How Early Internationalizers Learn: Experience Of Others And Paradigms Of Interpretation

Christian Schwens
University of Giessen
Faculty of Economics and Business Administration
Chair for Business Administration and Human Resource Management
Licher Str. 66
35394 Giessen
Germany
Tel.: 0049 641 9922103
Fax: 0049 641 9922109
e-mail: christian.schwens@wirtschaft.uni-giessen.de

Ruediger Kabst
University of Giessen
Faculty of Economics and Business Administration
Chair for Business Administration and Human Resource Management
Licher Str. 66
35394 Giessen
Germany
Tel: 0049 641 9922100
Fax: 0049 641 9922109
e-mail: ruediger.kabst@wirtschaft.uni-giessen.de

Abstract

Although learning plays a pivotal role in the seminal work by Oviatt & McDougall (1994), studies elaborating aspects of learning are largely missing in the field of international entrepreneurship. We address this deficit unfolding the process of learning in the pre-entry phase of internationalization as well as examining its subsequent imprinting effects (Levitt & March 1988; Cohen & Levinthal 1990). Our empirical results show that learning from direct experience is negatively related to early internationalization, whereas learning from others and learning from paradigms of interpretation have a positive impact on early internationalization. Furthermore, our results illustrate that early internationalizers continue to prefer cooperative modes of market penetration, show higher stability of mode choice, and realize a higher volume of internationalization.

Keywords: Early Internationalization; Learning Theory; Organizational Inertia

Introduction

Since the end of the 80s a vast number of studies have been published in the field of international entrepreneurship (e.g. Rennie, 1993; Oviatt & McDougall, 1994; Bell, 1995; Jones, 1999; Zahra, Ireland & Hitt, 2000; Dimitratos & Plakoyiannaki, 2003; Knight & Cavusgil, 2004, Zahra, 2005). In particular studies about entrepreneurial firms that are virtually engaged in international business right from inception have found widespread interest (Oviatt & McDougall, 1994).[1]

Oviatt & McDougall's (1994) seminal framework for the study of the phenomenon of international new ventures can be regarded as *the* major milestone in international entrepreneurship research.[2] The International New Venture Theory emphasizes *how* early and rapid internationalization of entrepreneurial companies is possible (Autio, 2005: 10), arguing that learning plays an important role (Zahra, 2005). However, reviewing articles in the years after Oviatt & McDougall´s work has been published, it becomes obvious that arguments rooted in Resource-Based View (RBV) dominate the research field (Bloodgood, Sapienza & Almeida, 1996; Westhead, Wright & Ucbasaran, 2001; Zahra, Matherne & Carleton, 2003), whereas studies addressing aspects of learning have not yet received equivalent research attention.

Thus, the question arises, why has learning not yet found equivalent research attention although it plays such an important role in the prominent Oviatt & McDougall (1994) framework? Many scholars posit that learning generally plays a pivotal role for entering or expanding in international markets (Anderssen, 1993; Barkema & Vermeulen, 1998; Zahra, Ireland & Hitt, 2000). Agreeing on that Zahra (2005: 25) claims that there is a clear "[…] need to examine how new ventures learn".

Addressing these requests, the aim of our paper is to elaborate how early internationalizers learn in order to enter foreign markets from inception. Furthermore, we examine subsequent imprinting effects of early internationalization.

We posit that early internationalizers have a different way of learning in comparison to companies that internationalize in later years. Whereas late internationalizers accumulate their

---

1 This phenomenon of early internationalization has been attributed with different labels such as International New Ventures (Oviatt & McDougall 1994), Global Start-ups (Oviatt & McDougall 1995), Global High-tech Firms (Jones, 1999), High Technology Start-ups (Jolly, Alahuta & Jeannet, 1992), Innate Exporters (Ganitsky, 1989) or Born Globals (Madsen & Servais, 1997). Our study uses the term early internationalizer as we put an emphasis on the timing to internationalization (and not on the volume of internationalization).

2 The prominence of the framework becomes obvious as it was awarded the decade award in a special issue of the Journal of International Business Studies in 2004.

own experience over time in order to induce first foreign market commitments (Johanson & Vahlne, 1977/1990), early internationalizers learn from experience of others and from paradigms of interpretation (Levitt & March, 1988; Cohen & Levinthal, 1990; March, 1991). This learning pattern helps early internationalizers to overcome liabilities of newness, size and foreignness and allows for rapid internationalization at a high pace (Zahra, 2005).

To achieve our aim we will proceed as following: First, we will give a review of the prior literature on learning and early internationalization. Second, we will introduce a framework based on learning theory and derive hypotheses on the learning process leading to early internationalization as well as on the imprinting effect on subsequent entry-mode choice, entry-mode stability and volume of internationalization (Levitt & March, 1988; Cohen & Levinthal, 1990; March, 1991). Third, we test our hypotheses on a cross-industry sample of internationally operating German firms, differentiating between early and late internationalizers. The final section summarizes the results, points out limitations and hints at aspects for future research.

Literature Review

As mentioned earlier, studies that focus on learning and early internationalization, in particular examining pre-entry learning and its subsequent imprinting effects on internationalization, are still rare in international entrepreneurship research.

Instead of examining the relationship between the firm's learning behavior enabling first internationalization, a number of studies in the research field have focussed on the implications of internationalization on the subsequent internationalization process. Zahra, Ireland & Hitt (2000) examine the effects of international expansion (international diversity and mode of market entry) on post-entry technological learning of the firm and on the firm's financial performance. This was one of the first empirical works to examine the learning process induced after early internationalization. The results indicate that the management of new ventures pays particular attention to integrating the knowledge gained from foreign market expansion. In contrast to Zahra et al. (2000) who focussed on one aspect of learning (technological learning), Yeoh (2004) applied learning-based theory for the study of technological, market and social learning. Emphasizing the imprinting effect of early internationalization, Autio, Sapienza & Almeida (2000) found earlier initiation of internationalization and higher knowledge intensity to be associated with faster international growth. Autio et al.´s (2000) argumentation is that due to learning advantages of newness

(LAN) young firms are better able to assimilate new knowledge as they adapt to and innovate more rapidly in new and dynamic environments. Thus, we know from Autio et al. (2000) that early internationalizers show a faster international firm growth than firms internationalizing later in their lifecycle and suffering from organizational inertia. The article by Autio et al. (2000) has been extended by Sapienza, Autio, George & Zahra (2005). Besides the influence on firm growth, effects on firm survival are elaborated in this work. In another work Sapienza, De Clerq & Sandberg (2005) applied learning theory combined with attention-based view to examine the antecedents of international and domestic learning effort.

From our literature review we can conclude that so far there have been studies on the antecedents of learning effort (Sapienza et al. 2005), the effect of early internationalization on technological learning (Zahra et al., 2000) and studies on the antecedents of technological, market and social learning (Yeoh, 2004). Studies elaborating how new ventures learn in order to be able to commit foreign market entry right from inception are largely missing. However, this research question is of major importance as early internationalizers "[…] appear to differ in the extent of their learning, but the sources of these variations are not well defined. To fill this gap in the literature, future studies need to examine how […] these ventures learn" (Zahra, 2005: 25).

Thus, the aim of our study is to contribute to the question of how early internationalizers learn in order to be able to internationalize in the year of their foundation. Furthermore, in line with Autio's (2005: 12) request our research also examines whether early internationalization has an imprinting effect on the subsequent entry-mode choice, entry-mode stability, and volume of internationalization of the firm.

Theoretical framework

In order to study learning of early internationalizers, we apply learning theory building on the works by Levitt & March (1988) and Cohen & Levinthal (1990). According to Levitt & March (1988: 319) learning is routine-based, history-dependent and target-oriented. The authors define learning as "encoding inferences from history into routines that guide [future] behaviour" (Levitt & March, 1988: 319). Thus, learning is largely a function of prior related knowledge (Cohen & Levinthal, 1990). Learning is multifaceted and includes aspects such as the content of learning (what is learned?), the subject of learning (who is learning?), the incentives and motives for learning (when does learning take place?) and the efficiency and effectiveness of learning (which results does learning yield?). Our focus is on the process of learning and thus on the question of how learning unfolds. According to Levitt & March

(1988) the process of learning unfolds by *learning from direct experience, learning from experience of others and learning from paradigms of interpretation.*

Based on Levitt & March (1988) we define learning from direct experience as the firm's learning from prior experiences with and knowledge about the foreign market, e.g. collected systematically via market research prior to foreign market entry. By learning from experience of others we mean the ability of the firm to absorb and accumulate knowledge about the foreign market from network partners prior to entering the foreign market. Learning from paradigms of interpretation is the firm's orientation towards and interpretation of best practices in the foreign market in order to reduce liabilities of foreignness prior to foreign market entry.

Every foreign market entry puts the entrant firm at risk, due to different cultural, political, economic, legal and linguistic circumstances in the focal market (Johansson & Vahlne, 1977). Thus, in order to reduce risk, the entrant firm needs to gain knowledge about the foreign market prior to its entrance. Referring to Levitt & March (1988) and Cohen & Levinthal (1990) we argue that knowledge generation differs between early and late internationalizers. In the following we will outline that learning from direct experience plays a pivotal role for the internationalization of late internationalizers, whereas early internationalizers´ learning behaviour is characterized by learning from experience of others and by learning from paradigms of interpretation.

Pre-entry process of learning

According to Johanson & Vahlne (1977) firms learn experientially in a reactive way during their internationalization process. They do so by accumulating own experience about foreign markets over time and by combining new knowledge to existing knowledge. That way they are able to commit first internationalization moves out of an established domestic market on a solid resource base. We posit late internationalizers to follow this process of stepwise knowledge development based on an existing know-how basis from the domestic market. Learning from direct experience characterizes these firms.

In contrast early internationalizers have a proactive risk-seeking behaviour to induce first foreign market commitments (Oviatt & McDougall, 1994). Due to their young firm history early internationalizers are lacking a stable domestic market at the beginning of the internationalization process. Early internationalizers - short in resources[3] - need to develop mechanisms in order to substitute their lacking own experience and resources. They do so by directly interfacing with their environment. Thus, they learn about foreign markets by gaining access to knowledge from network partners and by interpreting paradigms such as best practice firms which perform in the focal market. Due to a higher absorptive capacity, early internationalizers are better and faster able to identify, value, select and assimilate new knowledge (Zahra, 2005; Cohen & Levinthal, 1990). Figure 1 summarizes our argumentations for early internationalizers.

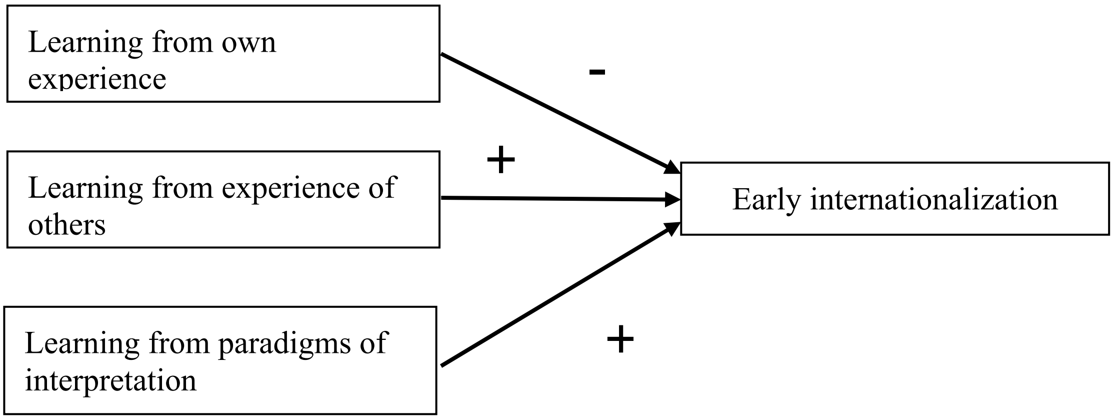


Figure 1: The pre-entry process of learning

Learning from own experience

According to Johanson & Vahlne (1977/1990) firms accumulate knowledge in an incremental manner. "The model focuses on the gradual acquisition, integration and use of knowledge about foreign markets and operations, and on the incrementally increasing commitments in foreign markets" (Johanson & Vahlne, 1977: 23). Thus, according to the proposed framework by Johanson & Vahlne (1977/1990), learning from direct experience plays a major role for a firm´s internationalization behavior. Late internationalizers appear to follow an internationalization process according to this model. After having collected and integrated own knowledge and experience about foreign markets over time, late internationalizers conduct first internationalization moves out of an established domestic market. Thus, learning from own experience is of major importance for their internationalization behavior, prohibiting foreign market entry in early years.

In contrast, early internationalizers make the strategic decision to enter foreign markets from inception. However, in order to reduce the liabilities of foreignness prior to first foreign market entry and to fulfil the aim of internationalization from inception, early

---

[3] Not necessarily all early internationalizers are short in resources. However, we explicitly focus our argumentation and analysis on new ventures that were not started as spin-offs.

internationalizers need to develop faster mechanisms that enable them to enter foreign markets right after foundation. Accumulating own knowledge over time, e.g. through systematic information collection via market research, is a time-consuming process, which does not allow for early internationalization. If the learning behavior of a firm is largely based on learning from own experience, the probability for the appearance of an early internationalizer is rather limited. If, however, internationalization does not depend on learning from own experience, the possibility to internationalize from inception is higher. The extent of learning from direct experience is consequently a major predictor for the appearance of early internationalization and differs in early and late internationalizing firms.

H1: The more intensive the learning from own experience, the lower the likelihood of early internationalization.

Learning from experience of others

Not having the possibility to learn from own experience before entering foreign markets, the question arises how early internationalizers substitute for own learning in order to reduce risk of foreign market entry. One possibility as pointed out by Levitt & March (1988) is to learn from experience of others, which is from information and experience accessed through network relationships.

Learning from network partners includes partner specific and critical information, skills which may be transferred to and used in other relationships (Kale, Singh & Perlmutter, 2000; Johansson & Vahlne, 2003). Although networking includes different facets, in order to induce internationalization, making use of network contacts is of different importance for early and late internationalizers. Early internationalizers are more proactive in exploiting network contacts to substitute their lacking own knowledge in the pre-entry phase.

According to Greve (2005: 1028) “an organization’s susceptibility to learn from others is determined by its motivation and capability.” Concerning motivation, learning theory (Cyert & March, 1963) suggests that scant resources increase search activities for third parties´ resources and knowledge. Limited in their resources, early internationalizers need to access others´ resources in order to be able to stem the necessary investments and risks of a foreign market penetration. Thus, exploiting knowledge from network partners helps an early internationalizer to overcome liabilities of foreignness. Further, learning from others allows early internationalizers to learn faster than late internationalizers learning from their own experience. Late internationalizers have developed certain routines over the years of their operations on the domestic market. However, these routines may not fit the requirements of the international market. Thus, prior to adopting new routines applicable to the international market from network partners, late internationalizers need to unlearn established routines from the domestic market hampering the internationalization process of late internationalizers. Thus, late internationalizers are more inert compared to early internationalizers absorbing new knowledge from others with a relatively clean slate due to their young company history (Nelson & Winter, 1982; Vermeulen & Barkema, 2001).

In conclusion we argue that learning from others takes place differently between early and late internationalizers concerning the influence of networks. Whereas early internationalizers learn from the experience of their network partners, late internationalizers develop knowledge about the focal market based on their own experience. Hypothesis 2 summarizes our arguments.

H2: The more intensive the learning from experience of others, the higher the likelihood of early internationalization.

Learning from paradigms of interpretation

Next to substituting own experience by network relationships, early internationalizers may learn from paradigms of interpretation. In order to overcome liabilities of foreignness entrepreneurial entrants imitate focal organizations which they perceive as best practice companies in the foreign market. By trying to organize their routines according to these benchmark firms, early internationalizers adapt organizational practices that fit the host country environment (Levitt & March 1988; Aldrich, 1999).

Referring to authors like Meyer and Rowan (1977) or Scott (1987), organizations do not only have to be efficient but they have to be legitimated. Legitimacy can be acquired by adopting structural elements that socially constructed environments regard as rational (Zucker 1987; DiMaggio and Powell 1991). Thus, early internationalizers may imitate those organizations in the target market that they perceive to be successful. Through mimetic isomorphism early internationalizers tend to become similar to those organizations reducing liability of foreignness and risk of foreign market entry (Scott and Meyer 1992).

Thus, imitation of best practice companies is another vehicle to substitute own learning and thus reducing the risk of foreign market commitment and allowing for early internationalization.

H 3: The more intensive the learning from paradigms of interpretation, the higher the likelihood of early internationalization.

Imprinting effects of early internationalization

Next to deducing hypotheses referring to pre-entry learning, the process of learning causes subsequent imprinting effects on the choice and stability of entry-mode as well as its volume of internationalization. We base this claim on two interrelated rationales: First, according to Nelson & Winter (1982) late internationalizers face *organizational inertia* hampering the internal knowledge transfer process. Second, according to Autio et al. (2000) early internationalizers possess *learning advantages of newness*.

Late internationalizers have an existing resource stock generated from years of activities on the domestic market. For them the prioritized challenge is to integrate new knowledge about the foreign market into the existing knowledge base. This is a challenging process as routines which have been approved over years of operations on the domestic market may not fit the requirements of the international market. As existing routines were repeated day after day, parts of the organization might refuse or be unable to adapt to the new requirements of international markets (Sapienza et al. 2005: 18).

Thus, the capability to identify new knowledge from others, select valuable information and assimilate them to the organization may be blocked "[…] by impermeable organizational boundaries" (Aldrich, 1999: 31). Late internationalizers have become more rigid, narrow and simple in their perceptions (Vermeulen & Barkema, 2001) and are characterised by organizational inertia (Nelson & Winter, 1982). The firm finds itself in a competency trap (Levitt & March, 1988). "A competency trap can occur when favourable performance […] leads an organization to accumulate more experience with it, thus keeping experience with a superior procedure inadequate to make it rewarding use" (Levitt & March, 1988: 322).

Early internationalizers, on the contrary, possess learning advantages of newness (Autio et al., 2000). Entrepreneurial companies do not need to unlearn established routines. When directly interfacing with their environment early internationalizers are better able to identify, value, select and assimilate new knowledge explicitly catered to the prerequisites of the foreign market. Thus, early internationalizers have a higher absorptive capacity as "[…] absorptive capacity does not simply depend on the organization's direct interface with the external environment. It also depends on transfers of knowledge across and within subunits […]" (Cohen & Levinthal, 1990: 131). Early internationalizers learn from networks and best practices of indigenous firms. Therefore they are in a better position to observe and implement the necessary information for market entry and are well prepared to fit the prerequisites of the new institutional environment. Thus, early internationalization is related to higher entry-mode stability.

Further, as learning is a history dependent process early internationalizers continue to internationalize by choosing more cooperative arrangements rather than establishing own foreign subsidiaries in order to internationalize on existing learning procedures. We agree with Cohen & Levinthal (1990: 137) who posit that "[..], organizations with higher levels of absorptive capacity will tend to be more proactive, exploiting opportunities present in the environment […]". Our argumentation is also in line with Gullién (2002: 513) who claims that "[o]lder organizations will not respond to their peers´ actions and experience as readily as younger ones because structural inertia leads them to believe that what they do is correct or irrelevant to them."

Figure 2 summarizes our argumentations on the imprinting effect of early internationalization on entry-mode choice, entry-mode stability and volume of internationalization.

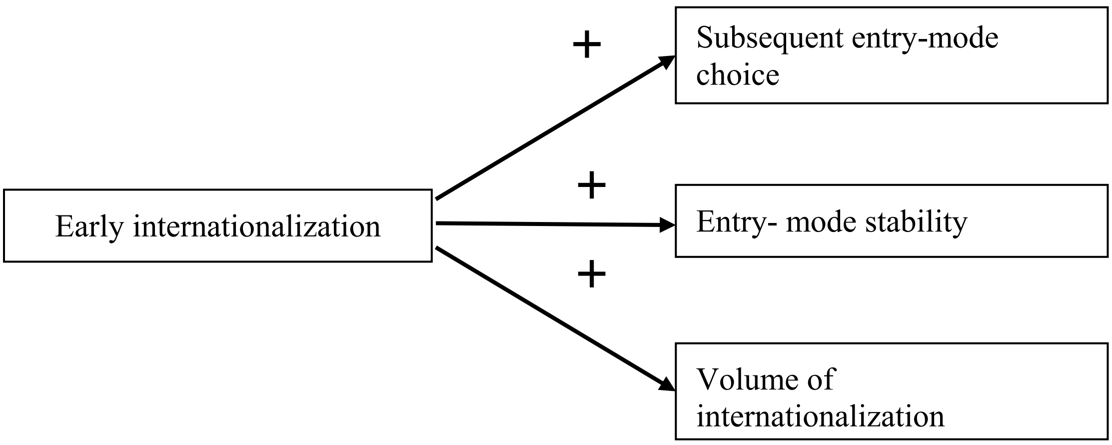


Figure 2: The imprinting effects of early internationalization

Subsequent entry-mode choice

Learning theory suggests that learning is routine based and history dependent. According to Stinchcombe (1965) a firm is imprinted by the social and cultural environmental conditions at the firm's inception. Thus, the learning behavior a firm applies at inception, may feed forward into subsequent internationalization actions.

This is supported by Cohen & Levinthal (1990: 136) who posit that "[a]ccumulating absorptive capacity in one period will permit its more efficient accumulation in the next. By having already developed some absorptive capacity in a particular area, a firm may more readily accumulate what additional knowledge it needs in the subsequent periods in order to exploit any critical external knowledge that may become available". Early internationalizers, having built up competences in substituting lacking own experience by experience of others, continue to apply this competence. Thus, early internationalizers - characterized by learning from others at the firm's inception - continue to cater to more cooperative entry-modes, rather than establish a foreign subsidiary in the subsequent internationalization phase.[4]

In contrast, late internationalizers are lacking routines to scan networks and best practice companies for new knowledge. They will continue to collect their own experiences in the focal market and develop own knowledge over time. Thus, late internationalizers are more likely to choose foreign wholly owned subsidiaries in order to internalise transactions and to possess a higher degree of control over transactions. This argumentation leads us to the following hypothesis:

H 4: Compared to late internationalizers, early internationalizers are more likely to continue to choose hybrid modes of market entry (instead of foreign own subsidiaries) in the subsequent process.

Entry-mode stability

Besides preferring cooperative modes of market penetration for subsequent international business, we argue that the learning behaviour of early internationalizers is more efficient in terms of sustainability. Early internationalizers generate knowledge from third parties, which have already collected practicable experiences in the focal market. In contrast, late internationalizers try to accumulate their own knowledge over time. However, this process of knowledge generation may be less efficient, as cultural, or country specific barriers may cause a significant amount of information asymmetries resulting in imperfect learning of late internationalizers.

By learning from others, early internationalizers generate more complete knowledge from inception corresponding to the prerequisites of the focal market. This knowledge generation results in a higher sustainability of decisions catered to the international market. The decisions made at the beginning of the foreign market penetration are better adjusted to overcome the liabilities of foreignness. Thus, early internationalizers have a lower propensity to switch entry-mode than late internationalizers. This leads us to the following hypotheses:

---

4 One could estimate that limited resources are another reason for why early internationalizers continue to cater to more cooperative subsequent entry-modes instead of establishing foreign own subsidiaries. However, the average number of employees – often considered a proxy for resources availability of a firm – shows that early internationalizers in our sample have a higher average number of employees (average # employees = 451,97) compared to late internationalizers (average # employees = 437,29). Thus, the choice of the subsequent entry mode is not affected by resource scarcity.

H 5: Compared to late internationalizers, early internationalizers are less likely to change their first chosen entry-mode in the subsequent phase.

Volume of internationalization

Early internationalizers build up organizational structures that fit international business from inception. Right from the start, a global vision is predominant in the firm's culture. This vision impels early internationalizers to induce further internationalization moves. Thus, we agree with Jones & Coviello (2005: 7) who argue that "[..] learning from past internationalisation experiences may feed forward into present and future internationalisation decisions and actions" (Jones & Coviello, 2005: 7). An early foray into foreign markets is an indicator for the subsequent importance and volume of internationality of the firm's business.

In addition, the different learning behavior of early internationalizers provides another explanation for the subsequent growth of internationalization. Early internationalizers enter foreign markets by imitating best practices in the focal market. However, if the rivals´ complexity is high, an early internationalizer may not be able to copy it one by one. According to Levitt & March (1994) firms that seek to mimic others tend to do so imperfectly, and in the process inadvertently generate innovations. "Thus, firms […] may try to replicate innovative ideas and in the process generate insightful new ideas themselves (Zaheer & Bell, 2005: 813). Imitation of best practice firms in the focal market induces a learning process itself and leads to new variations of knowledge that may be applicable for subsequent internationalization moves. Further, substituting lacking own knowledge by knowledge of others allows for a faster and more intensive extension of internationalization commitments. Hypothesis 5 summarizes our arguments:

H 6: Compared to late internationalizers, early internationalizers generate a higher volume of revenues from international markets.

Methods

Data

Empirical analysis is based on data gathered from German medium-sized companies via standardized postal survey. Using the "Hoppenstedt" enterprise directory of the year 1999, the total population of German medium sized companies[5] was identified resulting in 4,229 companies with international business activity. In the end of 1999, standardized

[5] To define medium sized companies we followed the criteria forwarded by the US Small Business Association, which classifies firms with a number of employees between 100 and 1,000 as a medium sized enterprise.

questionnaires were sent to all 4,229 medium-sized companies, resulting in a return of 449 questionnaires (10.6%).[6] Due to missing variables for our theoretical model, 269 companies finally entered our analysis.

In order to differ between early and late internationalizers we applied a rigid definition of early internationalizers as companies internationalizing during the first year after inception. Our sample of 269 international acting medium-sized companies was thereby split into 32 early internationalizers and 237 late internationalizers.

Measurement

Independent variables were mainly collected using likert-scaled items (from strongly disagree to strongly agree).The (first) dependent variable, early internationalizers, was measured using a dichotomous item, differentiating companies that internationalize in the year of foundation and companies internationalizing in later years. Aware of the disadvantages of a retrospective recall,[7] we asked companies about the year of foundation and their first year of internationalization. The (second) dependent variable, subsequent entry-mode choice, was also measured differentiating companies that chose cooperative post-entry foreign market penetration-modes (contractual or equity joint ventures) and companies that chose a foreign wholly owned subsidiary as post-entry foreign market penetration-mode. The (third) dependent variable, entry-mode stability, was measured by the timing of the first focal market entry-mode subtracted from the timing of the second focal market entry-mode. Another metric variable was operationalized for the fourth dependent variable, volume of internationalization, measured by the percentage of foreign sales to total sales

Metric variables operationalizing the number of employees of the company, and a dichotomous item differentiating between family business and non-family businesses are included in the analysis as control variables. Furthermore, different motives for foreign market entry are included in the statistical analysis. The impact and structure of motives is supposed to play a major role for internationalization (e.g. Tatoglu, Demirbag & Kaplan, 2003; Williams, 1992). Moreover we included a number of environmental variables. In order to display technological uncertainty we included the intellectual property rights index developed by Park & Ginarte (1997). In order to control for cultural uncertainty we included the cultural distance index by Kogut & Singh (1988). The political constraint index (Henisz,

---

6 The returns were tested for non-response-bias without showing significant problems.

7 In asking for the first year of internationalization there could be a problem with remembering due to the age of some of the companies. However, our sample incorporates a significant number of family businesses. As we addressed the questionnaire to the top management, the likelihood that the CEO has also been the founder is pretty high. The founders might well remember the initiation of internationalization right from inception.

2002) was included to control for political uncertainty. Table 1 gives an overview of the chosen measurements.

Looking at the correlation coefficients in table 2, no serious risk for multicollinearity exists (Anderson, Sweeney & Williams, 1996). All correlations stay below 0.7. A test for common methods variance (Podsakoff & Organ, 1986) was performed showing several factor loadings. Cook´s D (Cook, 1979) was calculated resulting in no need to eliminate cases that potentially distort the model (cutoff 4/n).

TABLE 1: Measurement of the dependent and independent variables

Variable	Operationalisation
Early internationalization	dichotomous (1 = internationalization within the first year of foundation; 0 = internationalization later than the first year)
Subsequent entry-mode choice	Dichotomous (1 = Contractual or Equity Joint-Venture; 0 = Wholly owned Subsidiary)
Volume of Internationalization	Foreign sales to total sales (%)
Entry-mode Stability	Number of years between first and second foreign market entry-mode
Learning from own experience	"this engagement was only feasible due to prior experience and prior learning about the focal market" (likert scale)
Learning from experience of others	"networks in the focal country have significantly facilitated foreign market entry" (likert scale)
Learning from paradigms of interpretation	"an orientation towards best practice enterprises played a major role for the decision for your foreign market entry-mode" (likert scale)
Comapny size (log)	number of employees (logarithm)
Family business	"is your company a family enterprise or is the majority of capital owned by one family or entrepreneur respectively" (dichotomous)
Motive: Access to foreign market	"motive underlying foreign market entry: access to foreign markets" (likert scale)
Motive: Access to know how	"motive underlying foreign market entry: access to know how" (likert scale)
Motive: Following customers	"motive underlying foreign market entry: following customers" (likert scale)
Motive: Following competitors	"motive underlying foreign market entry: following competitors" (likert scale)
Motive: Cost reductions	"motive underlying foreign market entry: cost reductions" (likert scale)
Cultural distance	Index for cultural distance (developed by Kogut & Singh, 1988)
Political constraint	Index for political uncertainty (developed by Henisz, 2002)
Intellectual Property Rights	Index for property rights protection (developed by Parke & Ginarte, 1997)

Table 2: Means, Standard Deviations and Correlations among Dependent and Independent Variables

	Variables	mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Early internationalization	.1147	.31923																
2	Subsequent entry-mode choice	.5109	.50079	-.053															
3	Volume of internationalization	37.24	23.115	.049	-.020														
4	Entry-mode stability	8.1387	8.2561	.084	.144*	.125*													
5	Prior experience in foreign market	2.51	.937	-.102	-.043	.164**	-.024												
6	Network in foreign country	2.49	1.057	.080	-.190**	.007	-.041	.275**											
7	Imitation of Best Practices	2.08	.921	.093	.095	-.069	.068	.056	.148										
8	Family Business	1.21	.410	.228**	-.088	-.078	-.060	.069	.024	-.070									
9	Motive: Access to foreign market	3.56	.775	.046	-.118	-.053	.023	.051	.206**	.139*	-.009								
10	Motive: Access to know how	1.86	.908	-.092	-.160**	-.022	.044	.087	.284**	.247**	.068	.196**							
11	Motive: Following customers	1.75	1.055	.052	-.149*	-.179**	-.154*	-.001	.172**	.219	.096	.070	.125*						
12	Motive: Following competitors	2.25	.994	.012	-.031	.123	.058	.230**	.019	.228	.197**	-.030	.048	.240**					
13	Motive: Cost reductions	1.97	1.079	.105	.049	.023	.003	.063	-.030	.141*	-.131*	-.233**	.139*	.156**	.246**				
14	Company size (# employees (log))	5.7272	.81576	-.103	.068	.277**	-.035	.120*	-.089	.026	-.135*	-.141*	-.059	-.052	.049	.210**			
15	Cultural Distance	1.1997	1.0783	.060	-.152*	.004	-.103	.012	-.110	-.217	-.049	-.082	-.099	.185**	-.013	.116	.006		
16	Political constraint	.36637	.16159	-.117	-.010	-.009	-.005	.045	.104	.123*	-.073	.162**	.066	-.083	-.027	-.019	-.103	-.410**	
17	Intellectual Property Rights	2.9047	8.5211	-.140*	-.105	.119	.180**	-.075	.043	.101	.056	.310**	.158*	-.013	.003	-.177	-.141	-.364**	.512**

mean = mean value; s.d. = standard deviation; Significance levels: *** ≤ 0,001; ** ≤ 0,01; * ≤ 0,05

For testing of the hypotheses three graphical chain models have been set up. Graphical chain models are based on path analysis and can depict complex association structures of both qualitative and quantitative variables (Cox & Wermuth, 1993; Lauritzen & Wermuth, 1989). From the technical point of view a system of regressions, so-called block regressions, form the basis of the graphic model, whereby each one of the dependent variables is identified, and the other variables are reciprocally regarded as independent variables. Table 3 gives an overview of the empirical results of the binary logit models (model 1 „early internationalization" and model 2 "subsequent entry-mode choice"). Table 4 shows the empirical results of the linear regression models (model 3 "entry-mode stability" and model 4 „volume of internationalization") underlying the graphical chain models. Figures 3, 4 and 5 show the graphical chain models.

Table 3: Binary logit models

	Model 1: Early internationalization	Model 2: Subsequent entry-mode choice
Constant/threshold	-3.318	-4.747
Early internationalization		.936*
Prior own experience	-.578*	.076
Network in foreign country	.706**	.225
Imitation of Best Practices	.848**	-.653***
Family Business	2.699***	-.062
Motive: Access to foreign market	.852*	.005
Motive: Access to know how	-1.116***	.600***
Motive: Following customers	-.395†	.340*
Motive: Following competitors	-.278	.143
Motive: Cost reductions	.741**	-.160
Company size (# employees (log))	-.639*	.114
Cultural Distance	.142	.530***
Political constraint	-3,006†	.816
Intellectual Property Rights	-.534†	.655
R^2 (Nagelkerke)	.389	-.254
Model Chi-Square	60,458	55.939
Correct classifications	89,2%	66,8%
Significance	.000	.000
N	269	269

Table 4: Linear regression models

	Model 3: Entry-mode stability	Model 4: Volume of internationalization
Constant/threshold	10.080	-18.752
Early internationalization	.149*	.230***
Prior own experience	.010	.139*
Network in foreign country	-.040	.028
Imitation of Best Practices	.039	-.138*
Family Business	-.135*	-.173**
Motive: Access to foreign market	-.033	-.092
Motive: Access to know how	.706	.053
Motive: Following customers	-.179**	-.190**
Motive: Following competitors	.111	-.183**
Motive: Cost reductions	-.006	-.059
Company size (# employees (log))	-.037	.304***
Cultural Distance	-.057	.065
Political constraint	-.180*	-.050
Intellectual Property Rights	.269***	.266***
(corrected) R^2	.067	.191
Significance	.004	.000
N	269	269

Significance levels: *** ≤ 0,001; ** ≤ 0,01; * ≤ 0,05

Empirical results

Hypothesis 1 is supported showing a significant negative relationship between direct experience in the focal market and early internationalization. Learning from direct own experience reduces the likelihood of early internationalization. As suggested in hypothesis 2 learning from experience of network partners has a significant positive influence on the likelihood of early internationalization. Thus, early internationalizers substitute their lacking own knowledge by learning from experience of their network partners. Hypothesis 3 proposes a significantly positive association between learning from imitation of benchmark firms in the focal market and the likelihood of early internationalization. Our empirical results from model 1 support this relationship. Early internationalizers learn by substituting their lack of experience by learning from experience of others and by learning from paradigms of interpretation such as best practice firms.[8]

Looking at the control variables we find that the motive “access to market” has a positive significant influence on early internationalization. This relationship shows that early internationalizers, or their management team respectively, have a global vision with an emphasis on foreign market development and thus forwarding early internationalization. The relationship between access to know how and early internationalization is negatively significant, indicating that access to know how seems to be a rather long-term oriented approach not being served by early internationalization. The positive relationship between the motive cost reductions and early internationalization indicates that early internationalization is a short-term measure in order to reduce costs and to increase firm efficiency. We also controlled for firm size. The results show that early internationalization is negatively related to firm size, thus supporting our argumentation that larger firms are more likely to suffer from organizational inertia hampering an early internationalization process.

Our results also support hypothesis 4, assuming that early internationalizers continue to apply cooperative entry-modes rather than establishing wholly owned foreign subsidiaries in the post-entry phase (model 2). Thus, subsequent internationalization is rooted in experiences and the knowledge gained during first internationalization. Still limited in their resources and imprinted by the routines generated from inception, early internationalizers continue to substitute lacking own resources and knowledge by cooperation with others.

Imitation of best practices is significantly related to establishing wholly owned subsidiaries in the post-entry phase. As indicated before, if firms imitate others they tend to do so imperfectly due to complex constellations. Our results show that after this knowledge gap has been closed, imitators aim at establishing own subsidiaries in the subsequent internationalization process. The motive ”following customers” is positively related to post-entry cooperation. If a customer has initiated internationalization activities, firms may try to follow these customers by substituting lack of own knowledge by cooperation with others in the focal market. Further, cultural distance shows a positive relationship with post-entry cooperation. The higher the cultural distance of a foreign market the higher the internationalization barriers and risks. To handle these risks, firms may choose more

---

[8] The results show that early internationalizers make the strategic decision to substitute their lacking own experience by experience of others and by paradigms of interpretation in order to reduce the risks of a foreign market entry. According to our argumentation, this effect needs to decrease more and more after changing the classification of early internationalizers from international activities after 1 year after inception to for example 3, 6 and 10 years after inception. We tested this effect empirically. Our results showed that the longer the time period between inception and first internaitonalization actions, the more the firm relies on own experience in order to reduce the liabilities of foreignness.

cooperative arrangements rather than decide for equity based entry-modes. Figure 3 shows the graphical chain model including the statistical models 1 and 2.

Hypothesis 5 suggests that early internationalization decreases the likelihood of changing the first chosen foreign market entry-mode in the subsequent internationalization phase. Our results in model 3 support this hypothesis. Early internationalization has a positive significant influence on subsequent entry-mode stability.

The relationships of the control variables indicate that the motive following customers is negatively related to subsequent entry-mode stability. This may be due to the fact that such reactive internationalization behavior necessitates continuous adaptation to organizational changes of the customer. Political uncertainty, measured by the political constraint index, is negatively related to entry-mode stability, suggesting a higher probability of entry-mode change due to volatility of the political environment. Intellectual property rights have a positive influence on entry-mode stability. This shows that patents provide a certain security and immunity to a firm, which makes strategic and organizational adaptation less necessary. Figure 4 summarizes the results from our linear regression model (models 1 and 3) in a graphical chain model.

Hypothesis 6 suggests a positive relationship between early internationalization and subsequent volume of internationalization. Our empirical results suggest that this relationship is supported. Early internationalization has an imprinting effect on the subsequent foreign market development and expansion.

Prior own experience is negatively related to the volume of internationalization. Accumulating knowledge over time by learning from direct experience is a long-enduring process, which results in a rather incremental, instead of rapid increase of international activities. The motives following customers and following competitors are negatively related to the volume of internationalization. This supports our claim that reactive internationalization behavior does not result in extensive internationalization activities. Firm size has a significant positive influence on the volume of internationalization, suggesting that internationalization is a resource-intensive process. Further property rights security forward the volume of internationalization. Patents and trademarks secure a firm from being imitated by competitors in the foreign market. Figure 5 shows the graphical chain model underlying our empirical results from model 1 and 4.

Figure 3: Graphical chain model (Models 1 and 2)

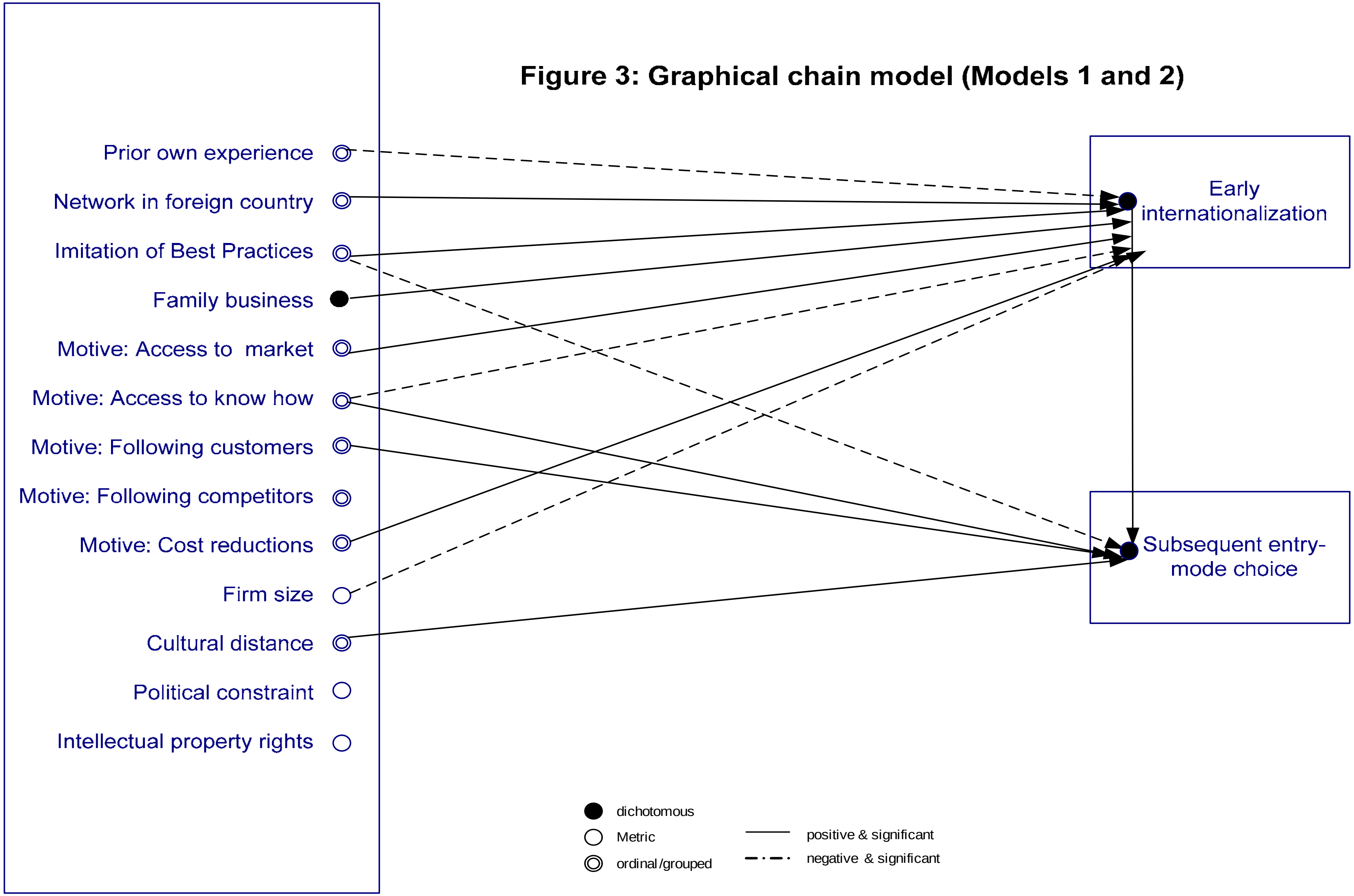


Figure 4: Graphical chain model (Models 1 and 3)

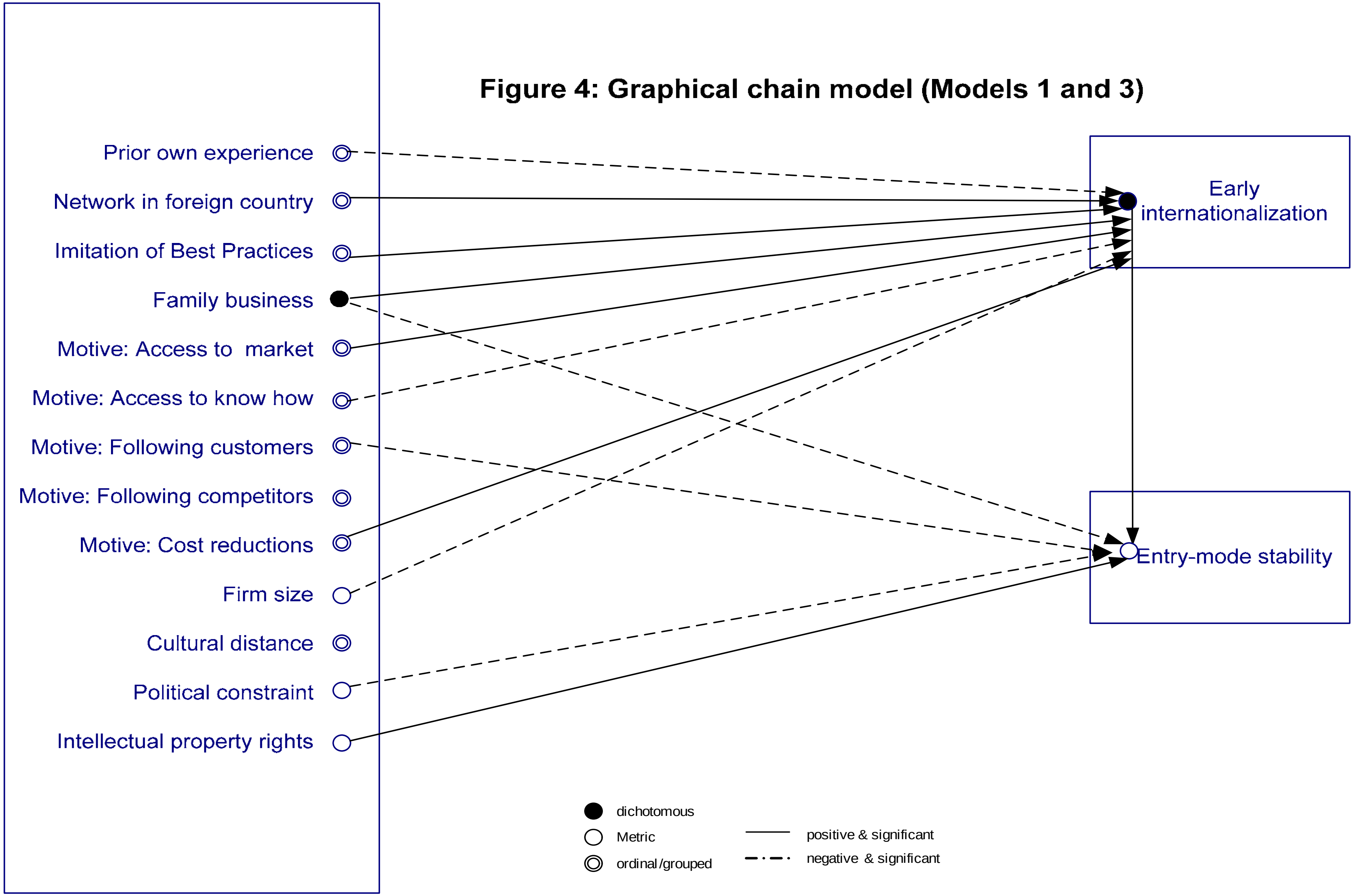
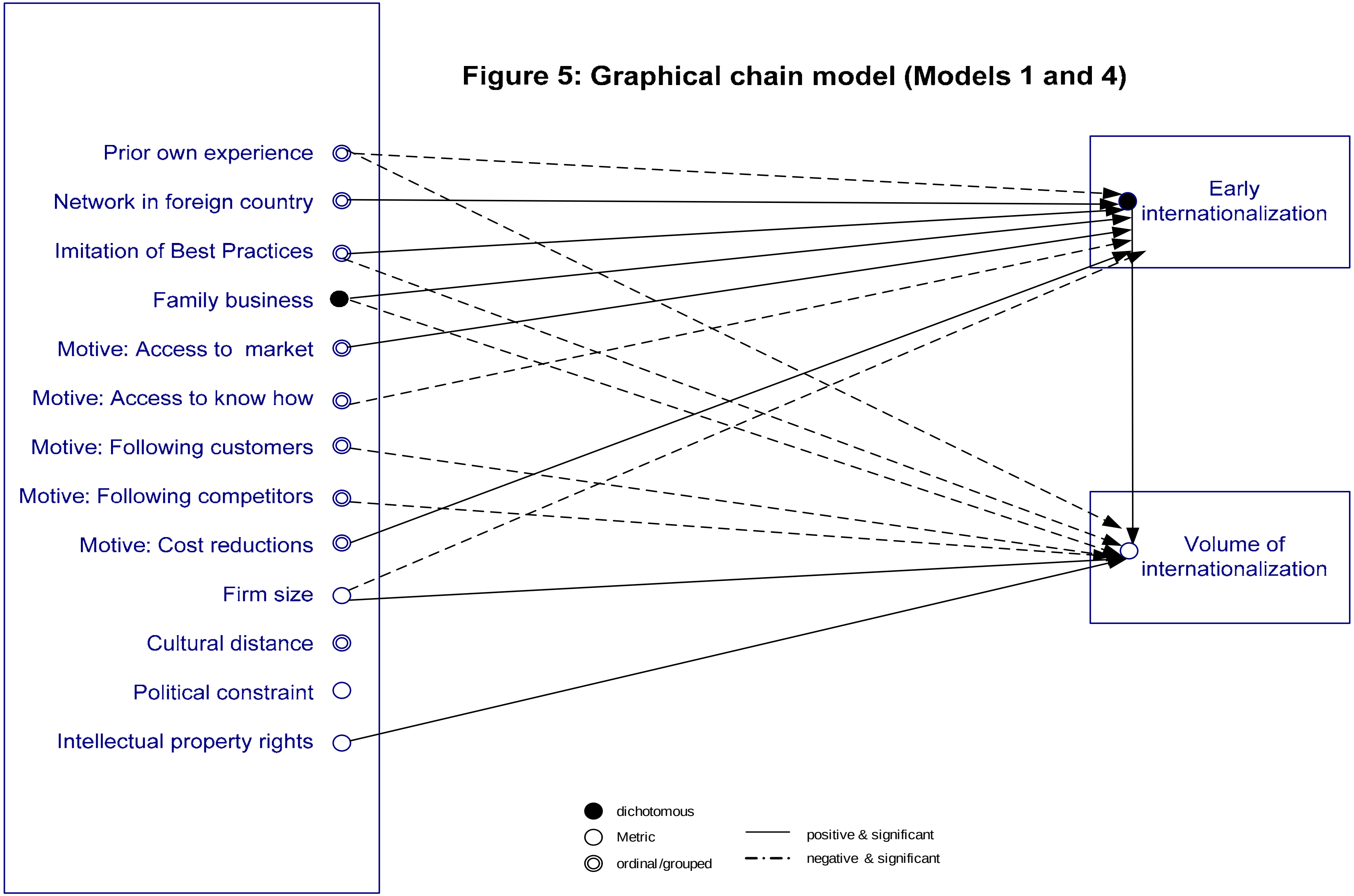


Figure 5: Graphical chain model (Models 1 and 4)



Discussion and implications for future research

The aim of our paper was to increase existing knowledge about how early internationalizers learn. Furthermore we elaborated the imprinting effect of early internationalization on the subsequent entry-mode choice, entry-mode stability, and volume of internationalization. Thus, we make several contributions to the research field. We shed light on the question how early internationalizers learn. Knowledge about this issue is limited so far (Zahra, 2005). By eliciting the influence of early internationalization on the subsequent entry-mode choice, entry-mode stability, and the volume of internationalization we show that early internationalization has an imprinting effect on the subsequent internationalization behaviour. So far work elaborating the long-term imprinting effect of early internationalization has been largely absent in the field (Autio, 2005: 12). Our work focuses on the pre-entry phase, however, by providing implications for the subsequent internationalization process, we contribute to a more profound post-entry understanding of the internationalization process of early internationalizers.

However, limitations also apply to our study. In particular a more differentiated analysis of the position of the company within the network may provide important insights, which so far have not been addressed. Supplementing our reasoning by a more in-depth intra-network analysis (Burt, 1992) or by social capital reasoning addressing power and exchange (Coleman, 1988) may increase our understanding of the utility of networks for early internationalizers. Furthermore, the concept of absorptive capacity of early internationalizers needs in-depth analysis in particular in respect to its dynamic properties.

In addition, more in-depth knowledge about learning in the post-entry phase is undoubtedly necessary in order to gain an understanding about the development of the core competencies of early internationalizers and the pace of subsequent internationalization behaviour. Thus, future research needs to address more detailed post-entry evidence.

So far we do not know how early internationalization behaviour impacts the survival of the firm. Sapienza, Autio, George & Zahra (2005) have made a first attempt to research impacts on firm survival. However, empirical testing of these aspects is still missing.

It becomes obvious, that in order to examine the above mentioned research questions and issues, there is a clear need for longitudinal data. Developments over time, like the switch in market entry mode or organizational learning can only be analyzed in more depth when powerful longitudinal data is available. In order to progress in the research field, future studies may address the limitations mentioned above.

References

Aldrich, H. E., 1999. **Organizations Evolving**. Sage.
Andersen, O. 1993. Internationalization of Firms. **Journal of International Business Studies,** 2: 209-231.
Anderson, D. R., Sweeney, D. J. & Williams, T. A. 1996. **Statistics for business and Economics**. St. Paul.
Autio, E. 2005. Creative tension: the significance of Ben Oviatt´s and Patricia McDougall´s article "toward a theory of international new ventures". **Journal of International Business Studies,** 36 (3): 9-19.
Autio, E., Sapienza, H. J. & Almeida, J. G. 2000. Effects of age at entry, knowledge intensità, and imitability on international growth. **Academy of Management Journal,** 43(5): 909-924.
Barkema, H. G. & Vermeulen, F., 1998: International expansion through Start-up or Acquisition: A Learning Perspective. **Academy of Management Journal,** 41(1): 7-26.
Bell, J., 1995. The internationalization of small computer software firms. **European Journal of Marketing,** 29(8): 60-75.
Bloodgood, J., Sapienza, H. J. & Almeida, J. G. 1996. The internationalization of new high-potential U.S. ventures: antecedents and outcomes. **Entrepreneurship Theory and Practice,** 20(4): 61-76.
Burt, R. S. 1992. **Structural holes: The social structure of competition.** Cambridge, MA: Harvard University Press.
Cohen, W. M. & Levinthal, D. A., 1990: Absorptive Capacity: A new perspective on learning and innovation, in: Administrative Science Quarterly, Vol. 35: 128-152.
Coleman, J. S. 1988. Social Capital in the Creation of Human Capital. American Journal of Sociology, 94: 95-120.
Cook, R. D. 1979. Influential Observations in Linear Regression. **Journal of the American Statistical Association,** 74: 169-174.
Cox, D.R. & Wermuth, N. 1993. Linear Dependencies Represented by Chain Graphs. **Statistical Science,** 8: 204-218.
Cyert, R. & March, J. 1963. **A behavioural theory of the firm,** Englewood Cliffs, NJ, Prentice Hall.
Czinkota, M. R. 1982. **Export Development Strategies: US Promotion Policies,** New York: Praeger.
DiMaggio, P. J. and W. W. Powell 1991 'The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields'. W. W. Powell and P. J. DiMaggio (eds.), **The new institutionalism in organizational analysis**: 63-82. Chicago: University of Chicago Press.
Dimitratos, P. & Plakoyiannaki, E., 2003. Theoretical foundations of an International Entrepreneurial Culture. **Journal of International Entrepreneurship,** Vol. 1: 187-215.
Ganitsky, J. 1989. Strategies for innate and adoptive exporters: lessons from Israel's case. **International Marketing Review,** 6(5): 50-65.
Greve, H. R., 2005. Interorganizational Learning and Heterogeneous Social Structure. **Organization Studies,** Vol. 26 (7): 1025-1047.
Gullien, M. F., 2002. Structural Inertia, Imitation, And Foreign Expansion: South Korean Firms And Business Groups In China, 1987-95. **Academy of Management Journal,** 43 (3): 509-525.
Henisz, W. J., 2002. The Institutional Environment of Infrastructure Investment. **Industrial and Corporate Change,** Vol. 11 (2): 355-389.

Johanson, J. & Vahlne, J.-E. 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, J. & Vahlne, J.-E. 1990. The mechanism of internationalisation. **International Marketing Review,** 7(4): 11-24.

Johanson, J. & Vahlne, J.-E., 2003. Business Relationship and Commitment in the Internationalization Process. **Journal of International Entrepreneurship,** Vol. 1: 83-101.

Jolly, V. K., Alahuta, M. & Jeannet, J.-P. 1992. Challenging the incumbents: how high-technology start-ups compete globally. **Journal of Strategic Change,** 1: 71-82

Jones, V. M. 1999. The Internationalization of Small High-Technology Firms. **Journal of International Marketing,** 7(4): 15-41.

Jones, V. M. & Coviello, N. E. (2005). Internationalisation: conceptualising an entrepreneurial process of behaviour in time. **Journal of International Business Studies,** 36(3): 284-303.

Kale, P., Singh, H. & Perlmutter, H., 2000. Learning and Protection of Proprietary Assets in Strategic Alliances: Building Relational Capital. **Strategic Management Journal,** Vol. 21: 217-237.

Knight, G. A. & Cavusgil, S. T. 2004. Innovation, organizational capabilities, and the born-global firm. **Journal of International Business Studies,** 35: 124-141.

Kogut, B. & Singh, H., 1988. Entering the United States by Joint Ventures: Competitive Rivalry and Industry Structure. Contractor, F. J. & Lorange, P. (eds.): **Cooperative Strategies in International Business**, Lexington: 241-251.

Lauritzen, S. L. & Wermuth, N. 1989. Graphical Models for Associations between Variables, some of which are qualitative and some quantitative. **Annals of Statistics**, 17: 31-57.

Levitt, B. & March, J. G., 1988. Organizational Learning. **Annual Review of Sociology,** 14: 319-340.

Madsen, T. K. & Servais, P. 1997. The internationalization of born globals: an evolutionary process? **International Business Review,** 6(6): 561-583.

March, J. G., 1991. Exploration and Exploitation in Organizational Learning. **Organizational Science,** Vol. 2 (1): 71-87.

Meyer, J. W. and B. Rowan 1977 'Institutionalized organizations: Formal structure as myth and ceremony'. **American Journal of Sociology**, Vol. 83: 340-363.

Nelson, R. R. & Winter, S. G. 1982. **An Evolutionary Theory of Economic Change.** Cambridge, MA: Belknap Press.

Oviatt, B. M. & McDougall, P. P. 1994. Toward a Theory of International New Ventures. **Journal of Intenational Business Studies,** 3: 30-44.

Oviatt, B. M. & McDougall, P. P. 1995. Global start-ups: Entrepreneurs on a worldwide stage. **Academy of Management Executive,** 9(2): 30-44.

Parke, W. G. & Ginarte, J. C., 1997. Intellectual Property Rights and Economic Growth. Contemporary Economic Policy, Vol. 15: 51-61.

Podsakoff, P. M. & Organ, D. W. 1986: Self-reports in Organizational Research: Problems and Prospects. **Journal of Management,** 12(4): 531-544.

Rennie, M. 1993. Global competitiveness: born global. **McKinsey Quarterly,** 4: 45-52.

Sapienza, H. J., Autio, E., George, G. & Zahra, S. A. 2005. A Capabilities Perspective on the Effects of Early Internationalization on Firm Survival and Growth, **forthcoming in Academy of Management Review.**

Sapienza, H. J. De Clercq, D. & Sandberg, W. R. 2005. Antecedents of international and domestic learning effort. **Journal of Business Venturing,** 20: 437-457.

Scott, W. R. 1987 'The adolescence of institutional theory'. **Administrative Science Quarterly**, Vol. 32: 493-511.

Scott, W. R. and J. W. Meyer 1992 'The organization of societal sectors'. J. W. Meyer and R. W. Scott (eds.), **Organizational Environments: Ritual and Rationality:** 129-153.

Stinchcombe, A. L., 1965. Social Structure and Organizations. March, J. G. (ed.): **Handbook of Organizations,** Chicago: 153-193.

Tatoglu, E., Demibrag, M. & Kaplan, G. 2003. Motives for Retailer Internationalization to Central and Eastern Europe. **Emerging Markets Finance and Trade,** 39(4): 40-57.

Vermeulen, F. & Barkema, H., 2001. Learning through acquisitions. **Academy of Management Journal,** Vol. 44 (3): 457-476.

Westhead, P., Wright, M. & Ucbasaran, D. 2001. The Internationalization of New and Small Firms: A Resource-Based View. **Journal of Business Venturing,** 16: 333-358.

Williams, D. E. 1992. Motives for Retailer Internationalization: Their Impact, Structure and Implications. **Journal of Marketing Management,** 8: 269-285.

Yeoh, P.-L., 2003. International learning: antecedents and performance implications among newly internationalizing companies in an exporting context. **International Marketing Review,** Vol. 21 (4/5): 511-535.

Zaheer, A. & Bell, G. G., 2005. Benefiting from Network Positions: Firm Capabilities, Structural Holes, And Performance. **Strategic Management Journal,** 26: 809-825.

Zahra, S. A. 2005. A theory of international new ventures: a decade of research: **Journal of International Business Studies,** 36: 20-28.

Zahra, S. A., Ireland, R. D. & Hitt, M. A. 2000. International expansion by New Venture Firms: International Diversity, Mode of Entry, Technological Learning, and Performance. **Academy of Management Journal,** 43(5): 925-950.

Zahra, S. A., Matherne, B. P. & Carleton, J. M. 2003. Technological Resource Leveraging and the Internationalisation of New Ventures. **Journal of International Entreprenurship,** 1: 163-186.

Zucker, L. G. 1987 'Institutional theories of organizations'. **Annual Review of Sociology**, Vol. 13: 443-464.