International Entrepreneurship: 
The Current Status of the Field and Future Research Agenda

Shaker A. Zahra
Department of Management
J. Mack Robinson College of Business Administration
Georgia State University
Atlanta, GA 30303
(404) 651-2894
szahra@gsu.edu

and

Gerard George
University of Wisconsin-Madison
Department of Management and Human Resources
Weinert Center for Entrepreneurship
School of Business
975 University Avenue
Madison, WI 53706-1323
Gegeorge@syr.edu

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International Entrepreneurship: The Current Status of the Field and Future Research Agenda

With the globalization of the world economy, interest in international entrepreneurship has increased rapidly over the past decade (Brush 1993, 1995; Hitt & Bartkus 1997; Hisrich, Honig-Haftel, McDougall & Oviatt 1995). One of the most important features of today's global economy is the growing role of young entrepreneurial new ventures (Almeida & Bloodgood 1996; Bell 1995; Clark & Mallory 1997; Fujita 1995; Haug, 1991). Through the 1990s, researchers' attention has centered on exploring the motivations for, the pattern of, and the pace of internationalization by new ventures (i.e., firms eight years or younger). Invoking multiple theoretical perspectives, some researchers suggest that new ventures frequently become active players in the global economy soon after the birth of these firms (e.g., Oviatt & McDougall 1999; Zahra, Matherne & Carleton 2000b). More recently, however, researchers have focused on examining the entrepreneurial activities of established companies (i.e., firms older than eight years), aiming to uncover the key patterns of innovative activities associated with successful internationalization (e.g., Zahra & Garvis 2000). By doing so, researchers have sought to explain how international entrepreneurship may lead to superior financial performance among established firms.

Recent attempts to develop a well-grounded framework to understand the nature and affect of international entrepreneurship have concentrated mainly on the application of various theoretical perspectives to explain this phenomenon by refuting the applicability of traditional frameworks (e.g., McDougall, Shane & Oviatt 1994; Oviatt & McDougall 1994). While insightful and informative, past research in this emerging area has followed different theoretical and methodological traditions, raising questions about its overall value added. This research has also lacked a unified framework that connects the antecedents, types, and outcomes of entrepreneurial activities pursued by new ventures and established companies (McDougall & Oviatt 2000; Oviatt & McDougall 1999). These shortcomings
suggest a need to pause and consider the current status and cumulative contributions of research into international entrepreneurship and to discuss ways to enhance future contributions.

In this chapter, we seek to achieve four objectives. First, we analyze the concept of international entrepreneurship and its theoretical domain. We believe that the ambiguity of the international entrepreneurship term has led to confusion in past research and caused researchers to overlook important issues. Our discussion distinguishes between international entrepreneurship activities of new ventures and established companies. Second, we review past empirical work on international entrepreneurship and analyze its theoretical foundations and then arrive at a synthesis of the key factors believed to influence international entrepreneurship. Third, we offer an integrative framework that connects the antecedents, types, and outcomes of international entrepreneurship. This framework recognizes the importance of contextual variables in determining the value some companies derive from pursuing international entrepreneurship. Finally, we outline ways to improve future international entrepreneurship scholarship, hoping to increase its rigor and impact while making it accessible and relevant to the managers of new ventures and well established companies.

Prior international entrepreneurship scholars have observed the close theoretical link between entrepreneurship and international business (IB) research (Hisrich, Oviatt & McDougall 1994; McDougall & Oviatt 2000). One of the most interesting revelations from reading published international entrepreneurship research is the extent to which scholars have made use of existing and emerging strategy theories and frameworks. In many ways, international entrepreneurship research has mirrored published strategy research, while also weaving together IB and entrepreneurship explanations of complex organizational phenomena. We believe this integration offers some important opportunities to develop more realistic and comprehensive frameworks of international entrepreneurship dimensions, antecedents and effects. Therefore, throughout this chapter we will highlight areas of convergence and
divergence among international entrepreneurship, entrepreneurship and strategy scholars. We also discuss ways where international entrepreneurship researchers can better employ strategy theories.

In the first section of this chapter, we present an overview of early research in international entrepreneurship, explain the growth of interest in this important phenomenon, and highlight key transition points in this research. We then review and critique studies that suggest that international entrepreneurship focuses on young firms. Attention will center on "born global" new ventures, recognizing the merits and shortcomings of this focus. Equally important, we also consider international entrepreneurship in established companies and explore the importance of studying these firms and the distinguishing characteristics of their international entrepreneurship. To move the field forward, we propose a comprehensive definition of international entrepreneurship and make some key distinctions between our definition and those definitions available in extant literature.

In the second section of the chapter, we analyze the contributions and cumulative value added of past international entrepreneurship research. We examine empirical and conceptual contributions, highlighting their theoretical foundations, data collection methods, and major findings. The discussion aims to distill what we know about international entrepreneurship and identify areas that need further research. We pay special attention to the challenges that researchers face in conducting research in international entrepreneurship of new ventures or established companies. Here, we categorize and then analyze the key findings of these studies into organizational, environmental, and strategic factors influencing international entrepreneurship. By doing so, we synthesize past research in a way that we hope will document and better model the relationships between international entrepreneurship and firm performance. The discussion also highlights several areas where strategy and entrepreneurship researchers converge and diverge.

In the third section of this chapter, we present a framework that connects its antecedents, types, and outcomes. Antecedents encompass the firm (e.g., top management team characteristics and firm
resources). Types of international entrepreneurship activities refer to the extent, speed, and scope of a firm's international operations. International entrepreneurship outcomes include financial and non-financial (e.g., learning) gains that new ventures and established companies seek from internationalization (Barkema & Vermeulen 1998). Factors that might affect the payoff from international entrepreneurship (e.g., strategic and environmental factors) are also considered. The proposed model makes use of theories from IB (Dunning 1988; Craig & Douglas 1996; Hymer 1976), global strategy (Hitt, Hoskisson & Ireland 1994; Hitt et al. 1995, 1997), strategic management (Grant 1991, 1996, 1998) and entrepreneurship (Katz & Gartner 1988; Kirzner 1973). This model highlights the necessity of integrating these views as we seek to better understand the nature and implications of international entrepreneurship.

In the concluding section of this chapter, we discuss ways to improve future international entrepreneurship research by enhancing both its rigor and contribution. The discussion covers theory building and empirical issues, highlighting the potential gains scholars can make by capitalizing on innovative methods applied in the strategic management and IB disciplines. We also identify some emerging issues that deserve greater attention in future international entrepreneurship research.

**Definition and Domain of International Entrepreneurship**

Recently, researchers have drawn on IB and entrepreneurship theories to define and study international entrepreneurship. Originating in the entrepreneurship literature, a stream of research suggests that some new ventures are ‘born global’ and therefore differ significantly from businesses that become international in scope over time as they accumulate resources or competencies to go global (Oviatt & McDougall 1994, 1999). Researchers, however, have noted that this phenomenon is not new and has existed in other countries, such as Sweden and Switzerland, and is a function of their resources and the size of their home markets (e.g., Bloodgood, Sapienza & Almeida 1996). Indeed, the IB literature provides multiple established theories that explain global expansion through market entry and the creation
of new or joint ventures in other countries. Examples are the life cycle (Vernon 1979) and internationalization (Johanson & Vahlne 1977) theories. Though some argue that these theories are not applicable due to the unique context of ‘born global’ organizations (Oviatt & McDougall 1994; McDougall, Shane & Oviatt 1994), such conclusions appear to overlook venturing by established firms. Therefore, we believe the larger research issue concerns the incongruence in the definition and scope of international entrepreneurship. This section of the chapter, therefore, defines the concept and domain of international entrepreneurship.

To date, the bulk of international entrepreneurship research has focused on studying the internationalization of new ventures. These past efforts have been limited in their scope, concentrating on international new ventures as an independent entrepreneurial act by an individual. This limited focus has several drawbacks. This focus ignores the fact that entrepreneurial activities are an ongoing process that unfolds over time. These activities reflect the creativity of various members of a new venture’s top management team. Members of these teams usually draw upon their innate abilities, skills and talents as well their experience. Another limitation of prior research is precluding the notion of corporate entrepreneurship or venturing by established firms, especially in international markets. Companies of different age and size often engage in entrepreneurial activities as they venture into international markets (Zahra & Garvis 2000) and these firms should be included in the study of international entrepreneurship.

Similarly, the study of entrepreneurship in multinational firms has received considerable attention in recent IB research (e.g., Bartlett & Ghoshal 2000; Birkinshaw 1997) and, therefore could provide additional insights into the domain, antecedents and consequences of international entrepreneurship (Barnevik 1991; Zahra & Garvis 2000).

Table 1 presents an overview of the evolution of research into international entrepreneurship. As Table 1 shows, the first known reference dates back to Morrow’s (1988) discussions of the age of the international entrepreneur. Morrow suggested that advances in technology, coupled with increased
cultural awareness, has made once-remote markets accessible to companies, whether new ventures or established companies. McDougall's (1989) study of new ventures' international sales was one of the first empirical efforts in this emerging area. This study has provided rich insights into differences between these firms and those ventures that did not go international.

In the early 1990s, McDougall and Oviatt (and their students) developed a series of case studies that clearly showed that some young ventures have gone international early in their life cycles. These case analyses clarified some of the approaches new ventures have followed in going international. Oviatt and McDougall (1994) followed this effort with an influential paper that defined international entrepreneurship, following the study of 'born global' new ventures. This definition was narrower in scope than those offered in the literature. Zahra (1993), for example, suggested that the study of international entrepreneurship should encompass both new firms and established companies. A report by an entrepreneurship panel (Giamartino, McDougall & Bird 1993) called for a broader definition of international entrepreneurship. Zahra and Schulte (1994) also observed a need to go beyond the 'born international' criterion highlighted in the early work of McDougall and Oviatt.

Wright and Ricks (1994) noted the growing importance of international entrepreneurship as an emerging research issue in IB. These authors also suggested that international entrepreneurship is a firm-level activity that crosses national borders and focuses on the relationship between businesses and the international environments in which they operate. This definition helped to shift attention away from using the age of the firm or timing of internationalization as the sole criterion to define international entrepreneurship. This definition also included young new ventures and established companies as being worthy of study. Wright and Ricks' definition, moreover, highlighted the context in which entrepreneurial activities occur, within new ventures or established corporations. This important insight further helped to
set the stage for connecting the antecedents, types and outcomes of international entrepreneurship. A firm's business environment plays an important role in spurring certain types of entrepreneurial activities (Zahra 1991, 1993) and determining the payoff from these activities (Zahra & Covin 1995). Finally, an advantage of the Wright and Ricks' (1994) definition was the inclusion of comparative analyses of entrepreneurial activities within the domain of international entrepreneurship. There is much to be gained from conducting comparative analyses of international entrepreneurship in new ventures and established companies (McDougall & Oviatt 2000; Wright & Ricks 1994; Zahra & Schulte 1994). These analyses can improve our understanding of the role of national cultures, national institutional environments, and centers (clusters) of innovations in promoting and shaping international entrepreneurship activities. These analyses can also improve theory development efforts by highlighting the role of contextual variables on relationships of interest.

Recently, Oviatt and McDougall (1999) offered a more inclusive list of topics that fall under the umbrella of international entrepreneurship. These topics included, among others, corporate entrepreneurship research. This research agenda reflected an important change in Oviatt and McDougall's view of international entrepreneurship; it recognized the importance of international entrepreneurship in established firms. McDougall and Oviatt (2000), moreover, suggested a broader definition of the entrepreneurship phenomenon; the study of established companies, and the recognition of comparative (cross-national) analysis. As Table 1 indicates, McDougall and Oviatt's recent definition appears to accept Miller's (1983) definition of entrepreneurship as an organizational level phenomenon that focuses on innovation, risk taking and proactiveness. This definition has been widely used in the literature (Zahra, Jennings & Kuratko 1999). This focus links international entrepreneurship research to other research already underway in the field of entrepreneurship. It also makes it easier to follow what firms actually do, rather than attempting to decipher the intent of the individual entrepreneurs.
The inclusion of established companies also corrects an oversight in the entrepreneurship field; namely, the presumption that well-established companies are not innovative and refuse to take risks. Many highly regarded well-established companies work hard to foster innovation, support venturing and encourage risk taking. To ignore these firms automatically precludes an important and vital part of the US and other economies. International entrepreneurship researchers, therefore, have several important opportunities as they study established companies. We outline some of these opportunities later in the chapter.

Despite the progress made towards defining international entrepreneurship, we remain concerned that the domain of this phenomenon remains vague. Lists that attempt to canvass and define the topics covered within international entrepreneurship also remain broad, raising questions about the unique research questions international entrepreneurship scholars should examine. For example, McDougall and Oviatt (2000) list the following topics as belonging within the domain of international entrepreneurship: cooperative alliances, corporate entrepreneurship, economic development activities, entrepreneur characteristics and motivations, exporting and other market entry modes, new ventures and IPOs, transitioning economies, and venture financing. While we applaud the desire to be inclusive, many of these issues have been the focus of considerable research by entrepreneurship, IB and strategy scholars. This suggests the question: What makes international entrepreneurship a distinct area of scholarly inquiry?

We believe what makes international entrepreneurship a unique and, indeed, worthwhile topic of research is the interplay between entrepreneurship and internationalization processes. Specifically, the innovativeness and risk taking that firms undertake as they expand (or contract) their international operations is what makes international entrepreneurship an interesting research area. Those insights and acts that bring new perspectives and strategies on how, what, when and why to internationalize a business activity give meaning to the international entrepreneurship phenomenon. For instance, an e-
commerce venture that goes international instantly at birth is an interesting organizational form that deserves examination. This can be studied using the theoretical lens from organizational theory, sociology, strategy, entrepreneurship, or IB. The innovativeness by which the firm identifies a market opportunity, defines (configures) its value chain, selects areas to be internationalized, and identifies unique ways to reach potential customers in cyberspace is what makes this an international entrepreneurship-type study. Similarly, we can find examples of established firms that are innovative, make proactive choices, and take risks to enter international markets (Zahra & Garvis 2000).

Focusing on the innovativeness and entrepreneurial nature of a firm’s internationalization has several advantages. It compels us to think about the processes by which entrepreneurial firms and their managers go about justifying their existence. These firms exist for many reasons, one of which is to offer a new way of doing things. As readily acknowledged in the strategy literature, this new way can create value through efficiency, speed, uniqueness and/or customization. New ventures continue to exist due to the inability of other firms to copy or undo the advantages of these firms. Entrepreneurial firms know that their advantages lie in continuous innovation. The ability to sustain this entrepreneurial spirit is what makes these organizations viable. Rivals, large or small, do not easily duplicate this entrepreneurial capability. Thus, it makes sense to focus on this entrepreneurial capacity as the theoretical engine in studying international entrepreneurship. New ventures that reach the global market quickly after their birth might be driven by a set of internal and external forces to do so. What matters is how these firms succeed in the global market, a variable that requires innovativeness, risk taking and entrepreneurship. As the global strategy literature suggests, some of these arguments apply equally well to established companies (Bartlett & Ghoshal 2000). This focus is consistent also with the strategy literature, where companies that excel in their industries are believed to exhibit a great deal of creativity and innovativeness in leveraging their core competencies. These companies stretch and leverage their
capabilities to achieve superior value creation for their customers and other stakeholders (Hamel & Prahalad 1994).

Focusing on innovativeness as a characteristic of international entrepreneurship has additional advantages. Innovativeness connects the concept of international entrepreneurship to ongoing research in the broader field of entrepreneurship such as corporate entrepreneurship (Burgelman & Sayles 1986; Zahra et al. 1999); research into entrepreneurial orientation (Lumpkin & Dess 1996); and comparative literature that suggests certain cultures are being more innovative or entrepreneurial (Mitchell et al. 2000; Shane 1993; Steensma et al. 2000).

The above discussion leads us to define international entrepreneurship as "the process of creatively discovering and exploiting opportunities that lie outside a firm's domestic markets in the pursuit of competitive advantage". This definition builds on recent writings in the field of entrepreneurship that highlight the importance of opportunity recognition, discovery and exploitation as a distinguishing characteristic of entrepreneurship (Shane & Venkataraman 2000; Zahra & Dess 2001). Further, the term "creatively," included in our definition, reinforces the need for innovativeness in the way a firm discovers and/or exploits opportunities, as discussed above. The definition also recognizes the fact that opportunities are sometimes discovered by some firms but are exploited by others. This is why we borrow the term competitive advantage from the strategic management literature (Barney 1991; Collis 1995). Having a competitive advantage can enable new ventures to create wealth to their owners by expanding internationally. Firms that internationalize their operations in innovative and creative ways stand to achieve significant gains that go beyond superior financial performance. Also, this definition is more inclusive than other definitions because it does not center on the size or age of the firm that pursues internationalization, consistent with McDougall and Oviatt (2000). Next, we review past research on international entrepreneurship literature.
Conceptual and Empirical Treatment of International Entrepreneurship: A Review

In this section, we review the conceptual and empirical studies with international entrepreneurship as their central premise of investigation. Several observations emerge from reviewing the international entrepreneurship research. First, past research has substantially benefited from the application of multiple theoretical foci. These theoretical perspectives include: the resource-based view (Autio et al. 1997; Bloodgood et al. 1996); transaction cost theory (Steenstra et al. 2000; Zacharakis 1997); organizational learning (Autio et al. 2000; Zahra, Ireland & Hitt 2000a); and product life cycle theory (Roberts & Senturia 1996). However, McDougall et al. (1994) suggest that traditional IB theories may not be applicable to 'born global' ventures. According to these authors, each of the traditional theories has several assumptions about the nature of the market or the sources of competitive advantages to be derived within certain market structures. McDougall et al. contend that many of these assumptions are not relevant in today's global markets or do not match the characteristics of 'born international' new ventures. Similarly, we believe that the acceptance of a narrow definition of the international entrepreneurship domain is likely to have restricted the use of certain theoretical frameworks. Conversely, the expanded definition we have just offered above provides a broader range of issues where theoretical foci can be applied to future studies of international entrepreneurship.

Second, the development of international entrepreneurship has relied to a large extent on samples based in the US (Bloodgood et al. 1996; McDougall 1989; McDougall & Oviatt 1996; Zahra et al. 2000a,b; Zahra & Garvis 2000). However, there are some studies that draw on non-US firms. For example, Autio and associates (2000, 1997) and Holmlund and Kock (1998) analyzed ventures in Finland, Coviello and Munro (1995) studied firms from New Zealand, and Fontes and Coombs (1997) studied Portuguese firms. Unfortunately, these studies and those that use US data have tended to evolve independent of each other. Therefore, there is little congruence and overlap in theory building that would account for the potential differences in international entrepreneurship across countries. A promising
development is recent work using multi-country data to compare cross-cultural effects on venture creation and alliance formation (Mitchell et al. 2000; Steensma et al. 2000).

Third, past studies appear to draw thematic conclusions based on case studies or small samples. For example, Autio and colleagues (2000) suggest learning advantages of newness using a sample of 57 privately held Finnish firms. Bloodgood and colleagues (1996) examined the antecedents and outcomes of the internationalization of 61 ventures. Similarly, McDougall and Oviatt (1996) draw conclusions on performance implications of internationalization using a sample of 62 firms. Other articles rely on case studies (e.g., Tiessen & Merrilees 1999). Also, most studies concentrated on high technology samples, thereby limiting the ability to generalize to samples of low technology or traditional industries (Burgel & Murray 1998; Fontes & Coombs 1997; Karagozoglu & Lindell 1997; Reuber & Fischer 1997; Zahra et al. 2000a, b). Only a few studies have examined service industries (e.g., Mößlang 1995). To summarize, while we commend prior authors for developing and establishing the domain of a new area of scholarly inquiry, there is a need to develop a stronger theoretical rationale and empirical testing with larger and more representative samples.

Fourth, the lack of longitudinal design is a major weakness of prior international entrepreneurship research. The dominance of cross-sectional research designs in past research has resulted in non-cumulative and inconsistent findings. Even though conducting longitudinal research is a time consuming and challenging process (Davidsson & Wiklund 2000), it can improve our understanding of the relationships examined in international entrepreneurship research (Sexton, Pricer & Nenide 2000). Such research designs can be especially helpful in identifying the potential causal links among variables of interest.

Limitations aside, the studies just reviewed have helped expand the domain of international entrepreneurship. These studies have tested international entrepreneurship as a multidimensional construct. These dimensions are further explored below. Also, several key relationships such as the
factors that determine internationalization or its outcomes have been addressed. We categorize these key issues as organizational factors, environmental factors, and strategic factors. To set the stage for the discussion, the next section of this chapter analyzes the various dimensions of international entrepreneurship explored in prior research.

**Dimensions of International Entrepreneurship**

Prior researchers focused on three key dimensions of international entrepreneurship. In Table 2, we present these dimensions and identify the studies that examined them. As Table 2 shows, the majority of prior studies examined the extent (or degree) of a new venture’s sales internationalization. Typically, the extent of internationalization was measured by the percent of a firm's sales generated from foreign markets. Some studies also examined the speed by which a new venture internationalized their operations. In these studies, speed was defined as the length of time that elapsed between the year the venture was created and the year of its first foreign sales. Table 2 also shows that some studies examined the scope of new venture's sales internationalization, measured by the number of countries (other country of origin) in which the new venture generated sales. Finally, two studies investigated the regional scope of a new venture's sales internationalization.

![Insert Table 2 about here](image)

One of the most striking features of past international entrepreneurship research is the fact that it has focused almost exclusively on indicators of internationalization of the firm's operations, both in scope (e.g., regions) and scale (i.e., level of sales derived from international operations). A glaring deficiency in past research is ignoring the internationalization of a firm's value chain or inputs into the production process. As acknowledged by strategy (Porter 1986) and global strategy (Bartlett & Ghoshal 2000) researchers, these variables can significantly influence the nature and magnitude of a firm's competitive advantage. International entrepreneurship researchers have also overlooked one of the key areas that
Organizational Factors Influencing International Entrepreneurship

One area that has received some attention in prior studies is the effect of firm related variables on international entrepreneurship. Researchers examined three sets of variables: top management team (TMT) characteristics, firm resources, and firm-specific variables. These variables have been widely discussed in strategy and entrepreneurship research. Table 3a summarizes the key findings from prior research on the effect of the top management team and resources on international entrepreneurship. Table 3b presents the results for the effect of firm variables on international entrepreneurship.

Strategy researchers have long maintained that the characteristics of the firm's top management team can spell the difference between its success and failure. These characteristics significantly affect firms' strategic choices (Finkelstein & Hambrick 1996), such as internationalization (Carpenter & Frederickson, 2001; Calof & Beamish, 1994). In Table 3a, we note the importance of TMT characteristics such as foreign work experience, foreign education, background, and vision as they relate to internationalization. Exposure to international markets or market practices significantly influences the firm's drive to internationalize. These findings are corroborated through case analyses (Oviatt & McDougall 1995; McDougall et al. 1996) and empirical studies (Bloodgood et al. 1996; Burgel & Murray 1998). This is important because senior managers' international experience is positively related to some indicators of firm performance (Carpenter, Sanders & Gregersen, 2001; Daily, Certo & Dalton, 2000).

Strategy researchers have invoked the resource-based theory as a key basis for explaining the various strategic choices companies make (Barney 1994). Our review also highlights the importance of firm resources as a factor influencing international entrepreneurship (Table 3a). Particular attention has
been given to how the firm's unique assets such as product innovativeness (Burgel & Murray 1998) influence the internationalization process (Zahra et al. 2000a). Also, intangible assets such as reputation and networks can significantly influence the speed and degree of internationalization (Zahra et al. 2000b). The proposition that unique organizational assets and knowledge bases can influence international entrepreneurship is also supported by case analyses (Oviatt & McDougall 1995). In turn, international expansion enhances the firm's learning and gives it access to new knowledge bases, as found in the study by Zahra et al. (2000a).

Researchers have also examined the effect of several organizational factors on a firm's international entrepreneurship. Specifically, researchers have examined the effects of age and size, speculating that experience and resources (firm size as proxy) intensify international entrepreneurship. As Table 3b shows, research findings did not support theoretical explanations. A similar conclusion emerged from prior studies on the effect of location, which was believed to give companies unique knowledge and resources that can intensify internationalization. Here too, empirical findings did not support theoretical explanations.

As Table 3b indicates, researchers have also examined venture origin, defined as whether the firm was established by a corporation or an independent entrepreneur. For example, Zahra et al. (2000b) found that ventures created by established firms were less likely to internationalize their sales. A corporate venture status was not significantly associated with the degree or speed of sales internationalization. Future international entrepreneurship researchers are likely to gain a great deal of insight from examining the effect of intangible assets and resources typically associated with venture origin on different dimensions of internationalization. Some strategy research has already uncovered significant differences between independent and corporate ventures in their resource bases (Shrader & Simon 1997) and competitive strategies, especially with respect to technological choices (Zahra 1996). Whether or not these differences manifest themselves in the extent or speed of new ventures'
internationalization remains unknown. Also, it is not clear if there are differences among independently owned (private) firms vs. publicly-owned and managed companies in internationalization or the gains achieved from this important but complex activity.

**Growth Orientation.** Managers’ motivation to achieve growth can influence a firm’s international entrepreneurship activities. One study that tested this proposition found that firms that had a high growth orientation were likely to internationalize their operations (Autio et al. 1997). This finding highlighted the importance of managerial attitudes in shaping the strategic direction of their enterprises (Finkelstein & Hambrick 1996), especially in terms of global expansion. However, the dearth of empirical studies that document the types of attitudes that are conducive to globalization and the direction of the relationship between these attitudes and success in international expansion remains a gap in this emerging research stream.

**Environmental Scanning.** Information about the industry and/or potential foreign markets can spur international entrepreneurship. Evidence indicates that the exposure and ability to gather information from foreign markets is positively associated with internationalization (Autio et al. 1997; Karagozoglu & Lindell 1997). These findings are consistent with strategic management research that highlights the importance of environmental analysis for the effective selection of the strategies companies pursue (Hambrick 1981; Miles & Snow 1978). Still, much can be gained from conducting more analyses that examine the various systems and processes by which companies gather information about opportunities in their international markets and how they interpret this information as they craft the strategies they pursue.

**Financial strength.** Table 3b suggests that some researchers have begun to examine the effect of a firm’s financial status on its internationalization. This research is guided by a belief that successful past organizational performance creates the slack resources needed to support international expansion. Two aspects of a new venture’s financial status were considered in prior studies: past ROE and debt
leverage. Zahra et al. (2000b) concluded that past ROE was not significantly associated with the status of internationalization (internationalized vs. not). Past ROE was positively but marginally associated with the speed and degree of sales internationalization. In terms of financial leverage, Bloodgood et al. (1996) reported a non-significant association with the degree of internationalization, raising a question about the potential contribution of past performance to new ventures’ internationalization. Perhaps, the results are unique to the samples examined to date. Alternatively, financial performance may not play a key role in explaining the internationalization of new ventures’ sales. That is, regardless of their financial position, some new ventures expand internationally to achieve a variety of strategic goals. Given that only a few studies have been conducted on this issue to date, however, it would be premature to drop indicators of past financial performance from future studies of international entrepreneurship.

In summary, consistent with long established tradition in the strategic management field, past empirical research has attempted to gauge the influence of several organizational variables on international entrepreneurship. Some key organizational variables are TMT characteristics, firm resources, and firm-level variables such as size, age, location, origin, growth orientation, environmental scanning, and financial strength. However, as the list of variables examined would suggest, a coherent theoretical framework that explains the potential influence of these variables on internationalization is lacking Table 3b also shows that many of these studies do not provide statistically significant support for these relationships. It is possible that external environmental factors play a more significant role in international entrepreneurship and may serve to lessen the effects of organizational factors on international entrepreneurship. Therefore, we now examine research that links a firm’s external environment to its international entrepreneurial activities.

Influence of the External Environment on International Entrepreneurship

Strategic management and entrepreneurship researchers have long acknowledged the importance of the external environment on a firm’s various strategic choices (Boyd, Dess & Rasheed
1993; Zahra & Bogner 2000). Consequently, researchers have explored the effect of a firm's external environment on different aspects of international entrepreneurship. Past empirical studies that have investigated these issues appear in Table 4. These results suggest that new ventures that internationalize their operations early in their life cycles compete in industries that are perceived as being different in their attributes from those where new ventures do not internationalize as quickly or as broadly. Table 4 also shows that the characteristics of a new venture's major industry may determine the gains to be made from internationalization (Roberts & Senturia 1996; Zahra, Neubaum & Huse 1996). That is, the characteristics of the industry may significantly moderate the relationship between international entrepreneurship and the financial gains from these activities, as found by Zahra and Garvis (2000).

Insert Table 4 about here

One has to be cautious in interpreting prior results on the effect of the environment on international entrepreneurship and a firm's future gains from international entrepreneurship. Only a limited number of studies have explored this issue to date, as it becomes evident from reviewing Table 4. Prior studies have also focused primarily on high technology industries, probably because these industries have experienced the highest rates of growth in the formation of new ventures. Low technology, both in manufacturing and service industries, have not received as much interest in international entrepreneurship research, raising the possibility that past findings do not generalize equally well to all economic sectors.

Researchers have also failed to examine the specific attributes of the environment on international entrepreneurship variables. This is evident in those studies that collected data from single industries in an effort to control for industry variability. This measurement strategy overlooks the possibility that managers within the same industry may view their environments quite differently, which would lead to significant differences in international entrepreneurship. The same variables may also have
different implications for internationalization and the gains to be achieved from this strategy at different points in time in the life of a given industry. Also, different segments of the same industry may also experience significant forces of competition, leading to significant differences in international entrepreneurship patterns and outcomes. Finally, researchers have been inconsistent in measuring industry attributes (whether objective or perceived), making it difficult to compare findings across studies and discern clear patterns in prior results. Other researchers have expressed a similar concern about strategic management research (Boyd et al. 1993) and suggested controlling for industry variables (Dess, Ireland & Hitt 1990). We believe that international entrepreneurship researchers would benefit significantly from using these recommendations in designing future empirical studies.

The above observations urge greater caution in interpreting prior research results on the relationships between the characteristics of a firm's business environment and international entrepreneurship. These studies also call attention to the need for greater and better theoretically grounded research. One issue that has escaped attention to date is the configuration of international entrepreneurship activities across business environments. Past researchers have examined individual international entrepreneurship dimensions while ignoring the overall configurations of these activities and their implications for a company's performance. Past research ignores the possibility that the payoff from international entrepreneurship might be determined by the tradeoffs or synergies that might exist among these activities.

**Influence of Strategic Factors on International Entrepreneurship**

International entrepreneurship researchers have also examined the effect of a company's competitive strategies on international entrepreneurship. Therefore, in Table 5, we summarize the key strategy variables used in prior research and their influence on a firm's international entrepreneurship. Table 5 suggests that these variables cover generic strategies, functional strategies, and entry strategy. Below we discuss each of these variables in turn.
Generic Strategies. Researchers propose that a firm’s competitive strategy can spur its international entrepreneurship. Consequently, prior studies have attempted to relate low cost strategy and differentiation strategy to internationalization. Past studies found that unique products and product differentiation were positively related to internationalization (Bloodgood et al. 1996; Fontes & Coombs 1997), thereby highlighting the importance of intangible factors in explaining international entrepreneurship. These findings are consistent with the resource-based theory of the firm, indicating that unique resources can intensify and expedite a firm’s international expansion. Also, Autio and colleagues (1997) emphasized the importance of R&D spending and international collaborative relationships, which were conducive to internationalization. Zahra et al. (2000b) noted that such relationships could give new ventures the knowledge and resources that can expedite international expansion.

Functional Strategies. Researchers also emphasized production, distribution, and marketing functions and their relationships with international entrepreneurship. Roberts and Senturia (1996) underscored the importance of product attributes such as uniqueness and customization, while Holmlund and Kock (1996) highlighted the importance of production competence for international entrepreneurship. However, McDougall (1989) and Bloodgood and colleagues (1996) found that international new ventures de-emphasize a distribution and marketing strategy.

Entry Strategy. International new ventures have also been profiled for their entry strategy. McDougall (1989) found that international new ventures have emphasized a large-scale entry strategy significantly more than small ventures. Fontes and Coombs (1997) related the composition of their clientele with internationalization in a niche market. Also, Beamish (1999) theorized that different types of
alliances are appropriate mode of entry choices for international entrepreneurship. Still, more empirical work is needed in this area, especially with regard to entrepreneurial firms.

To date, only a handful of studies have connected competitive strategy variables to international entrepreneurship. The selection of the variables, however, does not appear to follow established theories, even though comprehensive reviews of these theories are easily accessible (Carroll 1997; Teece et al. 1997; Williamson 1999). Most prior studies have not linked entry strategies to non-financial gains to be achieved through internationalization such as knowledge and learning. The paucity of prior empirical studies and lack of theoretical grounding also suggests a need to further explore these relationships within an integrated and coherent framework. We broadly categorized past studies into generic, functional and entry strategies. Clearly, opportunities for future scholarly inquiry abound.

**Towards an Integrated Model of International Entrepreneurship**

In this section, we propose a model of international entrepreneurship that is consistent with our previously stated definition and review of the literature. As already noted, past research shows a need to develop an integrative framework that can serve as a foundation for future theory building and testing of international entrepreneurship. Figure 1 presents a proposed integrative framework.

The model includes three sets of factors that we believe to influence international entrepreneurship. It indicates that organizational factors significantly influence a firm’s drive to internationalize and therefore are modeled as antecedents of international entrepreneurship, which supports the research summarized in Tables 3a and 3b. These organizational factors include the TMT, firm resources, and firm-related variables (such as age, size, financial strength, location, and origin). Given the formative stage of this stream of research, our list of organizational variables is meant to be representative rather than exhaustive. As research on international entrepreneurship grows, scholars are
likely to identify additional organizational variables that significantly determine a firm’s drive to internationalize.

Consistent with previous work, Figure 1 suggests that international entrepreneurship is multidimensional. Figure 1 highlights three dimensions of international entrepreneurship: extent, speed, and scope (Table 2). These three dimensions reveal different facets of international entrepreneurship. Extent would imply the dependence of the firm on international revenues or the number of new markets that a firm has entered. Speed signifies the rate at which the firm enters new markets. Scope could be geographic scope wherein we can possibly consider the economic regions as the unit of analysis or product scope, where we consider the breadth of the product mix that has been effectively internationalized. These dimensions are by no means exhaustive but they provide an adequate launching point for future work.

Next, we list strategic and environmental factors as potential moderators of the relationship between organizational factors and international entrepreneurship dimensions. The strategy literature suggests that a firm’s general and task environments significantly influence the motivation or the rate of internationalization (Hitt, Hoskisson & Kim 1997). Within the strategic set, we include two variables that were not present in our synthesis of past research. First, we believe that firm competencies are likely to be moderators. Firms that have particular competencies, say in production, can effectively or quickly transfer such capabilities to international markets. These companies, therefore, stand to achieve greater gains from their international expansion. Next, we use the term ‘differentials’ or ‘proximity’ to suggest the amount of difference between the home market and emerging opportunities. These differentials could be, for example, in market practices. For example, distribution systems differ greatly between countries and therefore influence certain dimensions of international entrepreneurship. Other differentials could be in national culture, customer profiles and habits among others. The other variables including generic,
functional and entry strategies listed as potential moderators have been discussed in the review section (Table 5).

Though one could argue that environmental factors and strategic factors overlap, we make the distinction in the interest of parsimony and clarity. Environmental factors included in the proposed model are competitive forces (number of competitors, bargaining power, etc.), growth opportunities (rate of market growth, countries with open markets, etc.), regulatory environment, industry profitability, institutional environment, and economies of scale (Table 4). These factors will act as moderators and determine the strength of the relationship between organizational variables and international entrepreneurship dimensions discussed above. Organizational variables (e.g. senior management's international experience) might affect international entrepreneurship quite differently in different levels of environmental uncertainty (Carpenter & Frederickson, 2001). Research from strategic management highlights the contingent nature of these relationships (Finkelstein & Hambrick, 1996). In particular, the strategic choice approach suggests that certain organizational characteristics may promote (or inhibit) international entrepreneurship activities in different business environments. Thus, a moderating relationship is appropriate when considering the effects of strategic and environmental factors on international entrepreneurship.

Finally, we suggest a set of outcomes from international entrepreneurship. These include outcomes such as financial and non-financial performance indicators. Past empirical research in international entrepreneurship has provided inconclusive results regarding the link between international entrepreneurship and performance. For example, Bloodgood et al. (1996) found a positive and marginally significant relationship between international entrepreneurship and firm income. Whereas Zahra and Garvis (2000) found no relationship between international entrepreneurship and return on assets, McDougall and Oviatt (1996) reported a non-significant relationship. Consequently, future studies would benefit by relating international entrepreneurship to multiple indicators of a company's financial
performance. Moreover, few past studies have related international entrepreneurship to non-financial performance. Oviatt and McDougall (1995) connected international entrepreneurship to market share, while Zahra et al. (2000a) related international entrepreneurship to technological learning and acquisition of new knowledge. The importance of non-financial outcomes of international entrepreneurship suggests a need to apply multiple measures to further improve future research in this area.

**Future Research in International Entrepreneurship**

Our review and analysis suggest that there are tremendous opportunities for research in international entrepreneurship. More recent work in this area has helped provide visibility and underscore the importance of this emerging research stream. Our definition, however, expands the domain of international entrepreneurship to include both new and corporate ventures. By doing so, we hope to expand the boundaries of and domain of the international entrepreneurship phenomenon, providing greater opportunities for discovery and integration. Also, we hope international entrepreneurship scholars draw from the entrepreneurship, strategic management, and IB literatures thereby enhancing the theoretical rigor and significance of their research. In this section, we outline three areas that may position international entrepreneurship as a prominent and productive research stream: the international entrepreneurship process, the context of international entrepreneurship, and post-internationalization agenda. Below we discuss these issues in turn.

**The International Entrepreneurship Process**

The fundamental questions in this area are "how, why, and when do entrepreneurial firms discover and exploit opportunities outside their home country?" These questions raise several interesting secondary research issues. The first issue includes those factors that may influence the firm's desire to search for opportunities beyond its domestic market. Some of these factors have been introduced in our proposed model (Figure 1). These factors may include TMT characteristics such as ability, exposure, and composition among others. Managers' creativity and insights may also contribute to this process. Also,
factors such as unused or slack firm resources that could be more effectively utilized in alternate market environments. Similarly, financial strength allows the firm the requisite latitude to take calculated risks to expand its market opportunities.

A second research issue involves the characteristics of internationalized firms. We illustrate with the issue of firm size and age. Though past research predominantly considers age as a significant factor in internationalization, it does not necessarily illustrate how age matters in the international entrepreneurship process. To remedy this situation, we suggest going beyond the use of age and size as control variables to address more creative research issues. These issues may include conducting research that determines if small new ventures adopt different strategies than larger corporate ventures. If so, the next step would be to uncover the reasons behind these differences, using traditional theoretical frameworks such as transaction cost economics or resource-based view, to suggest the constraints, benefits, and different configurations adopted by these ventures in the international entrepreneurship process.

Researchers studying new ventures should also recognize that major changes occur in firms' resource and skill base even during the early years of their life cycles. As aptly illustrated by Bantel (1998), for example, start-up and adolescent new ventures might adopt different strategies. Presently, it is not clear if and how these differences extend to international entrepreneurship. Future researchers, therefore, would benefit from taking these key organizational transitions as they examine new ventures' international entrepreneurship activities.

A third future research issue centers on the dimensions of international entrepreneurship. We suggest a need to examine the three dimensions of international entrepreneurship: extent, speed, and scope. Though few studies have sought to link firm characteristics to international entrepreneurship dimensions, considerably more work is required in this area. Future research may attempt to better understand the theoretical underpinning of differential relationships between top management, resources,
and firm characteristics and international entrepreneurship dimensions. For example, researchers could examine firm-level conditions under which international entrepreneurship is speedier or more geographically dispersed using, say, resource dependence or product life cycle arguments. Future empirical studies along these lines would greatly enhance our understanding of international entrepreneurship processes.

We have proposed a definition of international entrepreneurship as a process of creatively identifying and exploiting opportunities in markets that lie outside the firm’s domestic operations. This definition raises additional research questions that center on the sources of creativity associated with opportunity recognition in international markets. These sources may include managerial insights, experience, connections and contacts, network relationships and informal and formal industry analyses. Sources also include the types of information sources firms use to spot these opportunities; and the approaches companies use to exploit opportunities in international markets. Are these processes shaped by industry conditions? What role does national culture play in this regard (Kogut & Singh 1988)? How and when are these processes institutionalized? What types of organizational learning occur in and through these processes? How does this learning influence the future entrepreneurial activities of the firm? These and similar questions serve to highlight the range of theoretical and empirical issues that can (and perhaps should) be investigated in future international entrepreneurship research.

The Context of International Entrepreneurship

The fundamental question here is: "what contextual factors influence the internationalization of entrepreneurial firms?" By context of internationalization, we mean those conditions that make internationalization more attractive or lucrative than solely domestic operations. It is critical for future research to account for the context within which international entrepreneurship occurs. We list several environmental and strategic variables within our integrative framework that may guide future work in international entrepreneurship (Figure 1).
A key research issue concerns the major environmental factors affecting international entrepreneurship. There are other significant factors that merit attention in international entrepreneurship, including industry characteristics, country institutional and regulatory environments among others (Figure 1). This area is virtually unexplored because of the number of combination of factors that can help explain international entrepreneurship. For example, the role of institutions in fostering entrepreneurship and internationalization of these ventures has not been investigated. Recent theoretical work suggests that certain types of institutions provide opportunities for firms to develop their networks and attract international partnerships for expansion (George & Prabhu 2000). Unexplored areas also include industry characteristics and internationalization processes since many past studies have used small samples.

A second important research issue involves strategic variables that influence international entrepreneurship. Figure 1 indicates that firm competencies, strategic differentials, generic, functional, and entry strategies influence international entrepreneurship. How competencies moderate the relationship between organizational factors (such as firm resources) and international entrepreneurship dimensions (such as scope) is an interesting question to explore. Similarly, strategic differentials between home market practices and foreign markets are likely to moderate the relationship between firm resources and the speed of internationalization. Research that explores these issues could develop strong theoretical arguments based on the cognition or industrial-organization literatures.

**Post-Internationalization Processes and Outcomes**

The fundamental question in this area is "what happens after internationalization?" The importance of this area and its overlap with strategy literature is derived primarily on the basis of firm performance. Yet, to date, there are few studies that have explored the relationship between international entrepreneurship and performance with inconclusive and contradictory results. Our proposed definition of international entrepreneurship suggests that entrepreneurial firms enter international markets in the pursuit of opportunities that lead to competitive advantage that position them to create wealth. Future
research should explore the links between international entrepreneurship and competitive advantage or financial and non-financial performance outcomes.

Similarly, we know little about what these firms do after they enter new markets and how they remain entrepreneurial in their approach. Figure 1 suggests a direct link between dimensions of international entrepreneurship and performance, implying a certain set of combinations in which international entrepreneurship may be related to performance. For example, first mover advantages (Mascarenhas 1997) would suggest that international entrepreneurship speed would be related to competitive advantage while extent of internationalization may be related to non-financial outcomes such as organizational learning or multiple locations of value chain components to reduce transaction costs. Future research can help improve our understanding of these interesting but complex issues.

An area that demands research attention is the type of competitive advantages new ventures vs. established firms gain as they go international. These firms may pursue different goals and utilize different approaches in internationalizing their operations. If this is true, new ventures and established companies might gain very different types of advantages in their global markets. These advantages have implications for firm survival and effective performance. Research into such potential differences would be helpful.

Researchers have begun to examine the effect of international entrepreneurship variables on the non-financial measures of firm performance. Given the few studies completed to date, we do not know the extent to which international entrepreneurship contributes to organizational learning. In particular, we do not know if international entrepreneurship affects a firm’s social (Sohn 1994), technological (Zahra et al. 2000a) or other types of learning (Leonard-Barton 1995). A noteworthy issue to explore in future studies is whether international entrepreneurship enables established companies to overcome myopia of learning (Levinthal & March 1993). A related question that requires research attention is whether new ventures have a learning advantage over established companies in international entrepreneurship activities, as has
been argued recently in the literature (Autio et al. 2000). The effect of entry strategies on different types of learning is another issue that deserves further attention.

Entrepreneurship (Autio et al. 1997; Larson 1991; Lipparrini & Sobrero 1994), strategy (Gulati 1998; Jarrilo 1988; Keil, Autio & Robertson 1997) and IB (Welch & Welch 1996) have highlighted the importance of networks for successful organizational performance. Some past work has recognized the important role of networks for international entrepreneurship (Autio et al. 1997; Zahra et al. 2000b). Future research should explore the link between networks and international entrepreneurship and how this link affects the speed, scope and extent of internationalization. Given the diversity of networks that might prevail in an industry, it is especially important to connect the types of resources and information that exist and international entrepreneurship (Hara & Kanai 1994). Of interest is the effect of networks on a firm's reputation and how this reputation allows the firm to pursue international entrepreneurship opportunities. Reputation is an important strategic asset (Fombrun 1994; Hall 1993), especially for young entrepreneurial companies (Bell & McNamara 1991). A favorable reputation, connection to powerful and established networks and other invisible assets can profoundly influence the ways companies proceed to position themselves (Itami & Roehl 1987), especially in foreign markets.

Finally, we need to stress the importance of methodology in future empirical research. As noted earlier, our review indicates a sample bias in many studies. Past studies sampled high technology firms with little emphasis on traditional industries, or had small sample sizes that may not be entirely representative of the industry. A primary reason is the scarcity of good data. By expanding the domain and providing a framework, we, however, encourage future researchers to include multiple data sources and address issues of sample representativeness. For instance, researchers can access industry and country level data from established secondary data sources. Future studies could also be improved by using surveys by partnering with research colleagues in different countries. Such data collection methods would permit drawing generalizable and well-supported conclusions that can improve managerial practice.
Second, further work may explore internationalization and successes using longitudinal data and therefore address issues of causality and temporal stability (Sexton et al. 2000). Longitudinal studies of international entrepreneurship processes are especially lacking. Longitudinal studies also allow us to better explain the significance of the results and the relationship between international entrepreneurship variables and future company performance, if any.

In summary, we have highlighted multiple avenues for future scholarly work. We suggest three broad overlapping areas for future research; namely, the process, context and post-internationalization outcomes of international entrepreneurship. We have also offered examples of how such research would benefit and expand the knowledge that we presently have about international entrepreneurship. Past work has helped us develop a model that we used to suggest specific directions for future research (Figure 1). We believe that there are numerous opportunities available for further inquiry into international entrepreneurship and hope that scholars will systematically address these issues.

**Conclusion**

International entrepreneurship is a growing and important research stream, one that offers great opportunities for scholars to employ and integrate theories from multiple disciplines and draw on established theoretical frameworks. Changes in the competitive environment and the interdependence of the global economy make internationalization attractive to entrepreneurial firms. Yet, little is known about the process, context, and outcomes of such internationalization. As our review makes clear, there are several opportunities to conduct meaningful research that can enrich both the development of theory and has significant implications for practicing managers.

In this chapter, we have sought to achieve four objectives. First, we have attempted to expand the definition and domain of international entrepreneurship. Second, we have reviewed past research to identify and consolidate factors that may affect international entrepreneurship. Third, we have advanced an integrative framework that links factors affecting international entrepreneurship and their outcomes.
Finally, we have also provided specific directions and suggestions for the future scholarly pursuit of international entrepreneurship. We hope that this chapter and our proposed framework of international entrepreneurship will increase future research in this young but interesting area of the literature.
References


Table 1
A Chronicle of International Entrepreneurship Definitions

- McDougall (1989) states:
  "international entrepreneurship is defined in this study as the development of international new ventures or start-ups that, from their inception, engage in international business, thus viewing their operating domain as international from the initial stages of the firm's operation."

- Zahra (1993) defines international entrepreneurship as "the study of the nature and consequences of a firm's risk-taking behavior as it ventures into international markets."

- Giamartino, McDougall and Bird (1993), heading an entrepreneurship-division wide panel, suggested that the domain of international entrepreneurship be expanded.

- Oviatt and McDougall (1994) state:
  "...a business organization that, from inception, seeks to derive significant competitive advantage from the use of resources and sale of outputs in multiple countries."

- Wright and Ricks (1994) highlighted the growing importance international entrepreneurship as an emerging research theme. They suggested that international entrepreneurship is a firm-level activity that crosses national borders and focuses on the relationship between businesses and the international environments in which they operate.

- McDougall and Oviatt (1996) state:
  "new and innovative activities that have the goal of value creation and growth in business organization across national borders."

- McDougall and Oviatt (2000) state:
  "A combination of innovative, proactive, and risk-seeking behavior that crosses or is compared across national borders and is intended to create value in business organizations." They note that firm size and age are defining characteristics here. But they exclude nonprofit and governmental agencies.
<table>
<thead>
<tr>
<th>Extent/degree of Internationalization</th>
<th>Speed</th>
<th>Scope</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Countries</td>
</tr>
<tr>
<td>• McDougall (1989)</td>
<td>• Reuber &amp; Fischer (1997)</td>
<td>• Zahra et al. (2000a)</td>
</tr>
<tr>
<td>• McDougall et al. (1994)</td>
<td>• Zahra et al. (2000b)</td>
<td>• Roberts &amp; Senturia (1996)</td>
</tr>
<tr>
<td>• Bloodgood et al. (1996)</td>
<td>• Fontes &amp; Coombs (1997)</td>
<td></td>
</tr>
<tr>
<td>• McDougall &amp; Oviatt (1996)</td>
<td>• Lindquist (1997)</td>
<td></td>
</tr>
<tr>
<td>• Reuber &amp; Fischer (1997)@</td>
<td></td>
<td>• Reuber &amp; Fischer (1997)</td>
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<tr>
<td>• Zahra et al. (2000a)</td>
<td></td>
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<tr>
<td>• Zahra et al. (2000b)</td>
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### Table 3a

#### Influence of Organizational Factors on International Entrepreneurship (TMT and Resources)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dimension</th>
<th>Findings</th>
</tr>
</thead>
</table>
| **Top Management Team**   | Foreign work         | • Case analyses showed that new ventures led by managers with foreign work experience were able to quickly internationalize their operations and do so successfully (Oviatt & McDougall, 1995; McDougall et al. 1996).  
• Found a positive and significant association between managers foreign work experience and degree of new venture's internationalization (Bloodgood et al., 1996; Burgel & Murray 1998).  
• A higher percentage of managers of companies that internationalized worked for a foreign company at home (Burgel & Murray 1998). |
|                           | Education abroad     | • Found a positive (not significant) relationship between managers' receiving education outside the USA and new ventures' international expansion (Bloodgood et al., 1996)  
• A higher percentage of managers of companies that internationalized received education abroad than those of start ups that did not internationalize (Burgel & Murray 1998) |
|                           | Background           | • Firms with principal founders drawn from managerial parental backgrounds were significantly more likely to export than firms with other types of founders (Westhead et al., 1998).                                                                                                                                                          |
|                           | Global vision        | • Case analyses suggested that new ventures led by managers with global visions were able to internationalize quickly and successfully (Oviatt & McDougall, 1995).                                                                                                                                                     |
| **Resources**             | Unique assets        | • Case analyses suggested that new ventures with unique intangible assets were able to internationalize quickly and successfully (Oviatt & McDougall, 1995).  
• Companies that internationalized their operations had products that required significantly less customization and maintenance than those that did not (Burgel & Murray 1998). There were no differences between the two groups in the amount of installation or training required to use their products.  
• Start up companies that did not internationalize were more likely to describe their products as being less innovative (Burgel & Murray 1998).                                                                                           |
<table>
<thead>
<tr>
<th>Resources (continued)</th>
<th>R&amp;D spending</th>
<th>Network</th>
<th>Reputation</th>
</tr>
</thead>
</table>
|                       | - Positively (not significant) related to internationalization status, speed or degree (Zahra et al., 2000b).  
- Start-ups that internationalized their operations had higher R&D-to-sales ratio (Burgel & Murray 1998).  
- Start-up that internationalized their operations had higher ratio of employees who worked 50% or more of their time on new product development as percent of sales than those that did not (Burgel & Murray 1998). | - Case analyses suggested that new ventures with extensive networks were able to internationalize quickly and successfully (Oviatt & McDougall, 1995)  
- Technological networks are positively and significantly associated with status, speed and degree of internationalization, and this effect is higher for new firms with high R&D spending (Zahra et al., 2000b)  
- There were no significant differences between start-ups that internationalized and those that did not with regard to access to venture or angel capital (Burgel & Murray 1998).  
- Firms that had received industry grants were significantly more likely to export (Westhead et al. 1998). | - A reputation for technological superiority is positively and significantly associated with status, speed and degree of internationalization. This effect is higher for status and degree of internationalization new firms with high R&D spending (Zahra et al., 2000b). Interaction of reputation and R&D is not significant in the case of speed. |
Table 3b
Influence of Organizational Factors on International Entrepreneurship (Firm-Related Variables)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size</strong></td>
<td>• Venture size is positively associated with degree of internationalization (Bloodgood et al. 1997).</td>
</tr>
<tr>
<td></td>
<td>• Venture size (time 1) was negatively (not significant) with relative market share in time 2 (McDougall &amp; Oviatt 1996).</td>
</tr>
<tr>
<td></td>
<td>• Venture size was positively (not significant) associated with internationalization status, speed or degree (Zahra et al., 2000b).</td>
</tr>
<tr>
<td></td>
<td>• Company size is negatively associated (not significant) with degree of internationalization (Reuber &amp; Fischer, 1997).</td>
</tr>
<tr>
<td></td>
<td>• High tech start up that internationalized were significantly larger in sales and employment than firms that did not internationalize (Burgel &amp; Murray 1998).</td>
</tr>
<tr>
<td></td>
<td>• There was no significant difference in employment of exporters vs. non-exporters (Westhead et al. 1998).</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>• Age was negatively (not significant) associated with ROI in time 2 (McDougall &amp; Oviatt 1996).</td>
</tr>
<tr>
<td></td>
<td>• Age is positively associated with degree of internationalization in one equation but negative (not significant) in another (Reuber &amp; Fischer, 1997).</td>
</tr>
<tr>
<td></td>
<td>• Startups that internationalized were significantly older than firms that did not internationalize (Burgel &amp; Murray 1998).</td>
</tr>
<tr>
<td></td>
<td>• Venture age was positively (not significant) associated with internationalization status or degree (Zahra et al., 2000b). Speed of internationalization was not explored in the analysis.</td>
</tr>
<tr>
<td></td>
<td>• There were no significant differences in age between exporters and non-exporters (Westhead et al., 1998).</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>• There was no significant difference between firms that exported and those that did not in rural vs. urban location (Westhead et al., 1998)</td>
</tr>
<tr>
<td></td>
<td>• National culture influences the formation of technology alliances by entrepreneurial firms (Steensma et al. 2000)</td>
</tr>
<tr>
<td><strong>Origin</strong></td>
<td>• Corporate origin was negatively and significantly associated with status. Corporate origin was negative (not significant) with degree and speed of internationalization (Zahra et al., 2000b).</td>
</tr>
<tr>
<td><strong>Growth orientation</strong></td>
<td>• Firm growth orientation was positively associated with average absolute annual international sales growth (Autio et al. 1997).</td>
</tr>
</tbody>
</table>
| Environmental Scanning | • Average amount of environmental scanning was positively and significantly associated with international collaborative relationships which, in turn, was positively and significantly associated with average absolute annual international sales growth (Autio et al. 1997).  
• Analyses indicated that limited global information gathering capabilities limited companies’ internationalization (Karagozoglu & Lindell 1997). |
| Financial Strength | • ROE was positively (but NS) with internationalization status, positive and marginally significant (p<.10) with speed and degree of sales internationalization (Zahra et al., 2000b).  
• Leverage was positively (not significant) associated with degree of internationalization (Bloodgood et al., 1996). |
Table 4  
The Influence of External Environment on International Entrepreneurship

<table>
<thead>
<tr>
<th>Variables</th>
<th>Findings</th>
</tr>
</thead>
</table>
| Intensity of domestic competition  | • No differences between international and purely domestic new venture; sign is positive (McDougall 1989).  
|                                    | • Domestic market saturation was mentioned by only 26% of responding firms as a motivation for internationalization (K&L 1996). |
| Limited domestic growth            | • Case studies showed the limited growth of domestic markets was a major reason for the rapid internationalization of high technology new ventures (Coviello & Munro 1995).  
|                                    | • Insufficiency of domestic sales to achieve competitive levels of R&D was key motivation to internationalization, as mentioned by 35% of responding companies (Karagozoglu & Lindell 1997). |
| Intensity of international         | • International new ventures competed in industries that exhibited significantly higher levels of international competition (McDougall 1989).  
| competition                        | • Case studies showed that intensity of global competition in the industry was important factor in explaining the rapid internationalization of high technology new firms (Coviello & Munro 1995). |
| Restrictive government policies    | • International new ventures competed in industries that exhibited significantly higher levels of governmental protection and regulations (McDougall 1989). |
| Institutional environment         | • Institutional environments significantly influence international entrepreneurship (Mitchell et al. 2000).  
<p>|                                    | • Institutional structures in emerging economies facilitate entrepreneurship through effective governance mechanisms (George &amp; Prabhu 2000). |
| Economies of scale                 | • No differences between international and purely domestic new venture; sign is positive (McDougall 1989) |
| Retaliation by industry            | • No differences between international and purely domestic new venture; sign is positive (McDougall 1989). |
| incumbents                         |                                                                 |
| Industry gross profits             | • Is negatively and significantly associated with degree of internationalization (Bloodgood et al., 1996) |
| Industry sales growth              | • Positively (not significant) associated with degree of internationalization (Bloodgood et al., 1996) |
| Type of Industry                   | • Service firms tended to internationalize less than manufacturing firms (Burgel &amp; Murray 1998; Westhead et al., 1998). |</p>
<table>
<thead>
<tr>
<th>Variables</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Generic Strategy</strong></td>
<td>• Case analyses suggested that product differentiation was important for rapid internationalization (Oviatt &amp; McDougall 1995).</td>
</tr>
<tr>
<td>• Low cost</td>
<td>• Product differentiation is positively associated with degree of internationalization (Bloodgood et al., 1996).</td>
</tr>
<tr>
<td>• Differentiation</td>
<td>• Unique product is important for internationalization (Fontes &amp; Coombs 1997).</td>
</tr>
<tr>
<td></td>
<td>• R&amp;D spending positively and significantly associated with international collaborative relationships which were positively and</td>
</tr>
<tr>
<td></td>
<td>significantly associated with absolute annual international sales growth (Autio et al. 1997).</td>
</tr>
<tr>
<td></td>
<td>• Product quality is conducive to internationalization that is achieved through networks (Holmlund &amp; Kock 1998).</td>
</tr>
<tr>
<td><strong>Functional Strategy</strong></td>
<td>• International new ventures emphasized a distribution and marketing strategy less than domestic ventures (McDougall 1989).</td>
</tr>
<tr>
<td>• Production</td>
<td>• Firms that had the majority of their customers located in the same country as those measured six years earlier were significantly less</td>
</tr>
<tr>
<td>• Distribution</td>
<td>likely to export (Westhead et al. 1998)</td>
</tr>
<tr>
<td>• Marketing</td>
<td>• Product attributes may have important implications for the pace of new ventures’ internationalization (Roberts &amp; Senturia, 1996)</td>
</tr>
<tr>
<td></td>
<td>• Production competence was conducive to internationalization (Holmlund &amp; Kock 1998).</td>
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<td></td>
<td>• A negative sign (marginally significant) between marketing differentiation and degree of internationalization (Bloodgood et al., 1996)</td>
</tr>
<tr>
<td><strong>Entry strategy</strong></td>
<td>• International new ventures emphasized grand entry scale significantly more than domestic ventures (McDougall, 1989).</td>
</tr>
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<td></td>
<td>• Firms that targeted niche markets composed of advanced clients were prepared to internationalize (Fontes &amp; Coombs 1997).</td>
</tr>
<tr>
<td></td>
<td>• Technology alliances by entrepreneurial firms affected by national culture (Steensma et al. 2000).</td>
</tr>
</tbody>
</table>
Figure 1
An Integrated Model of International Entrepreneurship

Environmental Factors
- Competitive Forces
- Growth Opportunities
- National Culture
- Industry Profitability
- Institutional Environment
- Economies of Scale

Organizational Factors
- TMT Characteristics
- Firm Resources
- Firm Variables
  - Age, Size, Financial Strength,
  - Location, Origin etc.

Strategic Factors
- Competencies
- Differentials / Proximity
- Generic Strategies
- Functional Strategies
- Entry Strategy

Intl. Entrep.
- Extent
- Speed
- Scope

Competitive Advantage
- Financial Outcomes
- Non-Financial Outcomes