HOW DO AGE AND SPEED OF INTERNATIONALIZATION AFFECT FOREIGN GROWTH?

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ABSTRACT

Internationalization strategy has largely focused on stage theory and new venture theory. While both approaches have provided substantial insights into the process of internationalization, they have only marginally addressed resulting performance implications. Indeed, the two theories are at odds with patterns of foreign market entry regarding age and speed of internationalization. Drawing from empirical data in the retail industry, this research investigates the relationship between international age and internationalization speed and the resulting impact on growth. Our results suggest re-phrasing the concept of ambidexterity within an international context.

Keywords: internationalization process, international age, speed of internationalization, growth, international ambidexterity

INTRODUCTION

It has long been accepted that firms' operations beyond domestic boundaries enable them to reap the benefits from foreign market engagements and increase profitability (e.g. Barkema and Vermeulen, 1998). While empirical support for this assumption has been mixed (Tallman and Li, 1996), the recent literature has suggested a link between performance and the type of internationalization process (Vermeulen and Barkema, 2002). By definition, internationalization processes takes place over time (Jones and Coviello, 2005). In our analysis of different theories of internationalization processes, we notice that time also poses a distinguishing variable between the internationalization process of new ventures (Oviatt and McDougall, 1994; McDougall, Shane, S. and Oviatt, 1994) and the internationalization process of more mature and often incrementally or stage-oriented firms (Johanson and Vahlne, 1977, 1990; Johanson and Widersheim-Paul, 1975; Bilkey and Tesar, 1977).

More specifically, both processes are distinguished from each other according to: 1) the time required to start international activities (Reuber and Fisher, 1997; McNaughton, 2000), which we refer to as "internationalization age" and 2) the rate at at which internationalization occurs, namely the "speed of internationalization" (Coviello and Munro, 1997; Jones 1999). Speed is a time-based measure. It is indicative of how much time has passed in order to achieve a specified level of internationalization (Hurmerinta-Peltomäki, 2003; Jones and Coviello, 2005). By including a time-based dimension into our study on internationalization, we extend previous work that has suggested to incorporate the role and influence of time in internationalization research (Andersen, 1993, 1997; Zahra et al., 2000; Coviello and Jones,2004; Jones and Coviello,2005). The way traditional internationalizers and born globals approach internationalization is different because the manner in which they establish, continue, and consolidate their foreign presence varies. These differences in terms of age and speed of internationalization emphasize new ways of anchoring and substantiating their competitive advantage on the international scene, which is likely to entail performance differentials. While previous research has provided explanations on the timing of foreign market entry; none has given yet sufficient explanations to the resulting performance implications (Zahra, 2005; Sapienza, Autio, et al, 2006). Therefore, it is vital that research bridges this gap by focusing on the link between the type of internationalization process and performance through the lens of age and speed of internationalization. This is where our article is positioned.

We investigate the relationship between internationalization and performance by focusing on the impact of the time-varying internationalization process on international performance. We especially study the interacting effect between both age and speed of internationalization on "international growth", i.e. the relative increase of foreign sales revenues (Delmar, Davidsson and Gartner, 2003). We suggest that internationalization age has a negative influence on international growth (Barron, West and Hannan, 1994). Mature internationalizers initially rely on exploiting experiences in the home market and transferring it to foreign markets; while younger internationalizers build on the ability for radical value generation and dynamism. This implies that firms depend on *different* capabilities related to their age at first internationalization development. However, with regard to internationalization speed, these capabilities may turn to different outcomes regarding the type of capability development required in high rates of internationalization. Therefore, the two time-varying aspect of the internationalization process, when combined, can affect international growth in contradictory patterns.

Consequently, the paper is organized as follows. In the next section, we will develop our framework and hypotheses that link internationalization age with international growth, both as related to initial resources endowments and capabilities. Then, we introduce the moderating effect of speed of internationalization to tackle differences between several variants of internationalization processes. We continue with a section on methodology, present our findings and subsequently discuss both contributions and limitations of our approach. The article finishes with some avenues for further research related to international ambidexterity.

INTERNATIONALIZATION PROCESSES AND INTERNATIONAL GROWTH

While various streams of research have investigated the nature of foreign market entry, incremental internationalization and accelerated early cross-border engagements have come to form the dominant paradigms in international process research (Zahra, 2005). The first, the so-called Uppsala, or internationalization stage school, purports that firms enter into markets gradually, once having established their home base (Johanson and Vahlne, 1977, 1990; Bilkey and Tesar, 1977). In contrast, the so-called International New Venture theory suggests that firms adopt an accelerated foreign market entry process right from inception (Oviatt and McDougall, 1994). Both theoretical approaches have provided succinct explanations on the process of foreign market entry but none has yet given sufficient explanation of the underlying capability set and the differential (and often paradoxical) impact on organizational

growth or profit (Han, 2005; Zahra, 2005; Han, 2005; Sapienza, Autio, George and Zahra, 2006).

Incremental internationalization process theory builds on knowledge accumulation and experience. It incorporates several related approaches, which are similar in their explanatory power. The Uppsala Internationalization model (Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975) and the innovation-related internationalization model (Bilkey and Tesar, 1977; Cavusgil, 1980), both contend that firms become international in a slow and incremental process. The underlying assumption of the gradualist approach is that firms initiate their first international entry once they have a strong domestic market base, i.e. at an older age. Internationalizing at an older age supposes building on the referential resource base of the home market. Competitive advantage in foreign markets is gained by exploiting current home-based capabilities. These models, and particularly the Uppsala model, have been very influential in the theoretical development of this area and continue to be so. However, they are also subject to certain limits as highlighted by several researchers (Andersen, 1993, Melin, 1992, Ageron and Huault, 2002; Torres, 1997). Additionally, more recently, some authors have emphasized a new phenomenon of small and medium enterprises that are becoming international soon after being founded (Oviatt and McDougall, 2005, 1994; Autio et al., 2000; Rennie, 1993; Knight and Cavusgil, 1996 and Madsen and Servais, 1997). From the perspective of this theory, we encounter a process where new and unknown territory is investigated by young firms based on the development of hitherto non-existing capabilities. Regarding the age at with they internationalize, firms do not seem to rely on the same type of capabilities, which may impact their outcomes in terms of international growth.

We then take the view that internationalization speed does not have the same effects on growth as age at the first international entry increases. This can be explained by the fact that high speed requires specific resources a firm utilizes more or less easily, depending on its age of internationalization. Earlier internationalizers better unlearn past routine to integrate new entities but have difficulties in consolidating their activities and underlying capabilities in the home-based country which implies limited knowledge transfer and experience applied to these new settings. Late internationalizers have a better absorptive capacity (Cohen and Levinthal, 1990) but their older age constrains them by different liabilities leading to bigger inertia (Hannan and Freeman, 1984). In sum, the success of the internationalization process is based on the interplay between international age and speed.

Talking about internationalization success implies the definition of success measures. However, there is a general paucity of clear performance variables in the literature and authors have taken measures, such as ROA, ROS, and ROE (Daniels and Bracker, 1989; Kumar, 1984, Lu and Beamish, 2001), as well as market-based measures, such as Beta and risk-adjusted returns (Buhner, 1987; Collins, 1990; Goerzen and Beamish, 2003) to measure international growth. As Pangarkar (2007) notes, many of these indicators distort the relationship between internationalization and performance because many market measures may not even be applicable to small firms since many of them may not be listed on stock exchanges. In a similar vein, being early in the stage of internationalization, new venture firms might place strong emphasis on sales growth and an analytical focus on their profitability might underestimate the true performance by these firms. In this research, we define growth as the relative increase in foreign sales, which has been used quite consistently across a variety of studies (e.g. Sambharya, 1995; Quian, 1996; Delmar, Davidsson and Gartner, 2003).

1.1. INTERNATIONAL AGE AND INTERNATIONAL GROWTH

International expansion is one of the most important paths for firm growth. By leveraging resources into different markets, firms are in a position to capitalize on market imperfections and achieve higher returns of their resources. The major challenge of such an endeavour is to surpass the challenges of foreignness (Hymer, 1976; Zaheer, 1995) and newness (Stinchcombe, 1965). Originally, Penrose (1959) argued that growth depends on the reorganization of resources and routines. Growth opportunities require that new routines are being implemented, which rely on actors with the mechanisms and sense-making to act (McPherson, Jones and Zhang, 2004). Learning processes and knowledge create structure and routines that enhance opportunity recognition and exploitation.

The importance of international opportunity recognition places a premium on a firm's ability to identify, assimilate and use available knowledge. Ecological researchers refer to 'organizational imprinting' to depict an event that can have a differential effect if it occurs at key developmental stages. The younger the firm at internationalization, the more deeply imprinted is its dynamic capability for exploring opportunities in foreign markets (Hannan, Carroll, Dobrev, Han, and Torres, 1998, Sapienza, Autio and Zahra, 2006). When a firm internationalizes early, it is more aware, more capable and more willing to pursue international opportunities (Autio et al., 2000). Further, when it initiates the first international

entry, it assimilates routines and rules for change (Guillèn, 2002). Internationalizing early generates specialized capabilities for rapid adaptation to the external environment (Sapienza et al. 2006). Typically, younger international firms see foreign markets as less 'foreign' and embryonic routines reduce the time and costs of dynamic capability development (Autio et al., 2000). Through internationalization a firm develops different capabilities for dealing with foreign environments (Barkema, Shenkar, Vermeulen, and Bell , 1997).

Internationalization exposes the firm to new exogenous situations (cultural, economical, political, competitive conditions) and new endogenous constellations (reconfiguration of resource allocations). Early internationalizers enjoy some leaning advantages of newness that can enhance growth (Autio et al., 2000). In other words, young firms are better at learning new knowledge: the younger the firm at internationalization, the stronger its internationalization capabilities for rapid adaptation which allows overcoming path-dependencies and inertia to induce and foster ongoing market growth.
Internationalization requires firms to unlearn past routines and learn new ones (Barkema, et al., 1997). At a younger age, routines are less established, such that firms are less embedded in their past routines; indeed learning impediments through established routines are lower. Barkema et al. (1997) acknowledged the difficulty for older firms to unlearn established routines and adopt new ones, due to existing cognitive, political, and relational constraints. The older the firm, the more established are the routines and practices, and the higher is the level of organizational inertia (Hannan and Freeman, 1984). This routine embeddedness is a constraint in the exploitation of growth opportunities (Bettis and Prahalad, 1995). As firms age, the capacity to change their core structures decreases. Structural inertia arguments imply that younger firms are more likely to dynamically participate in the internationalization process than older firms (Autio et al 2000). The liability of senescence of older firms indicates that capabilities exhibit an increasing misfit with the environment and are resistant to change over time (Hannan, 1998). Process theory clearly explains that firms gradually invest resources that back up potential risks but does not incorporate the flexibility to explore new market opportunities (Andersen, 1993).

Late international initiation is linked to path-dependent learning and knowledge accumulation through international experience. That is, foreign market growth is contingent on a given portfolio of local capabilities and a firm's potential to reconfigure and deploy them for foreign market entry. Typically, the firm intends to pursue domestic growth until it reaches a

sufficient level of threshold knowledge necessary to support multinational activity. However, if sufficient threshold and consolidation knowledge have been developed to support organizational growth, this may lead to a lock-in for further international growth rates. A firm develops its knowledge in a path-dependent process in which possible future steps are constrained by its history. And it is exactly this cumulative knowledge development that limits feasible paths for growth (Knudsen and Madsen, 2002). Building on these arguments, we formally assume:

Hypothesis 1: There is a negative relationship between international age and international growth, so that the older the firm at the first international initiation, the lower the international growth rate.

1.2. THE INTERACTING EFFECT OF SPEED OF INTERNATIONALIZATION

Penrose (1959) argues that a firm's growth depends on its potential to sense and seize opportunities and respond to them by a reconfiguration of routines. So, a firm's growth through the expansion of international opportunities is influenced by its ability to integrate, build and reconfigure resources and routines to tackle a changing environment. Internationalization implies increasing cross-relationships with different countries and in turn, requires the transfer of tangible and intangible assets to international entities. Speed of internationalization corresponds to the rate by which a firm internationalizes. Building on Penrose's argument, related outcomes of speed depend on the capacity of the firm to deploy its dynamic capabilities (Teece, 2007, Wang and Ahmed, 2007). How frequently major organizational transformations occur and improve organizational outcomes of growth and survival remains a controversial matter in organizational studies (Barnett and Carroll, 1995). Moreover, the link between age and organizational change has been inconclusive.

Building a multinational company is a complex task (Hedlund, 1994; Malnight, 1995, 1996) and foreign expansion is constrained because the firm has to learn how to operate in a variety of cultural and institutional environments. Hence, the firm has to adapt structures and control systems to manage these different domestic and international entities (Barkema and Vermeulen, 1998). It might take considerable time before links between different units in a multinational company start to form (Tsai, 2000, Calori, Lubatkin, Very, 1994). Speed of internationalization increases difficulties towards internationalization, reduces the time for adaptation and has a negative effect on international performance (Vermeulen and Barkema,

2002). Therefore, a firm's age at first international initiation may limit or increase the outcomes of a fast internationalization. Thus, age-liabilities increase or decrease the effect of speed and their positive or negative effect is based on whether the relevant age-related capabilities are thought to improve or deteriorate with speed.

Later internationalization encourages the accumulation of knowledge and experience. These improve success in foreign markets (Tallman and Li, 1996; Daniels and Brakers, 1989). Little evidence currently exists whether performance effects are different for those firms that pursue a faster internationalization (Zahra, 2005, Mudambi and Zahra, 2007). Typically, firms which rely on home-based and cumulative capability acquisition only extend market coverage when their knowledge is sufficiently consolidated to face market uncertainty. It is the domestic maturation that allows the firm to sustain a competitive advantage abroad. Through accumulated experience in the foreign market, the firm develops routines and processes for dealing with the foreign context (Barkema et al., 1997). On the contrary, international new ventures do not have an incubation phase. Managers' prior experience is cited as influencing the speed of internationalization (Oviatt and McDougall, 2005) but as the firm internationalizes early, this experience had not been sufficiently entrenched. As a consequence, firms may be faced with a lack of consolidation capabilities. Consequently, these young international firms are likely to under perform at high speed because permanently exploring foreign markets requires resources and capabilities, solely generated in a preceding period of consolidation (Rothaermel and Deeds, 2004). Therefore, new ventures might neglect building capabilities for positional advantage and social embeddedness, i.e. consolidation capabilities. This lack of positional advantage (i.e. status, trust, reputation) and the absence of incipient routines can reduce the growth outcomes. The underlying arguments concern the liabilities of newness and liabilities of adolescence. On one hand, young firms are likely to fail because of the scarcity of the initial resources they can rely on (Freeman, Carroll and Hannan, 1983). On the other hand, older firms benefit from higher positional advantage and legitimacy (Podolny, 1993), which provide the firm with a solid background to face hazards rate. Older firms with large initial stock of resources benefit from a large endowment and are able to postpone the negative effects of speed on international growth.

As previously shown, internationalization requires the ability to integrate new environmental settings and this is linked to the absorptive capacity of firms (Cohen and Levinthal, 1990). Absorptive capacity is a dynamic capability pertaining to knowledge creation and utilization

that enhances a firm's ability to gain and sustain competitive advantages. Absorptive capacity comprises potential and realized absorptive capacity (Zahra and George, 2002). Potential absorptive capacity consists in knowledge acquisition and assimilation capabilities. Realized absorptive capacity involves knowledge transformation and exploitation. Mature internationalizers are supposed to have lower growth rates than young internationalizers because of age liabilities. However, they might choose to overcome structural inertial forces and more fully embrace international opportunities. In a high speed and uncertain context of internationalization, mature internationalizers can rely on the two different sets of absorptive capacity. First they count on their own domestic consolidated knowledge base that constitutes their potential absorptive capacity. As learning is more difficult, an organization needs prior related knowledge to assimilate and use new knowledge. Cumulative knowledge increases both the ability to integrate new knowledge into an organization's memory and the ability to recall and use knowledge required for high speed internationalization. Past knowledge influences the development of future knowledge acquisition and increases a firm's potential absorptive capacity. Second, their rapid and path-breaking process enables firms to overcome their age liabilities by developing dynamic routines for change which constitute their realized absorptive capacity. Mature firms following a fast internationalization track have an increased absorptive capacity and dynamic capabilities that foster international growth rates. In turn, young internationalizers pursuing a fast internationalization are required to have the ability to integrate and reconfigure existing knowledge and absorb new one. But they have not typically built up their potential absorptive capacity as they pursue their internationalization with non-formalized knowledge. Thus, young firms pursuing extreme degrees of internationalization speed are likely to face a critical edge at which efficiency changes start to be negative, i.e. be destructive for value creation. Firms carrying out such internationalization rushes can be easily overwhelmed by the significant complexity increase within a short, compressed time frame. Their absorptive capacity becomes worn out, and requisite organizational restructuring and adaptation becomes infeasible (Wagner, 2004). Therefore, we hypothesize that speed of internationalization moderates the negative relationship between international age and international growth in such a way that:

- Hypothesis 2a: Firms being young at first international initiation will follow a lower international growth rate when speed is high.
- Hypothesis 2b: Firms being mature at the first international initiation will follow a higher international growth rate when speed is high

2. METHODOLOGY

2.1. SAMPLE AND MEASURES

2.1.1. Sample

The empirical framework we used to test our assumptions is the grocery retailing industry. We define grocery retailing industry as the sale of consumer goods from a fixed location such as a store in small or individual lots for direct consumption by the purchaser. We selected this industry because several of its structural features make it particularly suitable for our research: First of all, the pursuit of international development has been a major target for most players in the industry (Hallsworth, 1992, Williams, 1992, Treadgold, 1988, Alexanders and Myers, 2000, Dawson, 1994; Dupuis and Fournioux, 2005). Second, we focus on a unique sector in order to observe the systematic differences of process across firms operating within the same competitive context (Rumelt, 1991). Third, whereas the Uppsala theory befits all industries, there is no consensus on the applicability context of the international new venture theory. Some authors argue that the international new venture phenomenon is only observable in knowledge-based industries (Burgel and Murray, 2000), while others defend a worldwide and virtually present trend in all industries (Rennie, 1993). So, the retailing industry is interesting to examine the relevance of the two dominant theories of internationalization as the pursuit of international growth has been a major objective for most players in the industry (Akehurst, 1983; Filser, 1998). Finally, the retail industry is even more appropriate for our research interest in that it contends a large variation of international age from 1 year old to 204 years old firms. Indeed, 10 firms on 96 from our database internationalized before they were 10 years old: for instance the German group Aldi internationalized to Austria, when it was seven years old; the French retailer Carrefour opened its first international outlet in Italy at the age of two.

Most research on internationalization processes – both stages and international new ventures theories - builds on samples involving, at maximum, three nations. In this study, our database describes the domestic and international activities of all retailers in the worldwide grocery retailing industry. We built the database using Planet Retail, the leading online provider of the global retailing and food service industry information. We also used data triangulation (Yin 1984) by collecting data from several other sources, like company websites, specialized press, sector analyses, biographies and annual reports. Our sampling frame includes all

internationalized companies in the world in the grocery retailing industry. We include six store formats: supermarket, hypermarkets and superstores, convenience stores, discount stores, neighbourhood stores and cash and carry. Planet retail provides information about 386 retailers. Among them, we selected international retailers as retailers having stores in at least two countries. Former studies considered firms as being international when they were implanted in at least six countries (Goerzen and Beamish, 2003) but we take the view that young internationalizers could not be that far internationalized at this early stage (Oviatt and McDougall, 2005). Among the 99 international retailers, we selected those, who were present for, at least two years in a row, in our data frame. In sum, we study 96 international retailers through 431 international subsidiaries from 1998 to 2004[*].

2.1.2. Measurement

To test our hypotheses we include different axes of measurement related to age dependency, and the internationalization process as follows:

Internationalization age corresponds to the age at the first year of first international entry. So, we measure international age as the time, in years, between a firm's founding date and its first international sales abroad (Autio et al. 2000).

International speed: We measure speed by the ratio of foreign stores to total stores by considering this ratio at the beginning and the end of the period and then measure speed as the difference divided by the number of years of observation (Wagner, 2004; Vermeulen and Barkema, 2002). The larger the change over the period, the higher the expansion speed.

International growth: We studied growth during the period 1998 – 2004, using international sales as a dependent variable. International sales output is defined as all sales revenues derived from international operations. We examined the change in international sales by calculating the relative growth of international sales on an annual basis over 7 years. This is in line with previous studies which considered relative sales growth as the best-established measure of growth (Delmar, Davidsson and Gartner, 2003).

[*] n.b. We ran the analysis also selecting international new ventures according to the criteria of 20% of foreign sales and results were the same. Aiming for degree of freedom spare, we kept the results for the 96 international retailers

Control variables. This study also includes several control variables that might affect the hypothesized relationships, including *country scope, competitive intensity, cultural heterogeneity and number of exits*. *Country scope* represents the number of country of implantation. Researchers formerly showed that performance increases with the number of countries (Tallman et Li, 1996, Goerzen et Beamish, 2003). Internationalization suggests extending the number of countries to an extent the firm is able to maintain and transfer its competitive advantage and benefit from internalization (Rugman, 1980). We suppose there is a positive link between country scope and international growth rates.

Further, we include *competitive intensity* measured by the firm-level Herfindahl–Hirschman indexes (HHI). We first compute each firm's annual squared market share (Carlton and Perloff, 1994) and then calculate an HHI for each country. Then, for each firm, we calculate an average HHI regarding its countries of implantation for each year *t*. According to the density-dependent model (Hannan and Freeman, 1989), organizational growth rates are affected by two forces – legitimation and competition. Each of these is, in turn, a function of population density. The relationship between population density and organizational failure should be of inverted U-shape, with increases in density first increases growth due to legitimation but eventually decreases growth as these first legitimation effects are overtaken by increasing competition effects (Carroll and Hannan, 2000).

Thirdly, we compute for *cultural heterogeneity*. Firms are involved in different countries with different cultural distances. Cultural or psychic distance reflects the differences between two countries along various dimensions. We measure this difference by referring to common measures in the literature (Hofstede, 1977, 1980; Kogut and Singh, 1988). We calculate a global index for each firm by summing up cultural distance indexes to obtain a score of global cultural heterogeneity for a group divided by the number of countries of implantation. Most of the time higher cultural distance is found between countries from different parts of the world, facing different growth rates. The majority of the retailers come from industrialized countries (USA, France, Germany) where the market is mature. Growth is higher in Asia and Eastern Europe, where psychic distance with original countries is high. We expect that the diversity of countries of implantation (high cultural heterogeneity) positively influences international growth rates.

Lastly, we control for the *number of exits* corresponds to the firm withdrawal from one or more countries of implantation. This becomes even more relevant as exits from foreign countries are numerous and de-internationalization processes have become a frequent phenomenon in recent years (Burt, Dawson and Sparks, 2004, Benito, 1997). Researchers

previously showed that performance is negatively related with exits, i.e. firms withdraw from a country if performance is low (Duhaime and Grant, 1984 ; Montgomery and Thomas 1988). We expect that the number of exits increases with a decrease in international growth rates.

2.2. STATISTICAL METHOD: MODEL SPECIFICATION

The data used in this research are longitudinal and follow a set of companies over time. Overall our panel sample of 3017 observations relates to 96 firms, each computed in their respective implantations over seven years (1998-2004), which corresponds to 431 subsidiaries all around the world. All the independent and control variables are lagged one year and we compute one index per variable for the period. We use regression line methods to obtain the average value of the variables over the period. Regression line method are more accurate than means as it includes temporality tendency. So we keep the advantage of panel data. In this study, we use multiple regression to examine the effects of the above variables on international growth rates in the grocery retailing industry between 1998 -2004.

2.3. RESULTS

2.3.1. Sample Descriptive Statistics

This section describes the results of the quantitative study. Since, the results are influenced strongly by the sample under study; the descriptive statistics of the sample are analyzed first. Then, the results of regression analyses are presented and analyzed.

Variables	*M*	*SD*	*1*	*2*	*3*	*4*	*5*	*6*
1. International Growth	0,23	0,41						
2. International Age	0,08	0,15	0,30**					
3. Internationalization Speed	0,01	0,02	0,36***	0,009				
4. Country Scope	2,76	4,00	-0,04	0,05	-0,04			
5. Competitive Intensity	0,21	0,11	0,18†	-0,05	0,017†	-0,16		
6. Cultural Heterogeneity	0,33	0,25	-0,03	-0,03	-0,03	0.44***	-0,018†	
7. Nb Exits	0.60	1,52	-0,16	-0,09	-0,12	0,53***	-0,06	0,32***

†p < 0.1 * p < 0.05 ** p < 0.01 *** p < 0.001

Table 1: Means, standard deviations, and correlations

The means, standard deviations, and Pearson correlations for all study variables are presented in Table 1. Given that no correlation between independent variables is above the threshold level of .65 (Tabachnick and Fidell, 1996: 84), multicollinearity does not appear to be a serious source of bias in our data. In parallel, the correlation matrix shows significant correlations with the dependent variables, most of which involve control variables.

2.3.2. Results of Regression Analyses

In Table 2, models 1-4 indicate the results of the multiple regressions related to the dependent variable 'International growth'. Accordingly, we tested the different boundary conditions for the application of multiple regression. Our tests confirm the possible application of regression models to our sample.

Variables	*International Growth*			
	Model 1	Model 2	Model 3	Model 4
Control				
Constant	0,08 (0,11)	-0,000 (0,11)	-0,04 (0,10)	-0,01 (0,10)
Country Scope	0,008 (0,013)	0,003 (0,01)	0,001 (0,01)	0,003 (0,01)
Competitive Intensity	0,680 (0,37) †	0,72 (0,35)*	0,52 (0,34)	0,65 (0,33) †
Cultural Heterogeneity	0,04 (0,18)	0,07 (0,17)	0,06 (0,16)	0,08 (0,16)
Nb Exits	-0,05 (0,03) †	-0,04 (0,03)	-0,02 (0,03)	-0,03 (0,02)
Independent				
Inverse International Age		0,79 (0,25) **	0,79 (0,24)**	0,66 (0,24)**
Moderators				
Internationalization Speed			4.90 (1,42)***	2,37 (1,74)
Interaction terms				
Inverse International Age * Internationalization speed				15,08 (6,26)*
R^2 / adjusted R^2	0,06 / 0,02	0,15 / 0,10	0,25 / 0,20	0,29 / 0,24
F statistic		7,41**	11,86***	4,95*

†p < 0.1 * p < 0.05 ** p < 0.01 *** p < 0.001

Table 2: Results of Regression Analysis

In model 1, we entered the control variables: market and country scope, competitive intensity, cultural heterogeneity and number of exits. Some control variables have convergent effects with the dependent variable at the 10% accepted error ratio. First, Competitive Intensity is positively related with international growth. Country-specific characteristics can driven or hamper growth. Legitimation is among the few variable to increase growth while competition decreases it (Christmann, Day and Yip, 1999). It seems like the industry is not mature as competitive intensity is positively linked with international growth rates relying on the positive effect of legitimation. Secondly, as expected, the number of exits is negatively linked with international growth rates.

In model 2-4, our regression uses a inverse transformation of the variable international age, which is possible as ages are strict positive numbers and as the inverse transformation is continuous and monotonic on $]0,\infty[$. In practice, the transformation is a decreasing function, which means that a positive (resp. negative) estimate for the transformed variable has to be interpreted as a negative (resp. positive) effect of the international age. We use this transformation instead of using directly the international age because it allows to better differentiate young firms while the model, simultaneously, tends to reduce the differences between old firms more than if it was using the direct international age variable, without transformation. This matches our needs, as old firms can be considered as mature, and from there on, a couple of years difference matters less than a couple of year difference between a two-year old and a four-year old firm.

In model 2, the main effect of the inverse of international age is entered which is positive and significant in support with H1. International growth rates diminish while the age of the firms at the first international initiation increases. This block is predictive ($\Delta R^2 = 0.08$, $F=7.41$ $p = 0.01$). In model 3, we include the direct effect of speed of internationalization. This effect is significant and positive, i.e. speed has a positive effect on growth. This block is again predictive. Model 4 introduces the interacting effect between the inverse of international age and internationalization speed. This block is predictive ($\Delta R^2 = 0.04$; $F= 4.95$ $p = 0,05$). To further analyze the interaction effects between internationalization age and speed, we refer to Figure 1, which draws the slopes of the relationship between international age and international growth rates with a low and high level of speed (Aiken and West, 1991). For an easier interpretation, we transformed back the Inverse International Age variable to plot instead the International Age. In H2a and H2b, we posit that speed should have a negative

impact on young internationalizers and a positive impact on mature internationalizers regarding international growth rates. In Figure 1, the two slopes indicate that international growth rates are higher for young internationalizers when speed of internationalization is low. On the contrary, international growth rates are higher for mature firms following fast internationalization. Thus, we conclude that speed of internationalization has a better outcome when firms internationalize at an older age.

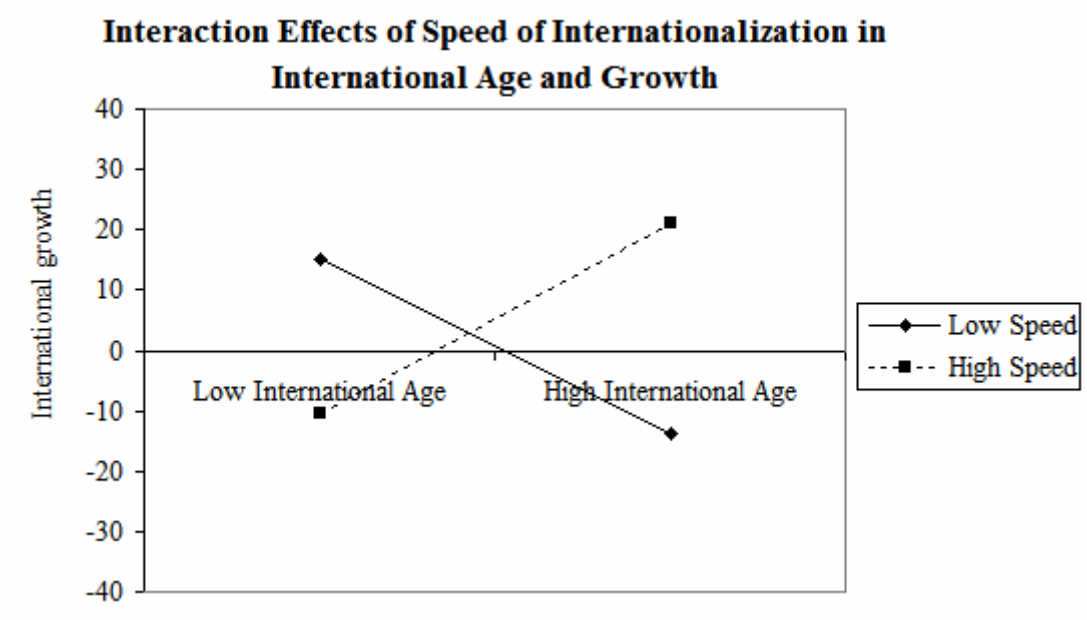

Figure 1 : The interacting effect of Speed

3. DISCUSSION

This research has focused on the impact of international age as related to the output variable 'international growth'. We developed and tested a model that suggests a negative relationship between firms' internationalization age and their potential international growth. Our findings showed that internationalization age occupies an important role in firms' foreign market activities. However, assuming that this direct relationship can be isolated from moderating influences neglects the complex set of internationalization drivers. While previous research has suggested that the relationship between internationalization and firm performance is contingent on foreign expansion speed (Autio et al., 2000; Wagner, 2004; Barkema and Vermeulen, 1998), our findings proved that there is a negative moderating effect of speed on the relationship between international age and growth. While the general impact of speed has been demonstrated in previous research (Autio et al., 2000; Oviatt and McDougall, 2005), it

has not been shown that variability in internationalization speed differentially influences international growth.

Thus, our findings extend previous research by adding two distinct types of interaction effects, relating speed to young and old firms. *First*, younger firms initially enjoy learning advantages of newness, which is a direct counterpoint to their presumed liabilities of newness. They are flexible in their operations to rapidly learn new capabilities. While initial low speed benefits young firms to build up absorptive capacity restraints, too rapid internationalization in early phases of international market operations will over-exhaust young firms' capacities to develop required structural adaptation capabilities. This, in turn will trigger negative performance effects (Wagner, 2004). Thus, young internationalizing firms which start slowly with their internationalization efforts are more effective. Once they have consolidated operations and reach a 'speed threshold' (Wagner, 2004), accelerating speed can be supportive in reaping internationalization advantages, now based on a solid foundation of their operations. *Second,* mature firms face the opposite challenges. Internationalizing at late age presumes that firms face the liability of senescence, which hampers their ability to successfully grow in new environments. Older firms typically lack the ability to actively search for new opportunities. Thus, internationalizing at low speed previews low growth as progressive exploration of foreign markets does not amount to its full potential. In contrast, internationalizing rapidly facilitates experiences which help to break up inflexible structures and check for new challenges. This has been associated with higher growth rates.

As with every piece of research, we face several limitations. While we have implicitly assumed that our hypotheses hold true for a majority of firms, we have not looked at moderating industry effects. This research relied upon a single industry, grocery retailing industry. Consequently, there is a need to strengthen theses results and a cross-industry perspective would be a promising point of departure for future studies. However, our database is cross-sectional (multi-country) and longitudinal, which increases its external validity. Secondly, previous research controlling for industry effects has shown that international new ventures with high growth rates face the same odds as firms with sequential and slower international growth (Mudambi and Zahra, 2007). Further, when industry conditions are highly uncertain, liabilities of newness and foreignness are relatively less severe and legitimacy and positional advantages are less important. Consequently, international new ventures may exhibit advantages in terms of learning and flexibility, which enable higher

growth rates. In less risky industries with well-known competitors, domestic firms with established legitimacy and positional advantages, experience leads to lower failures rates (Delios and Henisz, 2003). We also have a problem of truncation in our database. As the observations cover the period from 1998 to 2004, we use the average value of the variables over the period to test our hypotheses. Using panel data would have added more power regarding a study on processes. However, speed at time t can not have a direct effect on growth at time t. So, here we needed to use a moving window method, which enable speed at time t to have impact on growth at a later time. Consequently, one improvement would be to consider this statistical challenge on a longer period of time to be able to use the moving window methodology.

Future studies

Our research developed and tested a model including the interaction effect of age of internationalization and speed of internationalization on international growth sales but we can further extend our interpretation. In our research, we illustrated that the relationship between internationalization age and speed reveals contradictory outcomes, which need to be reconciled once a firm wants to succeed in its activities across its life-cycle of internationalization. These insights closely connect to a recent discussion initiated by March (1991), who established that firms need to implement both explorative and exploitative activities. 'Exploration' refers to experimentation with new alternatives, having returns that are uncertain, distant, and often negative and 'exploitation' describes the refinement and extension of existing competencies, technologies, and paradigms, exhibiting returns that are positive, proximate, and predictable (Benner and Tushman, 2003). Subsequent work has suggested the notion of "ambidexterity", which describes. a firm's needs to combine these seemingly contradictory activities in order to succeed (O'Reilly and Tushman, 2007, 2004; He and Wong, 2004; Jansen, Van den Bosch, and Volberda, 2005; Raisch and Birkinshaw, 2008).

Transferred to an international context, a young firm's activities can be interpreted as a form of explorative market expansion while lacking consolidation skills associated with exploiting existing opportunities. In contrast, activities of mature firms resemble exploitation which could lead into dead-lock and inflexibility, which is why these firms need to accelerate their speed in order to be more explorative. While there have been few studies, which applied 'ambidexterity' to an international context (Han, 2005), an exception is a recent study by

Barkema and Drogendijk (2007) suggests to distinguish between exploratory internationalization by entering new and distant cultural blocks and exploitative internationalization within an existing cultural block. The authors further request to 'use this lens to evaluate *alternative* strategies of exploitation and exploration for internationalizing companies' (p 1145).

Our research immediately connects to this proposal by suggesting an extended notion of ambidexterity. We established that young internationalizers, which pursue a slow internationalization process as well as mature internationalizers undertaking a rapid internationalization, both reach higher growth than processes advocated by the incremental theory of Uppsala and the international new venture theory. Being mature at the time of internationalization resembles exploitation, while being young incorporates more explorative activities. Besides, fast internationalization can be interpreted as a more explorative form of internationalization. So, the Uppsala theory and the international new venture theory embrace only one side of the process of internationalization, respectively exploitation and exploration; while being a young and a slow internationalizers or a mature and fast internationalizers embraces both exploration and exploitation. Drawing on that, we can see that the different combinations of exploration and exploitation in the internationalization processes lead to a differentials in performance outcomes and the combination of both exploitation and exploration allows for higher international sales growth.

Therefore, this research reveals contradictory outcomes which need to be reconciled once a firm wants to succeed in its activities across its life-cycle of internationalization. One promising avenue for future research is to more precisely analyse the notion of 'international ambidexterity': we purport that companies need to balance their internationalization processes by implementing both explorative and exploitative internationalization. An important, question to raise would be *how* to pursue international ambidexterity, which could relate to temporal cycling between periods of exploitation and bursts of exploration or the simultaneous pursuit of both exploration and exploitation (Gupta, Smith and Shalley, 2006).

4. CONCLUSION

Limitation aside, this paper has investigated the relationship between international age and speed and has introduced a logical extension of the general notion of ambidexterity within an international context. By interpreting accelerated internationalization as the quest for exploration and slow internationalization as exploitation, we built on previous research that has tried to combine these seemingly conflicting activities as related to a firm's age at first international market entry. The foundation developed here demonstrates that the intervening variable of speed differentially impacts the success of internationalization and that these contradictory results can only be reconciled when firms align their internationalization speed, i.e. shift between their accelerated and slow internationalization activities over time. These insights suggest the notion of 'international ambidexterity' as an important concept for further research.

REFERENCES

Aiken, L.S., and West, S;G. (1991). *Multiple Regression: Testing and Interpreting Interactions*. Newbury Park, CA: Sage

Ageron, B., and Huault, I. (2002). Complexité du processus d'internationalisation de la PME: vers un enrichissement de l'analyse behavioriste. *Management International*, 6: 2, 43-53

Alexander, N. and H. Myers (2000). The Retail internationalisation Process. *International Marketing Review* 17: 4-5, 334-353.

Andersen, O. (1997). Internationalization and market entry mode: a review of theories and conceptual frameworks. *Management International Review*. 37: 2, 7-42.

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

Autio, E., Sapienza, H. J. and Almeida, J. G. (2000). Effects of Age at Entry, Knowledge Intensity, and Imitability on International Growth. *Academy of Management Journal*, 43: 5, 909-924.

Barkema, H. G. and Drogendijk, R. (2007). Internationalization in small, incremental or larger steps? ***Journal of International Business Studies***, 38, 1132-1148.

Barkema, H.G. and Vermeulen, F. (1998). International Expansion through Start-up or Acquisition: A Learning Perspective. *Academy of Management Journal*, 43:5, 909-924.

Barkema, H.G., Shenkar, O., Vermeulen, F., Bell J. H. J. (1997). Working Abroad, Working with Others: How Firms Learn to Operate International New Ventures. *Academy of Management Journal,* 40: 2, 426-442

Barnett, W.P; Carroll, G.R. (1995). Modeling internal organizational change. *Annual Review of Sociology*, 21: 1, 217-248

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

Barron, D.N.; West, E.; Hannan, M.T (1994). A Time to Grow and a Time to Die: Growth and Mortality of Credit Unions in New York City, 1914-1990. *American Journal of Sociology*, 100: 2, 381-418

Benito, G. R. G. (1997). De-internationalization. *Management International Review***,** 37: 2, 7-25.

Benner, M. J. and Tushman M. L. (2003). Exploitation, Exploration, and Process Management: The Productivity Dilemma Revisited", *Academy of Management Review*, 28: 2, 238-256.

Bettis, R.A. ans Prahalad, C. K.(1995). The dominant logic: retrospective and extension. *Strategic Management Journal*, 16: 1, 5-14

Bilkey, W.J., Tesar, G. (1977). The Export Behavior of Smaller-sized Wisconsin manufacturing firms. *Journal of International Business Studies*, 8: 1, 93-98,

Birkinshaw, J. and Gibson, C. (2005). Building Ambidexterity into an Organization", *Sloan Management Review*, 45: 4, 47-55

Buhner, R. (1987). Assessing International Diversification of West German Corporations. *Strategic Management Journal*, 8: 25-37

Burgel, O. and Murray, G.C. (2000). The International Market Entry Choices of Start-Up Companies in High-Technology Industries. *Journal of International Marketing*, 8: 2, 33-64

Burt, S., Dawson J., and Sparks L. (2004). International Divestment Activities of European Grocery Retailers. *European Management Journal*, 22: 5, 483-492.

Calori, R., Lubatkin, M., Very, P. (1994). Control Mechanisms in Cross-Borders Acquisitions: An International Comparison. *Organization Studies.* 15:3, 361-380

Carlton, D., Perloff, J. (1994). *Modern Industrial Organization*. Second Edition. New York.

Carroll G.R., Hannan, M.T. (2000). *The Demography of Corporations and Industries.* Princeton University Press.
Cavusgil, S.T. (1980). On the Internationalization Process of Firms, *European Research*, 8: 6, 273-281.
Christmann, P., Day, D.L., Ypi, G.S. (1999). The relative influence of country conditions, industry structure and business strategy on MNC subsidiary performance. Journal of International Management. 5: 4, 241-265
Cohen, W.M. and Levinthal, D.A. (1990). Absorptive Capacity: A New Perspective on Learning and Innovation. *Administrative Science Quarterly*, 35: 1, 128-152.
Collins, J.M. (1990): A Market Performance Comparison of US Firms Active in Domestic, Developed, Developing Countries, 21:271-287
Coviello, N;E. and Jones, M.V (2004). Methodological issues in international entrepreneurship research**.** *Journal of Business Venturing*. 19: 4, 485-503
Coviello, N.E. and Munro, H.J. (1997). Network relationships and the internationalisation process of small software firms. *International Business Review*. 6: 4, 361-386.
Daniels, J.D. and Bracker, J. (1989). Profit Performance: Do Foreign Operations Make a Difference? *Management International Review*, 29: 46-56
Dawson, J. A. (1994) Internationalization of Retailing Operations. *Journal of Marketing Management*, 10: 4, 267-282
Delios, A. and W. J. Henisz (2003). Political hazards, experience, and sequential entry strategies: the international expansion of japanese firms, 1980-1998. *Strategic Management Journal.* 24: 11, 1153-1162.
Delmar, F. Davidsson, P. Gartner, W.B (2003). Arriving at High Growth. *Journal of Business Venturing*. 18: 2, 189-216
Dupuis, M. and Fournioux, J. (2005). Internationalisation du distributeur: de l'avantage competitive à la performance. *Décision Marketing*. 37: Janvier-Mars, 45-56
Filser, M. (1998). Taille Critique et strategie du distributeur: analyses théoriques et implications managériales. *Décision Marketing*, 15: septembre_décembre, 7-16
Freeman, J. Carroll, G.R., Hannan, M.T. (1983). The Liability of Newness: Age Dependence in Organizational Death Rates. *American Sociological Review*, 40, 215-228
Goerzen, A. and Beamish, P.W. (2003). Geographic Scope and Multinational Entreprise Performance, *Strategic Management Journal*, 24: 1289-1306.
Guillen, M.F. (2002). Structural Inertia, Initiation, and Foreign Expansion: South Korean Firms and Business Groups in China, 1987-95. *Academy of Management Journal*, 45: 3, 509-525
Gupta, A.K., Smith, K.G, and Shalley, C.E (2006). The Interplay between Exploration and Exploitation. *Academy of Management Journal* , 49: 4, 693-706.
Hallsworth, A. G. (1992). Retail internationalization: contingency and context? *European Journal of marketing* 26: 8-9, 25-34.
Han, M. (2005). *Towards strategic ambidexterity: The nexus of pro-profit and pro-growth strategies fort he sustainable international corporation*. Paper submitted to the JIBS Frontier Conference 2005, Rotterdam, Netherlands
Hannan, M.T. (1998). Rethinking Age Dependence in Organizational Mortality: Logical Formalizations. *American Journal of Sociology*, 104: 1, 126-166
Hannan, M.T., Carroll, G.L., Dobrev, S.D., and Han, J., Torres, J.C. (1998). Organizational Mortality in European and American Automobile Industries, Part I: Revisiting the Effects of Age and Size. *European Sociological Review*. 14: 3, 279-302
Hannan, M.T., Freeman, J. (1984). Structural Inertia and Organizational Change. *American Sociologial Review*. 49, 149-164

He Z.L. and.Wong, P.K. (2004). Exploration versus Exploitation: An Empirical Test of the Ambidexterity Hypothesis, *Organization Science*, 15:4, 481-494
Hedlund, G. (1994). A Model of Knowledge Management and the N-Form Corporation. *Strategic Management Journal*. 15:5, 73-90
Hofstede, G. (1980). Culture and Organizations. *International Studies of Management and organization*, 10:4, 15-41
Hofstede, G. (1977) Power in Organization. *International Studies of Management and Organization*, 7:1, 3-6
Hurmerinta-PeltomAki, L. (2003). Time and Internationalisation Theoretical Challenges Set by Rapid Internationalisation. *Journal of International Entrepreneurship*. 1: 2, 217-236
Hymer, S.H. (1976). *The International Operations of National Firms.* Cambridge: MIT Press
Jansen J.J.P, Van den Bosch F.A.J, in Volberda, H.W. (2005). Exploratory Innovation, Exploitative Innovation, and Ambidexterity: The Impact of Environmental and Organizational Antecedents. *Schmalenbach Business Review.* 57: 4, 351-363.
Johanson, J. and. 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*, Summer-Spring: 23-32.
Johanson, J. and Vahlne, J.-E. (1990). The Mechanisms of Internationalization. *International Management Review*, 7: 4, 11-24.
Johanson, J. and Wiedersheim-Paul, F. (1975). The Internationalization of the Firm - Four Swedish Sases. *International Marketing Review*, 12: 3, 305-322
Jones, M.V. (1999). The internationalization of small high technology firms. *Journal of International Marketing*. 7: 4, 15-41
Jones, M.V, Coviello, N.E. (2005). Internationalisation: conceptualising an entrepreneurial process of behaviour in time. *Journal of International Business Studies*. 36:3, 284-303
Knudsen, T. and Madsen, T.K. (2002). Export Strategy: A Dynamic Capabilities Perspective. *Scandinavian Journal of Management*, 18:4, 475-502.
Kogut, B. and Singh, H. (1988) The effect of National Culture on the Choice of Entry Mode. *Journal of International Business Studies*. 19:3, 411-432
Kumar, M.S. (1984). Comparative Analysis of UK Domestic and International Firms. *Journal of Economic Studies*. 11, 26-42.
Lu, J.W. and Beamish, P.W. (2001). The Internationalization and Performance of SMEs, *Strategic Management Journal*, 22, 565-584.
Malnight, T.W. (1996). The Transition from Decentralized to Network –Based MNC Structures: an Evolutionary Perspective. *Journal of International Business Studies*. 27: 1, 43-65
Malnight, T.W. (1995). Globalization of an ethnocentric firm: an Evolutionary Perspective. *Strategic Management Journal*. 16: 2, 119-141.
March, J. (1991) Exploration and Exploitation in Organizational Learning. *Organization Science,* 2:1, 71-87.
Mathews, J.A. and Zander, I. (2007). The International Entrepreneurial Dynamics of Accelerated Internationalisation. *Journal of International Business.* 38:3, 387-403.
McDougall, P.P., Shane, S. and Oviatt, B.M. (1994) Explaining the Formation of International New Ventures: The Limits of Theories from International Business Research, *Journal of Business Venturing*, 9: 6, 469-487.
Macpherson, A.; Jones, O.; and Zhang, M. (2004). Evolution or revolution? Dynamic capabilities in a knowledge-dependent firm. *R & D Management,* 34: 2, 161-177
McNaughton, R.B. (2000). Determinants of time-span to foreign market entry. *Journal of Euromarketing*. 9: 2, 99-112
Melin, L. (1992). Internationalization as a strategy process. *Strategic Management Journal* 13: special issue, 99-118.

Montgomery, C. A. and Thomas A. R. (1988). Divestment: motives and gains. *Strategic Management Journal.* 9: 1, 93-97.
Mudambi, R., Zahra, S.A. (2007). The Survival of International New Ventures. *Journal of International Business Studies*, 38: 2, 333-353
O'Reilly III, C.A, and Tushman, M.L. (2007). *Ambidexterity as a Dynamic Capability: Resolving the Innovator Dilemma*. Working Paper.
O'Reilly, C. M. and Tushman, M. L. (2004). The Ambidextrous Organization**,** *Harvard Business Review*, 82: 4, 74-81
Oviatt, B. M., and McDougall, P. P. (2005). Defining International Entrepreneurship and Modeling the Speed of Internationalization**.** *Entrepreneurship Theory and Practice*, 29:5, 537-553.
Oviatt, B. M., and McDougall, P. P. (1994) Toward a Theory of International New Ventures. *Journal of International Business Studies*, 25:1, 45-64.
Pangarkar, N. (2007). Internationalization and Performance of Small – and Medium-sized Enterprises, *Journal of World Business*. in press
Penrose, E. (1959). The *Theory of the Growth of the Firm*. Oxford: Blackwell
Podolny J.M. (1993), A Status-Based Model of Competition. *American Journal of Sociology*, 98, 829-872.
Raisch, S., Birkinshaw, J. (2008). Organizational Ambidexterity: Antecedents, Outcomes, and Moderators. *Journal of Management*. 34: 2, 1-35
Rennie, M. W.(1993). Born global. *McKinsey Quarterly*, 4, 45-52
Reuber, R.A and Fischer, E. (1997). The influence of the management team's international experience on the internationalization behaviors of SMEs**.** *Journal of International Business Studies*. 28: 4, 807-825
Rothaermel, Frank T. and Deeds, D.L. (2004). Exploration and Exploitation Alliances in Biotechnology: A System of New Product Development. *Strategic Management Journal*, 25: 3, 201-221.
Rumelt, R.P. (1991). How much does Industry matter. *Strategic Management Journal*. 12:3, 167-185
Rugman, A.M (1980). Internalization Theory and Corporate International Finance. *California Management Review*, 23:2, 73-79
Rugman, A. M. (1980). A new theory of the multinational enterprise: internationalization versus internalization**.** *Columbia Journal of World Business***,** 15: 1, 3-29.
Sambharya, R.B. (1995). The Combined Effect of International and Product Diversification Strategies of Performance of US-based Multinational Corporations. *Management International Review*, 35, 197-218.
Sapienza, H.J., Autio, E., George, G. and Zahra, S. A. (2006) A Capability Perspective on the Effects of Early Internationalization on Firm Survival and Growth. Academy of Management Review, 31:4, 914-933.
Stinchcombe, A.L. (1965). *Social Structure and Organizations*. Handbook of Organizations. J.March. Chicago. Rand McNally, 142-193.
Tabachnick, B.G. and Fidell, L.S. (1996). *Using Multivariate Statistics*. NY: HarperCollins
Tallman, S. and Fladmore-Lindquist, K. (2002). Internationalization, Globalization, and Capability-Based Strategy. *California Management Review*, 45: 1, 116-135
Tallman, S. and Li, J.T. (1996) Effects of International Diversity and Product Diversity on the Performance of Multinational Firms. *Academy of Management Journal*, 39: 1, 179-196.
Teece, D.J. (2007) Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance. *Strategic Management Journal*, 47: 2,175-192.

Torrès, O. (1997). *Pour une approche critique de la spécificité de gestion de la petite et moyenne enterprise: application au cas de la globalisation*. Thèse de Doctorat en Science de gestion, Université de Montpellier I.
Treadgold, A. (1988). "Retailing without frontiers, the emergence of transnational retailers." *Retail and Distribution Management.* Novembre/Decembre, 8-12.
Tsai, W. (2000). Social Capital, Strategic Relatedness and the Formation of Intraorganizational Linkages. *Strategic Management Journal*. 21:9, 925-940
Tushman, M.L. and C.A. O'Reilly (1996). Ambidextrous Organizations: Managing Evolutionary and Revolutionary Change. *California Management Review,* 38: 4, 8-30.
Vermeulen, F. and Barkema, H. (2002) Pace, Rhythm, and Scope: Process Dependence in Building a Profitable Multinational Corporation. *Strategic Management Journal*, 23: 7, 637-653.
Wagner, H. (2004) Internationalization speed and cost efficiency: evidence from Germany. *International Business Review*, 13: 4, 447-463
Wang, C. L., and Ahmed, P.K. 2007 Dynamic Capabilities: A Review and Research Agenda. *International Journal of Management Review*, 9: 1, 31-51.
Williams, D. E. (1992). Motives for retailer internationalization: their impact, structure and implications. *Journal of Marketing Management.* 8, 269-285.
Williams, D. E. (1992). Retailer internationalization: an empirical inquiry. *European Journal of marketing*. 26: 8-9, 8-24.
Yin, R. (1984). Case Study Research: Design and Methods, Sage. Beverly Hills
Zaheer, S. (1995) Overcoming the Liability of Foreignness. *Academy of Management Journal*, 38: 2, 341-363.
Zahra, S. (2005) A Theory of International New Ventures: A Decade of Research. *Journal of International Business Studies*, 36, 20-28
Zahra, S.A. and George, G. (2002). Absorptive capacity: a review, reconceptualization, and extension. *Academy of Management Review*, 27:2, 185-203
Zahra, S.A., Ireland, R.D. and Hitt, M.A. (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.