How Dynamic Capabilities Interfere in the Internationalization Process of Firms

Survival and Growth in Foreign Market Environments

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Abstract

Strategies of internationalization have long been in the focus of international business and global strategy research. While two of the major theories – process theory and new venture theory – have provided substantial input on selected types of internationalization processes, they have only marginally addressed the resulting impact on growth and survival. Adopting a dynamic capability perspective, we argue that there are two classes of explorative and exploitative capabilities differentially linked to output variables. Consistent with the dynamic capability view, we further defend that third-order capabilities are required to balance and update internationalization capabilities in order to maximize internationalization performance. An integrated model with some testable propositions is developed which prepares the ground for future empirical research.

Keywords: Dynamic capabilities, internationalization, exploitation, exploration, growth, survival

INTRODUCTION

It has long been accepted that firms' operations beyond domestic boundaries enable them to reap off the benefits of foreign markets 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 profitability and the type of internationalization process (Vermeulen and Barkema, 2002). In particular, the Uppsala internationalization process theory emphasizes that firms learn experientially as they enter foreign markets (Johanson and Vahlne, 1990). This incremental path-dependent involvement is characterized by a higher number of international markets entries and a higher level of commitment in the entry mode. In contrast, a new stream of research highlights the existence of international new ventures, so-called 'born globals', which aspire for rapid internationalization right from inception (McDougall, Shane and Oviatt, 1994).

Both research on incremental internationalization processes and early cross-border engagement has provided explanations on the timing of foreign market entry but none has yet given sufficient explanation of the differential results of organizational growth and survival (Zahra, 2005; Sapienza, Autio, George and Zahra, 2006). Typically, research originated in an analysis of the relationship between the external environment and the firm. However, instead of merely responding to external challenges, other factors may have an impact on the strategy and performance in a global setting (Zou and Cavusgil, 1996). This concern gives way to analyzing the internationalization process in terms of a firm's resources and capabilities.

In this light, global market success is not only determined by environmental contingencies but also depends on the dynamic adjustment of internal operations. When firms extend their international activities, they accumulate knowledge and capabilities to better fit the requirements of foreign markets (Sapienza et al., 2006). As capabilities for new market entry relate to multiple environments, it is the firm's capacity to constantly reconfigure its internationalization potential. Hence, a dynamic capability view (DCV) offers a suitable theoretical foundation as it suggests leeway for learning, integrating, building and reconfiguring internal and external competencies (Teece, Pisano and Shuen, 1997). Consequently, dynamic capabilities allow firms to overcome path-dependencies in their internationalization process.

By adopting a DCV perspective, our paper provides two major contributions. *First*, we suggest that different types of capabilities support incremental and accelerated internationalization processes. While incremental step-wise internationalization may initially be based on exploiting experience and transferring it to a variety of markets, accelerated internationalization builds on the ability for radical value generation and adjustment. *Second*, while the DCV has assumed that capability building relates to positive outcomes, we argue that it does not only explain success but also failure. Building on the exploration versus exploitation paradigm (March, 1991), we suggest that only a constant interplay between a firm's diverse internationalization capabilities results in both growth and survival. In contrast, a one-sided focus on singular types of process capabilities is supposed to incur a trade-off between the two output variables.

The paper is organized as follows. In the next chapter, we provide a brief overview of the DCV and its contribution to internationalization processes. By drawing on the exploration versus exploitation paradigm, we will reinterpret the interrelation between stage and new venture theories of internationalization and their perspective on capabilities. Building on this, we introduce four types of dynamic internationalization capabilities. Subsequently, we will develop a framework and propositions that link dynamic internationalization capabilities with the output variables of growth and survival. Finally, we discuss both contributions and limitations of our approach and develop potential avenues for further research.

A CAPABILITY-BASED PERSPECTIVE OF INTERNATIONALIZATION PROCESSES

Resources, Capabilities, and Internationalization

The resource-based view of strategy proclaims that it is the possession and successful exploitation of unique resources rather than market contingencies that explains competitive advantage (Wernerfelt, 1984; Barney, 1991). Building on and extending the resource-based view, the DCV refers to the firm’s ability to alter its resource base by creating, integrating, recombining and releasing resources to address rapidly changing environments (Teece et al., 1997). Collis (1994) is particularly explicit in making the point that dynamic capabilities govern the rate of change of ordinary capabilities given path dependencies and market positions. Eisenhardt and Martin (2000) are even more precise in specifying dynamic capabilities as the antecedent organizational and strategic routines by which managers alter their resource base.

Even though the notion of dynamic capabilities has created some terminological confusion, there is broad consensus that change is an integral part of the firm. However, inconsistencies exist, predominantly as to how dynamic capabilities can be captured in reality (Wernerfeld 1989; Williamson 1999). While existing capabilities (first-order capabilities) are likely to result in improved performance, especially in volatile environments, these capabilities have to undergo a constant process of change. In order to change existing capabilities, it has been argued that so-called 'second-order' capabilities come into play, e.g. learning, improving, changing, etc. (Collis, 1994). Moreover, deploying these 'second-order' capabilities involves both capability exploitation and capability exploration. While the former suggests that a company uses rent-generating resources that are firm-specific, difficult to imitate, and able to generate abnormal returns, the latter refers to the extent to which a firm builds completely new capabilities (Tallman, 1991). However, it has been argued that even 'second-order' capabilities can turn into 'core rigidities' (Leonard-Barton, 1992). In such a situation, a firm requires so-called 'third-order' dynamic capabilities that emphasize a firm's constant pursuit of the renewal, reconfiguration and re-creation of both first and second-order capabilities (Wang and Ahmed, 2007). It is precisely this notion of third-order capabilities that forms the core of our ideas and we will later argue that seemingly opposing types of dynamic internationalization capabilities require constant updating and interchange, or what has been termed 'ambidexterity' in the literature (Duncan 1976; Tushman and O'Reilly 1996).

Prior research in international business and global strategy has offered insights into internationalization capabilities by adopting a resource-based view (Collis, 1991; Peng, 2001) or knowledge-based view (Kogut and Zander, 1992). It has been suggested that the resources of the firm determine the choice of market entry. Yet resource advantage may not be sufficient and the firm needs distinctive capabilities to make better use of resources (Penrose 1959). A few recent studies have advanced the notion that firms compete with one another based on their ability to learn and apply knowledge to foreign markets, i.e. on the basis of their dynamic capabilities (Chang and Rosenzweig, 2001; Luo, 2002; Tallman and Fladmore-Lindquist, 2002; Sapienza et al., 2006). For instance, Luo (2002) investigated the impact of organizational and environmental factors on capability building. He emphasized the necessity to find an appropriate configuration between capability exploration and exploitation and analyzed resulting performance improvements. In their conceptual paper, Knuden and Madsen (2002) focused on export strategy and argued that the cumulative history of knowledge development limits feasible paths for international growth. Since routines contain a rather stable code for behaviour, they will constrain the course of action unless they are disrupted. Thus, the authors suggest that the most crucial element is the trade-off between short-run benefits of market access and long-run changes in capabilities and organization design (Knudsen and Madsen, 2002: 489). Similarly, Tallman and Fladmore-Lindquist (2002) emphasize the duality between capability building and capability leveraging and relate them to international expansion and global integration. Sapienza et al. (2006) are among the few who linked dynamic capabilities to output variables of international growth and survival. And more recently, Teece (2007) has been very explicit in reminding us that dynamic capabilities are especially relevant to multinational enterprise performance.

While all of these studies have contributed to the current interest in a dynamic capability perspective of internationalization, they have only provided isolated insights into the linkage between specific types of capabilities, and the resulting consequences. Thus, our understanding of the DCV and its potential in explaining internationalization strategies is still incomplete. We presume that the DCV provides more interesting input into the question of internationalization, especially as capabilities may become obsolete over time or even lead to a firm's lock in. While we suggest that incremental and accelerated internationalization rest on different sets of capabilities, each set may cease to deliver sufficient results in the long run.

Dynamic Internationalization Capabilities and Internationalization Processes

Most research on dynamic capabilities fails to present a clear articulation of those specific dynamic capabilities at stake in the exploitation versus exploration process (March, 1991). Capabilities required for exploitation are fundamentally different from those required for exploration (O'Reilly and Tushman, 2007). Exploitation refers to control, certainty, risk reduction, while exploration corresponds to discovery, risk-taking, experimentation, flexibility and innovation. The internationalization process depicts the track a firm decides to follow for its worldwide operations. It describes how a firm develops organizational forms abroad, e.g. wholly-owned subsidiaries, franchised firms, or joint ventures (Li, Yu Yang and Yue, 2007). Based on the previous definitions of exploitation and exploration, we see incremental internationalization (Johanson and Wiedersheim, 1975; Johanson and Vahlne 1977, 1990; Bilkey and Tesar, 1977; Cavusgil, 1980) being an exploitation strategy, whereas, exploration seems to mirror the accelerated process of internationalization represented by the theory of international new ventures (Oviatt and McDougall, 1994). If we reconsider international expansion in the light of such a dynamic capability-driven model, we will be able to identify different types of capabilities interlinked with internationalization processes. A closer focus on these capabilities provides additional inputs into how the respective processes take place.

Dynamic Internationalization Capabilities and the International Exploitation Process

The incremental internationalization process is seen as an exploitation process built upon knowledge accumulation and experience. It includes approaches that are closely related together. 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 gradual and step-by-step process. Internationalization of the firm is described as being necessarily path-dependent based on prior knowledge acquisition. Thus, internationalization is a process related to the reduction of uncertainty by accumulating knowledge. Knowledge of the firm increases with time and experience so that firms choose an incremental pattern of internationalization, gradually seizing opportunities on a country-by-country basis. Firms have to compensate the trade-off between market knowledge, resource dependency, and uncertainty. Traditional ventures that follow a path-dependent international path mostly benefit from a larger size and home-consolidated resources that are positively related with internationalization (Bloodgood, Sapienza and Almeida, 1996). The underlying assumption of the gradualist approach implies that firms initiate their first international entry once they have a strong domestic market base.

With respect to the previous arguments, we can identify two types of dynamic internationalization capabilities linked with the international exploitation process. T*hreshold capabilities* are required once a firm follows an internationalization path. Building on the referential resource base of the home market, competitive advantage in foreign markets is gained by exploiting current home-based capabilities. Companies marginally increase their resource commitments in order to overcome the 'liability of foreignness' (Zaheer, 1995). For example, these capabilities allow the incorporation of new, foreign-based assets and capabilities while maintaining efficient management procedures. They 'relate to the ability of the firm to organize so as to function competitively in different contexts' (Tallman and Fadmore-Lindquist, 2002: 120). At the same time, there is no immediate need to incorporate very distant and foreign knowledge and dramatically change the firm's basic routines.

However, the assumption that sustainable competitive advantage comes from an unchanging resource-base runs counter to operating in a dynamic environment (Collis, 1991). In the course of repeated internationalization activities, firms typically undergo a process of learning and knowledge accumulation from prior sequential entries (Sapienza et al., 2006). They consolidate existing capabilities, e.g. unify products or brands and build regional clusters that follow the same management principles. In this phase, profit generating 'bundles of resources' act as a driver of further firm expansion while companies still confine their operations to the geographical vicinity of their existing knowledge. Taken collectively, these *consolidation capabilities* create structures and routines that focus on opportunity recognition and exploitation (March, 1991). As Luo (2002) notes, capability building is indeed more exploitative, dedicated to building the skills needed for local operations.

Dynamic Internationalization Capabilities and International Exploration Process

In 1988, Johanson and Mattson pointed out that some firms might follow a different pattern of internationalization than proposed by the stage model. Indeed, frequency, intensity, and integration of relationships across countries might modify the step-wise path firms are to follow. More recently, the phenomenon of small and medium-sized enterprises emerged which became international soon after their foundation. A related stream of interest started to develop which focused on the growing role of these so called "Born Globals" or "International New Ventures" their ability to internationalize faster and create value for their owners in the global marketplace (Oviatt and McDougall, 2005, 1994; Autio et al., 2000).

Oviatt and McDougall (1994) defined an international new venture as "a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and the sale of output in multiple countries" (p. 49). Born globals are defined as firms that were established after 1976 and have reached at least 25% of foreign sales within three years after establishment (Madsen, Rasmussen and Servais, 2000). Some of major forces behind the rise of born globals have been explained by Rennie (1993), Knight and Cavusgil (1996): technological developments in production, communication, transportation systems foster globalization and new ventures do not follow a path-dependent approach. Most of these firms internationalize early which has explained by the role of entrepreneurs. It is assumed that through their risk-taking posture and international experience, rapid internationalization at a young age is encouraged. Consequently, notions of speed, irregularity, and dispersion have been of major interest to researchers in this domain (Oviatt and McDougall, 2005). Interest in new ventures further developed and led to an explanation of accelerated internationalization processes. From the perspective of this new venture theory, we encounter an exploration process where new and unknown territory is investigated based on the development of hitherto non-existing capabilities.

While this first group of capabilities may serve as a driver for internationalization performance, i.e. first-order capabilities, learning must also include the exploration of completely new capabilities. Companies cannot solely rely on home-country-derived capabilities but also need to explore host-country specific knowledge (Chang, 1995; March, 1991). In the extreme, this is exactly what new venture theories of internationalization propose (Oviatt and McDougall, 1994): There are firms that act as 'born globals' right from inception without necessarily moving through all sequential stages of incremental market entry. Thus, we presume that there is another set of *value-adding capabilities* companies need to newly build once they enter foreign markets. As capability-building starts from scratch, there is no previous experience or knowledge that facilitates the process. However, it has been argued that individual managers' knowledge might be regarded a substitute for this lack of corporate experience (Sapienza et al., 2006). These companies heavily benefit from first mover advantages as their capabilities are valuable, rare, costly to imitate and with few substitutes (Barney, 1991). For example, 'born globals', or more generally, 'international new ventures', derive value from their ability to manage and access assets of other firms through inter-firm relationships in many different locations (Mathews and Zander, 2007).

While leveraging value adding capabilities might be a major factor for driving a firm's growth, it still relates to a static source of advantage that may lead to core rigidities (Leonard-Barton, 1992). Thus, we assume that a firm needs a final set of capabilities we call *disruption capabilities.* At the level of the individual subsidiary, Birkinshaw and Hood (1998) address them as 'strategic change capabilities'. Transferred to the whole firm, disruption capabilities may eventually lead to a strategic reconfiguration at the corporate level or constantly question operating routines. As Autio et al., (2000: 919) remark 'as firms get older, they develop learning impediments that hamper their ability to successfully grow in new environments and […] the relative flexibility of newer firms allows them to rapidly learn the competencies necessary to pursue continued growth in foreign markets.' Thus, developing disruptive capabilities is supposed to prevent firms from age-related liabilities (Carroll and Hannan, 2000) and lock-in effects with existing routines and capabilities.

So far, we have introduced a set of second-order capabilities linked to the two processes of exploration and exploitation. These preliminary arguments provide a starting point for the development of a conceptual model in the next section.

A MODEL OF DYNAMIC CAPABILITIES, SURVIVAL AND GROWTH

As shown, the internationalization process of firms calls upon dynamic capabilities to seize and exploit foreign market opportunities and thus increase international presence. Dynamic exploitative capability and dynamic explorative capabilities provide firms with different incentives to address the internationalization process. Both explorative and exploitative internationalization is directed at growth, e.g. the rate by which a firm develops organizational activities abroad. However, the former builds on ongoing changes of existing capabilities while the latter focuses on new capability building. Both represent an account of 'second-order' capabilities. Further, we argue that dynamic capabilities are linked to international performance, measured by the key indicator of international survival (Delios and Beamish, 2001, Mitchell, Shaver and Yeung, 1994). But only if survival rate is constantly monitored and underlying dynamic capabilities are checked, will there be long-term survival. Thus, it is 'third-order' capabilities that are conducive to long-term performance (Wang and Ahmed, 2007). These capabilities are precisely at the heart of explaining why previously incremental internationalizing firms adopt an accelerated process and vice versa, i.e. update their second-order capabilities. Thirdly, theoretical considerations dealt with the different process approaches with regard to age: the Uppsala theory's focuses on older firms, while the international new ventures theory focuses on younger firms. Taken collectively, we build on our previous consideration and conceptualize the relationship between dynamic capabilities, international growth, and international survival, moderated by age (Figure 1) which has been identified as one of the most relevant variables influencing a firm's international strategy (Preece, Miles and Baetz, 1999). Age refers to 'organizational age' and the 'age at the first time of internationalization' (i.e. international age). Both age and international age are supposed to influence the relationships between dynamic capabilities, international growth and survival because of liabilities that can either push or pull international growth or survival

(Carroll and Hannan, 2000; Hannan et al., 1998). Lastly, the exploitative or explorative nature of the international process is manifested in international growth rates. A too slow or too fast increase in this rate has different implication for survival abroad.

>> Insert Figure 1: <<
A Model of Dynamic Capabilities, Internationalization Growth, and Survival

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Dynamic Capabilities 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) and newness (Stinchcombe, 1965).

International growth depicts the variability in the internationalization process. A slower, step-wise and path-dependent internationalization process leads to lower growth. In contrast, a rapid and path-breaking process is supposed to result in higher growth. Originally, Penrose (1959) argued that growth depends on the reorganization of resources and routines. Thus, dynamic capabilities are at the core of this reorganization. Growth opportunities require dynamic capabilities in order to implement new routines that rely on actors with the mechanisms and sense-making to act (McPherson, Jones and Zhang, 2004). Dynamic capabilities create structure and routines that focus on opportunity recognition and exploitation. More precisely, we argue that it is the *different* nature of exploitative and explorative dynamic internationalization capabilities that leads to multiple international paths. Exploitative dynamic capabilities are 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 (first-order) and a firm's potential to reconfigure and deploy them for foreign market entry (second-order). Thus, a firm needs to build second-order dynamic threshold capabilities to sense and seize opportunity to grow in foreign markets and subsequently transfer them to multiple environments (second-order dynamic consolidation capabilities). Typically, the firm intends to pursue domestic growth until it reaches a sufficient level of threshold capacity necessary to support multinational activity. However, if sufficient threshold and consolidation capabilities have been developed to support organizational growth, they 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).

From a theoretical perspective, a constraint in relating prior knowledge and capabilities to growth potential, is their insufficient explanation of an accelerated internationalization processes. Why should a firm with only marginal internationalization knowledge be able to achieve high growth? It is here that the notion of explorative dynamic capabilities is relevant. It reflects an organization's ability to achieve new and innovative forms of competitive advantage by using second-order dynamic value adding or disruptive capabilities. These are the specific capabilities to develop new products and or markets right when entering foreign markets without any limitations due to prior knowledge (Wang and Ahmed, 2007). Therefore, explorative dynamic capabilities allow firms to overcome path-dependencies and inertia to induce and foster ongoing market growth. Building on these arguments, we formally propose:

Proposition 1: There is a positive relationship between explorative dynamic capabilities and international growth, so that the more companies focus on explorative dynamic capabilities, the higher are international growth rates.

Dynamic Capabilities and International Survival

International process theorists largely focus on a firm's survival in foreign markets (Delios and Henisz, 2000). The focus on survival is linked to a better and more complete understanding of a firm's strategic decision-making. Thereby, it is assumed that a firm voluntarily decides to exit a country or to accelerate its internationalization strategy. Typically, survival corresponds to the longevity of a firm and failure rates are used as a common measure of international exits. This becomes even more prevalent 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). Survival as a key variable has already been used in different studies (Delios and Beamish, 2001, Mitchell et al. 1994). Moreover, venture theorists have suggested that survival, rather than profitability or performance, is an important factor because it takes time to generate profits (Mudambi and Zahra, 2007).

Exploitative dynamic capabilities encourage the accumulation of knowledge and experience. These improve survival chances and success in foreign markets (Tallman and Li, 1996; Daniels and Brakers, 1989). Little evidence currently exists whether survival rates are different for those firms that pursue a faster internationalization (Zahra, 2005, Mudambi and Zahra, 2007). Typically, firms which rely on exploitative capabilities 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. On the contrary, firms which rely on explorative dynamic capabilities 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 second-order capability (threshold or consolidation capability). As a consequence, firms may be faced with a lack of exploitative dynamic second-order capabilities. Consequently, if these firms will not be able to deploy third-order capabilities to change their pathway from exploration to exploitation, they are likely to fail because permanently exploring companies need some performance stability solely generated by exploitation (Rothaermel and Deeds, 2004). Thus, we suggest that:

Proposition 2: There is a positive relationship between exploitative dynamic capabilities and international survival, so that the more companies focus on exploitative dynamic capabilities, the higher is the international survival rate.

Moderating Effect of Organizational Age

Despite high attention attributed to the relationship between age and failure hazards, the way age might possibly affect organizational growth and decline has not been studied extensively (Carroll and Hannan, 2000). Internationalization requires firms to unlearn past routines and learn new ones (Barkema, Shenkar, Vermeulen, and Bell, 1997). At a younger age, routines are less established, so 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. It has consequently been argued that organizational inertia relates to firm age. 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). The liability of senescence of older firms indicates that there is an increasing mismatch between a firm's capabilities and the environment (Carroll and Hannan, 2000). Process theory explains that firms gradually invest resources that back up potential risks but do not incorporate the flexibility to explore new market opportunities (Anderson, 1993). Thus, the older the firms, the more difficult it will be to create new market space for further growth.

Internationalization requires a firm to exploit its competitive advantage, which has two characteristics: durability (Hymer, 1976) and profitable transferability between countries (Teece, 1980). But internationalization is not directly linked with performance. When a firm expands abroad, it faces liabilities of foreignness due to differences to its home country (Hymer, 1976). Zaheer (1995) showed that specific resources and more precisely, the administrative heritage are essential to overcome liabilities of foreignness. A young firm is likely to fail because of scarce initial resources (Freeman, Carroll and Hannan, 1983). In contrast, older firms benefit from higher positional advantage and legitimacy (Podolny, 1993), which give them a solid background in facing hazards rates. Thus, older firms with an initial resource base benefit from a large endowment to postpone the negative effects of age on survival while, at the same time, they suffer from limited international growth rates. Thus, we propose:

Proposition 1a: Organizational age negatively moderates the positive relationship between explorative dynamic capabilities and international growth. Thus, the higher the age, the lower is international growth.

Proposition 2a: Organizational age positively moderates the positive relationship between exploitative dynamic capabilities and international growth. Thus, the higher the age, the higher is international survival.

Moderating Effect of International Age

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 different 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 (Sapienza et al. 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). Typically, younger firms see foreign markets as less 'foreign' and embryonic routines reduce the time and costs of dynamic capability development (Autio et al., 2000). Therefore, we propose:

Proposition 1b: International age positively moderates the positive relationship between explorative dynamic capabilities and international growth. Thus, the lower international age, the higher is international growth.

Through internationalization a firm develops different capabilities for dealing with foreign environments (Barkema et al., 1997). Internationalization exposes the firm to new exogenous situations (cultural, economical, political, competitive conditions) and new endogenous constellations (reconfiguration of resource allocations). This seems to suggest that firms' ability to learn about a new host environment moderates the speed of internationalization (Oviatt and McDougall, 2005). Indeed, fast capability development can eventually lead to faster firm growth and improved profitability (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 to the external environment (Sapienza et al., 2006). This is in line with our previous description of disruption capabilities, which seem easier to develop, once the firm is young and adopts an experiential stance. However, in building these capabilities, firms might neglect building capabilities for positional advantage and social embeddedness, i.e. consolidation capabilities. Thus, survival might be at risk.

Proposition 2b: International age negatively moderates the positive relationship between explorative dynamic capabilities and international growth. Thus, the higher international age, the lower is international survival.

DISCUSSION, LIMITATIONS, AND IMPLICATIONS

While we suggest, that each set of dynamic internationalization capabilities provides a basis for performance improvements, many authors have argued that it is difficult to reconcile exploration and exploitation (e.g. Jansen, Van den Bosch and Volberda, 2005). However, more recent research has built on the original arguments by March (1991) that a firm needs to focus on both processes in order to succeed (Gupta, Smith and Shalley, 2006). Among other suggestions, it has been argued that firms temporally separate the two conflicting processes (Puranam, Singh and Zollo, 2006). While these strategies require the ability to fluidly change organizational attributes and managerial approaches to change, they prevent firms from turning inert. Cumulative capability development results in older firms being more static, exhibiting structural inertia (Hannan et al. 1998). This hampers a faster internationalization process, which requires risk-taking behaviour. Also, international new ventures do not face inertia which prevents mature companies from changing routines. International new ventures possess specific capabilities necessary to challenge path dependencies in the internationalization process. These capabilities enable the firm to overpass structural inertia. However, risk of failure by dissipating competitive advantage is still substantial (Oviatt and McDougall, 1994). As international new ventures do not rely on a set of deeply rooted capabilities, they lack consolidation capabilities. Building on these insights, we suggest that internationalization processes need to be equally balanced in the long run and that it is precisely the interplay between explorative internationalization and exploitative internationalization that strongly determines a firm's growth and survival in foreign market environments. The previous analysis of dynamic exploration and exploitation capabilities illustrates that they incur a trade-off between growth and survival. However, both types of capabilities, as well as both types of output variables are required in the long-run. Theory of strategic renewal recognizes that maintaining adaptiveness requires both exploiting existing competencies and exploring new ones (Levinthal and March, 1993). Strategic renewal overcomes the inertial forces embodied in an organization's established strategy. It is a process by which firms promote, accommodate and utilize new knowledge and innovative behaviour to change its core competencies and/or its product market domain (Floyd and Lane, 2000). This is precisely captured by the notion of third-order capabilities, which are needed to obtain a balance. While we are currently unaware of studies that have related third-order capabilities to internationalization processes, there is an associated discussion focused on organizational ambidexterity (O'Reilly and Tushman, 2007). Inherent is the idea, that firms separate seemingly conflicting activities by pursuing one at a time or conducting them in different structural units (Gupta et al, 2006). The international strategy literature proposes that differentiation may occur between headquarters and subsidiaries (Egelhoff 1991), or that global teams and centres of excellence (Ambos and Schlegelmilch 2005) may be used to focus on exploratory and exploitative activities. As successful internationalization processes rest on the deployment of differential capabilities, Lehrer and Asakawa (2002) argue, firms must choose between initial exploitative or explorative capability-building. And only if firms are able to shift between explorative and exploitative internationalization is it likely that they will grow and survive. We suggest an extended notion of ambidexterity to capture this point. By "international ambidexterity" we imply that companies achieve a temporary equilibrium state in striving for both growth and survival. Hence, it is important to balance the detrimental effects of a single-sided focus on exploitative or explorative internationalization capabilities and avoid potential lock-in situations a company is likely to fall into. The following Figure 2 illustrates the four types of exploratory and exploitative dynamic internationalization capabilities linked by international ambidexterity.

>> Insert Figure 2: Exploration, Exploitation, and Dynamic Capabilities <<

While we have assumed that these statements hold true for the majority of firms, we have not looked at industry effects. Indeed, controlling for industry effects has shown that international new ventures with high growth rates face the same survival odds as firms with sequential and slower international growth (Mudambi and Zahra, 2007). 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 exhibit advantages in terms of value adding and disruption capabilities, which enable higher growth and eventually higher survival rates. In less risky industries with well-known competitors, domestic firms with established legitimacy and positional advantages, experience leads to lower failures rates (Mudambi and Zahra, 2007). Consequently, there is a need to strengthen explorative capabilities, resulting in lower growth and higher survival rates. We conclude that a cross-industry perspective would be a promising point of departure for future studies. It is also worth considering the broader implications of this research for the field of international business. Our major theoretical contribution was to establish a linkage between previously isolated considerations of explorative and exploitative dynamic capabilities and output variables. The established typology of dynamic capabilities contributes to linking four different types of second-order capabilities to improve internationalization growth and survival. In order to make full use of this classification, empirical validation is required and it follows that some of the major limitations of this article are due to its conceptual nature.

Further, we have not identified the ideal point for switching between explorative and exploitative internationalization as well as a long-term balance over time. Also, a longitudinal analysis of dynamic internationalization capabilities holds some promise.

CONCLUSION

This paper has introduced a framework, which sought to combine internationalization processes with exploratory and exploitative capabilities. We suggested that it is most likely that alignment will occur on the basis of temporal separation (‘international ambidexterity’), finally leading to a balance of international growth and survival. Researchers have only recently recognized the limits of conventional internationalization theories and have started to build new and innovative grounds. We hope that this paper contributes to this agenda and concurrently invites for empirical studies on this important but yet under-researched subject.

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TABLES AND FIGURES

Figure 1: A Model of Dynamic Capabilities, Internationalization Growth, and Survival

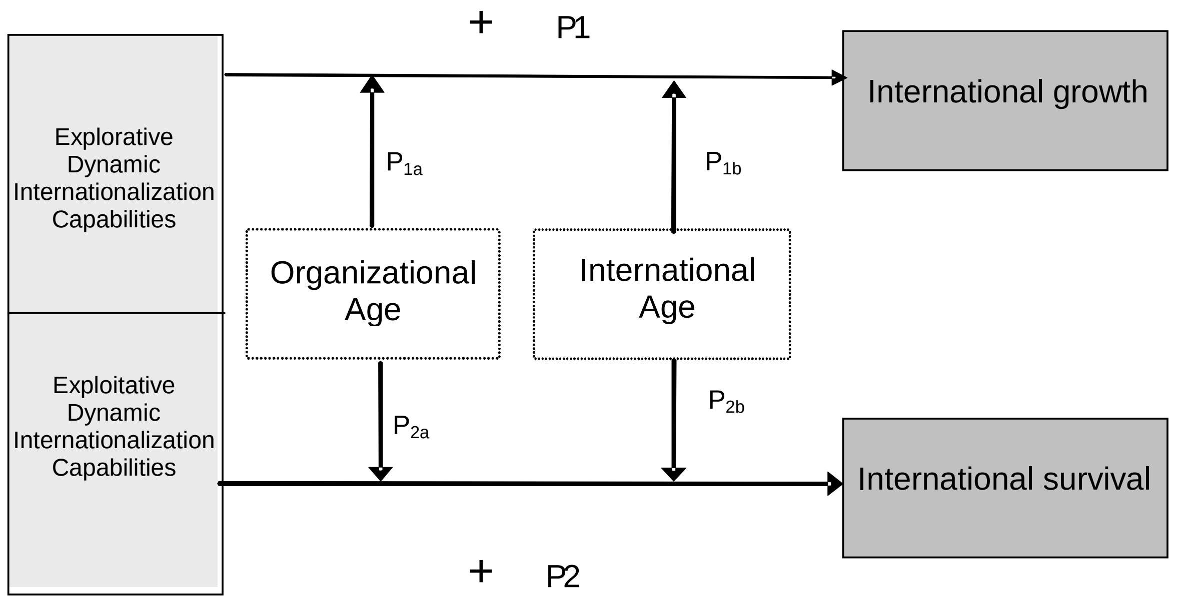

Figure 2: Exploration, Exploitation, and Dynamic Capabilities (adapted from Prange and Opgenhoff, 2007)