors and robust chi-square tests of model fit are given for all outcome variables. These procedures take into account the non-normality of outcomes and the non-independence of observations due to cluster sampling (Muthén and Muthén 2007). We performed bootstrapping with 1000 draws. Missing values for the scaled items are replaced by the full information maximum-likelihood (FIML) approach. The FIML approach has been identified as one of the preferred methods of addressing missing data (Graham 2009). We chose the SEM approach because SEM offers much potential for small firm research, as it is capable of analyzing latent constructs (important constructs such as strategy, orientation and performance are latent and multidimensional) and their simultaneous complex relationships (Shook et al. 2004). However, we also must acknowledge that the use of SEM should follow certain standards to unfold its utility. After a complete description of the sample selection procedure and the empirical data, measurement reliability and validity must be

evaluated. Next, researchers must assess both the structural coefficients and the model fit. Brown (2006) recommends the use of at least three fit indices First, Brown recommended reporting an absolute fit index (such as χ^2) that evaluates how close the observed variance-covariance matrix is to the estimated matrix. Researchers would desire a result that is not statistically significant (i.e., the observed covariance matrix equals the estimated matrix). However, the χ^2 statistic is very sensitive to sample size (Hair et al. 2010). Second, Brown recommended reporting an absolute fit index with parsimony correction (such as RMSEA) that incorporates a penalty for poor model parsimony. According to Hu and Bentler (1999), a cut-off value close to 0.06 is necessary to conclude that there is a relatively good fit between the hypothesized model and the observed data. Hair et al. (2010) suggested a cut-off value of 0.07. Third, Brown (2006) recommended a comparative fit index (such as the CFI) that evaluates the fit of the hypothesized model to a null model with covariances = 0. The CFI ranges from 0 to 1 (where 1 indicates perfect fit), and according to Hu and Bentler (1999), a cut-off value close to 0.95 is necessary to assume a good fit. Hair et al. (2010) stated that a cut-off value of 0.90 is "usually" (p. 669) acceptable. Accordingly, we will report the χ^2 statistic, the RMSEA and the CFI. Finally, when modelling mediated relationships, it is important to control for the endogeneity of the constructs. Hence, we correlate the disturbance terms of the endogenous constructs with each other (Antonakis et al. 2010). In correlating the error terms, researchers acknowledge that there might be a common cause affecting the measurement error of the endogenous constructs (refer to Appendix 5 for more information).

5. Results

First, we test the simultaneous effect of the control variables on performance. Because we find that only firm size has a significant effect on performance ($p < 0.05$), we decide to maintain size as the only covariate in the subsequent models to reduce model complexity. Second, we test the individual direct relationships (see Table E–4). Models 1, 2 and 3 exhibit positive and significant effects from scanning, planning and international entrepreneurial orientation, respectively, on performance. Model 4 considers the simultaneous direct influences of scanning, planning and international entrepreneurial orientation on performance. The results show that the performance effect of scanning and planning vanishes when the three constructs are simultaneously considered. On the basis of these results, we can support Hypothesis 1.

Model 5 tests the mediation model, which is proposed by Hypotheses 2 and 3. Model 5 exhibits strong and highly statistically significant paths from both scanning and

planning to entrepreneurial orientation and from entrepreneurial orientation to per-
formance. Further, the direct effects of scanning and planning on international per-
formance are non-significant. This finding statistically supports complete mediation
(Baron and Kenny 1986) respectively "indirect-only mediation" (Zhao, Lynch and
Chen 2010, p. 200) . Following the criteria for model fit assessment provided by Hu
and Bentler (1999) and Hair et al. (2010), the model fit reaches acceptable values
(RMSEA 0.060, CFI 0.961), although the Chi-square is statistically significant. There-
fore, we can conclude that both Hypotheses 2 and 3 are supported.

	Model 1	Model 2	Model 3	Model 4	Model 5[1]	Model 6
Paths	β	β	β	β	β	β
IEO → Performance	0.277 ***			0.280 *	0.280 *	0.258 ***
Scanning → Performance		0.160 ***		-0.060 ns	-0.062 ns	
Planning → Performance			0.197 ***	0.043 ns	0.042 ns	
Scanning → IEO					0.308 ***	0.304 ***
Planning → IEO					0.525 ***	0.529 ***
Controls						
Firm size	0.078 ns	0.105 *	0.094 ns	0.081 ns	0.088 ns	0.087 ns
Model fit						
χ^2	13543 ns	113.198 ***	58.758 ***	267.314***	268.907 ***	269.213 ***
df	12	25	18	95	96	97
RMSEA	0.015	0.076	0.061	0.055	0.055	0.054
CFI	0.998	0.967	0.975	0.962	0.962	0.962

Note: Standardized estimates are shown.
* $p \le 0.05$, ** $p \le 0.01$, *** $p \le 0.001$, ns = not significant.
[1] Model estimated without correlation between error terms because the model was not identified otherwise.

Table E–4:   Results of SEM on the Mediation
Source: Own creation.

To further validate complete mediation through SEM, the model fit of the mediated
model (model 5) can be compared to a model without the direct effects (model 6).
Thereby, we test whether the direct performance effects of scanning and planning
are negligible. If the mediated model (model 5) is not significantly better than the indi-
rect model (model 6), then the direct performance effects of scanning and planning
can indeed be neglected. A Chi-square (χ^2) difference test suggests that the medi-
ated model (model 5) is not significantly better than the indirect model (model 6) –
both with and without the error correlation implemented in model 6. We therefore
choose the parsimonious model with more degrees of freedom (df) because both
models fit the data similarly well, which implies that we could reduce complexity by
choosing model 6 over model 5 without losing information.

Model 6 proposes that scanning and planning processes each have an indirect effect on performance only. Scanning has a significant indirect effect of $\beta = 0.079$ on performance ($p \leq 0.01$). Planning also has a significant overall indirect effect of $\beta = 0.137$ on performance ($p \leq 0.001$).

Hypothesis 4 proposes that international entrepreneurial orientation has a positive effect on scanning and planning processes and is tested via a non-recursive structural model (see Table E–5). We find that all structural coefficients are highly significant supporting the relevance of the instrumental variables and the reciprocal relationship between processes and international entrepreneurial orientation (refer to model 7). The processes do impact international entrepreneurial orientation, and international entrepreneurial orientation impacts the processes. The effect of entrepreneurial orientation on performance is significantly positive as well. In conclusion, we can support hypothesis 4.

	Model 7	Model 8
Paths	β	β
IEO → Performance	0.139 **	0.200 ***
Scanning → IEO	0.421 ***	0.211 ***
Planning → IEO	0.481 ***	0.412 ***
IEO → Scanning	0.486 ***	
IEO → Planning	0.330 ***	
Instrumental Variables		
Foreign market reporting → Scanning	0.330 ***	0.745 ***
Foreign market controlling → Planning	0.405 ***	0.873 ***
Geographic distance → IEO	0.384 ***	0.537 ***
Controls		
Firm size	0.103 *	0.101 ns
Model fit		
χ²	824.058 ***	975.963 ***
df	260	262
RMSEA	0.060	0.067
CFI	0.930	0.912

Note: Standardized estimates are shown.
* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$, ns = not significant.

Table E–5:   Results of SEM on the Bi-directional Relationship
Source: Own creation.

Concluding, we support hypothesis 4 in favour of a reciprocal relationship. Comparing the reciprocal model (model 7) with a nested model that does not include the reciprocity (model 8) we find that model 7 is superior because it has a significant better model fit ($\Delta\chi^2(\Delta df=2) = 151.905$, $p \leq 0.001$). This result supports the consideration of the bi-directional relationship between international entrepreneurial orientation and scanning and planning.

Because the structural relations could be different considering different performance measures, we assessed model 6 with five different performance measurements: (1) perceived international financial performance, as discussed before, (2) perceived overall satisfaction regarding international performance, (3) perceived achievement of financial and non-financial goals and (4) foreign sales. We find that the structural relationships stay the same no matter which performance measure is used. Although the effect sizes and the model fit differ, the relationships remain constant, implying that the performance effect of scanning and planning is mediated by the international entrepreneurial orientation. The results for the mediating and the reciprocal models can be found in Table H–5 and Table H–6 in Appendix 6.

6.   Discussion and Conclusions

Scanning leads to superior performance, as do thorough planning processes. Likewise, a high level of international entrepreneurial orientation leads to a high level of international performance. However, when all three "success factors" are considered at the same time, the performance effect vanishes. This finding can be explained by the intervening mechanism of international entrepreneurial orientation that has thus far been mostly disregarded. While other studies have derived international entrepreneurial orientation as an antecedent factor (Knight and Cavusgil 2004; Jones and Coviello 2005), we showed that the effect of scanning and planning on international performance is completely mediated by international entrepreneurial orientation. Hence, the impact that scanning and planning have on performance is fully channelled by international entrepreneurial orientation such that the direct process-performance relationships are negligible. This extraordinary result might explain the variance in the results of earlier research on scanning and planning processes (Schwenk and Shrader 1993; Julien and Ramangalahy 2003) and the "why" of the process-performance relationship (Baron and Kenny 1986). We conclude that scanning and planning lead to success because of international entrepreneurial orientation, as international entrepreneurial orientation constitutes a dynamic capability that transforms business processes in response to changing environments and thereby creates economic rents. Thus, international entrepreneurial orientation explains why and how processes contribute to firm performance. This result strengthens the significance of entrepreneurial orientation for internationally established SMEs.

Increasing the objective knowledge of SME managers through foreign market scanning and planning may either directly impact international performance or indirectly effect international performance through changing international entrepreneurial orien-

tation. We argued that learning more about relevant and possibly distant markets reduces the perceived risks of international business. When the risk is perceived to be more accessible, the SME manager may be willing to take more risks. Such learning also opens up new avenues for business opportunities that can be proactively acted upon. Hence, an increase in processes can lead to an increase in international entrepreneurial orientation. Thereby, we argued, based on the basic idea of the Stimulus-Organism-Response model, that processes are easier to change than behavioural attitudes. Hence, processes can function as stimuli in changing or at least affecting international entrepreneurial orientation. International entrepreneurial orientation determines internationalization behaviour (i.e. whether the firm enter new markets, which markets, which products, etc.), and behaviour ultimately impacts performance. Within this mediated model, the conceptualization of international entrepreneurial orientation as a dynamic capability played a central role. We differentiated between resources, processes and (dynamic) capabilities, highlighting their hierarchical ordering. Knight and Cavusgil (2004) argued from a dynamic capability perspective that international entrepreneurial orientation can be viewed as a dynamic capability because it gives rise to successful entry into new markets. In fostering innovative, proactive and risk-taking behaviour, a firm can constantly renew its resources and competences to achieve international objectives. While Knight and Cavusgil (2004) interpreted international entrepreneurial orientation as antecedent to business processes, we followed the capability-building perspective (Makadok 2001). However, we could show that there is a bi-directional relationship between processes and international entrepreneurial orientation in international markets. Thereby, we refer to Covin and Slevin (1991), who argued in their seminal work that entrepreneurial orientation both influences and is influenced by organizational resources and competences. The authors have further elaborated: "A firm's ability to engage in entrepreneurial behaviour will depend, in part, on its resources and competencies. These variables are operationally defined in the broadest sense and are intended to include (…) organizational-level capabilities (e.g. ability to get a new product to the market in a timely fashion) and organizational systems (e.g. marketing research systems). Resources and competencies provide the bases for all forms of organizational action. They can serve as either facilitators or deterrents of entrepreneurial behaviour, and influence the specific form of entrepreneurship in which the firm engages." (p. 15). In their conceptual model, Covin and Slevin (1991) already introduced the idea of a possibly reciprocal relationship assuming that capabilities and resources have a stronger effect on entrepreneurial orientation than the other way around. Our results support a bi-directional relationship and show that the effect that scanning has on entrepreneurial orientation is larger than the way around, which gives support to

Covin and Slevin's thesis. However, our model showed that planning is influenced by entrepreneurial orientation to a greater extent than planning affects entrepreneurial orientation. Furthermore, Covin and Slevin (1991) noted in their model that resources and competences may also influence the relationship between entrepreneurial orientation and firm performance. Clearly, moderation is another plausible causal mechanism for the interplay of resources and capabilities. In our case, modelling interactions would classify the conditions under which scanning and planning processes influence performance, which represents a different but highly relevant research question (refer to Appendix 7 on a conceptual discussion of the modelled relationships). Although several moderating relationships of the entrepreneurial orientation-performance relationship have been already considered in the literature, there is potential for further research (Rauch et al. 2009).

Overall, this study contributes to the research on the performance effects of processes and dynamic capabilities within established international SMEs. We advance theory by modelling international entrepreneurial orientation as dynamic capability that intervenes in the process-performance relationship. Thereby, we explain why SMEs can capitalize on processes and show that international entrepreneurial orientation does not only initiate and impact processes of SMEs – international entrepreneurial orientation is also influenced by the very same processes. International entrepreneurial orientation must be understood as a key dynamic capability transforming and adapting firm processes in changing environments to perform well in international markets, not only as an antecedent factor. Thereby, this study closes a knowledge gap on how SMEs create competitive advantage from processes by employing the dynamic capability perspective. Moreover, with a large sample of international SMEs, this study contributes to the knowledge on the international performance-international entrepreneurial orientation relationship.

From a practical perspective, SME managers learn that (1) scanning and planning are crucial to a firm's international success because of their international entrepreneurial orientation and that (2) they, as managers, have two main channels by which to influence the probabilities that they succeed in international markets. This finding means that the contribution of managers lies in designing, developing and constructing capabilities and in anticipating the value of resources and processes. The first perspective highlights the fact that managers must make use of resources and processes to adapt to the environment. Processes enable the firm to build a basis for the pursuit of entrepreneurship. Already, Barringer and Bluedorn (1999) showed that environmental scanning and some planning dimensions significantly impact corporate entrepreneurship. The authors summarized with the following: "What is particularly

instructive about this result is that the pursuit of entrepreneurship requires an increase in the intensity of some management practices, such as scanning intensity. Opportunity recognition, which is a precursor to entrepreneurial behaviour, is often associated with a flash of genius, but in reality is probably more often than not the end result of a laborious process of environmental scanning and industry awareness. As a result, the fundamental practice of scanning the environment to recognize opportunities and threats should be a principal concern of entrepreneurially minded firms." (p. 436). Hence, the foundation of entrepreneurship can be established in international entrepreneurial orientation as a dynamic capability that integrates and configures resources and processes. Highlighting the second perspective, managers must realize that there are complex feedback-loops. International entrepreneurial orientation also impacts the extent to which scanning and planning processes are carried out. Managers also contribute through their anticipation of the value of certain resources and processes.

7.   Limitations and Directions for Further Research

There are several limitations to this study, which we will attend to in the following. In doing so, we will also discuss avenues for further research.

We have considered only two firm processes. Future studies could analyze and test the relationship of other processes and firm-level factors with international entrepreneurial orientation (Covin and Slevin 1991). Additionally, resources as a basis for processes could be included in future studies. Moreover, two natural limitations of information and hence scanning should be addressed. First, information does not have obvious units. Second, information may not be cumulative (Fiet 1996). Therefore, the relationship between scanning and entrepreneurial orientation might not be completely linear. At some point, further information may no longer contribute to international entrepreneurial orientation. Managers should be aware of that. Furthermore, planning is a heterogeneous task. Future research needs to better account for this heterogeneity (Gruber 2007). One might want to focus on a specific planning area and differentiate between planning intensity, planning responsibility, planning flexibility, planning horizon or planning locus, as not all areas may be of equal importance to international entrepreneurial orientation and ultimately to firm success (Barringer and Bluedorn 1999). Another conceptual question is the conceptualization and dimensionality of entrepreneurial orientation. Although Rauch et al. (2009) found in their meta-analysis that different conceptualizations and specifications of entrepreneurial orientation do not influence its overall effect on performance, researchers must be conscious of the specification they employ (a comprehensive discussion can

be found in Covin, Green and Slevin 2006). Following Miller (1983), we defined international entrepreneurial orientation as being reflected in innovativeness, proactiveness and risk taking. Lumpkin and Dess (1996), however, considered two additional dimensions as being part of the construct. Other studies argued that the dimensions must be addressed as independent constructs (Kreiser, Marino and Weaver 2002), and some even suggest a formative understanding (Covin, Green and Slevin 2006).

From a methodical perspective, our study is limited because of our focus on internationally active SME from Germany and the use of perceptual data. Although our sample design is consistent with our research aim and is also consistent with other research studies on similar research objects (Maekelburger, Schwens and Kabst 2012), we cannot claim the complete generalization of our results. Since we focused on four main manufacturing industries within one single country, we cannot generalize the results to other sectors or to other countries. Researching SME with international activities, it is not possible to transfer our results to SME that only operate in the home market. Furthermore, it would be beneficial for future studies to collect data on performance from a different source which was not possible for us since German firms are not obliged to publish financial data. Moreover, although our models showed acceptable fit indices in terms of recommended cut-off values, the model fit is not perfect and must be taken as a limitation of our study. Similarly, modeling causal relationships based on cross-sectional data leads to tentative rather than conclusive results. Hence, a longitudinal research design could extend findings on the relevance and development of international entrepreneurial orientation, which might support the causal relationships drawn in this study and the reciprocal effects between international entrepreneurial orientation and processes.

Finally, our study has highlighted the complex and bi-directional relationships between firm processes and dynamic capabilities in creating competitive advantage. As we have interpreted international entrepreneurial orientation as a dynamic capability, future research should analyze the proposed relationships in different settings, different types of firms and different environmental conditions. Researching the boundary conditions is essential to determine the limitations of dynamic capabilities (Barreto 2010). We could imagine that the role of international entrepreneurial orientation is most dominant in challenging, competitive and quickly changing environments. Another idea is the differentiation of service firms. In this study, we cannot draw any conclusion about service firms because we focused on the manufacturing industry. As service firms must often establish a physical presence in new country markets, they may have to strongly rely on capability building for rent creation.

F.   Final Remarks

1.   Discussion and Conclusions

1.1.   Core Results

SME internationalization is an important topic and a complex research issue. SMEs distinguish themselves from larger firms and exhibit particularities that also influence their internationalization process. Small firms are nimbler, more flexible and can better adapt to changing circumstances than their larger counterparts (Rosenbusch, Brinckmann and Bausch 2011; Li, Qian and Qian 2012). They have different structures, apply different processes and differ with regard to their organizational culture and entrepreneurial orientation. But SMEs also lack knowledge, resources and experience as compared to MNEs (Mudambi and Zahra 2007). When smaller firms consider internationalizing, they face not only the liability of foreignness, but also the liability of smallness (Lu and Beamish 2001).

The academic literature highlights the relevance of this research topic because of the challenges SMEs face, but also because of the firms' economic relevance. SMEs dominate the economic landscape and drive innovation (Keng and Jiuan 1989). Because of their significance, researchers, policymakers and practitioners are interested in extending the knowledge on the internationalization process of SMEs.

The internationalization process is more complicated than merely deciding on which countries to enter (Kuivalainen et al. 2012). The firm has to decide on the entry mode, the timing and the extent as well. These decisions are often influenced by several internal and external contextual factors. Moreover, market selection does neither necessarily result in a higher firm performance nor in a steady increase of the internationalization level. The firm may also change its operation mode (Calof and Beamish 1995), de-internationalize (Benito and Welch 1997) or start rapid internationalization only after several years of operation in the domestic market (Bell et al. 2003). Different and complex internationalization patterns and profiles highlight the necessity to fit organizational dimensions to the particular organizational situation the firm is operating in (Aspelund and Moen 2005; Knight and Cavusgil 2005; Hagen et al. 2012). Ultimately the firm's international performance does not only depend on the internationalization level (Pangarkar 2007; Papadopoulos and Martin 2010), but primarily on the firm internal coordination dimensions and their alignment (Yeoh and Jeong 1995; Chung, Wang and Huang 2012).

Because of the complexity of the internationalization processes, this thesis aimed to offer a multidimensional, holistic perspective on internationalization. The four studies this thesis is composed of explore the different phases and relationships within the scope of the overall internationalization process. Researching the patterns that SMEs take may help to predict future changes, developments and driving forces. But it has to be recognized that the patterns as well as their underlying dimensions are open to change. Changing the operation mode changes the international situation and the conditions the firm is operating in and hence different organizational means may become necessary to face the changed situation and compete effectively. Overall, different components affect the international performance of SME.

In general, this research emerges from a lack of knowledge on (1) the internationalization patterns that are followed by SMEs, (2) the reasons for changes in internationalization behaviour, (3) different organizational configurations and types of international family firms and (4) the way SME can capitalize on organizational processes. This lack of knowledge parallels the managerial relevance of internationalizing successfully. Thus, the present research responds to the following key questions:

(1) What are the internationalization patterns that SMEs follow, what determines the patterns and how do the patterns develop over time?

(2) What are the reasons behind foreign operation mode changes (i.e. mode increases and mode reductions)?

(3) What configurations of culture, strategy and structure do international family firms exhibit and how do these configurations differ in terms of performance and further variables relevant to internationalization?

(4) How do scanning and planning processes contribute to the international performance of international SME?

The core results of the studies conducted on each of these questions are interesting and can be described as follows.

By answering the first general research objective, we show that SMEs follow three different internationalization patterns: born global, born-again global and traditional. We find that the internationalization patterns differ not only based on scale, scope and commencement, but also with regard to several descriptive variables such as international experience, the number of production subsidiaries, size, the number of countries served, technology orientation and perceived overall performance. Furthermore, we discuss the possible changes in internationalization patterns and ac-

count for the dynamics of foreign market involvement. Most SMEs did not change their internationalization pattern, but from the firms that did most changed from a traditional to a more dedicated and committed internationalization pattern. Finally, we show that certain factors influence the internationalization patterns of SMEs. In particular, international orientation and growth orientation are important variables in explaining the differences between traditional, born global and born-again global firms. Other factors are the communication capability, intelligence generation capability and marketing-mix standardization.

Regarding the second broad research aim, we conclude that executives recognize a wide range of reasons for mode change, but the importance and magnitude of those stimuli differ with regards to mode increases and reductions. While performance and external environment increase the likelihood of mode reductions, internal environment and managerial attitudes induce mode increases. As compared with results of Calof and Beamish's study (1995), there are only a few differences. The importance of performance as a stimulus for change is not significantly more important in the context of mode reductions than mode increases. Similarly, stimuli from the external environment increase the probability of mode reductions, which was not expected since theory does not advise on a direction of the relationship. In addition, we found that external environment is significantly linked to radical mode changes.

By exploring the third research question in a taxonomic approach, we discovered four distinct types of international family firms: Domestic-focussed Traditionalists, Global Standardisers, Multinational Adapters and Transnational Entrepreneurs. The top-performing firms were the Transnational Entrepreneurs – firms that are internationally oriented, people- and idea-driven, in which risk-taking within a decentralized and specialized structure facilitates efficient responses to foreign environments and provides international customers with high-quality products and services. Apart from the defining (i.e. clustering) variables several other distinguished the configurations from one another. Firm size and resources, the levels of regional expansion and their dominant operation modes differed considerably between the patterns.

The fourth and last study finds that scanning and planning leads to success because of international entrepreneurial orientation, as international entrepreneurial orientation constitutes a dynamic capability that transforms business processes in response to changing environments and thereby creates economic rents. Thus, international entrepreneurial orientation explains why and how processes contribute to firm performance. The impact that scanning and planning have on performance is completely mediated by international entrepreneurial orientation so that the direct process-

performance relationships are negligible. Moreover, we found that there is a recipro-cal, i.e. bi-directional, relationship between processes and international entrepreneu-rial orientation. Hence, the processes impact international entrepreneurial orientation, but international entrepreneurial orientation also influences the processes.

In summary, the findings of this doctoral thesis illuminate the complexity of SMEs' internationalization process. The international orientation and growth orientation as well as firm internal capabilities determine the internationalization pattern that a firm follows. This pattern is based on the firm's decisions on country scope, operation modes, timing and the resulting foreign sales ratio. Since these factors are open to change – due to environmental circumstances and/or internal strategic choices – the internationalization pattern may change as well. Foreign operation mode changes, for instance, can be a result of changes in the attitudes of the management, the internal environment in terms of strategies and resources, the external environment and also performance. In order to succeed in the international environment SMEs can use dif-ferent combinations of strategies, structures and cultures. Transnational Entrepre-neurs, i.e. internationally orientated and risk-taking SMEs with a decentralized and specialized structure, perform best on an international scale, although Global Stan-dardiser and Multinational Adapter also showed consistent configurations resulting in solid international performance. Achieving a fit between these organizational coordi-nation dimensions and the international situation will be rewarded with positive busi-ness outcomes. SMEs can actively reconfigure, integrate and orchestrate their proc-esses in order to improve their international performance. The international entrepre-neurial orientation of SMEs seems to be a key dynamic capability within this context. It mediates the performance effects of scanning and planning processes and simul-taneously affects how the processes are carried out.

1.2.   Research and Theoretical Implications

The present thesis contributes to research and theory in several ways, which will be discussed in the following.

Within the first study, internationalization patterns were derived on the basis of the Uppsala model and born global research. By exemplifying the communalities be-tween the research streams, we were able to derive general internationalization di-mensions that are capable of measuring the internationalization pattern at a specific point in time. Thereby we followed the understanding that the internationalization pat-tern is a latent construct, which is not directly observable but can be measured via manifest dimensions. Without using arbitrary thresholds and definitions, we were able to confirm the three patterns discussed most in the academic literature: traditional,

born global and born-again global. On the one hand, this result provides objective and quantitative support to the findings of former studies (Bell, McNaughton and Young 2001; Bell et al. 2003; Tuppura et al. 2008; Kontinen and Ojala 2012) and responds to Bell et al.'s (2003) call for more research on born-again global firms. On the other hand, it extends the existing knowledge and contributes to the current state of the research by advancing the conceptualization of internationalization patterns and applying a latent class analysis to derive distinct internationalization patterns. It has been highlighted that the usage of such methods should be strengthened in international business research (McNaughton 2003). Moreover, the conceptualization of the internationalization patterns is useful for the overall understanding of the internationalization process of SMEs (Kuivalainen, Saarenketo and Puumalainen 2012; Kuivalainen et al. 2012). Within this context, Jones and Coviello (2005) discussed the relationship between emergent patterns and dynamic profiles of internationalization behaviour. The internationalization patterns as conceptualized in this study can be captured as the timing of cross-border firm-level activities, the range of operation modes and countries as well as the extent of foreign sales, at a specific point in time. However, the changes in the composition of these indicators describe the dynamic profiles of SME's internationalization behaviour. Hence, internationalization profiles describe longer periods of internationalization behaviour accommodating different patterns. Finally, we support Vermeulen and Barkema (2002) in stating that the internationalization pattern depends on a set of firm-specific capabilities.

The second study contributes to the literature on mode changes, shifts or conversions. By analyzing the reasons for mode increases as compared to mode reductions, we showed that SME managers perceive different sets of stimuli to be causing mode increases or reductions respectively. This echoes Fletcher's (2001) results. Moreover, the major reasons for incremental and radical mode changes differ. While the external environment induces radical change, both upstream and downstream, performance and attitudes are connected with incremental one-step reduction. The results further imply that environmental as well as internal firm factors have to be considered when analyzing a change in the foreign operation mode, or even more generally speaking, a change in internationalization behaviour. Another theoretical implication is that both behavioural-based models of internationalization and the economic-strategic approach do not sufficiently explain mode changes. While the behavioural models do not cover mode reductions and are not capable of describing the direct influence of performance and external environment on mode change, managerial attitudes can hardly be explained with economic approaches, although attitudes are highly relevant for explaining mode increases. Therefore, economic reasoning

has to expand its explanatory power by including attitudinal variables (Perks and Hughes 2008). Consequently, we conclude with Benito and Welch (1994) that both research streams taken separately might not be appropriate to explain all facets of mode changes. Explained variance of mode shifts can be increased when stimuli from both research streams are combined.

The third study provides an important contribution to the research on family firm internationalization by developing a taxonomy of small international family firms because little is known about the interplay of culture, strategy and structure for family firms in international markets. With this study, we responded to the call by Kontinen and Ojala (2010) to increase the empirical research on the internationalization of family firms. Moreover, we contribute to the research on internationalizing family firms by considering international, i.e. non-domestic, performance. Many studies of internationalized family firms have either disregarded performance or focussed on total sales (growth). Hence, we extend the knowledge on the performance consequences of organizational configurations outside of the home countries of family firms. Furthermore, Kontinen and Ojala (2010) called for studies on the resources that are used by family firms to balance their limited access to financial resources in the context of internationalization. Our study serves this function by characterizing the clusters based on their international and technological know-how. We found that resources such as international and technological know-how differentiate the clusters, but also that financial resources appear to differ between the clusters. International know-how is important to a company because family members with experience in international business will be internationally oriented and willing to take risks. Thus, with a better knowledge of foreign markets, these managers can decide more precisely which strategies they should pursue to gain competitive advantage and achieve success. Heeding the call by Sciascia et al. (2012) for research that takes into account the different international entrepreneurship variables, we found that the configurations did not differ significantly regarding the born globalness and the international experience. However, there appears to be a connection between the configurations discussed in this study and the internationalization stages discussed in the behavioural-based stage models of internationalization (Johanson and Vahlne 1977; Bilkey 1978). Although we built the taxonomy based on classic organizational variables, we see that the configurations differ with regard to the number of countries in which the firms operate, the foreign operation modes that they use and the geographical scope of their foreign market activities.

The fourth study contributes to theory and research in the field by deriving how resources, processes and capabilities relate to one another. We argue that interna-

tional entrepreneurial orientation is a dynamic capability that integrates, combines and transforms processes and resources so that the firm can match the changing requirements of the international environment. Thereby we advance the understanding of international entrepreneurial orientation and dynamic capabilities (Jantunen et al. 2005; Kuivalainen, Sundqvist and Servais 2007; Lu et al. 2010). We follow existing definitions in the field and imply a hierarchical perspective describing the structural relationship between resources, processes and dynamic capabilities (Winter 2003; Wang and Ahmed 2007). While other studies derived international entrepreneurial orientation as an antecedent factor (Knight and Cavusgil 2004; Jones and Coviello 2005), we showed that the effect of scanning and planning on international performance is completely mediated by international entrepreneurial orientation. We argue that learning about foreign markets reduces the perceived risks of international business. When the risk is perceived to be more accessible, SME managers may be willing to take more risks. Such learning also opens up new avenues for business opportunities that can be proactively acted upon. Hence, an increase in processes can lead to an increase in international entrepreneurial orientation. Thereby, we follow the basic idea of the Stimulus-Organism-Response model (Woodworth 1929) and propose that processes are easier to change than behavioural attitudes. Hence, processes can function as stimuli in changing international entrepreneurial orientation. International entrepreneurial orientation determines internationalization behaviour (i.e. whether the firm enter new markets, which markets, etc.), and behaviour ultimately impacts performance. Moreover, we found that scanning and planning processes are reciprocally linked with international entrepreneurial orientation which poses a dynamic capability. Hence, we can extend the understanding of how and why SMEs can take advantage of different business processes.

1.3.   Managerial Implications

Since SME internationalization is still a challenging managerial issue with various complex content areas, the firm-specific view of this doctoral thesis provides major managerial implications.

The first study shows that several firm-internal factors influence the internationalization pattern that a firm follows. Therefore, managers learn that internationalization patterns are not deterministic but can be actively influenced by the management. Firms can make strategic decisions that change their patterns over time. Moreover, because we show which factors influence the patterns, SME managers can become aware of the relevant features. They can try to influence, build and design their internationalization pattern. More importantly, this study shows that the managerial capa-

bilities determine the internationalization patterns most as compared to organizational and marketing capabilities.

The second study highlights the crucial antecedences that have to be observed and considered when mode changes are planned or change decisions have to be made. Executives can use the experiences and findings provided in this study as an orientation towards a more rational decision-making process.

The third study finds four configurations of family firms and thereby provides a benchmark to SME and family firm managers. Although we discussed real types and not ideal types, firm managers can learn from the top performing group, i.e. the Transnational Entrepreneurs. It appears that international, risk and people orientation are key drivers of the organizational configurations and thereby influence success in foreign markets. If a firm wants to grow internationally, those orientations must be enhanced. Further, managers should realize that firm orientations should fit the strategies and structures. Although the Transnational Entrepreneurs were the most successful firms, both the Global Standardisers and the Multinational Adapters exhibited sound configurations of orientations, strategies and structures that resulted in solid international performance. Moreover, there appears to be a connection between the configurations discussed in this study and the internationalization of family firms. It might be worthwhile for a manager to consider the firm's level of internationalization and how compatible it is with the firm's organizational culture, structure and strategy. If the company aims to successfully expand internationally, then the manager might want to consider the configurations Global Standardiser, Multinational Adapter, or Transnational Entrepreneur. Depending on the level of international activity sought, the manager can use the configurations described in this study as an orientation or even a target.

The fourth study implies for SME managers that scanning and planning processes are crucial to a firm's international success because of their international entrepreneurial orientation and that managers have two main channels by which to influence the probabilities that they succeed in international markets. The managers' contribution lies in designing, developing and constructing capabilities and in anticipating the value of resources and processes. The first perspective highlights the fact that managers must make use of resources and processes to adapt to the changing international environment. Processes enable the firm to build a basis for the pursuit of entrepreneurship. Hence, the foundation of entrepreneurship can be established in international entrepreneurial orientation as a dynamic capability that integrates and configures resources and processes. Highlighting the second perspective, managers

must realize that there are complex feedback-loops. International entrepreneurial orientation also impacts the extent to which scanning and planning processes are carried out. Managers contribute to rent creation through their anticipation of the value of certain resources and processes.

Overall, the examination of internationalization as a process implies that decisions, especially on the dimensions of entry mode, country dimensions and timing, lead to specific international situations, which in turn require certain organizational forms in order to be successful. Managers have to realize the importance of firms' structure, strategy and culture, but also the significance of processes and capabilities within the internationalization process. It is a tremendous advantage for managers to be able to initiate early impulses in the successful development of resources, processes, capabilities and coordination dimensions (cf. Swoboda et al. 2009; Swoboda and Jager 2009; Jager 2010). SME managers can fit the organizational coordination dimensions to their international situation and try to achieve superior performance. Clearly, these coordination dimensions do have an impact on firms' international performance and therefore have to be actively managed within the internationalization process.

2.   Further Research

In addition to theoretical and managerial implications, this doctoral thesis also provides issues for further research. Although limitations and further research topics are discussed at the end of each study, general fields for further research emerge regarding the data basis, the conceptual and theoretical framing and the overall topic of SME internationalization.

First, although the present work is based on a large data sample, there are possibilities to extend the data basis in future studies. In this study we researched SME from Germany that are not diversified, not linked to any MNE and from the manufacturing industry only. Future research should contribute empirical results from a different country or even across several countries. Also the explicit consideration of service and retail firms seems worthwhile. Broadening the data basis in terms of including further industries, countries and environmental contexts would help to investigate SME internationalization. Furthermore, the empirical design of the study based on managerial perceptions includes behavioural attitudes and orientations of managers, but might restrict the robustness and degree to which the conclusions can be generalized. Future research could validate the results with objective data and try to avoid potential threats because of common method bias by incorporating secondary data.

The focus on smaller German firms limits the generalization of the results and affects the measures. Although the constructs have been defined as precise as possible by drawing on literature, only specific organizational context is examined. Focusing particularly on the relevance and intensity of structural, process-related, and cultural/attitudinal issues suggests that additional analyses on further specific organizational context might enlarge the scope of implications that can be drawn from such a study. Finally, as organizations are complex in nature, there are other aspects of organizational context which could be included in a study. Moreover, we highlighted in the course of this work that internationalization is a dynamic process and that we lack information on the time-based development of SMEs' international operations. Hence, future research studies are advised to carry out studies with a longitudinal or an experimental design. This would be extremely helpful to address causal and temporal relationships between constructs, such as processes and capabilities or the overall internationalization process.

Second, from a conceptual perspective this study could have explored other determinants of internationalization patterns and coordination dimensions, processes and capabilities of SME. Apart from early export stage models and determinants of rapid internationalization, we know little about the motives and driving forces of SME internationalization. Research could extend the focus on external factors as determinants of internationalization and also on the interactions between determinants of internationalization (Li et al 2012). This dissertation focussed on internal-firm dimensions and their influence and design towards successful internationalization. However, external environmental factors play a crucial role at several instances in the internationalization process and should therefore be considered more comprehensively by future research studies. For example, we would imagine that the performance effect of organizational configurations depends on the international situation and environmental variables. Furthermore, different aspects of the organizational configuration can be considered. There are not only different structures, processes and cultures that shape an organization but also distinct resources and capabilities. Future research could derive complex configurations that promise success for different internationalization patterns. Also non-linear relationships have to be considered bearing in mind the complexity of the smaller firm operating in the international environment. Another interesting field of research that has already been highlighted by Coviello and McAuley (1999) in their review is the analysis of networks. This dissertation has not dealt with SME networks but advises future studies to analyze the network capability within the wider context of dynamic capabilities and processes of the internationalizing small firm. As Torkelli et al. (2012) pointed out it would be interesting to

research the interplay of network competences and entrepreneurial orientation or other strategic orientations. There surely exist boundary conditions that delimit the benefit of competences and capabilities.

Third, from a theoretical point of view, this field of research could be well advanced by integrating theories and digging deep into their common foundations. However, there is a difference between integrating and combining complimentary theories and creating a theoretical patchwork. Future research should aim to advance theory development, question the underlying models and find parallels. Many authors claim that both the research on SME internationalization and the international entrepreneurship discipline lack a unifying framework, but we showed that several attempts have been made towards closing this gap. A promising avenue is the combination of international business with entrepreneurship theories (Jones and Coviello 2005; Jones, Coviello and Tang 2011). Within this context, it would be desirable to further develop and maybe even empirically test an overall model of SME internationalization. Since the overall internationalization model introduced in this dissertation served the primary function of structuring this doctoral thesis and relating the respective papers, we call for empirical studies focussing exclusively on this regard. Past studies have tended to have a narrow focus and look at specific parts of the overall process. However, we think that the specific results from the last years can be assembled and a bigger picture can be derived in order to advance the knowledge on the holistic process of SME internationalization.

Fourth, several possible research questions regarding SME internationalization remain unanswered. Although research has progressed far in analyzing and describing different types of firms and different combinations of structures and processes (Miller and Friesen 1982; Karagozoglu and Brown 1988; Covin 1991), knowledge is lacking on how exactly smaller firms coordinate and change their organizational design during the internationalization process. One possible way to approach this research goal is the contingency analysis of organizational dimensions. Future research could try to develop typologies of successful combinations of internationalization patterns and coordination dimensions. Also the advancement of strategic types of international SMEs and their performance consequences seems promising (Hagen et al. 2012). A very interesting and promising approach would be to combine the internationalization patterns, organizational dimensions and performance into contingency or fit models.

G.   References

Acedo, Francisco J. and Marian V. Jones (2007), "Speed of Internationalization and Entrepreneurial Cognition: Insights and a Comparison between International New Ventures, Exporters and Domestic Firms," *Journal of World Business*, 42 (3), 236-252.

Aharoni, Yair (1966). *The Foreign Investment Decision Process*, Boston, MA: Harvard University Press.

Ajzen, Icek (1991), "The Theory of Planned Behavior," *Organizational behavior and human decision processes*, 50 (2), 179-211.

Akaike, Hirotugu (1987), "Factor Analysis and Aic," *Psychometrika*, 52 (3), 317-332.

Amabile, Teresa M., Regina Conti, Heather Coon, Jeffrey Lazenby and Michael Herron (1996), "Assessing the Work Environment for Creativity," *The Academy of Management Journal*, 39 (5), 1154-1184.

Amit, Raphael and Paul J.H. Schoemaker (1993), "Strategic Assets and Organizational Rent," *Strategic Management Journal*, 14 (1), 33-46.

Andersen, James C. and David W. Gerbing (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Pyschological Bulletin*, 103 (3), 411-423.

Andersen, Otto (1993), "On the Internationalization Process of Firms: A Critical Analysis," *Journal of International Business Studies*, 24 (2), 209-231.

Andersen, Otto (1997), "Internationalization and Market Entry," *Management International Review*, 37 (2), 27-42.

Anderson, James C. and David W. Gerbing (1988), "Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach," *Psychological Bulletin*, 103 (3), 411-423.

Andersson, Svante and Felicitas Evangelista (2006), "The Entrepreneur in the Born Global Firm in Australia and Sweden," *Journal of Small Business and Enterprise Development*, 13 (4), 642-669.

Antonakis, John, Samuel Bendahan, Philippe Jacquart and Rafael Lalive (2010), "On Making Causal Claims: A Review and Recommendations," *The Leadership Quarterly*, 21 (6), 1086-1120.

Armario, Julia M., David M. Ruiz and Enrique M. Armario (2008), "Market Orientation and Internationalization in Small and Medium-Sized Enterprises," *Journal of Small Business Management*, 46 (4), 485-511.

Armstrong, J. Scott and Terry S. Overton (1977), "Estimating Nonresponse Bias in Mail Surveys," *Journal of Marketing Research*, 14 (3), 396-402.

Aronoff, Craig E. and John L. Ward (1995), "Family-Owned Businesses: A Thing of the Past or a Model for the Future?," *Family Business Review*, 8 (2), 121-130.

Aspelund, Arild, Tage Koed Madsen and Øystein Moen (2007), "A Review of the Foundation, International Marketing Strategies, and Performance of International New Ventures," *European Journal of Marketing*, 41 (11/12), 1423-1448.

Aspelund, Arild and Øystein Moen (2005), "Small International Firms: Typology, Performance and Implications," *Management International Review*, 45 (3), 37-57.

Autio, Erkko, Harry J. Sapienza and James G. Almeida (2000), "Effects of Age at Entry, Knowledge Intensity, and Imitability on International Growth," *The Academy of Management Journal*, 43 (5), 909-924.

Baird, Inga S., Marjorie A. Lyles and James Burdeane Orris (1994), "The Choice of International Strategies by Small Businesses," *Journal of Small Business Management*, 32 (1), 48-57.

Baker, William E. and James M. Sinkula (2009), "The Complementary Effects of Market Orientation and Entrepreneurial Orientation on Profitability in Small Businesses," *Journal of Small Business Management*, 47 (4), 443-464.

Balabanis, George I. and Eva S. Katsikea (2003), "Being an Entrepreneurial Exporter: Does It Pay?," *International Business Review*, 12 (2), 233-252.

Bandalos, D.L. (2002), "The Effects of Item Parceling on Goodness-of-Fit and Parameter Estimate Bias in Structural Equation Modeling," *Structural Equation Modeling*, 9 (1), 78-102.

Barney, Jay B. (1991), "Firm Resources and Sustained Competitive Advantage," *Journal of Management* 17 (1), 99-120.

Baron, Reuben M. and David A. Kenny (1986), "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations," *Journal of Personality and Social Psychology*, 51 (6), 1173-1182.

Barreto, I. (2010), "Dynamic Capabilities: A Review of Past Research and an Agenda for the Future," *Journal of Management*, 36 (1), 256-280.

Barringer, Bruce R. and Allen C. Bluedorn (1999), "The Relationship between Corporate Entrepreneurship and Strategic Management," *Strategic Management Journal*, 20 (5), 421-444.

Barringer, Bruce R. and Daniel W. Greening (1998), "Small Business Growth through Geographic Expansion: A Comparative Case Study," *Journal of Business Venturing*, 13 (6), 467-492.

Bartlett, C. A. and Sumantra Ghoshal (1991). *Managing across Borders: The Transnational Solution*, Boston, MA: Harvard Business School Press.

Baum, Matthias, Christian Schwens and Rüdiger Kabst (2011), "A Typology of International New Ventures: Empirical Evidence from High-Technology Industries," *Journal of Small Business Management*, 49 (3), 305-330.

Beal, Reginald M. (2000), "Competing Effectively: Environmental Scanning, Competitive Strategy, and Organizational Performance in Small Manufacturing Firms," *Journal of Small Business Management*, 38 (1), 27-47.

Beamish, Paul W., Lambros Karavis, Anthony Goerzen and Christopher Lane (1999), "The Relationship between Organizational Structure and Export Performance," *Management International Review*, 39 (1), 37-54.

Belderbos, Rene and Jianglei Zou (2009), "Real Options and Foreign Affiliate Divestments: A Portfolio Perspective," *Journal of International Business Studies*, 40 (4), 600-620.

Bell, Jim, Rod McNaughton and Stephen Young (2001), "'Born-Again Global' Firms - an Extension to the 'Born Global' Phenomenon," *Journal of International Management*, 7 (3), 173-189

Bell, Jim, Rod McNaughton, Stephen Young and Dave Crick (2003), "Towards an Integrative Model of Small Firm Internationalisation," *Journal of International Entrepreneurship*, 1 (4), 339-362.

Benito, Gabriel R. G. (1997), "Divestment of Foreign Production Operations," *Applied Economics*, 29 (10), 1365-1378.

Benito, Gabriel R. G. and Geir Gripsrud (1992), "The Expansion of Foreign Direct Investments: Discrete Rational Location Choices or a Cultural Learning Process?," *Journal of International Business Studies*, 23 (3), 461-476.

Benito, Gabriel R. G., Torben Pedersen and Bent Petersen (2005), "Export Channel Dynamics: An Empirical Investigation," *Managerial and Decision Economics*, 26 (1), 159-173.

Benito, Gabriel R. G. and Lawrence S. Welch (1994), "Foreign Market Servicing: Beyond Choice of Entry Mode," *Journal of International Marketing*, 2 (2), 7-27.

Benito, Gabriel R. G. and Lawrence S. Welch (1997), "De-Internationalization," *Management International Review*, 37 (2), 7-26.

Bevan, Alan, Saul Estrin and Klaus Meyer (2004), "Foreign Investment Location and Institutional Development in Transition Economies," *International Business Review*, 13 (1), 43-64.

Bilkey, Warren T. (1978), "An Attempted Integration of the Literature on the Export Behavior of Firms," *Journal of International Business Studies*, 9 (1), 33-46.

Birkinshaw, Julian (1997), "Entrepreneurship in Multinational Corporations: The Characteristics of Subsidiary Initiatives," *Strategic Management Journal*, 18 (3), 207-229.

Björkman, Ingmar and Michael Eklund (1996), "The Sequence of Operational Modes Used by Finnish Investors in Germany," *Journal of International Marketing*, 4 (1), 33-55.

Block, Joern (2009). *Long-Term Orientation of Family Firms: An Investigation of R&D Investments, Downsizing Practices, and Executive Pay*, Wiesbaden: Gabler.

Block, Jörn (2010), "Family Management, Family Ownership, and Downsizing: Evidence from S&P 500 Firms," *Family Business Review*, 23 (2), 109-130.

Block, Jörn, Peter Jaskiewicz and Danny Miller (2011), "Ownership Versus Management Effects on Performance in Family and Founder Companies: A Bayesian Reconciliation," *Journal of Family Business Strategy*, 2 (4), 232-245.

Bloodgood, James M., Harry J. Sapienza and James G. Almeida (1996), "The Internationalization of New High-Potential U.S. Ventures: Antecedents and Outcomes," *Entrepreneurship: Theory & Practice*, 20 (4), 61-76.

Bobillo, Alfredo M., Felix López-Iturriaga and Fernando Tejerina-Gaite (2010), "Firm Performance and International Diversification: The Internal and External Competitive Advantages," *International Business Review*, 19 (6), 607-618.

Boddewyn, Jean J. (1979), "Foreign Divestment: Magnitude and Factors," *Journal of International Business Studies*, 10 (1), 21-27.

Boddewyn, Jean J. (1983), "Foreign and Domestic Divestment and Investment Decisions: Like or Unlike?," *Journal of International Business Studies*, 14 (3), 23-35.

Boddewyn, Jean J. (1985), "Theories of Foreign Direct Investment and Divestment: A Classificatory Note," *Management International Review*, 25 (1), 57-65.

Bollen, KennethA (1996), "An Alternative Two Stage Least Squares (2sls) Estimator for Latent Variable Equations," *Psychometrika*, 61 (1), 109-121.

Bonaccorsi, Andrea (1992), "On the Relationship between Firm Size and Export Intensity," *Journal of International Business Studies*, 23 (4), 605-635.

Bracker, Jeffrey S., Barbara W. Keats and John N. Pearson (1988), "Planning and Financial Performance among Small Firms in a Growth Industry," *Strategic Management Journal*, 9 (6), 591-603.

Bradley, Frank (1995). *International Marketing Strategy*, New York, NY: The Free Press.

Brouthers, Keith D. and Jean-François Hennart (2007), "Boundaries of the Firm: Insights from International Entry Mode Research," *Journal of Management*, 33 (3), 395-425.

Brouthers, Keith D. and George Nakos (2004), "SME Entry Mode Choice and Performance: A Transaction Cost Perspective," *Entrepreneurship: Theory and Practice*, 28 (1), 229-247.

Brouthers, Lance E. and George Nakos (2005), "The Role of Systematic International Market Selection on Small Firms' Export Performance," *Journal of Small Business Management*, 43 (4), 363-381.

Brown, Timothy A. (2006). *Confirmatory Factor Analysis for Applied Research*, New York: The Guilford Press.

Buckley, Peter J. (2002), "Is the International Business Research Agenda Running out of Steam?," *Journal of International Business Studies*, 33 (2), 365-373.

Buckley, Peter J. and Mark Casson (1981), "The Optimal Timing of a Foreign Direct Investment," *The Economic Journal*, 91 (361), 75-87.

Buckley, Peter J. and Mark C. Casson (1998), "Analyzing Foreign Market Entry Strategies: Extending the Internalization Approach," *Journal of International Business Studies*, 29 (3), 539-561.

Buckley, Peter J., Christopher L. Pass and Kate Prescott (1990), "The Implementation of an International Market Servicing Strategy in UK Manufacturing Firms," *British Journal of Management*, 1 (3), 127-136.

Burns, Tom and George M. Stalker (1961). *The Management of Innovation*, London: Tavistock.

Cadogan, John W., Charles C. Cui and Erik Kwok Yeung Li (2003), "Export Market-Oriented Behavior and Export Performance: The Moderating Roles of Competitive Intensity and Technological Turbulence," *International Marketing Review*, 20 (5), 493-513.

Cadogan, John W., Charles C. Cui, Robert E. Morgan and Vicky M. Story (2006), "Factors Facilitating and Impeding the Development of Export Market-Oriented Behavior: A Study of Hong Kong Manufacturing Exporters," *Industrial Marketing Management*, 35 (5), 634-647.

Cadogan, John W. and Adamantios Diamantopoulos (1995), "Narver and Slater, Kohli and Jaworski and the Market Orientation Construct: Integration and Internationalization," *Journal of Strategic Marketing*, 3 (1), 41-60.

Calof, Jonathan L. (1993a), "The Impact of Size on Internationalization," *Journal of Small Business Management*, 31 (4), 60-69.

Calof, Jonathan L. (1993b), "The Mode Choice and Change Decision Process and Its Impact on International Performance," *International Business Review*, 2 (1), 97-120.

Calof, Jonathan L. and Paul W. Beamish (1995), "Adapting to Foreign Markets: Explaining Internationalization," *International Business Review*, 4 (2), 115-132.

Canabal, Anne and George O. III White (2008), "Entry Mode Research: Past and Future," *International Business Review*, 17 (3), 267-284.

Carlson, Sune (1966). *International Business Research*, Uppsala: Acta Universitatis Upsaliensis.

Casillas, Jose C., Ana M. Moreno and Jose L. Barbero (2010), "A Configurational Approach of the Relationship between Entrepreneurial Orientation and Growth of Family Firms," *Family Business Review*, 23 (1), 27-44.

Cavusgil, S. Tamer and Shaoming Zou (1994), "Marketing Strategy-Performance Relationship: An Investigation of the Empirical Link in Export Market Ventures," *Journal of Marketing*, 58 (1), 1-21.

Cavusgil, S. Tamer, Shaoming Zou and G. M. Naidu (1993), "Product and Promotion Adaptation in Export Ventures: An Empirical Investigation," *Journal of International Business Studies*, 24 (3), 479-506.

Chetty, Sylvie and Henrik Agndal (2007), "Social Capital and Its Influence on Changes in Internationalization Mode among Small and Medium-Sized Enterprises," *Journal of International Marketing*, 15 (1), 1-29.

Chetty, Sylvie and Colin Campbell-Hunt (2004), "A Strategic Approach to Internationalization: A Traditional Versus A "Born-Global" Approach," *Journal of International Marketing*, 12 (1), 57-81.

Chow, Yuen Kong and Robert T. Hamilton (1993), "Corporate Divestment: An Overview," *Journal of Managerial Psychology*, 8 (5), 9-13.

Chung, Henry F. L., Cheng Lu Wang and Pei-how Huang (2012), "A Contingency Approach to International Marketing Strategy and Decision-Making Structure among Exporting Firms," *International Marketing Review*, 29 (1), 54-87.

Clark, Timothy, Derek S. Pugh and Geoff Mallory (1997), "The Process of Internationalization in the Operating Firm," *International Business Review*, 6 (6), 605-623.

Claver, Enrique, Laura Rienda and Diego Quer (2007), "The Internationalisation Process in Family Firms: Choice of Market Entry Strategies," *Journal of General Management*, 33 (1), 1-16.

Claver, Enrique, Laura Rienda and Diego Quer (2009), "Family Firms' International Commitment : The Influence of Family-Related Factors," *Family Business Review*, 22 (2), 125-135.

Claver, Enrique., Laura Rienda and Diego Quer (2008), "Family Firms' Risk Perception: Empirical Evidence on the Internationalization Process," *Journal of Small Business and Enterprise Development*, 15 (3), 457-471.

Cooper, Arnold C., Timothy B. Folta and Carolyn Woo (1995), "Entrepreneurial Information Search," *Journal of Business Venturing*, 10 (2), 107-120.

Coviello, Nicole E. and Andrew McAuley (1999), "Internationalisation and the Smaller Firm: A Review of Contemporary Empirical Research," *Management International Review*, 39, 223-256.

Covin, Jeffrey G. (1991), "Entrepreneurial Versus Conservative Firms: A Comparison of Strategies and Performance," *Journal of Management Studies*, 28 (5), 439-462.

Covin, Jeffrey G., Kimberly M. Green and Dennis P. Slevin (2006), "Strategic Process Effects on the Entrepreneurial Orientation–Sales Growth Rate Relationship," *Entrepreneurship: Theory & Practice*, 30 (1), 57-81.

Covin, Jeffrey G. and Dennis P. Slevin (1989), "Strategic Management of Small Firms in Hostile and Benign Environments," *Strategic Management Journal*, 10 (1), 75-87.

Covin, Jeffrey G. and Dennis P. Slevin (1991), "A Conceptual Model of Entrepreneurship as Firm Behavior," *Entrepreneurship: Theory & Practice*, 16 (1), 7-25.

Crick, Dave (2009), "The Internationalisation of Born Global and International New Venture SMEs," *International Marketing Review*, 26 (4/5), 453-476.

Crick, Dave and Shiv Chaudhry (2006), "International Marketing Strategy in the Electronics Industry: A Follow-up Investigation of UK SMEs 18 Months after the Export Withdrawal Decision," *Journal of Strategic Marketing*, 14 (3), 277-292.

Crick, Dave and Martine Spence (2005), "The Internationalisation of 'High Performing' UK High-Tech SMEs: A Study of Planned and Unplanned Strategies," *International Business Review*, 14 (2), 167-185

Crick, David, Robert Bradshaw and Shiv Chaudhry (2006), ""Successful" Internationalising UK Family and Non-Family-Owned Firms: A Comparative Study," *Journal of Small Business and Enterprise Development*, 13 (4), 498-512.

Cyert, Richard M. and James G. March (1963). *A Behavioral Theory of the Firm*, Englewood Cliffs, NJ: Prentice Hall.

Czinkota, Michael R. (1982). *Export Development Strategies*, New York, NY: Praeger.

Delios, Andrew and Paul W. Beamish (2001), "Survival and Profitability: The Roles of Experience and Intangible Assets in Foreign Subsidiary Performance," *The Academy of Management Journal*, 44 (5), 1028-1038.

Delmar, Frédéric and Scott Shane (2003), "Does Business Planning Facilitate the Development of New Ventures?," *Strategic Management Journal*, 24 (12), 1165-1185.

Dess, Gregory G., Stephanie Newport and Abdul M. A. Rasheed (1993), "Configuration Research in Strategic Management: Key Issues and Suggestions," *Journal of Management*, 19 (4), 138-170.

Dhanaraj, Charles and Paul W. Beamish (2003), "A Resource-Based Approach to the Study of Export Performance," *Journal of Small Business Management*, 41 (3), 242-261.

Diamantopoulos, Adamantios, Petra Riefler and Katharina P. Roth (2008), "Advancing Formative Measurement Models," *Journal of Business Research*, 61 (12), 1203-1218.

Diamantopoulos, Adamantios and Heidi M. Winklhofer (2001), "Index Construction with Formative Indicators: An Alternative to Scale Development," *Journal of Marketing Research*, 38 (2), 269-277.

Dichtl, Erwin, Hans-Georg Koeglmayr and Stefan Mueller (1990), "International Orientation as a Precondition for Export Success," *Journal of International Business Studies*, 21 (1), 23-40.

Dimitratos, Pavlos, Spyros Lioukas and Sara Carter (2004), "The Relationship between Entrepreneurship and International Performance: The Importance of Domestic Environment," *International Business Review*, 13 (1), 19-41.

Donckels, Rik and Erwin Fröhlich (1991), "Are Family Businesses Really Different? European Experiences from Stratos," *Family Business Review*, 4 (2), 149-160.

Doty, D. Harold, William H. Glick and George P. Huber (1993), "Fit, Equifinality, and Organizational Effectiveness: A Test of Two Configurational Theories," *The Academy of Management Journal*, 36 (6), 1196-1250.

Drazin, Robert and Andrew H. Van de Ven (1985), "Alternative Forms of Fit in Contingency Theory," *Administrative Science Quarterly*, 30 (4), 514-539.

Duhaime, Irene M. and John H. Grant (1984), "Factors Influencing Divestment Decision-Making: Evidence from a Field Study," *Strategic Management Journal*, 5 (4), 301-318.

Duhaime, Irene M. and Charles R. Schwenk (1985), "Conjectures on Cognitive Simplification in Acquisition and Divestment Decision Making," *Academy of Management Review*, 10 (2), 287-295.

Edström, Anders and Jay Galbraith (1977), "Transfer of Managers as a Coordination and Control Strategy in Multinational Organizations," *Administrative Science Quarterly*, 22 (2), 248-263.

Eisenhardt, Kathleen M. and Jeffrey A. Martin (2000), "Dynamic Capabilities: What Are They?," *Strategic Management Journal*, 21 (10/11), 1105-1111.

Ellis, Paul D. (2005), "The Traders' Dilemma: The Adverse Consequences of Superior Performance in Mediated Exchanges," *International Business Review*, 14 (4), 375-396.

Eriksson, Kent, Jan Johanson, Anders Majkgard and D. Deo Sharma (1997), "Experiential Knowledge and Cost in the Internationalization Process," *Journal of International Business Studies*, 28 (2), 337-360.

Evans, Jody and Felix T. Mavondo (2002), "Psychic Distance and Organizational Performance: An Empirical Examination of International Retailing Operations," *Journal of International Business Studies*, 33 (3), 515-532.

Fernández, Zulima and María J. Nieto (2005), "Internationalization Strategy of Small and Medium-Sized Family Businesses: Some Influential Factors," *Family Business Review*, 18 (1), 77-89.

Fernández, Zulima and María Jesús Nieto (2006), "Impact of Ownership on the International Involvement of SMEs," *Journal of International Business Studies*, 37 (3), 340-351.

Fiet, James O. (1996), "The Informational Basis of Entrepreneurial Discovery," *Small Business Economics*, 8 (6), 419-430.

Fina, Erminio and Alan M. Rugman (1996), "A Test of Internalization Theory and Internationalization Theory: The Upjohn Company," *Management International Review*, 36 (3), 199-213.

Fletcher, Richard (2001), "A Holistic Approach to Internationalisation," *International Business Review*, 10 (1), 25-49.

Ford, I. David and Philip J. Rosson (1997). "The Relationships between Export Manufacturers and Their Overseas Distributors," in I. David Ford (Ed.), *Understanding Business Markets*. London: The Dryden Press, 68-81.

Fornell, Claes and David F. Larcker (1981), "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, 18 (3), 39-50.

Forsgren, Mats (2002), "The Concept of Learning in the Uppsala Internationalization Process Model: A Critical Review," *International Business Review*, 11 (3), 257-277.

Foscht, Thomas, Bernhard Swoboda and Dirk Morschett (2006), "Electronic Commerce-Based Internationalisation of Small, Niche-Oriented Retailing Companies," *International Journal of Retail & Distribution Management*, 34 (7), 556-572.

Freeman, Susan and S. Tamer Cavusgil (2007), "Toward a Typology of Commitment States among Managers of Born-Global Firms: A Study of Accelerated Internationalization," *Journal of International Marketing*, 15 (4), 1-40.

Frishammar, Johan and Svante Andersson (2009), "The Overestimated Role of Strategic Orientations for International Performance in Smaller Firms," *Journal of International Entrepreneurship*, 7 (1), 57-77.

Fryges, Helmut (2005), "The Change of Sales Modes in International Markets – Empirical Results for German and British High-Tech Firms," *ZEW (Center for European Economic Research)*, Discussion Paper No. 05-82, Mannheim.

Galbraith, Jay R. (1973). *Designing Complex Organizations*, Boston, MA: Addison-Wesley

Gallo, Miguel A. and Jannicke Sveen (1991), "Internationalizing the Family Business: Facilitating and Restraining Factors," *Family Business Review*, 4 (2), 181-190.

Geiser, Christian (2010). *Datenanalyse Mit Mplus*, Wiesbaden: Springer.

Gemser, Gerda, Maryse J. Brand and Arndt Sorge (2004), "Exploring the Internationalisation Process of Small Businesses: A Study of Dutch Old and New Economy Firms," *Management International Review*, 44 (2), 127-150.

Gilbert, Clark G. (2006), "Change in the Presence of Residual Fit: Can Competing Frames Coexist?," *Organization Science*, 17 (1), 150-167.

Gilbert, X. and P. Strebel (1987), "Strategies to Outpace the Competition," *Journal of Business Strategy*, 8 (1), 28-36.

Gomes-Casseres, Benjamin (1987), "Joint Venture Instability: Is It a Problem?," *Columbia Journal of World Business*, 22 (2), 97-102.

Graham, John W. (2009), "Missing Data Analysis: Making It Work in the Real World," *Annual Review of Psychology*, 60 (1), 549-576.

Graves, Chris and Jill Thomas (2008), "Determinants of the Internationalization Pathways of Family Firms: An Examination of Family Influence," *Family Business Review*, 21 (2), 151-167.

Griffith, David A., Aruna Chandra and John K. Ryans Jr (2003), "Examining the Intricacies of Promotion Standardization: Factors Influencing Advertising Message and Packaging," *Journal of International Marketing*, 11 (3), 30-47.

Gruber, Marc (2007), "Uncovering the Value of Planning in New Venture Creation: A Process and Contingency Perspective," *Journal of Business Venturing*, 22 (6), 782-807.

Hadjikhani, Amjad (1997), "A Note on the Criticisms against the Internationalization Process Model," *Management International Review*, 37 (2), 43-66.

Hagen, Birgit, Antonella Zucchella, Paola Cerchiello and Nicolò De Giovanni (2012), "International Strategy and Performance - Clustering Strategic Types of SMEs," *International Business Review*, 21 (3), 369-382.

Hagenaars, Jacques A. and Allan L. McCutcheon (Ed.) (2002). *Applied Latent Class Analysis*. New York: Cambridge University Press.

Hair, Joseph F., Ronald L. Tatham, Rolph E. Anderson and William Black (2010). *Multivariate Data Analysis*, Upper Saddle River, NJ: Pearson Prentice Hall.

Hamilton, Robert T. and Yuen Kong Chow (1993), "Why Managers Divest-Evidence from New Zealand's Largest Companies," *Strategic Management Journal*, 14 (6), 479-484.

Harms, Rainer, Sascha Kraus and Carl H. Reschke (2007), "Configurations of New Ventures in Entrepreneurship Research: Contributions and Research Gaps," *Management Research News*, 30 (9), 661-673.

Harzing, Anne-Wil (1997), "Response Rates in Mail Surveys," *International Business Review*, 6 (6), 641-665.

Hashai, Niron (2011), "Sequencing the Expansion of Geographic Scope and Foreign Operations by Born Global Firms," *Journal of International Business Studies*, 42 (8), 995-1015.

Haynes, Michelle, Steve Thompson and Mike Wright (2003), "The Determinants of Corporate Divestment: Evidence from a Panel of UK Firms," *Journal of economic behavior & organization*, 52 (1), 147-166.

Hedlund, Gunnard and Adne Kverneland (1985), "Are Strategies for Foreign Markets Changing? The Case of Swedish Investment in Japan," *International Studies of Management & Organization*, 15 (2), 41-59.

Hennart, Jean-Francois, Dong-Jae Kim and Ming Zeng (1998), "The Impact of Joint Venture Status on the Longevity of Japanese Stakes in U.S. Manufacturing Affiliates," *Organization Science*, 9 (3), 382-395.

Hopwood, Christopher J. (2007), "Moderation and Mediation in Structural Equation Modeling: Applications for Early Intervention Research," *Journal of Early Intervention*, 29 (3), 262-272.

Hordes, Mark W., J. Anthony Clancy and Julie Baddaley (1995), "A Primer for Global Start-Ups," *Academy of Management Executive*, 9 (2), 7-11.

Hu, Li-tze and Peter M. Bentler (1999), "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives," *Structural Equation Modeling: A Multidisciplinary Journal*, 6 (1), 1-55.

Hughes, Marie Adele and Dennis E. Garrett (1990), "Intercoder Reliability Estimation Approaches in Marketing: A Generalizability Theory Framework for Quantitative Data," *Journal of Marketing Research*, 27 (2), 185-195.

Hymer, Stephen Herbert (1976). *The International Operations of National Firms: A Study of Direct Foreign Investment*: MIT press Cambridge, MA.

Iacobucci, Dawn, Neela Saldanha and Xiaoyan Deng (2007), "A Meditation on Mediation: Evidence That Structural Equations Models Perform Better Than Regressions," *Journal of Consumer Psychology*, 17 (2), 139-153.

Ibeh, Kevin I. N. (2003), "Toward a Contingency Framework of Export Entre-preneurship: Conceptualisations and Empirical Evidence," *Small Business Economics*, 20 (1), 49-68.

Ibrahim, Nabil A., John P. Angelidis and Faramarz Parsa (2008), "Strategic Management of Family Businesses: Current Findings and Directions for Future Research," *International Journal of Management*, 25 (1), 95-110.

Institut für Mittelstandsforschung Bonn. (2012). "Schlüsselkennzahlen Des Mittelstandes." Retrieved 11.02.2013, from www.ifm-bonn.org.

Jager, Martin (2010). *Dynamische Prozesse Der Internationalisierung: Theoriegeleitete Empirische Analyse Familiengeführter Kmu*: Springer.

Jantunen, Ari, Kaisu Puumalainen, Sami Saarenketo and Kalevi Kyläheiko (2005), "Entrepreneurial Orientation, Dynamic Capabilities and International Performance," *Journal of International Entrepreneurship*, 3 (3), 223-243.

Jaworski, Bernard J. and Ajay K. Kohli (1993), "Market Orientation: Antecedents and Consequences," *The Journal of Marketing*, 57 (3), 53-70.

Johanson, Jan and Jan-Erik Vahlne (1977), "The Internationalization Process of the Firm - a Model of Knowledge Development and Increasing Foreign Market Commitments," *Journal of International Business Studies*, 8 (1), 23-32.

Johanson, Jan and Jan-Erik Vahlne (1990), "The Mechanism of Internationalisation," *International Marketing Review*, 7 (4), 11-24.

Johanson, Jan and Jan-Erik Vahlne (2009), "The Uppsala Internationalization Process Model Revisited: From Liability of Foreignness to Liability of Outsidership," *Journal of International Business Studies*, 40 (9), 1411-1431.

Johanson, Jan and Finn Wiedersheim-Paul (1975), "The Internationalization of the Firm - Four Swedish Cases," *The Journal of Management Studies*, 12 (3), 305-323.

Jolly, Vijay K., Matti Alahuhta and Jean-Pierre Jeannet (1992), "Challenging the Incumbents: How High Technology Start-Ups Compete Globally," *Strategic Change*, 1 (2), 71-82.

Jones, Marian V. and Nicole E. Coviello (2005), "Internationalisation: Conceptualising an Entrepreneurial Process of Behaviour in Time," *Journal of International Business Studies*, 36 (3), 284-303.

Jones, Marian V., Nicole Coviello and Yee Kwan Tang (2011), "International Entrepreneurship Research (1989–2009): A Domain Ontology and Thematic Analysis," *Journal of Business Venturing*, 26 (6), 632-659.

Julien, Pierre-André and Charles Ramangalahy (2003), "Competitive Strategy and Performance of Exporting SMEs: An Empirical Investigation of the Impact of Their Export Information Search and Competencies," *Entrepreneurship: Theory and Practice*, 27 (3), 227-246.

Karagozoglu, Necmi and Warren B. Brown (1988), "Adaptive Responses by Conservative and Entrepreneurial Firms," *Journal of Product Innovation Management*, 5 (4), 269-281.

Kellermanns, Franz W. and Kimberly A. Eddleston (2006), "Corporate Entrepreneurship in Family Firms: A Family Perspective," *Entrepreneurship Theory and Practice*, 30 (6), 809-830.

Keng, Kau Ah and Tan Soo Jiuan (1989), "Differences between Small and Medium Sized Exporting and Non-Exporting Firms: Nature or Nurture," *International Marketing Review*, 6 (4), 27-40.

Ketchen, David J. Jr. and Christopher L. Shook (1996), "The Application of Cluster Analysis in Strategic Management Research: An Analysis and Critique," *Strategic Management Journal*, 17 (6), 441-458.

Keupp, Marcus Matthias and Oliver Gassmann (2009), "The Past and the Future of International Entrepreneurship: A Review and Suggestions for Developing the Field," *Journal of Management*, 35 (3), 600-633.

Khan, A. Qayyum and Dileep R. Mehta (1996), "Voluntary Divestitures and the Choice between Sell-Offs and Spin-Offs," *Financial Review*, 31 (4), 885-912.

Kline, Rex B. (2011a). *Principles and Practice of Structural Equation Modeling*, New York, NY: The Guilford Press.

Kline, Rex B. (2011b). *Principles and Practice of Structural Equation Modeling*, New York: The Guilford Press.

Knight, Gary (2000), "Entrepreneurship and Marketing Strategy: The SME under Globalization," *Journal of International Marketing*, 8 (2), 12-32.

Knight, Gary A. (2001), "Entrepreneurship and Strategy in the International SME " *Journal of International Management*, 7 (3), 155-171

Knight, Gary A. and S. Tamer Cavusgil (1996), "The Born Global Firm: A Challenge to Traditional Internationalization Theory," *Advances in International Marketing*, 8, 11-26.

Knight, Gary A. and S. Tamer Cavusgil (2004), "Innovation, Organizational Capabilities, and the Born-Global Firm," *Journal of International Business Studies*, 35 (2), 124-141.

Knight, Gary A. and S. Tamer Cavusgil (2005), "A Taxonomy of Born-Global Firms," *Management International Review*, 45 (3), 15-35.

Knight, Gary A. and Peter W. Liesch (2002), "Information Internalisation in Internationalising the Firm," *Journal of Business Research*, 55 (12), 981-995.

Knight, Gary A., Tage Koed Madsen and Per Servais (2004), "An Inquiry into Born-Global Firms in Europe and the USA," *International Marketing Review*, 21 (6), 645-665.

Kocak, Akin and Temi Abimbola (2009), "The Effects of Entrepreneurial Marketing on Born Global Performance," *International Marketing Review*, 26 (4/5), 439-452.

Kontinen, Tanja and Arto Ojala (2010), "The Internationalization of Family Businesses: A Review of Extant Research," *Journal of Family Business Strategy*, 1 (2), 97-107.

Kontinen, Tanja and Arto Ojala (2011a), "International Opportunity Recognition among Small and Medium-Sized Family Firms," *Journal of Small Business Management*, 49 (3), 490-514.

Kontinen, Tanja and Arto Ojala (2011b), "Social Capital in Relation to the Foreign Market Entry and Post-Entry Operations of Family SMEs," *Journal of International Entrepreneurship*, 9 (2), 133-151.

Kontinen, Tanja and Arto Ojala (2012), "Internationalization Pathways among Family-Owned SMEs," *International Marketing Review*, 29 (5), 496-518.

Kreiser, Patrick M., Louis D. Marino and K. Mark Weaver (2002), "Assessing the Psychometric Properties of the Entrepreneurial Orientation Scale: A Multi-Country Analysis," *Entrepreneurship: Theory & Practice*, 26 (4), 71.

Kuivalainen, Olli, Kaisu Puumalainen, Sanna Sintonen and Kalevi Kyläheiko (2010), "Organisational Capabilities and Internationalisation of the Small and Medium-Sized Information and Communications Technology Firms," *Journal of International Entrepreneurship*, 8 (2), 135-155.

Kuivalainen, Olli, Sami Saarenketo and Kaisu Puumalainen (2012), "Start-up Patterns of Internationalization: A Framework and Its Application in the Context of Knowledge-Intensive SMEs," *European Management Journal*, 30 (4), 372-385.

Kuivalainen, Olli, Sanna Sundqvist, Sami Saarenketo and Rod McNaughton (2012), "Internationalization Patterns of Small and Medium-Sized Enterprises," *International Marketing Review*, 29 (5), 448-465.

Kuivalainen, Olli, Sanna Sundqvist and Per Servais (2007), "Firms' Degree of Born-Globalness, International Entrepreneurial Orientation and Export Performance " *Journal of World Business*, 42 (3), 253-267

Kumar, Nirmalya, Louis W. Stern and James C. Anderson (1993), "Conducting Interorganizational Research Using Key Informants," *Academy of Management Journal*, 36 (6), 1633-1651.

Kwon, Yung-Chul and Michael Y. Hu (2000), "Market Orientation among Small Korean Exporters," *International Business Review*, 9 (1), 61-75.

Lages, Luis Filipe, Jose Luis Abrantes and Cristiana Raquel Lages (2008), "The Stratadapt Scale - a Measure of Marketing Strategy Adaptation to International Business Markets," *International Marketing Review*, 25 (5), 584-600.

Lee, Hyunsuk, Donna Kelley, Jangwoo Lee and Sunghun Lee (2012), "SME Survival: The Impact of Internationalization, Technology Resources, and Alliances," *Journal of Small Business Management*, 50 (1), 1-19.

Leonidou, Leonidas C. (1995), "Export Stimulation Research: Review, Evaluation and Integration," *International Business Review*, 4 (2), 133-156.

Leonidou, Leonidas C. and Constantine S. Katsikeas (1996), "The Export Development Process: An Integrative Review of Empirical Models," *Journal of International Business Studies*, 27 (3), 517-551.

Leonidou, Leonidas C., Constantine S. Katsikeas and Nigel F. Piercy (1998), "Identifying Managerial Influences on Exporting: Past Research and Future Directions," *Journal of International Marketing*, 6 (2), 74-102.

Li, Jiatao (1995), "Foreign Entry and Survival: Effects of Strategic Choices on Performance in International Markets," *Strategic Management Journal*, 16 (5), 333-351.

Li, Lee, Gongming Qian and Zhengming Qian (2012), "Early Internationalization and Performance of Small High-Tech "Born-Globals"," *International Marketing Review*, 29 (5), 536-561.

Li, Lei, Dan Li and Tevfik Dalgic (2004), "Internationalization Process of Small and Medium-Sized Enterprises: Toward a Hybrid Model of Experiential Learning and Planning," *Management International Review*, 44 (1), 93-116.

Lindgren, Ulf and Kjell Spångberg (1981), "Corporate Acquisitions and Divestments: The Strategic Decision-Making Process," *International Studies of Management & Organization*, 11 (2), 24-47.

Lo, Yungtai, Nancy R. Mendell and Donald B. Rubin (2001), "Testing the Number of Components in a Normal Mixture," *Biometrika*, 88 (3), 767-778.

Lopez, Luis E., Sumit K. Kundu and Luciano Ciravegna (2008), "Born Global or Born Regional: Evidence from an Exploratory Study in the Costa Rican Software Industry," *Journal of International Business Studies*, 40 (7), 1228-1238.

Lu, Jane W. and Paul W. Beamish (2001), "The Internationalization and Performance of SMEs," *Strategic Management Journal*, 22 (6/7), 565-586.

Lu, Yuan, Lianxi Zhou, Garry Bruton and Weiwen Li (2010), "Capabilities as a Mediator Linking Resources and the International Performance of Entrepreneurial Firms in an Emerging Economy," *Journal of International Business Studies*, 41 (3), 419-436.

Lumpkin, G. Thomas and Gregory G. Dess (1996), "Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance," *The Academy of Management Review*, 21 (1), 135-172.

Lyles, Marjorie A., Inga S. Baird, James Burdeane Orris and Donald F. Kuratko (1993), "Formalized Planning in Small Business: Increasing Strategic Choices," *Journal of Small Business Management*, 31 (2), 38-50.

Madsen, Tage Koed (2013), "Early and Rapidly Internationalizing Ventures: Similarities and Differences between Classifications Based on the Original International New Venture and Born Global Literatures," *Journal of International Entrepreneurship*, 11 (1), 65-79.

Madsen, Tage Koed and Per Servais (1997), "The Internationalization of Born Globals: An Evolutionary Process? ," *International Business Review*, 6 (6), 561-583.

Maekelburger, Birger, Christian Schwens and Rüdiger Kabst (2012), "Asset Specificity and Foreign Market Entry Mode Choice of Small and Medium-Sized Enterprises: The Moderating Influence of Knowledge Safeguards and Institutional Safeguards," *Journal of International Business Studies*, 43 (5), 458-476.

Magidson, Jay and Jeroen K. Vermunt (2004). "Latent Class Models," in David Kaplan (Ed.), *The Sage Handbok of Quantitative Methodology for the Social Sciences*. Thousand Oaks, CA: Sage, 175-198.

Makadok, Richard (2001), "Towards a Synthesis of the Resource-Based and Dynamic-Capability Views of Rent Creation," *Strategic Management Journal*, 22 (5), 387-401.

March, James G. and Zur Shapira (1987), "Managerial Perspectives on Risk and Risk Taking," *Management Science*, 33 (11), 1404-1418.

Martinez, Jon I. and J. Carlos Jarillo (1989), "The Evolution of Research on Co-ordination Mechanisms in Multinational Corporations," *Journal of International Business Studies*, 20 (3), 489-514.

Martinez, Jon I. and J. Carlos Jarillo (1991), "Coordination Demands of International Strategies," *Journal of International Business Studies*, 22 (3), 429-444.

Mata, Jose and Pedro Portugal (2000), "Closure and Divestiture by Foreign Entrants: The Impact of Entry and Post-Entry Strategies," *Strategic Management Journal*, 21 (5), 549-562.

Mata, José and Pedro Portugal (2002), "The Survival of New Domestic and Foreign-Owned Firms," *Strategic Management Journal*, 23 (4), 323-343.

Matsuno, Ken, John T. Mentzer and Ayşegül Özsomer (2002), "The Effects of Entrepreneurial Proclivity and Market Orientation on Business Performance," *The Journal of Marketing*, 66 (3), 18-32.

McAuley, Andrew (1999), "Entrepreneurial Instant Exporters in the Scottish Arts and Crafts Sector," *Journal of International Marketing*, 7 (4), 67-82

McCutcheon, Allan L. (1987). *Latent Class Analysis*, Newbury Park: Sage Publications.

McCutcheon, Allan L. (2002). "Basic Concepts and Procedures in Single- and Multiple-Group Latent Class Analysis," in Jacques A. Hagenaars and Allan L. McCutcheon (Ed.), *Applied Latent Class Analysis.* Cambridge: Cambridge University Press, 56-85.

McDougall, Patricia P. and Benjamin M. Oviatt (2000), "International Entrepreneurship: The Intersection of Two Research Paths," *The Academy of Management Journal*, 43 (5), 902-908.

McDougall, Patricia P., Benjamin M. Oviatt and Rodney C. Shrader (2003), "A Comparison of International and Domestic New Ventures," *Journal of International Entrepreneurship*, 1 (1), 59-82.

McDougall, Patricia P., Scott Shane and Benjamin M. Oviatt (1994), "Explaining the Formation of International New Ventures: The Limits of Theories from International Business Research," *Journal of Business Venturing*, 9 (6), 469-487.

McGee, Jeffrey E. and Olukemi O. Sawyerr (2003), "Uncertainty and Information Search Activities: A Study of Owner–Managers of Small High-Technology Manufacturing Firms," *Journal of Small Business Management*, 41 (4), 385-401.

McNaughton, Rod (2003), "The Number of Export Markets That a Firm Serves: Process Models Versus the Born-Global Phenomenon," *Journal of International Entrepreneurship*, 1 (3), 297-311.

Melin, Leif (1992), "Internationalization as a Strategy Process," *Strategic Management Journal*, 13 (Special Issue Winter), 99-118.

Merrilees, Bill and James H. Tiessen (1999), "Building Generalizable SME International Marketing Models Using Case Studies," *International Marketing Review*, 16 (4/5), 326-344.

Miller, C. Chet and Laura B. Cardinal (1994), "Strategic Planning and Firm Performance: A Synthesis of More Than Two Decades of Research," *The Academy of Management Journal*, 37 (6), 1649-1665.

Miller, Danny (1983), "The Correlates of Entrepreneurship in Three Types of Firms," *Management Science*, 29 (7), 770-791.

Miller, Danny (1992), "Environmental Fit Versus Internal Fit," *Organization Science*, 3 (2), 159-178.

Miller, Danny (1996), "Configurations Revisited," *Strategic Management Journal*, 17 (7), 505-512.

Miller, Danny and Peter H. Friesen (1982), "Innovation in Conservative and Entre-preneurial Firms: Two Models of Strategic Momentum," *Strategic Management Journal*, 3 (1), 1-25.

Miller, Danny and Peter H. Friesen (1983), "Strategy-Making and Environment: The Third Link," *Strategic Management Journal*, 4 (3), 221-235.

Millington, Andrew I. and Brian T. Bayliss (1990), "The Process of Internationalisation: UK Companies in the Ec " *Management International Review*, 30 (2), 151-161.

Miocevic, Dario and Biljana Crnjak-Karanovic (2011), "Cognitive and Information-Based Capabilities in the Internationalization of Small and Medium-Sized Enterprises: The Case of Croatian Exporters," *Journal of Small Business Manage-ment*, 49 (4), 537-557.

Mitchell, Will, J. Myles Shaver and Bernard Yeung (1992), "Getting There in a Global Industry: Impacts on Performance of Changing International Presence," *Strategic Management Journal*, 13 (6), 419-432.

Mitchell, Will, J. Myles Shaver and Bernard Yeung (1993), "Performance Following Changes of International Presence in Domestic and Transition Industries," *Journal of International Business Studies*, 24 (4), 647-669.

Moen, Øystein (2002), "The Born Globals: A New Generation of Small European Exporters," *International Marketing Review*, 19 (2), 156-175.

Moen, Øystein and Per Servais (2002), "Born Global or Gradual Global? Examining the Export Behavior of Small and Medium-Sized Enterprises," *Journal of International Marketing*, 10 (3), 49-72.

Montgomery, Cynthia A., Ann R. Thomas and Rajan Kamath (1984), "Divestiture, Market Valuation, and Strategy," *The Academy of Management Journal*, 27 (4), 830-840.

Moog, Petra, Désirée M. Schlepphorst and Susanne Schlepphorst (2011), "Owner Orientations and Strategies and Their Impact on Family Business," *Journal of International Entrepreneurship and Innovation Management*, 13 (1), 95-112.

Moreno, Ana M. and José C. Casillas (2008), "Entrepreneurial Orientation and Growth of SMEs: A Causal Model," *Entrepreneurship: Theory & Practice*, 32 (3), 507-528.

Morschett, Dirk, Hanna Schramm-Klein and Bernhard Swoboda (2010), "Decades of Research on Market Entry Modes: What Do We Really Know About External Antecedents of Entry Mode Choice?," *Journal of International Management*, 16 (1), 60-77.

Mostafa, Rasha, Colin Wheeler and Marian Jones (2005), "Entrepreneurial Orientation, Commitment to the Internet and Export Performance in Small and Medium Sized Exporting Firms," *Journal of International Entrepreneurship*, 3 (4), 291-302.

Mudambi, Ram and Shaker A. Zahra (2007), "The Survival of International New Ventures," *Journal of International Business Studies*, 38 (2), 333-352.

Muthén, Linda and Bengt O. Muthén (2007). *Mplus User's Guide*, Los Angeles, CA: Muthén & Muthén.

Nakos, George and Keith D. Brouthers (2002), "Entry Mode Choice of SMEs in Central and Eastern Europe," *Entrepreneurship: Theory & Practice*, 27 (1), 47-63.

Naldi, Lucia, Mattias Nordqvist, Karin Sjöberg and Johan Wiklund (2007), "Entrepreneurial Orientation, Risk Taking, and Performance in Family Firms," *Family Business Review*, 20 (1), 33-47.

Naman, John L. and Dennis P. Slevin (1993), "Entrepreneurship and the Concept of Fit: A Model and Empirical Tests," *Strategic Management Journal*, 14 (2), 137-153.

Navarro, Antonio, Francisco J. Acedo, Matthew J. Robson, Emilio Ruzo and Fernando Losada (2010), "Antecedents and Consequences of Firms' Export Commitment: An Empirical Study," *Journal of International Marketing*, 18 (3), 41-61.

Nees, Danielle (1981), "Increase Your Divestment Effectiveness," *Strategic Management Journal*, 2 (2), 119-130.

Newby, Rick, John Watson and David Woodliff (2003), "SME Survey Methodology: Response Rates, Data Quality, and Cost Effectiveness," *Entrepreneurship: Theory & Practice*, 28 (2), 163-173.

Nicholas, Stephen (1983), "Agency Contracts, Institutional Modes, and the Transition to Foreign Direct Investment by British Manufacturing Multinationals before 1939," *The Journal of Economic History*, 43 (3), 675-686.

Nummela, Niina , Kaisu Puumalainen and Sami Saarenketo (2005), "International Growth Orientation of Knowledge-Intensive SMEs," *Journal of International Entrepreneurship*, 3 (1), 5-18.

Nummela, Niina, Sami Saarenketo and Kaisu Puumalainen (2004), "A Global Mindset - a Prerequisite for Successful Internationalization?," *Canadian Journal of Administrative Sciences,* 21 (1), 51-64.

Nunnally, Jum C. (1967). *Psychometric Theory*, New York, NY: McGraw-Hill.

Nunnally, Jum C. (1978). *Psychometric Theory*, New York, NY: McGraw-Hill.

Nylund, Karen, Amy Bellmore, Adrienne Nishina and Sandra Graham (2007), "Subtypes, Severity, and Structural Stability of Peer Victimization: What Does Latent Class Analysis Say?," *Child Development*, 78 (6), 1706-1722.

Nylund, Karen L., Tihomir Asparouhov and Bengt O. Muthén (2007), "Deciding on the Number of Classes in Latent Class Analysis and Growth Mixture Modeling: A Monte Carlo Simulation Study," *Structural Equation Modeling*, 14 (4), 535-569.

O'Regan, Nicholas, Abby Ghobadian and David Gallear (2006), "In Search of the Drivers of High Growth in Manufacturing SMEs," *Technovation*, 26 (1), 30-41.

Okoroafo, Sam C. (1997), "Strategic and Performance Issues Associated with Mode of Entry Substitution Patterns," *International Marketing Review*, 14 (1), 20-38.

Oviatt, Benjamin M. and Patricia P. McDougall (1994), "Toward a Theory of International New Ventures," *Journal of International Business Studies*, 25 (1), 45-64

5555

333

3333

Puck, Jonas F., Dirk Holtbrügge and Alexander T. Mohr (2009), "Beyond Entry Mode Choice: Explaining the Conversion of Joint Ventures into Wholly Owned Subsidiaries in the Peoples Republic of China," *Journal of International Business Studies*, 40 (3), 388-404.

Randoy, Trond and C. Clay Dibrell (2002), "How and Why Norwegian Mncs Commit Resources Abroad: Beyond Choice of Entry Mode," *Management International Review*, 42 (2), 119-140.

Rauch, Andreas, Johan Wiklund, G. Thomas Lumpkin and Michael Frese (2009), "Entrepreneurial Orientation and Business Performance: An Assessment of Past Research and Suggestions for the Future," *Entrepreneurship: Theory & Practice*, 33 (3), 761-787.

Ray, Gautam, Jay B. Barney and Waleed A. Muhanna (2004), "Capabilities, Business Processes, and Competitive Advantage: Choosing the Dependent Variable in Empirical Tests of the Resource-Based View," *Strategic Management Journal*, 25 (1), 23-37.

Reid, Stan D. (1981), "The Decision-Maker and Export Entry and Expansion," *Journal of International Business Studies*, 12 (2), 101-112.

Rennie, Michael W. (1993), "Global Competitiveness: Born Global," *McKinsey Quarterly*, 1993 (4), 45-52.

Rialp, Alex, Josep Rialp and Gary A. Knight (2005), "The Phenomenon of Early Internationalizing Firms: What Do We Know after a Decade (1993–2003) of Scientific Inquiry?," *International Business Review*, 14 (2), 147-166.

Ripollés-Meliá, María, Martina Menguzzato-Boulard and Luz Sánchez-Peinado (2007), "Entrepreneurial Orientation and International Commitment," *Journal of International Entrepreneurship*, 5 (3), 65-83.

Ripollés, María, Andreu Blesa and Diego Monferrer (2012), "Factors Enhancing the Choice of Higher Resource Commitment Entry Modes in International New Ventures," *International Business Review*, 21 (4), 648-666.

Robertson, Christopher and Sylvie K. Chetty (2000), "A Contingency-Based Approach to Understanding Export Performance," *International Business Review*, 9 (2), 211-235.

Robinson, Richard B., Jr. and John A. Pearce (1983), "The Impact of Formalized Strategic Planning on Financial Performance in Small Organizations," *Strategic Management Journal*, 4 (3), 197-207.

Rogers, Everett (1962). *Diffusion of Innovations*, New York, NY: The Free Press.

Rosenbusch, Nina, Jan Brinckmann and Andreas Bausch (2011), "Is Innovation Always Beneficial? A Meta-Analysis of the Relationship between Innovation and Performance in SMEs," *Journal of Business Venturing*, 26 (4), 441-457.

Rossiter, John R. (2002), "The C-Oar-Se Procedure for Scale Development in Marketing," *International Journal of Research in Marketing*, 19 (4), 305-335.

Rosson, Philip J. and I. David Ford (1982), "Manufacturer-Overseas Distributor Relations and Export Performance," *Journal of International Business Studies*, 13 (2), 55-72.

Roth, Kendall (1992), "International Configuration and Coordination Archetypes for Medium-Sized Firms in Global Industries," *Journal of International Business Studies*, 23 (3), 533-549.

Roth, Kendall and Allen J. Morrison (1992), "Business-Level Competitive Strategy: A Contingency Link to Internationalization," *Journal of Management*, 18 (3), 473-487.

Roth, Kendall, David M. Schweiger and Allen J. Morrison (1991), "Global Strategy Implementation at the Business Unit Level: Operational Capabilities and Administrative Mechanisms," *Journal of International Business Studies*, 22 (3), 369-402.

Ruzzier, Mitja, Robert D. Hisrich and Bostjan Antoncic (2006), "SME Internationalization Research: Past, Present, and Future," *Journal of Small Business and Enterprise Development*, 13 (4), 476-497.

Samiee, Saeed and Kendall Roth (1992), "The Influence of Global Marketing Standardization on Performance," *Journal of Marketing*, 56 (2), 1-17.

Schilke, Oliver and Anthony Goerzen (2010), "Alliance Management Capability: An Investigation of the Construct and Its Measurement," *Journal of Management*, 36 (5), 1192-1219.

Schwarz, Gideon (1978), "Estimating the Dimension of a Model," *The annals of statistics*, 6 (2), 461-464.

Schwenk, Charles B. and Charles B. Shrader (1993), "Effects of Formal Strategic Planning on Financial Performance in Small Firms: A Meta-Analysis," *Entrepreneurship: Theory & Practice*, 17 (3), 53-64.

Sciascia, Salvatore, Pietro Mazzola, Joseph Astrachan and Torsten Pieper (2012), "The Role of Family Ownership in International Entrepreneurship: Exploring Nonlinear Effects," *Small Business Economics*, 38 (1), 15-31.

Seringhaus, F. H. Rolf (1993), "A Comparison of Export Marketing Behavior of Canadian and Austrian High-Tech Firms," *Journal of International Marketing*, 1 (4), 49-69.

Shane, Scott and S. Venkataraman (2000), "The Promise of Enterpreneurship as a Field of Research," *The Academy of Management Review*, 25 (1), 217-226.

Sharma, Pramodita and S. Manikutty (2005), "Strategic Divestments in Family Firms: Role of Family Structure and Community Culture," *Entrepreneurship: Theory & Practice*, 29 (3), 293-311.

Shook, Christopher L., David J. Ketchen, G. Tomas M. Hult and K. Michele Kacmar (2004), "An Assessment of the Use of Structural Equation Modeling in Strategic Management Research," *Strategic Management Journal*, 25 (4), 397-404.

Short, Jeremy C., G. Tyge Payne and David J. Ketchen (2008), "Research on Organizational Configurations: Past Accomplishments and Future Challenges," *Journal of Management*, 34 (6), 1053-1079.

Shuman, Jeffrey C. and John A. Seeger (1986), "The Theory and Practice of Strategic Management in Smaller Rapid Growth Firms," *American Journal of Small Business*, 11 (1), 7-18.

Simon, Herbert A. (1976). *Administrative Behavior*, New York: Free Press.

Sine, Wesley D., Hitoshi Mitsuhashi and David A. Kirsch (2006), "Revisiting Burns and Stalker: Formal Structure and New Venture Performance in Emerging Economic Sectors," *Academy of Management Journal*, 49 (1), 121-132.

Slater, Stanley F. (1995), "Issues in Conducting Marketing Strategy Research," *Journal of Strategic Marketing*, 3 (4), 257-270.

Solberg, Carl Arthur (2002), "The Perennial Issue of Adaptation or Standardization of International Marketing Communication: Organizational Contingencies and Performance," *Journal of International Marketing*, 10 (3), 1-21.

Spector, Paul E. (2006), "Method Variance in Organizational Research," *Organizational Research Methods*, 9 (2), 221-232.

Spiegel, Frank and Joern Block (2011), "Regionale Bedeutung Von Familienunternehmen in Westdeutschland " *Available at SSRN 1974599 since 19th December 2011*.

Steensma, H. Kevin, Jeffrey Q. Barden, Charles Dhanaraj, Marjorie A. Lyles and Laszlo Tihanyi (2008), "The Evolution and Internalization of International Joint Ventures in a Transitioning Economy," *Journal of International Business Studies*, 39 (3), 491-507.

Stevenson, Howard H. and J. Carlos Jarillo (1990), "A Paradigm of Entrepreneurship: Entrepreneurial Management," *Strategic Management Journal*, 11 (1), 17-27.

Su, Zhongfeng, En Xie and Yuan Li (2011), "Entrepreneurial Orientation and Firm Performance in New Ventures and Established Firms," *Journal of Small Business Management*, 49 (4), 558-577.

Sui, Sui, Zhihao Yu and Matthias Baum (2012), "Prevalence and Longitudinal Trends of Early Internationalisation Patterns among Canadian SMEs," *International Marketing Review*, 29 (5), 519-535.

Sullivan, Daniel (1994), "Measuring the Degree of Internationalization of a Firm," *Journal of International Business Studies*, 25 (2), 325-342.

Swoboda, Bernhard (2002). *Dynamische Prozesse Der Internationalisierung. Managementtheoretische Und Empirische Perspektiven Des Unternehmerischen Wandels*, Wiesbaden: Gabler.

Swoboda, Bernhard, Martin Jager (2009), "Fit Between Internationalization Stage and Firms' Structure, Systems and Culture – A Profile Deviation Perspective," Academy of International Business Annual Conference, San Diego.

Swoboda, Bernhard, Martin Jager, Dirk Morschett and Hanna Schramm-Klein (2009), "A Behaviour-based Analysis of the Changes of the Structure, Systerms and Culture in the Internationalisation Process over Time," in Jorma Larimo and Tiia Vissak (Ed.), *Research on Knowledge, Innovation and Internationalization. Progress on International Business Research,* Vol. 4. Bingley: Emerald, 41-68.

Teece, David J. (2007), "Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance," *Strategic Management Journal*, 28 (13), 1319-1350.

Teece, David J., Gary Pisano and Amy Shuen (1997), "Dynamic Capabilities and Strategic Management," *Strategic Management Journal*, 18 (7), 509-533.

Tofighi, Davood and Craig K. Enders (2007). "Identifying the Correct Number of Classes in Growth Mixture Models," in Gregory R. Hancock (Ed.), *Advances in Latent Variable Mixture Models*. Greenwich, CT: Information Age, 317-341.

Torkkeli, Lasse, Kaisu Puumalainen, Sami Saarenketo and Olli Kuivalainen (2012), "The Effect of Network Competence and Environmental Hostility on the Internationalization of SMEs," *Journal of International Entrepreneurship*, 1-25.

Tsang, Eric W. K. (2001), "Internationalizing the Family Firm: A Case Study of a Chinese Family Business," *Journal of Small Business Management*, 39 (1), 88-94.

Tuppura, Anni, Sami Saarenketo, Kaisu Puumalainen, Ari Jantunen and Kalevi Kyläheiko (2008), "Linking Knowledge, Entry Timing and Internationalization Strategy," *International Business Review*, 17 (4), 473-487.

Turnbull, Peter W. (1987). "A Challenge to the Stages Theory of the Internationalization Process," in Philip J. Rosson and Stan D. Reid (Ed.), *Managing Export Entry and Eypansion. Concept and Practice*. New York, NY: Praeger, 21-40.

Upton, Nancy, Elisabeth J. Teal and Joe T. Felan (2001), "Strategic and Business Planning Practices of Fast Growth Family Firms," *Journal of Small Business Management*, 39 (1), 60-72.

Van de Ven, Andrew H. (1992), "Suggestions for Studying Strategy Process: A Research Note," *Strategic Management Journal*, 13 (Special Issue Summer), 169-191.

Vermeulen, Freek and Harry Barkema (2002), "Pace, Rhythm, and Scope: Process Dependence in Building a Profitable Multinational Corporation," *Strategic Management Journal*, 23 (7), 637-653.

Vermunt, Jeroen K. and Jay Magidson (2002). "Latent Class Cluster Analysis," in J.A. Hagenaars and Allan L. McCutcheon (Ed.), *Applied Latent Class Analysis*. Cambridge: Cambridge University Press, 89-106.

Vuong, Quang H. (1989), "Likelihood Ratio Tests for Model Selection and Non-Nested Hypotheses," *Econometrica: Journal of the Econometric Society*, 307-333.

Walters, Peter G. P. (1993), "Patterns of Formal Planning and Performance in U.S. Exporting Firms," *Management International Review*, 33 (1), 43-63.

Walters, Peter G. P. and Saeed Samiee (1990), "A Model for Assessing Performance in Small U.S. Exporting Firms," *Entrepreneurship: Theory & Practice*, 15 (2), 33-50.

Wang, Catherine L. and Pervaiz K. Ahmed (2007), "Dynamic Capabilities: A Review and Research Agenda," *International Journal of Management Reviews*, 9 (1), 31-51.

Weerawardena, Jay , Gillian Sullivan Mort, Peter W. Liesch and Gary A. Knight (2007), "Conceptualizing Accelerated Internationalization in the Born Global Firm: A Dynamic Capabilities Perspective," *Journal of World Business*, 42 (3), 294-306

Welch, Lawrence S. and Reijo Luostarinen (1988), "Internationalization: Evolution of a Concept," *Journal of General Management*, 14 (2), 34-55.

Williams, Jasmine E. M. (2003), "Export Information Use in Small and Medium-Sized Industrial Companies," *International Marketing Review*, 20 (1), 44-66.

Winter, Sidney G. (2003), "Understanding Dynamic Capabilities," *Strategic Management Journal*, 24 (10), 991-995.

Woodworth, Robert S. (1929). *Psychology* New York: Holt.

Wright, Richard W. and David A. Ricks (1994), "Trends in International Business Research: Twenty-Five Years Later," *Journal of International Business Studies*, 25 (4), 687-701.

Yang, Zhilin, Xuehua Wang and Chenting Su (2006), "A Review of Research Methodologies in International Business," *International Business Review*, 15 (6), 601-617.

Yeoh, Poh-Lin (2000), "Information Acquisition Activities: A Study of Global Start-up Exporting Companies," *Journal of International Marketing*, 8 (3), 36-60.

Yeoh, Poh-Lin and Insik Jeong (1995), "Contingency Relationships between Entrepreneurship, Export Channel Structure and Environment: A Proposed Conceptual Model of Export Performance," *European Journal of Marketing*, 29 (8), 95-115.

Yeoh, Poh-Lin and Kendall Roth (1999), "An Empirical Analysis of Sustained Advantage in the U.S. Pharmaceutical Industry: Impact of Firm Resources and Capabilities," *Strategic Management Journal*, 20 (7), 637-653.

Yip, George S., Javier Gomez Biscarri and Joseph A. Monti (2000), "The Role of the Internationalization Process in the Performance of Newly Internationalizing Firms," *Journal of International Marketing*, 8 (3), 10-35.

Yli-Renko, Helena, Erkko Autio and Vesa Tontti (2002), "Social Capital, Knowledge, and the International Growth of Technology-Based New Firms," *International Business Review*, 11 (3), 279-304.

Young, Stephen, James Hamill, Colin Wheeler and J. Richard Davies (1989). *International Market Entry and Development*, Englewood Cliffs, NJ: Prentice Hall.

Zahra, Shaker A. (1991), "Predictors and Financial Outcomes of Corporate Entrepreneurship: An Exploratory Study," *Journal of Business Venturing*, 6 (4), 259-285.

Zahra, Shaker A. (1993), "A Conceptual Model of Entrepreneurship as Firm Behavior: A Critique and Extension," *Entrepreneurship: Theory & Practice*, 17 (4), 5-21.

Zahra, Shaker A. (2003), "International Expansion of U.S. Manufacturing Family Businesses: The Effect of Ownership and Involvement," *Journal of Business Venturing*, 18, 495-512.

Zahra, Shaker A. and Jeffrey G. Covin (1995), "Contextual Influences on the Corporate Entrepreneurship-Performance Relationship: A Longitudinal Analysis," *Journal of Business Venturing*, 10 (1), 43-58.

Zahra, Shaker A. and Dennis M. Garvis (2000), "International Corporate Entrepreneurship and Firm Performance: The Moderating Effect of International Environmental Hostility," *Journal of Business Venturing*, 15 (5-6), 469-492.

Zahra, Shaker A., James C. Hayton and Carlo Salvato (2004), "Entrepreneurship in Family Vs. Non-Family Firms: A Resource-Based Analysis of the Effect of Organizational Culture," *Entrepreneurship: Theory & Practice*, 28 (4), 363-381.

Zahra, Shaker A., R. Duane Ireland and Michael A. Hitt (2000), "International Expansion by New Venture Firms: International Diversity, Mode of Market Entry, Technological Learning, and Performance," *Academy of Management Journal*, 43 (5), 925-950.

Zahra, Shaker A., Juha Santeri Korri and JiFeng Yu (2005), "Cognition and International Entrepreneurship: Implications for Research on International Opportunity Recognition and Exploitation," *International Business Review*, 14 (2), 129-146.

Zahra, Shaker A., Donald O. Neubaum and Morten Huse (1997), "The Effect of the Environment on Export Performance among Telecommunications New Ventures," *Entrepreneurship: Theory & Practice*, 22 (1), 25.

Zahra, Shaker A., Harry J. Sapienza and Per Davidsson (2006), "Entrepreneurship and Dynamic Capabilities: A Review, Model and Research Agenda," *Journal of Management Studies*, 43 (4), 917-955.

Zellweger, Thomas M., Philipp Sieger and Corinne Muehlebach (2010). "How Much and What Kind of Entrepreneurial Orientation Is Needed for Family Business Continuity?," in Matthias Nordqvist and Thomas M. Zellweger (Ed.), *Transgenerational Entrepreneurship: Exploring Growth and Performance in Family Firms across Generations*. Cheltenham: Edward Elgar, 195-214.

Zhao, Xinshu, John G Lynch and Qimei Chen (2010), "Reconsidering Baron and Kenny: Myths and Truths About Mediation Analysis," *Journal of Consumer Research*, 37 (2), 197-206.

Zou, Shaoming and S. Tamer Cavusgil (1996), "Global Strategy: A Review and an Integrated Conceptual Framework," *European Journal of Marketing*, 30 (1), 52-69.

H.   Appendix

1.   Latent Class Analysis: An Alternative Approach towards Internationalization Patterns

The present study used a latent class approach to address the debate concerning internationalization patterns among SMEs. As noted in the study, researchers interested in examining internationalization patterns have commonly classified firms into groups, i.e. patterns, based on cut-off scores. Despite the usefulness of the results provided by those studies, there are important measurement and conceptual problems attached to estimating internationalization patterns via classifying the firms based on arbitrary thresholds. The results may not be comparable at best or impose differences between firms that are not meaningful at worst.

The appropriate method that deals with such classification problems is the Latent Class Analysis (LCA). The LCA is conceptually similar to cluster analysis since it identifies latent groups based on observed response patterns (McCutcheon 1987; Nylund et al. 2007). The LCA is understood as a mixture modelling technique that aims to identify meaningful groups of firms that are similar in their responses to certain variables (Nylund, Asparouhov and Muthén 2007). More generally, it is a multivariate approach that assumes the existence of an underlying categorical latent variable that determines a firm's class membership (Nylund et al. 2007).

The usage of LCA offers several benefits, especially as compared to traditional hierarchical cluster analysis. (1) LCA models are probabilistic and can hence be re-tested with an independent sample (Nylund et al. 2007). (2) LCA models provide model fit indices. These statistical indices can be used to asses model fit and to decide on the number of latent classes (Nylund, Asparouhov and Muthén 2007). (3) The LCA allows the inclusion of both predictor and outcome variables (Nylund et al. 2007). (4) The LCA can be used for exploratory and confirmatory purposes (McCutcheon 1987). (5) LCA models can be based on categorical and continuous indicators (Vermunt and Magidson 2002).

As showed in study 1, the LCA uses observed indicator variables to estimate the model parameters, i.e. the latent classes and the conditional probabilities. These parameters are estimated via an iterative maximum-likelihood-based procedure. The aim of this procedure is to maximize the maximum-likelihood (ML) function, i.e. to find the parameter estimates that maximize the loglikelihood value. This value is a measure of the data's probability to fit to the specified model (Geiser 2010). To find the ML estimates Mplus uses the expectation-maximization (EM) algorithm usually in combi-

nation with the Fisher-Scoring, Newton-Raphson or Quasi-Newton algorithm. Whereas the EM algorithm is generally said to be most efficient when estimates are rather far from the optimum, the other algorithms are preferred for accelerated convergence (Vermunt and Magidson 2002). Being iterative algorithms, the procedures commence with a set of starting values and proceed with a series of steps until a specified convergence criterion is reached (McCutcheon 2002). That means that each additional iteration results in such a marginal change that the algorithm stops.

However, there is one complication that often occurs with LCA models. The ML algorithms can converge to a local maximum instead of the global, i.e. true, maximum of the likelihood function (McCutcheon 2002). That means that the procedure may result in the wrong parameter estimates because of local maxima. Hence, it is necessary to repeat the procedure with different starting values (McCutcheon 2002; Vermunt and Magidson 2002; Geiser 2010). We followed the advice of Geiser (2010) to raise the default starting values and iterations in Mplus and used 5000 sets of starting values with 200 iterations each.

After calculating several LCA models, the researcher has to decide on the number of classes. Currently researchers use a combination of statistical criteria and indices to evaluate the LCA models and decide on the number of latent classes. Most often used are information criteria such as the AIC (Akaike 1987) and BIC (Schwarz 1978). Another important criterion is the theoretical fit or the agreement with theory (Nylund, Asparouhov and Muthén 2007). While many textbooks advise on the primary usage of the BIC (Hagenaars and McCutcheon 2002; Magidson and Vermunt 2004), simulation studies showed that other criteria such as the LMR provide a useful tool for class enumeration (Lo, Mendell and Rubin 2001; Tofighi and Enders 2007). The LMR as well as the VLMR is a likelihood ratio test that compares nested latent class models. Although LCA models with different numbers of latent classes are considered nested models, the Chi-square difference test, i.e. the likelihood ratio test, is not applicable (Nylund, Asparouhov and Muthén 2007). Hence, Lo, Mendell and Rubin (2001) used an approximation based on the early work of Vuong (1989) and proposed the VLMR and the LMR as test statistics. The tests compare the improvement in model fit between two latent class models (i.e. they compare the $k + 1$ and the k class models with each other) and provide a p-value that determines if there is a statistically significant improvement in fit for the inclusion of one more class (Nylund, Asparouhov and Muthén 2007). Usually, researchers are required to use a combination of statistical measures supplemented by a theoretical evaluation of the latent classes.

2. Literature Review on Mode Changes

We carried out a literature review on mode changes and present the results of the review in a summarizing figure (see Figure H–1). The figure is ordered alphabetically within the three categories mode increases, mode reductions and mode increases and reductions (i.e. both forms of change). We included both conceptual and empirical studies into the review.

MODE INCREASE (conceptual, secondary data/case study and primary data based empirical studies)

Author (Year)	Research question	Form of Change (+/-)	Theory	Model	Data / industry / method	Results	Stimuli	Further research
Buckley and Casson (1981)	Predict the timing of the switch from exporting to WOPS	Export to WOPS (+)	Economic	- Costs of servicing foreign market - Demand conditions in foreign market - Host market growth	Economic modelling (conceptual)	- Both the static and dynamic (cost) conditions must be satisfied for the timing of the switch to be efficient. - If the firm uses only the static condition then there will be a tendency for it to switch as soon as the NPV of the switch becomes positive, which means investing too early.	-	- Analyzing the sequence of switches.
Benito and Gripsrud (1992)	Test internationalization process model in terms of distance	Move to FDI (+)	Internationalization process	- Distance	Secondary data/ 93 Norwegian firms/ 201 investments/ t-tests	- No support is found for the notion that the first FDI takes place in culturally closer countries than later FDIs. - An expansion into more distant countries is not found as the number of investments increases.	-	-
Gomes-Casseres (1987)	Instability of IJV	IJV to WOPS (+), liquidation (-)	-	-	Secondary data/ 180 US MNE/ manufacturing/ descriptive	- Similar reasons leading to instability of JV as of WOPS: Wrong decisions have to be corrected; factors that determine the costs and benefits of ownership structures may have to be changed. - JV: As a firm's capabilities grow, it may no longer need the cooperation with partner.	Internal environment, Attitudes	-
Nicholas (1983)	Transition from agents to branch selling as alternative institutional modes for British MNE	Agents to WOS (+)	Transaction cost and agency theory	-	Secondary data/ 21 British MNE/ manufacturing/ case study	- Transaction costs, frequency of transactions and accumulation of market-specific knowledge by the principal are important variables. - The greater the frequency of transactions and the more complex the nature of transactions the higher the costs of contracting and the relatively cheaper is branch selling.	External and internal environment	-

Figure to be continued

Figure H-1 continued

Study	Aim	Relationship	Theory	Data/method	Findings	Category	Future research
Björkman and Eklund (1996)	Explain the sequence of operation modes	General (+)	Internationalization process, internalization theory (Transaction cost)	- Size - International experience - Industry - Local concentration ratio - Strong local competitors - Network - Top mgmt change - Deviation from traditional path	Primary data/ 86- Finnish firms with WOS or WOPS in Germany/ logit model	Only few firms followed the traditional establishment chain. - Company size and international experience do not predict leap-froging. - Through networks a company may acquire knowledge, and leap-frog stages. - FDI are sometimes preceded and influenced by top management change.	Internal environment	- Test additional hypotheses within internalization theory. - Factors influencing managerial perceptions of foreign markets.
Buckley, Pass and Prescott (1990)	Impact of foreign operation mode on the competitiveness of UK manufacturer	Minimal (+), change in export form, competitiveness move to FDI (+)	-	- Competitive performance - Comp. potential - Comp. process - Change in foreign market servicing	Primary data/ 15- UK firms/ 25 moves/ manufacturing/ descriptive	Firms have an approach to market servicing rather than a strategy; act reactive. - Mode change has a significant impact on competitiveness, this impact depends on the form of change.	External environment	- Investigate pattern of change
Ellis (2005)	Termination of intermediaries	Agents (+)	(Transaction cost and agency theory)	- Intermediary performance - Cultural distance - Exchange uncertainty - Relationship age - Termination propensity	Primary data/ 86- Chinese firms/ 18 (moderated) regression	Relationship between client perceptions of intermediary performance and termination propensity is U-shaped. - Positive correlation between client dissatisfaction and termination, but this link only holds for poor-performing intermediaries. - Traders' dilemma found to be robust under varying conditions of exchange uncertainty, cultural distance and relationship age.	Performance	- Include organizational and environmental variables. Other institutional settings.
Hedlund and Kverneland (1985)	Entry and growth strategies in foreign markets	General (+)	Internationalization process	-	Primary data/ 18- Swedish firms/ 32 Japanese subsidiaries/ manufacturing/ descriptive	Half of the companies investigated went directly from a sales agent to manufacturing in Japan, rather than taking the route via a sales subsidiary. - No clear association between entry strategy and company performance established.	-	- Develop theories of the firm's internationalization process.
Millington and Bayliss (1990)	Formation of a manufacturing subsidiary	Move to WOPS/JV (+)	Internationalization process	-	Primary data/ 90- UK firms/ manufacturing/ descriptive	Incremental process is exception rather than manu-rule. - Experience of parent important.	Internal environment	-

Figure to be continued

Figure H–1 continued

Pedersen, Petersen and Benito (2002)	Decision to integrate foreign WOS sales operations	Agents to WOS (+)	Transaction cost and agency theories	- Switching motivators (Diminishing satisfaction, accumulation of market knowledge, growth of market, growth of company) - Switching costs (Contractual restrictions, loss of sales revenue, recruitment and training costs, internat. experience)	Primary data/ 214 Danish exporter/ manufacturing/ longitudinal/ logistic regression	- Prediction of mode shifts is described as interplay between changes of organizational and environmental conditions and the switching costs (cost-benefit-analysis). - Significant influence of satisfaction with the intermediary and accumulation of market knowledge on shift.	Performance, internal and external environment	- Enlarge framework. - Other empirical settings. - Examine precautions against switching costs.
Petersen, Benito and Pedersen (2000)	Replacements of foreign intermediaries	Agents (+), change of agent	Transaction cost and agency theories	- Performance factors (dissatisfaction) - Information-asymmetry factors (distance, control, experience) - Switching-costs (relationship length, contract period, notice of termination, loss of sales revenue)	Primary data/ 273 Danish exporter/ manufacturing/ longitudinal/ logistic regression	- Dissatisfaction with financial performance does not significantly affect replacement. - Information-asymmetry factors have mixed influence on replacement decision. - Switching costs are important barriers to replace agents.	External environment	- Explore formation of decision-making. - Examine role of experiential knowledge.
Petersen, Pedersen and Benito (2006)	Performance of intermediaries and intermediaries' termination	Agent (+)	Agency theory	Termination Performance Monitoring Contract restrictions Severance payments Market growth Sales potential Asset specificity	Primary data/ 258 Danish exporter/ manufacturing/ longitudinal/ logistic regression	- One third has either switched intermediary or integrated forward. - Termination dilemma supported. - Whereas monitoring is a major driver of performance, neither severance payment nor contractual restrictions have significant effects on performance.	Performance	- Explore inter-organizational governance instruments.
Puck, Holtbrügge, Mohr (2009)	Explain the likelihood of foreign firms' converting their JV with a local firm into a wholly owned subsidiary	IJV to WOPS (+)	Transaction cost and institutional theory	- Internal isomorphic pressures - External uncertainty - Acquisition local knowledge - Governmental regulations - Cultural distance	Primary data/ 94 IJV in China/ manufacturing MNE/ logistic regression	- Positive relationship between level of internal isom. pressures, perceived level of external uncertainty, acquisition of local knowledge and likelihood that IJV will be converted. - Negative association between extent of perceived governmental regulations, cultural distance and likelihood that IJV will be converted into WOPS.	Internal environment	- Test with SME. - Further factors influencing the conversion.

Figure to be continued

Figure H–1 continued

Randoy and Dibrell (2002)	MNE's resource commitment (assets) in foreign countries	General commitment in terms of assets (+)	Eclectic paradigm	- Strategic motives - Firm-specific factors - Transaction-specific factors - Location-specific factors	Primary data/ 129 involvements by 34 Norwegian MNEs/ regression	- Strategic and location-specific factors have a significant influence on foreign resource commitments.	Internal and external environment	-
Steensma et al. (2008)	Evolution of IJV	IJV to WOPS (+)	Social exchange, organizational learning	- Decision power imbalance - Conflict - Learning from foreign parent	Primary data/ 124 Hungarian IJV/ logistic regression	- Only when there is both a power imbalance between the parents and high levels of conflict is the likelihood that the JV converts to a WOPS enhanced. - The extent to which the JV has learned from the foreign parent indirectly determines which parent gains full ownership.	Internal environment	- Consider whether the internalization of IJV by foreign parent is an option. - Consider multiple-partner relationships.

MODE REDUCTION (conceptual, secondary data/case study and primary data based empirical studies)

Benito and Welch (1997)	De-Internationalization	General (-)	Economics, strategic management, internationalization process	- International operations - Performance - Management (change) - Environment - Strategy	Conceptual	- De-internationalization as an outcome of past international operations, also affected by current internal and external developments. - De-Internationalization seen as minor adjustment of international position. - Change in management key facilitator. - Reasons for de-internationalization range from poor performance to adverse governmental action and failure to fulfil expectations.	Performance, internal and external environment	- Longitudinal research.
Boddewyn (1979)	Divestment by MNE	Divestment of subsidiary or division (-)	Economic	- Poor performance - Environmental conditions - Lack of fit and resources - Structural and organizational factors	Conceptual	- Divestment mainly due to poor performance. - Strategic considerations: firms divest subsidiaries that do not "fit" even if they are profitable. - Organizational and personal factors affect the attitudes decision to divest.	Performance, internal environment	- Studies on magnitude and cause of divestments.

Figure H-1 continued

Author (year)	Purpose	Construct	Theory	Variables	Method/Sample	Findings/Propositions	Environment	Future research
Chow and Hamilton (1993)	Bring together different stands of divestment literature	General divestment in terms of selling assets (-)	Industrial organization, finance, corporate strategy	-	Conceptual	- Changes in management personnel appear to be a prior condition for divesting. - Short-term financial effects of divestment activity are marginal; the impetus towards divestment must come from the longer-term perspective of corporate strategy.	Internal environment	- Research on negative connotations attach to divestment decisions.
Sharma and Manikutty (2005)	Divestment in family firms	Sale of (part) of business unit or division (-)	(RBV)	- Need to divest - Family structure - Community culture - Divestment - Post-divestment performance	Conceptual	- Family firms controlled by community families (authority of the senior generation and equality among siblings) are likely to be slow in their ability to make divestment decisions. - Firms controlled by absolute nuclear families (liberty and indifference to equality) will be most efficient in making divestment decisions.	Internal environment	- Validate ideas through empirical research. - Include other dimensions of culture.
Belderbos and Zou (2009)	Real options portfolio perspective on foreign affiliate divestments.	IJV (-)	Real options theory	Variables on affiliate, parent firm and macroeconomic factors	Secondary data/ 1078 Asian manufacturing affiliates of Japanese electronics MNE/ probit model	- Affiliates are less likely to be divested in response to adverse environmental change if they represent growth or switch option value to the MNE under conditions of macroeconomic uncertainty. - Affiliates are sub-additive to the portfolio or (partially) redundant from an options portfolio perspective if the characteristics of their operations overlap with those of other affiliates.	External environment	- Longitudinal cross-country analysis of affiliates' survival probabilities.
Benito (1997)	Determinants of the (deliberate) divestment of foreign manufacturing operations	(WO)PS (-)	Industrial organization, finance, corporate strategy	- GNP growth - Host country risk - Subsidiary in the EC - Cultural distance - JV - Acquisition - Int. experience - Horizontal venture - RandD intensity - Diversified parent - Size of parent - Age of subsidiary	Secondary data/ 153 subsidiaries of Norwegian manufacturing firms/ logistic regression	- Subsidiaries are less likely to be divested - if their operations are closely related (i.e. horizontal) to their parent companies - if economic growth in the host countries is comparatively strong.	Internal, external environment, (performance)	- Performance considerations influencing divestment decisions. - Perceptions of the actual decision makers.

Figure to be continued

Figure H–1 continued

Author (year)	Topic / question	Divestment direction	Theoretical perspective	Variables	Data / Method	Findings	Focus	Comments
Delios and Beamish (2001)	Influence of intangible assets and experience on foreign subsidiary survival and profitability	Divestment of WOPS (-)	-		Secondary data/ 3080 subsidiaries of 641 Japanese MNE/ logistic regression	- Host country experience influences WOPS survival but does not have an independent relationship with profitability. - Host country experience contributes to the adaptation of intangible assets in a manner that positively influences WOPS profitability.	Internal environment	- Measures of resources, capabilities and performance at subsidiary level. - Test applicability of results.
Haynes, Thompson and Wright (2003)	Determinants of divestment	General divestment (-)	Agency-cost and strategic perspective	- number of divestments - Assets divested - Fin. performance - Firm leverage - Threat - Change top mgmt - Diversification level - Firm size - Acquisition - Concentration - Market share	Secondary data/ 144 UK publicly quoted firms/ manufacturing/ longitudinal/ OLS regression	- Divestment is a purposeful response to financial, corporate governance and strategic variables. - Response of divestment activity to adverse changes in performance is quite rapid.	Performance, internal environment	- Test in non-Anglo-American countries.
Hennart, Kim and Zeng (1998)	Compare longevity of stakes in JV versus those in WOPS	Divestment of JV (-), WOPS (-)	(Transaction cost theory)	- JV - Experience - Diversification - Acquisition - Industry growth - Size - Age	Secondary and primary data/ 323 Japanese manufacturing affiliates in US/ Cox proportional hazard model	- Keeping all other factors constant, stakes in JV are more likely to be terminated than those in WOPS (due to a higher probability of being sold). - JV status, diversification and parent size, do not significantly impact gross exit rates, but not significantly affect the probability that an affiliate will be liquidated.	Internal environment	- Examine factors behind exit by sale and exit by liquidation. - In-depth study of divestment.
Khan and Mehta (1996)	Divestment decision and the choice between sell-offs vs. sell-off and spin-spin-offs (-) off	Divestment	Economic (standard share value model of the firm)	- Two proxies for marginal return - Three proxies for overhead costs - Four proxies for financial leverage	Secondary data/ 304 divesting (218 sell-offs, 86 spin-offs), 257 non-divesting firms/ different industries/ longitudinal	- Firm will voluntarily divest a division experiencing a decline in marginal rate of return when the firm suffers from high costs.	Performance	-

Figure to be continued

Figure H–1 continued

Author (Year)	Research focus	Dependent variable (-)	Theory	Factors	Data / Method	Results	Environment	Future research
Li (1995)	Effects of diversification and entry strategies, org. learning and experience on survival probabilities of foreign subsidiaries.	Exits of foreign subsidiaries (-)	Internationalization process	- Diversification strategy - Entry strategy - Organizational learning and experience	Secondary data/ 267 firms entering US market/ computer and pharmaceutical industries/ longitudinal/ event-history logistic regression	- Diversification strategies, entry strategies and organizational experience have significant effects on the exit hazards of foreign firms. - Strategic choices are associated with different hazards of exit for foreign subsidiaries.	Internal environment	- Effects of industry and home country influences on subsidiary survival.
Mata and Portugal (2000)	The longevity of foreign entrants considering two possible ways of subsidiary exit: firm closure and capital divestment.	Foreign capital divestment, closure (-)	MNE and economic theory	- Entry mode - Human capital - Plants - Diversification - Limited liability - Majority JV - WOS - Scale economies - Concentration - Entry - Industry growth - Foreign presence	Secondary data/ 1033 foreign firms in Portugal/ longitudinal/ logistic regression	- Ownership arrangements and organizational structure affect the likelihood of divestment, but they exert no significant effect upon closure. - The entry mode exerts opposite effects on the two modes of exit, greenfield entrants being more likely to shutdown, but less likely to be divested. - Firms with large endowments of human capital are less likely to exit, irrespective of the exit mode considered.	Internal environment	- Reasons for divestments other than failure.
Montgomery, Thomas and Kamath (1984)	How does the financial market value divestitures?	General divestment (-)	-	- Divestment motives (strategic divestment, selling undesired units, liquidity concerns, forced divestments, undiscussed divestments)	Secondary data/ 78 divestments/ strategic plans/ longitudinal/ ANOVA	- Divestments that were part of integrated, strategic plans exhibited large positive stock market effects. - Routine, non-strategic divestments were associated with negative stock price effects.	Internal environment	- Intricacies of positive and negative aspects of divestment.
Duhaime and Grant (1984)	Factors influencing corporate-level divestment decisions of large diversified firms	General divestment (-)	Corporate portfolio theory	- Firms financial strength - Unit strength - Unit independency - General economic growth - Managerial attachment	Primary data/ 40 large US firms/ structured interviews/ non-parametrical	- A business unit's strength, its relationship to other units and its parent firm's financial position compared to its competitors are important divestment influences, whereas other factors such as general economic conditions are not.	Internal environment	- Individually influencing factors and their relative impacts on divestment. - Interrelationships between factors.

Figure H–1 continued

Study	Objective	Mode/direction	Theory	Constructs	Data/method	Findings	Environment/attitudes	Comments
Hamilton and Chow (1993)	Distinguish divesting and non-divesting firms.	General divestment (-)	-	- Environm. influences - Org. considerations - Financial performance - Motives	Primary data/ 36 largest New Zealand-owned firms/ 208 divestments/ descriptive	- Divesting firms were considerably larger and faster growing than non-divesting. - Divestment was motivated by need to convert unattractive assets into liquid form which could then be held to strengthen the balance sheet, or reinvested.	Performance	-
Nees (1981)	Role of the division manager in the divestment decision	General divestment (-)	-	-	Primary data/ 6 large EU and US companies/ 14 divestments/ case study	- As soon as a divestment is seriously considered, the division manager should be informed, his expectations and legitimate preoccupations should be taken into account, openly discussed and solved.	-	-
Pauwels and Matthyssens (2004)	Export market withdrawal as a possible manifestation of strategic flexibility	Export (-)	-	-	Primary data/ 12 withdrawals/ European MNE and SME/ in-depth interviews/ case study	- While no ex ante strategic flexibility was observed, factors such as degree of managerial autonomy, emergence of generative learning and possibility of local experimentation led to creation of new strategic option in reaction to perceived misfit between export environment and current export strategy.	Internal environment, attitudes	- Strategic flexibility in the internationalization process.
MODE INCREASES AND REDUCTIONS (conceptual, secondary data/case study and primary data based empiric studies)								
Boddewyn (1983)	Differences between investment and divestment decisions (foreign and domestic)	General investment (+) and divestment (-)	-	-	Conceptual	- Divestment decision differs from investement decision making - Greater centralization of decision making - Lesser a priori rationality - Greater importance of a high-level "new man" providing "impetus" - Decision more tactical and personal than strategic and organizational.	Attitudes, internal environment	- Comparison of foreign investment and divestment decision processes.
Boddewyn (1985)	Review of theoretical approaches towards FDI and divestment	FDI (+), divestment (-)	Economic (International trade theory, location theory, investment theory, theory of the firm, industrial organization theory)	- Condition factors - Motivation factors	Conceptual	- Perceived profitability as motivator to invest abroad. - Condition-based theories include references to change in some external factors (increase in trade barriers makes export unprofitable so that FDI becomes imperative). - Internal decision stressed in organizational and management theories rather than economic ones. - Divestments explained roughly by condition-based theories, motivation-based theories and precipitating-circumstances-based theories.	Performance, external and internal environment	- Analyses of macroeconomic data regarding different types of FDI and divestment. - Recognize different types of FDI and divestment. - Dynamic explanation.

Figure to be continued

Figure H-1 continued

Buckley and Casson (1998)	Model for market entry decision	Exporting, licensing, JV, WOPS (+/-)	Economic	- Different forms of costs - Profit	Economic modeling (conceptual)	- A change in any variable that increases the adoption of these strategies tends to inhibit the adoption of alternative strategies, and to encourage the adoption of alternative strategies instead. These alternative strategies are the ones whose costs are independent of the variable concerned.	Performance	- Several ways to modify the model.
Mitchell, Shaver and Yeung (1992)	Effects of increasing and decreasing international presence on market share and survival	General (+/-)	-	Strategy variables Increase vs. decrease Survival Market share	Secondary data/ 111 firms/ medical sector/ longitudinal/ (event-time) regression	- Both increasing and decreasing international presence have negative associations with survival, while decreased internationalization is associated with decreased US market share. - Preparedness. focused management and learning from international experience.	Internal environment	- Analyze different expansion paths. - Are there stages that can successfully be omitted?
Mitchell, Shaver and Yeung (1993)	Relationship between firm performance and changes in international presence	General (+/-)	-	Change Survival Market share	Secondary data/ 35 US firms/ medical sector/ longitudinal/ descriptive	- International expansion is necessary for survival when foreign firms begin to penetrate a domestic market, but only firms with substantial market share and international experience gained prior to the industry transition can expand successfully.	-	- Examine more firms in more industries. - Refine the measures of change. - Analyze staged expansion.
Crick and Chaudhry (2006)	Reasons for market withdrawal, follow-up after exporter quit	General (+/-)	Internationalization process	-	Case studies / 12 UK SME/ in-depth interviews/ case study	- If domestic demand is adequate, mode change is not worthwhile. - After withdrawal: - Take ad-hoc orders. - Moved to JV - WOPS in low-labor-cost country; exports to UK and other countries.	-	- Increase sample size. - Case studies into specific export withdrawal decisions. - Different industries and across countries.

Figure to be continued

Figure H–1 continued

	Objective	Scope	Theory	Variables	Method/ sample	Findings		
Fina and Rugman (1996)	MNE penetration strategies	General (+/-)	Internationalization process, internalization theory	-	Case study/ 1 US-based MNE/ case-study	- Both theories hold true: Upjohn has largely followed sequential process, but has also moved from export to FDI to licensing. - In majority of markets it had later on shifted to modes providing higher degree of control.	-	-
Fryges (2005)	Adjustment of foreign sales mode.	Agent, direct export, other sales modes (+/-)	Internationalization process, RBV, transaction cost theory, eclectic paradigm	Country, size, International experience of management, R&D, technology, opportunity, customization, Consumer good, Business service, country risk, Share of total sales, years since entry, Gross domestic product	Secondary data/ 218 UK and German firms/ manufacturing and service/ longitudinal/ logit model	- Internationalization process model is not suitable for explaining behaviour of young firms in high-tech sectors (firms change from direct exports to agents and the way around). - Transaction cost theory and RBV are both relevant for explaining the probability of switching from one sales mode to another. - Dunning's ownership and internalization advantages are decisive for selecting optimal sales mode, especially for predicting a change from indirect to direct exports.	Internal and external environment	-
Gemser, Brandt and Sorge (2004)	SME usage of cooperative or autonomous modes and the possible changes in this use of strategy over time	General (+/-)	Internationalization process, Transaction cost and network approach	-	Case studies/ 12 Dutch SME/ engineering and software industry/ 46 in-depth interviews/ descriptive	- Reasons for reduction: resources constraints or 'ineffective' modes of entry. - Reasons for increase: managerial learning, market potential or market size. - No difference between industries.	Attitude, internal and external environment	- Impact of size - Internationalization trajectories of SMEs. - Differentiate according to sector type. - Role of corporate culture of new economy firms.
Lindgren and Spångberg (1981)	Differences between acquisition and divestment processes	General (+/-)	Strategic management and organizational theories	-	3 Case studies/ 6 Swedish MNE with 26 subsidiaries in 12 countries/ 2 MNE/ 4 Swedish MNE/ interviews	- Acquisition decisions have been guided by offensive motives. - Divestment motives have been found to be more defensive.	-	

Figure H-1 continued

Study	Research question	General (+/-)	Approach	Data	Items / process	Findings	Environment	Further
Chetty and Agndal (2007)	Influence of social capital on (+/-) mode change	General (+/-)	Transaction cost and network approach	Primary data/ 36 mode changes / 20 NZ and Swedish SME/ case study	-	- Most frequent type of mode change is toward a high-control internationalization mode. - Social capital takes different roles (efficacy, liability, serendipity) in influencing mode change most frequently.	Internal environment	- Different industry and cultural contexts - Test findings in quantitative study
Calof (1993b)	(1) How do firms go about making mode change decisions? (2) How does this process affect performance?	License/ franchise, indirect and direct export, WOS, JV, WOPS (+/-)		Primary data/ 38 Canadian-owned medium sized firms/ 72 interviews, 100 mode changes	- Process (Use and source of formal studies, consultation with outsiders, alternative modes/tion options considered, implementation options considered, time taken to make decision, nature of the process, complexity)	- The importance of a solely rational mode decision-making process seems minimal in terms of its existence and its effect on performance. - As many decisions are based on gut feel the mode changes/decision-making process might consist of continuous development of knowledge.	Internal environment	-
Calof and Beamish (1995)	Why firms change mode	Increase and reduction (+/-)	Internationalization process	Primary data/ 76 executives from 38 Canadian firms/ 100 mode changes/ in-depth interviews/ descriptive	15 items representing attitudes, internal and external environment, performance	- Mode change can be traced to stimuli which effect executives' beliefs towards market potential and modes costs/benefits, or stimuli that change a constraint (environmental or resource) which prevented the firm from previously selecting their most desired mode. - The internationalization pattern (de-investment, one-step and multi-step investment), depends on the nature of the stimuli. - Attitudes are the major determinant of the internationalization path.	Attitudes, internal and external environment, performance	- Further research on mode changes.
Clark, Pugh and Mallory (1997)	Internationalization process in terms of increasing involvement in foreign markets	General increase (+), few reductions (-)	Internationalization process	Primary data/ 25 large UK-based firms/ 203 moves/ in-depth interviews/ descriptive	-	- Two factors influencing shift of modes: (1) market-specific knowledge, (2) generalized knowledge from operating internationally. - Establishment chain is one amongst several paths to FDI. - Strategic relationship between foreign operations has an impact on subsequent mode shifts with past experience feeding into the decision. - Mode combinations observed.	Internal environment	- Firm as unit of analyses.

Figure to be continued

Figure H–1 continued

Fletcher (2001)	Inward, outward and liked forms of internationali-zation, also de-internationaliza-tion	General (+/-)	Internationali-zation process	28 factors (management and firm characteristics, incentives, impediments)	Primary data/ 503 Australian exporter/ de-scriptive	- Factors unique to de-internationalization did not include any management characteristics, but mainly impediments.	Attitudes, internal environment	- Replication of study. - Factors causing de-internation-alization.
Okorafo (1997)	Determinants, decision proc-ess, and per-formance impli-cations of in-cremental and non-incremental substitution pattern	General (+/-)	Eclectic para-digm	33 determinants, different performance measures	Primary data/ 70 Canadian 104 US large and medium-sized firms/ manufacturing/	- Most of substitution choices were part of a strategic plan. - Substitutions are incremental and non-incremental. - No conclusion on performance effects. - Most determinants affect pattern choice	Internal envi-ronment	- More de-terminants. - Determine relative influ-ences of environment, expected performance, etc. - Include strategic issues. - Larger sample.

Figure H–1:   Literature Review on Mode Changes

Source: Own creation.

3. Major Stimuli for Mode Change

For study 1 we used the 15 stimuli for mode change that Calof and Beamish (1995) identified during informal interviews. For our questionnaire measurement we employed the exact same items (see Table H–1). Moreover, we asked the executives to name up to three of the most important stimuli and also to rate the 15 stimuli on a scale. The perceived importance can be viewed in Table H–1.

Increase of modes				Reduction of modes		
One-step	Two-step	Total		One-step	Two-step	Total
59 (16)	38 (15)	97 (16)	Performance	67 (30)	24 (27)	91 (29)
30	11	41	1. Continual good (poor) performance made it clear to us that a change of mode was necessary.	49	18	67
24	25	49	2. In view of our development, the mode change was the next logical step in successful market development.	4	1	5
5	2	7	3. The mode was simply not holding its own within our overall operations.	14	5	19
200 (54)	132 (53)	332 (54)	Internal environment	90 (40)	31 (35)	121 (39)
			Strategy			
9	15	24	4. We wanted to diversify (reduce) products/markets.	3	1	4
59	34	93	5. A change was needed if we were to realize our growth objectives/reduce costs of operations.	13	8	21
67	45	112	6. We made a strategic decision that the foreign market is more (less) important in the future.	14	5	19
			Resources			
21	15	36	7. It was the decision to integrate more (less) resources because of good (bad) business in the past.	18	8	26
37	20	57	8. It was more efficient to serve the market in a new way.	36	4	40
7	3	10	9. New management had a different idea than old management about importance of (particular) international business.	6	5	11
36 (10)	32 (13)	68 (11)	External environment	47 (21)	31 (35)	78 (25)
4	3	7	10. The contractual situation has changed.	6	6	12
2	9	11	11. Regulations/norms in the market have changed.	19	7	26
18	8	26	12. Development of demand was more/less than we thought before.	22	14	36
12	12	24	13. We were asked to buy (sell) a business (in the sense of an opportunity).	--	4	4
72 (20)	46 (19)	118 (19)	Attitudes	20 (9)	3 (3)	23 (7)
16	10	26	14. Over time, we became more comfortable operating within the market and felt that a change in mode was now appropriate.	13	1	14
56	36	92	15. We changed the mode because we had a greater (lower) commitment to the market.	7	2	9
367 (100)	248 (100)	615 (100)	Total	224 (100)	89 (100)	313 (100)
Note: Respondents stated the three most important variables for the change decision out of the list (% in brackets).						

Table H–1:   Major Stimuli for Mode Change

Source: Own creation.

To check for multicollinearity of the measures, we considered the VIF values and the correlations between the indices. Since all values are found to be below the common

thresholds, multicollinearity is assumed not to be a serious problem within the present data (see Table H–2).

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Performance	1.00								
2. Internal environment	0.29**	1.00							
3. External environment	0.10	-0.15**	1.00						
4. Attitudes	0.09	0.37**	-0.21**	1.00					
5. Firms age	-0.03	0.05	0.15**	0.15**	1.00				
6. Firms size	0.16**	0.22**	-0.10	0.23**	0.21**	1.00			
7. Accum. of market knowledge	0.03	0.24**	0.09	0.10	0.19**	0.19**	1.00		
8. Combination of modes	-0.10	-0.05	0.04**	-0.17**	-0.09	-0.47**	-0.09	1.00	
9. Geographic distance	-0.11*	0.09	0.09	0.01	0.14*	0.19**	0.08	0.04	1.00
10. Competition intensity	0.06	0.32**	0.07	0.05	-0.04	0.03	0.13*	0.06	0.20**
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; others not significant; N=320									

Table H–2:   Correlation Matrix

Source: Own creation.

4.   Alternative Specification of International Entrepreneurial Orientation

Different conceptualizations and operational specifications of IEO have been advertised in the literature (composite measure vs. single dimensions, three vs. five constituent dimensions etc.). We want to briefly elaborate why we chose the perspective that is followed in study 4.

Rossiter (2002) argued: "For completely concrete constructs, one concrete item is all that is necessary. For abstract constructs, one concrete item for each constituent or first-order component is all that is necessary. The multiple items are used to cover the constituents or components parsimoniously." (p. 321). Following Miller's (1983) conceptualization, we believe that IEO is an abstract construct that has several constituents (per definition). Miller (1983) stated: "the literature shows entrepreneurship to be a multidimensional concept comprising three dimensions: innovation, proactiveness, and risk taking (…). In general, theorists would not call a firm entrepreneurial if it changed its technology or product-line ("innovated" according to our terminology) simply by directly imitating competitors while refusing to take any risks. Some proactiveness would be essential as well. By the same token, risk-taking firms that are highly levered financially are not necessarily considered entrepreneurial. They must also engage in product-market or technological innovation. Thus our focus upon the composite dimension is intuitively reasonable." (p. 780).

It is, hence, not a question of whether innovativeness, proactiveness and risk taking may vary independently, but whether they must (refer to Covin et al.'s 2006 excellent discussion of the dimensionality of the construct in the appendix of their paper). Eve-

ryone would agree that the three dimensions exist as distinct constructs. Following Covin et al.'s (2006) logic, we argue that it is a conceptual question whether entrepreneurial orientation is modelled based on single dimensions or based on a composite measure. Although studies have shown that firms can score differently on the dimensions and the dimensions may vary independently, the dimensions correlate highly and entrepreneurial firms have been shown to score (rather) high on all three dimensions (Mostafa, Wheeler and Jones 2005). Hence, per definition, all three constituents have to be given (to some extent) in order for a firm to be entrepreneurial. Modelling the dimensions individually would have a different conceptual meaning. Therefore, the definition and the conceptualization of the construct characterize its dimensionality. All in all, we think that there is a strong theoretical reason to follow the conceptualization of Miller (1983) and not to separate the construct. To contrast the two different measurement specifications, we present the reliability and validity indicators in Table H–3.

Item	ItTC (≥ 0.3)	α (≥ 0.7)	λ (CFA) (≥ 0.3)	AVE (CFA) (≥ 0.5)	CR (CFA) (≥ 0.7)	Operationalization source
International entrepreneurial orientation						
Risk taking[1]		0.719		0.570	0.725	Own measure based Miller and Friesen (1982), Covin and Slevin (1989)
When chances and risks are equally distributed in international decision making situations, we refrain from the project (reverse coded)	0.561		0.686			
We have a proclivity to high risk over low risk projects	0.561		0.819			
Innovativeness[1]		0.655		0.357	0.677	Own measure based Covin and Slevin (1989)
Technology is our special strength	0.525		0.646			
Flexibility and customer focus are important to us	0.364		0.449			
We focus on the development of new products and innovations	0.474		0.633			
The enforcement of unconventional ideas and the acceptance of creative thinkers are important to us	0.395		0.577			
Proactiveness[1]		0.723		0.452	0.748	Own measure based on Knight and Cavusgil (2004)
We are proactively growth and profit oriented	0.544		0.580			
We act based on the belief that our firm's future lies in international markets	0.565		0.712			
We actively encourage the international orientation of our employees	0.553		0.770			
We consistently trust in our own strengths	0.413		0.448			

[1] Measured with seven-point Likert-type scales: To what extend do you agree to the following statements? Please answer on a scale between 1=completely disagree and 7= completely agree.

Table H–3:   Alternative Specification and Measurement of IEO

Source: Own creation.

Following the conceptualization of Miller (1983), there are two major possibilities of how to model IEO:

(1) The first option is to model IEO as a composite construct consisting of ten items. The results of the mediation and the reciprocal models can be seen in Table H–4.

(2) The second option is to model IEO as a composite construct on the three sub-dimensions innovativeness, proactiveness and risk taking. Since the AVE is below common cut-off values in our study, we considered the dimensionality of the construct and followed recent studies on entrepreneurial orientation by representing the construct with three parcels instead of the ten items. Hence, we created three indices by averaging the two items on risk taking, the four items on innovativeness and the four items on proactiveness (Moreno and Casillas 2008; Ripollés, Blesa and Monferrer 2012). Thereby we followed recent studies on entrepreneurial orientation (Moreno and Casillas 2008; Ripollés, Blesa and Monferrer 2012) and used item parceling in order to model international entrepreneurial orientation and account for the different facets of IEO and also improve model fit. Item parceling involves "summing or averaging item scores from two or more items and using these parcel scores in place of the item scores" (Bandalos 2002, p. 78).

	Model 1	**Model 2**
Paths	Indirect effects model	Reciprocal model
IEO → Performance	0.277 ***	0.232 ***
Scanning → IEO	0.284 ***	0.499 ***
Planning → IEO	0.497 ***	0.352 **
IEO → Scanning		0.346 ***
IEO → Planning		0.752 ***
Instrumental Variables		
Foreign market reporting → Scanning		0.479 ***
Foreign market controlling → Planning		0.272 ***
Geographic distance → IEO		0.243 ***
Controls		
Firm size	0.085 ns	0.091 ns
Model fit		
χ^2	1019.087 ***	1812.166 ***
df	223	448
RMSEA	0.077	0.071
CFI	0.865	0.858
Model indirect		
Scanning → IEO → Performance	0.079 **	0.116 **
Planning → IEO → Performance	0.137 ***	0.082 *
Note: Standardized estimates shown. * p ≤ 0.05, ** p ≤ 0.01, *** p ≤ 0.001, ns = not significant.		

Table H–4:   Competing Reciprocal Models with Alternative IEO Specification

Source: Own creation.

To our understanding both solutions lead to similar results and the same structural relationships, but differ in the presentation. We implemented the second option in study 4 because it is based on Miller's conceptualization, follows recent trends in literature, takes account of the AVE value and also improves model fit.

5.   Endogeneity, non-recursive SEM and Instrumental Variables

A major problem in model specification, estimation and interpretation is the potential inconsistency of parameter estimates. Ensuring the consistency of estimates is especially important when trying to make causal claims based on non-experimental data. According to Antonakis et al. (2010) there are several threats to validity endangering consistent estimation. Major threats to validity are omitting variables from the model (i.e. omitting important regressors, but also omitting fixed effects, etc.), omitted selection, reciprocity, measurement error, common-method variance, inconsistent inference and model misspecification. Hence, proper model estimation is hindered by endogeneity which means that the effect of the independent variable on the dependent cannot be interpreted because of the named causes.

We considered the potential endogeneity in study 4 in that we took into account the threats of (1) the model misspecification that may result because the correlation between the disturbance terms of the endogenous constructs is not modelled and (2) the reciprocity, or simultaneity as Antonakis et al. (2010) called it.

Having proposed a mediation model in study 4, we need to acknowledge that IEO and international performance are two endogenous constructs. As Antonakis et al. (2010) describe in their paper a common mistake in management research is the estimation of SEM without correlating the disturbance terms of the two endogenous constructs. Without error correlation the model suggests that "there is no 'common shock' that might predict x and y, which is unmeasured and not accounted for in the model" (Antonakis et al. 2010, p. 1102). In order to receive consistent and unbiased estimates, we include the correlation into our model.

In order to meet the second potential threat, we included three latent instrumental constructs into our model, since every endogenous variable (latent construct in our case) needs at least one instrument (Bollen 1996). According to Kline (2011a) an instrument has to have a direct effect on the "problematic" causal variable and at the same time no direct effect on the criterion (p. 156). But Kline also emphasizes that both conditions have to be given by theory not by statistical calculations. In our case, we have reason to assume that the relevance of foreign market reporting is an antecedent of scanning processes that has no direct effect on internal performance. Similarly, foreign market controlling influence planning processes but do not impact international performance in a direct way. The perceived psychic distance to overseas markets is an important determinant of the international entrepreneurial orientation (Dichtl, Koeglmayr and Mueller 1990), but has no direct performance consequences. Furthermore, the instrument may be exogenous as well as endogenous, although exoge-

nous instruments are preferred because they do not correlate with any of the distur-
bance terms (Antonakis et al. 2010; Kline 2011a).

6.   Alternative Specification of International Performance

Performance is a multidimensional construct and several studies have addressed
that IEO may have different effects on different aspects of performance.

Paths	Model 1 Financial perform-ance[1]	Model 2 Satisfaction (single item)[2]	Model 3 Target approach (single item)[3]	Model 4 Foreign sales (single item)[4]
IEO → Performance	0.258 ***	0.172 **	0.623 ***	0.172 **
Scanning → IEO	0.304 ***	0.312 ***	0.287 ***	0.311 ***
Planning → IEO	0.529 ***	0.523 ***	0.548 ***	0.524 ***
Controls				
Firm size	0.087 ns	0.147 **	0.107 **	0.007 ns
Model fit				
χ^2	269.213 ***	223.952 ***	240.902 ***	218.935 ***
df	97	71	71	71
RMSEA	0.054	0.060	0.063	0.059
CFI	0.962	0.961	0.958	0.962
Model indirect				
Scanning → IEO → Performance	0.079 **	0.053 *	0.179 ***	0.053 *
Planning → IEO → Performance	0.137 ***	0.090 *	0.342 ***	0.090 **

Note: Standardized estimates shown.
* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$, ns = not significant.
[1] Three items on perceived financial international performance as it is shown in the manuscript.
[2] Single item on the overall satisfaction with regards to the international performance (Likert-type).
[3] Index comprised of the evaluation of several financial and non-financial international goals/targets and the corre-
sponding degree of achievement of these goals.
[4] Absolute number as provided by the SME manager.

Table H–5:   Competing Mediation Models with Alternative Performance Measures
Source: Own creation.

In order to explore the influence of IEO on different measures of international per-
formance, we display the models with different performance measurement in Tables
H–5 and H–6. Since it could be argued that IEO is mainly influential to the financial
performance of a firm, we chose to focus on this aspect of international performance
in study 4. Rauch et al. (2009) stated: "The conceptual argument of the EO–
performance relationship focuses mainly on financial aspects of performance. Busi-
nesses with high EO can target premium market segments, charge high prices and
"skim" the market ahead of competitors, which should provide them with larger profits
and allow them to expand faster (Zahra and Covin 1995). The relationship between
the EO construct and nonfinancial goals, such as increasing the satisfaction of the
owner of the firm, is less straightforward. We argue that there is little direct effect of

EO on nonfinancial goals because this relationship is tenous." (p. 765). However, to access the influence of IEO on different measures of international performance, we provide additional computations (see Tables H–5 and H–6).

Paths	Model 1 Financial per-formance[1]	Model 2 Satisfaction (single item)[2]	Model 3 Target approach (single item)[3]	Model 4 Foreign sales (single item)[4]
IEO → Performance	0.139 **	0.122 *	0.516 ***	0.126 **
Scanning → IEO	0.421 ***	0.387 ***	0.301 ***	0.404 ***
Planning → IEO	0.481 ***	0.494 ***	0.537 ***	0.478 ***
IEO → Scanning	0.486 ***	0.494 ***	0.508 ***	0.493 ***
IEO → Planning	0.330 ***	0.482 ***	0.474 ***	0.482 ***
Instrumental Variables				
Foreign market reporting → Scanning	0.330 ***	0.329 ***	0.334 ***	0.330 ***
Foreign market controlling → Planning	0.405 ***	0.416 ***	0.444 ***	0.416 ***
Geographic distance → IEO	0.384 ***	0.387 ***	0.379 ***	0.387 ***
Controls				
Firm size	0.103 *	0.159 **	0.108 **	0.014 ns
Model fit				
χ^2	824.058 ***	788.389 ***	812.344 ***	758.178 ***
df	260	217	217	217
RMSEA	0.060	0.066	0.067	0.064
CFI	0.930	0.923	0.922	0.927
Model indirect				
Scanning → IEO → Performance	0.058 *	0.047 *	0.155 ***	0.051 **
Planning → IEO → Performance	0.067 *	0.060 *	0.277 ***	0.060 **

Note: Standardized estimates shown.
* $p \leq 0.05$, ** $p \leq 0.01$, *** $p \leq 0.001$, ns = not significant.
[1] Three items on perceived financial international performance as it is shown in the manuscript.
[2] Single item on the overall satisfaction with regards to the international performance (Likert-type).
[3] Index comprised of the evaluation of several financial and non-financial international goals/targets and the corresponding degree of achievement of these goals.
[4] Absolute number as provided by the SME manager.

Table H–6:   Competing Reciprocal Models with different international Performance Measures
Source: Own creation.

7.   Conceptual Remarks regarding Moderation

In the course of developing study 4, we often discussed the nature of the relationship between processes, IEO and international performance. One question that has often been raised was whether moderation would be an option. While we agree that it is very likely to find a theoretical framework and empirical evidence for a moderated perspective (Rauch et al. 2009 discussed several possible moderators in their meta analysis), we did not pursue the moderated perspective out of the following reasons:

We believe that it is an essential conceptual question whether the relationship is assumed to be moderated or mediated. Baron and Kenny (1986) argued that "(a) the

moderator function of third variables, which partitions a focal independent variable into subgroups that establish its domains of maximal effectiveness in regard to a given dependent variable, (b) the mediator function of a third variable, which represents the generative mechanism through which the focal independent variable is able to influence the dependent variable of interest." (p. 1173)

In our case the quote by Baron and Kenny would imply the following: (a) Moderation: Either scanning and planning processes contribute to a firm's international financial performance when IEO is high, or IEO contributes to firm performance in international markets when scanning and planning processes are implemented. These moderated relationships show that certain circumstances can affect the direction or strength of a relationship. The moderator is capable of changing or magnifying a relationship. (b) Mediation: Scanning and planning contribute to a firm's international financial performance because of the IEO. There are two causal effects: a) scanning and planning processes affect IEO and b) IEO affects international performance. Hence, the mediator explains the process through which an independent variable is thought to impact a dependent variable (Iacobucci, Saldanha and Deng 2007).

As we argued in study 4, we expect that scanning and planning are processes that contribute to a small firm's knowledge development and learning. Since these processes are potentially transferrable, we argue that the processes need to be transformed through the IEO of the small firms in order to create and sustain competitive advantage. Since we aimed at explaining the transformation process in the paper, we pursued the mediation perspective. Furthermore, we build our perspective on Makadok (2001). In his conceptual distinction of the resource-picking and the capability-building mechanism, Makadok pointed out that the timing of the mechanisms is the main distinction. He further argues that "(…) capability-building only creates economic profit if a firm is successful at acquiring other resources on which the capability in question can exert its productivity-enhancing influence" (p. 389). Hence, economic profit is created after the acquisition of the resource. The capability-building process is hence best described by mediation, since "Mediation involves a third variable (m) that represents a temporal step between X and Y in a causal chain" (Hopwood 2007, p. 263). Although moderation suits the idea of enhancing the productivity of the resources, it is not capable of making a distinction between the timing. In moderation there is an interaction of the two independent variables which does not allow causal or temporal claims. Providing a similar understanding of capabilities, Yeoh and Roth (1999) modelled (dynamic) capabilities as mediator in the resource-performance relationship. Because of the given reasons, we believe that mediation is the appropriate approach to model the causal relationship.