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Venture Capitalists as Catalysts to New Venture Internationalization: The Impact of Their Knowledge and Reputation Resources

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Venture Capitalists (VC) play an important role in influencing the strategic direction of the firms in which they invest. The findings of this study reveal that VCs can serve as a catalyst to new venture internationalization through the provision of knowledge and reputation resources. Furthermore, the international knowledge of a VC is more positively related to new venture internationalization when the VC is also reputable.

Introduction

Many high-growth international new ventures receive financial backing from venture capitalists (VCs) (Makela & Maula, 2005). Existing research validates that in addition to the financial resources that VCs transfer to the venture, VCs add value and influence the strategic direction of their portfolio companies through their involvement (e.g., Fried, Bruton, & Hisrich, 1998; Gorman & Sahlman, 1989; Lerner, 1995; MacMillan, Kulow, & Khoylian, 1989; Sapienza, 1992; Sapienza, Manigart, & Vermier, 1996). Thus, VCs are in a position to serve as a catalyst to new venture internationalization. Yet, we know little about the relationship between VC ownership and new venture internationalization, as only limited efforts have been made to begin to explore this relationship.

There are two notable studies that have begun to shed light on this topic. First, George, Wiklund, and Zahra (2005) argued that VCs influence the proclivity of small and medium-sized enterprises (SMEs) to take risks and to expand their internationalization efforts. While the firms in their study were not new ventures, SMEs share many of the same attributes and face similar challenges in internationalizing and are thus relevant to the study of new ventures. Interestingly, they found weak statistical support between VC ownership and international scale, suggesting that the relationship is likely important. Yet, no support was found between VC ownership and international scope. In their future research directions, they invite research that includes the experiences of VCs in examining the relationship between VCs and firm internationalization. In the second study, Carpenter, Pollock, and Leary (2003) utilized reasoned risk taking and agency perspectives in analyzing a sample of high-technology ventures that underwent an initial public offering (IPO) and that were 10 years of age or less. Counter to their hypothesis that there would be a positive relationship between VC backing and firm internationalization in high-technology IPO firms, they found a significant negative effect. Only when the VC placed an internationally seasoned director on the board was the relationship significantly positive. Their findings underscore the complexity of the relationship between VCs and new venture internationalization.

While these studies offer great value to the literature, one of their limitations is their focus on a single attribute of the VCs, such as the extent of ownership or international experience. Drawing on the resource-based view, the purpose of this article is to shed insight into multiple resources that VCs bring to a new venture and in particular, how intangible resources individually and jointly contribute to new venture internationalization. While the financial resources invested by VCs likely enable internationalization by allowing the new venture to exhibit higher levels of strategic aggressiveness (McDougall, 1989; McDougall, Oviatt, & Shrader, 2003) and enter geographic markets on a larger scale (George et aI., 2005), it is also possible that VCs lacking the knowledge resources to support internationalization might choose to discourage such a strategy. Furthermore, although somewhat neglected in the context of new venture internationalization to date, existing research highlights the importance of the reputational resources that a VC has to offer (Chang, 2004; Fried & Hisrich, 1995; Gulati & Higgins, 2003). Thus, we first explore in this article whether or not the international knowledge and reputation resources of VCs influence new venture internationalization. Second, we consider if the bundling of these two intangible resources offers an even greater effect.

Multiple contributions are made in this study. First, in terms of the international entrepreneurship literature, we respond to previous calls for research to further explore how VCs influence new venture internationalization (George et al., 2005). In doing so, we explore how new ventures overcome internal shortcomings to leverage the intangible resources held externally by VCs and pursue a large-scale strategy such as internationalization, which is regarded as riskier and more challenging (Hill, Hwang, & Kim, 1990; Johanson & Vahlne, 1977; Kuemmerle, 2001). We also offer insight into inconsistent findings between VC backing and new venture internationalization (Carpenter et al., 2003; George et al.). Second, prior VC research demonstrates many ways in which VCs add value in addition to the exchange of financial resources. A contribution of this study is to offer insight into yet another potential benefit--the strategic influence of VCs on new venture internationalization. Third, our multi-item operationalization of internationalization is a methodological contribution to the literature examining the relationship between VCs and new venture internationalization. Last, the importance of choosing the right VC is frequently emphasized in the literature (Dimov & DeClercq, 2006; Jaaskelainen, Maula, & Seppa, 2006; Sapienza, 1992; Wijbenga, Postma, & Stratling, 2007). For new ventures that desire to pursue an internationalization strategy, we offer insight as to how the profile of VCs can lead to internationalization.

Our article is structured as follows: In the first section, we review the literature and develop hypotheses relating to the impact of VC resources that spur new venture internationalization. This is followed by our methodology, analysis, and results based on a sample of 93 VC-backed new ventures in the communications sector that are publicly held. Last, we provide a discussion of the implications and directions for future research.

Theory and Hypotheses

We draw upon the resource-based view to consider how a VC might individually and jointly influence new venture internationalization through their international knowledge and reputation. The resource-based view of the firm has become an influential theoretical perspective in international business research (Peng, 2001) and has also proven helpful in explaining the internationalization of new ventures (Kotha, Rindova, & Rothaermel, 2001; McDougall, Shane, & Oviatt, 1994; Zahra, Matherne, & Carleton, 2003). According to the resource-based view, firms are seen as a bundle of tangible and intangible resources, and the extent that these resources are inimitable, rare, valuable, and nonsubstitutable determines their competitive advantage (Barney, 1991). In order to internationalize, a firm must possess the resources to form a competitive advantage that enables it to overcome the additional costs of cross-border operations as well as to be competitive in foreign markets (Dunning, 2000). In today's global environment, intangible resources such as knowledge and reputation are argued to represent a more sustainable source of competitive advantage because of the ambiguity surrounding intangible resources and the difficulties of foreign competitors to easily replicate them (Kotha et al.; Porter, 1998).

Recent research drawing on the resource-based view has begun to highlight the ability of firms to leverage intangible resources possessed externally, whether via knowledge spillovers (Anand, Glick, & Manz, 2002; Audretsch, 1998) or associating with other, reputable firms (Pfeffner & Salancik, 2003; Podolny, 1994). In this study, we posit that international knowledge and reputation represent two intangible resources of a VC that can serve as important catalysts for new venture internationalization.

VC Knowledge and New Venture Internationalization

Knowledge is viewed as the most strategically important of the firm's resources (Grant, 1996) and refers to "any information, belief, or skill that the organization can apply to its activities" (Anand et al., 2002, p. 88). We are specifically interested in this study in international knowledge or any information, beliefs, and skills that organizations can apply to a firm's internationalization activities. Knowledge about international markets was at the core of the early process models of internationalization developed by Johanson and Vahlne (1977) and their Uppsala colleagues. Their models of incremental internationalization focused on knowledge of international markets as the cursor of internationalization. More recently, internationalization scholars have found that the acquisition of knowledge related to competing internationally does not necessarily have to be acquired by the venture over time, but may come internally from the entrepreneur or externally from a stakeholder in the venture's network (see e.g., Bell, 1995; Bloodgood, Sapienza, & Almeida, 1996; Coviello & Munro, 1995; Oviatt & McDougall, 1995; Reuber & Fischer, 1997; Sharma & Blomstermo, 2003). New ventures are characterized as having a "high ratio of

assumption to knowledge" (McGrath & MacMillan, 1995, p. 4), leading new ventures to frequently look to external sources for knowledge to verify that they are on the right path and improve their chances of success.

Because of their ownership relationship, VCs have a strong incentive to share their knowledge with the new ventures in which they invest. VCs tend to play an active role in the new ventures that they invest in (Baum & Silverman, 2004; Ruhnka, Feldman, & Dean, 1992) and have even been considered to be part of a venture's human resources (Florin, Lubatkin, & Schulze, 2003). This is largely because of the high level of risk associated with VC financing and that VCs want to not only protect their investment but do whatever it takes to ensure a high return (Fried et al., 1998). In some cases, the investment by VCs can spur the replacement of certain management positions within the new venture (sometimes even the actual founder), a membership on the board of directors or ongoing forms on monitoring (Carpenter et al., 2003; Fried et al.). In other words, because of their equity stake and their provision of scarce financial resources, VCs have a high level of bargaining power in the relationship with a new venture that they invest in (Porter, 1980). As a result, VCs have multiple means by which to influence the direction that a new venture takes. A VC that has a high level of international expertise or knowledge is in a position to have strong influence in pushing a venture to internationalize. In Carpenter et al.'s study examining the impact of various investors on venture internationalization, when the VC is represented by a board member with international experience, the effect was so strong that the otherwise negative effect of VC backing on internationalization was reversed. New ventures with greater stocks of international knowledge will ultimately pursue a higher level of internationalization as they are more alert to opportunities that exist in areas in which they have experience and are knowledgeable (Ardichvili, Cardozo, & Ray, 2003). Thus, we hypothesize:

Hypothesis 1: The greater the international knowledge of VCs that invest in a new venture, the greater the level of new venture internationalization.

VC Reputation and New Venture Internationalization

As defined by Fombrun (1996, p. 72), "a corporate reputation is a perceptual representation of a company's past actions and future prospects that describes the firm's overall appeal to all of its key constituents when compared with other leading rivals." Reputation is frequently acknowledged as a source of competitive advantage, largely as a result of the difficulties in creating, imitating, or substituting reputation (Barney, 1991). In general, the value of a firm's reputation can be seen through signaling potential and current exchange partners, such as customers, employees, or investors (Fombrun & Van Riel, 2004) and creating economic profits (Klein & Leffler, 1981). A reputation can help a firm contract with these exchange partners through allowing the firm to lower costs, increase prices, and create competitive barriers (Deephouse, 2000). As perhaps best noted by Fombrun and Van Riel (p. 3), "a good reputation acts like a magnet: it attracts us to those who have it."

When a VC invests in a venture, the venture is able to draw upon the reputation of the investing VC as a resource. Because new ventures have a limited track record, potential customers and partners may have limited information on which to base their assessment of the new venture's quality and reliability. This has even been called an external liability of newness by some scholars (Rao, 1994). Thus, stakeholders may also look to the reputation of those firms that the new venture is associated with in order to base their assessment (Stuart, 2000). External sources of reputation are argued to "provide confirmation to the rest of the world of the value and worth of the organization" (Pfeffner & Salancik, 2003, p. 145). This is supported by sociologists who argue that the evaluations of a firm are strongly associated with the social standing of the actors associated with it when uncertainty exists (Podolny, 1994). Fombrun (1996, p. 62) exemplifies the reliance on external sources of reputation as a process in which firms "rent the reputations of their lawyers, accountants, bankers and consultants as a means of signaling their own credibility and integrity to key constituents." Hence, this implies that a new venture "owns" a reputation, but also has the ability to "rent" a reputation through association with other firms.

Research in recent years has begun to acknowledge the reputational benefits that accompany the VC's financial investment (Chang, 2004; Fried & Hisrich, 1995; Gulati & Higgins, 2003). For example, the time-to-IPO of public Internet startups was found to be positively associated with the reputation of participating VCs (Chang). Also, the reputation of the VC was found to be positively related to 1-year stock price returns (Arthurs & Busenitz, 2005). The VC's reputation also impacts new venture internationalization. The reputation of the VC can signal to providers of other needed resources that the new venture is properly managed and likely to continue, following a high growth

trajectory, and thus, is a worthy firm to do business with (Fombrun & Van Riel, 2004). Essentially, partnering with a reputable VC can translate into access to long-term financial resources via an IPO as well as other needed resources to support internationalization.

It is also likely that the reputation of the VC may enhance the legitimacy of the venture, as its investment serves as a form of credible commitment (Williamson, 1996). The reputational effects associated with the VCs enable the venture to more easily overcome the liability of newness (Stinchcombe, 1965), and also allow the new venture to overcome the constraints related to entering an international market. Otherwise referred to as the liability of foreignness, such constraints might include transaction costs related to spatial distance as well as the unfamiliarity and lack of legitimacy within the host country context (Zaheer, 1995). In comparison to domestic firms and mature international firms, international new ventures have been found to focus more heavily on leveraging reputational resources through their network (Chetty & Wilson, 2003). This suggests that new ventures likely attempt to leverage the reputation of their VCs when internationalizing to overcome some of the legitimacy constraints faced in foreign markets.

In essence, the reputation of investing VCs can enhance new venture internationalization by providing reputational benefits and opportunities to the venture, and in so doing, help offset costs or risks related to market unfamiliarity and a lack of legitimacy.

Hypothesis 2: The greater the reputation of VCs that invest in a new venture, the greater the level of new venture internationalization.

VC Knowledge, VC Reputation, and New Venture Internationalization

Hypotheses 1 and 2 proposed that VC international knowledge and VC reputation will positively affect new venture internationalization. Beyond the independent main effects of these two variables on new venture internationalization, it is also likely that they will have an interactive effect. Existing research suggests the intangible resources of a firm do not necessarily exist independent of each other, but, rather, exist as an interdependent bundle of resources (Barney, 1991). For example, in their study of six intangible resources and performance, Carmeli and Tishler (2004, p. 1258) concluded "the positive effect of the interactions among the organizational elements on organizational performance is such that the higher the values of the other intangible organizational elements, the larger the effect of any given intangible organizational element." Likewise, Wiklund and Shepherd (2003) examined market knowledge and technological knowledge jointly as an important bundle of resources leading to a sustainable competitive advantage.

In the context of this study, we similarly argue that the combination of being reputable and knowledgeable on matters pertaining to international business will likely strengthen the relationship with new venture internationalization. A VC' s reputation will be accorded greater legitimacy as a basis for signaling a new venture's likely performance in international markets when that VC has an extensive record of prior experience with international investments (George et al., 2005). When internationally experienced VCs with strong reputations choose to invest in a venture, they do so based on the knowledge they possess regarding the venture's likely appeal to international markets. Thus, if new ventures can generate strong investment interest from reputable VCs who possess in-depth international knowledge, chances are greater that those new ventures will excel in international markets they may be targeting. When the VC has a good reputation, the venture will pay more attention and give more weight to the advice of the VC, and thus the knowledge of the VC "spills over" more efficiently and has a stronger impact on the venture's internationalization. In short, the following relationship is hypothesized.

Hypothesis 3: The positive relationship between VC international knowledge and new venture internationalization will be more positive when VC reputation is high rather than when it is low.

Methodology

Sample

The sample was comprised of 93 high-technology VC-backed new ventures in the United States that had undergone an initial public offering between 1996 and 2000. A firm was deemed to be a new venture if the firm was 6 years old or less at the time of IPO. This is consistent with other new venture studies (Brush, 1995; Coviello & Jones, 2004; Robinson, 1999; Shrader, Oviatt, & McDougall, 2000), as the first 6 years are regarded as a crucial period in which survival is determined for a majority of companies (U.S. Small Business Administration, 1992). As the primary motivation of our study is to examine how VCs spur internationalization through the transfer of knowledge and reputation, we limited our sample to new ventures that had received VC backing.

New ventures that had undergone an initial public offering in the United States were included largely because of data availability. In addition, new ventures that pursued an initial public offering were likely to be growth oriented and thus, more likely to consider foreign markets in their early years. Following other studies using IPO venture data (e.g., Carpenter et al., 2003; Florin et al., 2003; Robinson & McDougall, 2001), all firms that were corporately held or the result of a corporate spin-off were eliminated from the sample. Because of the small number of new ventures that underwent an IPO each year, data was gathered for new ventures that had undergone an IPO between 1996 and 2000, to increase the size of the sample. No new ventures that had undergone an IPO from 2001 forward were included because of the significant decrease in firms going public when the Internet bubble burst.

High-technology industries have been observed to be pursued by international new ventures in previous studies (Burgel & Murray, 2000; Coviello & Munro, 1997; Jolly, Alahuhta, & Jeannet, 1992; Kotha et al., 2001; Zahra, Ireland, & Hitt, 2000). Prior research also suggests technological knowledge is a principal means of gaining global market share (Franko, 1989) and cross-border integration (Kobrin, 1991). Porter (1986) further argues that industries that rely on upstream activities, such as research and development, as a means of competitive advantage are much more likely to compete globally than those industries that rely on more downstream activities for competitive advantage. Thus, high-technology industries appeared to be an appropriate context to study new venture internationalization. New ventures were included in the sample only if their primary industry was classified as high-technology by Securities Data Corp (SDC) Global New Issues database (Ranft & Lord, 2000) and within the communications high-technology classification.

Data Sources

Our study relied exclusively on publicly available data. The Global New Issues Database of the Securities Data Corp (SDC), a source that provides research on public offerings, was used to initially identify potential firms to include in the sample. To collect data on the VCs associated with a new venture, the Venture Economics Database of the SDC was drawn upon. Financial data and other company-specific information were obtained either through the ventures' prospectus or Compustat North America. Unless otherwise stated, all variables were gathered at the end of the fiscal year in which the new venture underwent the IPO.

Dependent Variable: New Venture Internationalization

Although numerous internationalization measures exist, we follow Sullivan (1994), who stresses the importance of using multiple measures and consider the performance, structure, and attitudinal categories underlying the internationalization construct. Three measures were thus utilized to create a multi-item internationalization scale. First, the international sales intensity of a new venture represents the performance dimension, and is defined as the venture's degree of international involvement based on sales. It was operationalized as foreign sales as a percentage of total sales (Carpenter et al., 2003; Preece, Miles, & Baetz, 1998) in the IPO year. Second, to assess the structural dimension of internationalization, we draw on the international asset intensity, which assesses the venture's degree of international involvement taking into account the location of the venture's assets as of the IPO year. The variable was operationalized as foreign assets as a percentage of total assets (Daily, Certo, & Dalton, 2000; Sambharya, 1996). Third, the international scope variable considers the attitudinal dimension and examines the extent to which a new venture enters foreign markets outside its home region. This variable was operationalized by counting the number of regions in the triad that had been entered, including North America, Asia Pacific, and the European Union (Rugman & Verbeke, 2004). Data for each of these three measures were sourced from the segment data of Compustat North America. The Cronbach alpha for the composite measure was .71.

Independent Variables

VC Reputation. To assess reputation of the VCs, we followed prior scholars to consider evidence of past investment activity (Chang, 2004; Dimov, Shepherd, & Sutcliffe, 2007), prior performance (Chang; Gompers, 1996) and media visibility (Bansal & Clelland, 2004; Dimov et al.; Fombrun & Shanley, 1990) to develop a multi-item scale. We captured the prior investment activity of a VC through three measures: the total amount of invested capital since inception, the total number of companies in its portfolio, and the age of the VC firm. For prior performance, we measured the IPO success rate of the VC. To assess the media visibility, a count of articles published in The Wall Street Journal mentioning the VC in the year the new venture went public was utilized. The data for prior investment activity and performance were taken from the SDC's Venture Economics Database, and The Wall Street Journal counts were constructed from Lexis Nexus data. For ventures that had more than one VC, the data were summed. With the exception of VC age and IPO success rate, the other three variables were transformed by taking their natural logarithm (Cohen, Cohen, West, & Aiken, 2003) prior to developing the final measure. The Cronbach alpha for the composite measure was .75.

VC International Knowledge. The VC international knowledge variable was operationalized by taking the count of VCs that held board directorships for the new venture and that had prior international experience. International experience was determined by whether or not the prospectus of the new venture indicated that the VC serving as a board member currently or previously worked in a foreign company or for the foreign subsidiary of a U.S.-based company (Carpenter et al., 2003).

Interaction Variable. For testing the proposed interaction hypothesis, we multiplied each of the two independent variables together: VC International Knowledge x VC Reputation. Each variable was mean-centered prior to creating the interaction terms and entering into the analysis.

Control Variables

New Venture Age. Similar to other new venture internationalization studies, control variables were incorporated for the age of the new venture. Age might influence a new venture's propensity to internationalize, as older firms typically have more resources (Kotha et al., 2001; Reuber & Fischer, 2002; Zahra, Neubaum, & Huse, 1997; Zahra et al., 2000). The age of the new venture at IPO was determined from the founding date listed in the SDC's Global New Issues database and cross-validated within the new ventures' prospectus.

New Venture Size. The size of the new venture was considered as a result of larger firms having more resource availability that might influence their ability to internationalize (Bloodgood et al., 1996; Burgel & Murray, 2000; Steensma, Marino, Weaver, & Dickson, 2000; Zahra et al., 1997, 2000). Additionally, firms that are larger are suggested to be more reputable. Size was operationalized through the new ventures' total assets in their IPO year.

New Venture International Experience. The prior international experience of the ventures' top management teams (TMT) was controlled for, because it has been found to lead to new venture internationalization (Bloodgood et al., 1996; Carpenter et al., 2003; Reuber & Fischer, 1997; Sapienza, Autio, George, & Zahra, 2006). New venture international experience was operationalized, as the count of TMT members whose biographies in the venture' s prospectus indicated that they had worked in a foreign company or for the foreign subsidiary of a U.S.-based company (Sambharya, 1996).

IPO Year. Four dummy variables were also created to control for the year of IPO, as the new ventures identified in the sample had completed an IPO at various times between 1996 and 2000. This was especially important, as some years have a greater number of ventures as a result of the Internet bubble.

Analysis & Results

Correlations, means, and standard deviations of the variables are presented in Table 1. The average age of the new ventures was 3.5 years, and ranged from 1 to 6 years. On average, the new ventures in the sample held approximately $246 million dollars in assets, and achieved $56.4 million in sales. Of the 93 ventures, 34 reported

international sales. The average international sales intensity, asset intensity, and scope for those new ventures that had entered foreign markets as of their IPO year were 24.8%, 4.5%, and 1.8 regions of the triad, respectively.

The VC reputation and international knowledge variables exhibited a relatively low intercorrelation (r = -.09). While VC international knowledge had a significant correlation with the new venture internationalization (r = .28, p < .01), the VC reputation was positively related to new venture internationalization, but insignificant. One of the IPO year dummy variables exhibited significant correlations with the other three IPO year dummy variables, largely due to a slightly higher number of firms in this category (Cohen et al., 2003). An analysis of the variance inflation factors (VIF) produced VIFs that ranged from 1.06 to 1.61, which are well below the 10 rule of thumb (Hair, Anderson, Tatham, & Black, 1998), suggesting that multicollinearity is unlikely to be a factor.

The new venture internationalization dependent variable was continuous, but also left centered because of those new ventures that had not internationalized. Accordingly, we utilized a Tobit regression in Stata. The results of the Tobit regression analysis are displayed in Table 2. In model 1, the control variables were entered. In model 2, the impact of VC international knowledge and reputation on new venture internationalization were examined. The interaction variable was then entered in model 3.

Table 1

Descriptive Statistics and Pairwise Correlations ($N = 93$)

		1	2	3	4	5	6	7	8	9	10
	Mean	.09	.08	.16	.35	3.48	1.17	245.78	.43	.11	.00
	SD	.28	.27	.37	.48	1.33	1.35	542.84	.63	1.83	.82
1. IPO year dummy (1996)		—									
2. IPO year dummy (1997)		−.09	—								
3. IPO year dummy (1998)		−.13	−.13	—							
4. IPO year dummy (1999)		*−.23	*−.21	**−.33	—						
5. New venture age		−.05	−.04	−.07	.02	—					
6. New venture int'l experience		.10	−.04	−.12	.02	.01	—				
7. New venture size		−.10	−.05	.05	−.01	−.12	.05	—			
8. VC international knowledge†		−.09	−.13	−.02	.14	−.09	*.24	.17	—		
9. VC reputation		.03	−.17	**−.29	−.03	.08	−.05	.20	−.09	—	
10. New venture internationalization		.16	.04	.14	−.18	.08	*.25	.06	**.28	.12	—

* $p < .05$; ** $p < .01$.
† variable has been transformed.

The first two hypotheses are initially tested in model 2. Hypothesis 1, which proposed a positive relationship between the international knowledge possessed by VCs and new venture internationalization, received support ([beta] = .65, p < .05). In hypothesis 2, a positive relationship was similarly proposed to exist between VC reputation and new venture internationalization. Support was again achieved ([beta] = .22, p < .05). There is a significant improvement in the Likelihood Ratio Chi-square from model 1 to model 2 (7.89, p < .05), offering further support.

The third and final hypothesis recognizes the complexity of the VC and new venture internationalization relationship, and proposed that it is the interactive effect of the VC variables that impacts new venture internationalization. Specifically, it was hypothesized that VC international knowledge has a more positive effect on new venture internationalization when the VC is also reputable. This two-way interaction is tested in model 3. As the regression coefficient for the two-way interaction term is positive and significant ([beta] = .37, p < .05), hypothesis 3 is supported. The Likelihood Ratio Chi-square also shows a significant improvement between models 2 and 3 when the interaction term is added (4.85, p < .05). As shown in Figure 1, when a VC is highly reputable, the relationship between VC international knowledge and new venture international intensity becomes more positive.

Discussion

Following calls to better understand the relationship between new venture internationalization strategy and the role of VCs, our study highlights the importance of intangible resources and the complexity of the impact of those resources on new venture internationalization. Although many international new ventures receive financial backing from VCs, limited efforts have been made to fully understand the implications of this seemingly influential player within a new venture's network. Taking a resource-based perspective, our study explored two intangible resources that VCs bring to a new venture, and in particular, how these resources individually and jointly contribute to internationalization. The results proved quite interesting, and shed light on the inconsistent findings of previous studies.

In the case of international knowledge of VCs serving on the new venture's board, support was obtained for a positive relationship with new venture internationalization. This finding further highlights the role of knowledge resources to ventures considering early internationalization, demonstrating that the knowledge transferred from a VC to the new venture is likely a result of the VC's in-depth involvement with the new venture. This conclusion is further supported by Carpenter et al. (2003), who found that the positive relationship between VC backing and new venture internationalization was stronger when the VC was represented by a board member with international experience. In addition to VC international knowledge, the reputation of VCs that have invested in a new venture was also found to be a significant predictor of new venture internationalization. Ventures with a more reputable VC exhibited higher levels of internationalization, demonstrating the value of leveraging reputable partners to exploit foreign markets. As prior research indicates that the reputation of VCs contribute to other aspects of new venture performance, including time to IPO (Chang, 2004) and IPO success (Gulati & Higgins, 2003), we offer yet another way reputation benefits a new venture and serves as a valuable intangible resource.

Table 2

Tobit Regression Results (Dependent Variable: New Venture Internationalization)

	Model 1		Model 2		Model 3	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Control variables						
IPO year dummy (1996)	.80	(.71)	1.01	(.64)	.72	(.61)
IPO year dummy (1997)	.80	(.72)	1.40*	(.69)	1.02	(.67)
IPO year dummy (1998)	.94	(.56)	1.34*	(.57)	.98	(.54)
IPO year dummy (1999)	−.41	(.49)	−.31	(.46)	−.34	(.43)
New venture age	.17	(.14)	.18	(.13)	.20	(.12)
New venture international experience	.25	(.14)	.20	(.13)	.26*	(.12)
New venture size	.00	(.00)	.00	(.00)	.00	(.00)
Independent variables						
VC international knowledge			.65*	(.29)	.62*	(.26)
VC reputation			.22*	(.11)	.15	(.10)
VC international knowledge × VC reputation					.37*	(.16)
Constant	−2.02**	(.72)	−2.04**	(.66)	−1.88**	(.61)
Log likelihood	−91.99		−88.04		−85.62	
Likelihood ratio Chi-square	11.62		19.51		24.36	
Change in likelihood ratio Chi-square			7.89*		4.85*	

* $p < .05$; ** $p < .01$ ($n = 93$) unstandardized estimates are reported.

Our most interesting finding is that when both resource variables and their interaction were added to the model, the interaction variable was significant, thus demonstrating that the international knowledge possessed by a VC was most positively and significantly related to new venture internationalization, when the VC was also reputable. Thus, a VC can serve as a catalyst to new venture internationalization, and it is the VC with a combination of international knowledge and reputation resources that offers the most influence to new venture internationalization.

It is important to note that the international knowledge and reputation gained from VCs are not being contracted for, but rather, vicariously exploited by the new ventures. This is a way that new ventures can add to their resource base without solely relying on the international knowledge of their TMT and emerging reputation. In other words, new

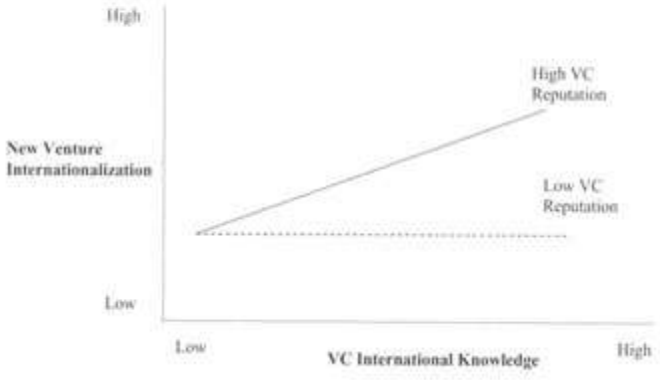
ventures are not necessarily internationalizing alone, but rather effectively drawing upon their network (Coviello & Munro, 1997). Together, these findings imply that although the resource-based view traditionally assesses the resources located internally to a firm as contributing to their competitive advantage, the resources located externally can be important and valuable as well.

Multiple contributions are made from this study. In terms of the international entrepreneurship literature, we respond to previous calls for research to further explore how VCs influence new venture internationalization (George et al., 2005) through using a resource-based perspective. In doing so, we explore how new ventures overcome internal shortcomings to leverage their external relationship with a VC and pursue a large-scale strategy such as internationalization. VCs are a vital component of a new venture's network when internationalizing. An important conclusion is the recognition that for VC-sponsored new ventures, these ventures do not internationalize alone, but are aided by this stakeholder. New ventures need not think of having to do it alone, but may look externally for valuable tangible and intangible resources in their quest to compete in the international marketplace.

Consistent with prior studies, our control variable, new venture international experience, was significant. Thus, our study confirms the importance of TMT international experience for ventures seeking internationalization. This finding suggests that TMT members of new ventures are able to rely upon and exploit their individual knowledge built up from prior international work experience to the internationalization of their current operations. Given the complexity of our internationalization variable, we offered a more robust test of the TMT international experience/internationalization relationship that supplements prior studies (Bloodgood et al., 1996; Carpenter et al., 2003).

Figure 1

Interaction Plot



Our study also offers insight into some rather inconsistent findings between VC backing and new venture internationalization. The empirical results of previous studies have been largely mixed, with the relationship between the VC and venture internationalization found to be sometimes negative (Carpenter et al., 2003; George et al., 2005), sometimes positive (George et al.; LiPuma, 2007), and in some cases, inconclusive (Burgel & Murray, 1998; Fernhaber, Gilbert, & McDougall, 2008). We suggest it is important to consider not only whether a new venture has or lacks VC financial backing, but also what other resources the VC offers. Consistent with the resource-based view (Barney, 1991), the bundle of resources offered to a new venture through their VCs is more important than the individual resources. Our study suggests that the intangible resources provided by VCs have a significant influence on the internationalization of a new venture.

Our study also makes a methodological contribution to the literature. Previous studies (e.g., Burgel & Murray, 1998; Carpenter et al., 2003) examining the relationship between VCs and new venture internationalization have relied on a single-item measure of internationalization. We were able to develop a 3-item measure that considered the performance, structure, and attitudinal dimensions of new venture internationalization.

Within the VC literature, VCs are argued to add value in many ways including strategy formulation (Fried et al., 1998). A contribution of our study is to offer further insight into a specific strategy--internationalization--that VCs are able to influence in their portfolio of new ventures. In particular, we demonstrate how VCs are able to influence strategy formulation through the combination of reputational and knowledge resources being transferred.

Finally, our study has important practical implications for entrepreneurs in choosing the right VC. This decision is frequently emphasized in the literature (De Clercq, Fried, Lehtonen, & Sapienza, 2006; Sapienza, 1992). For entrepreneurs who desire to pursue internationalization, our study highlights the importance of finding a VC who is reputable and that has a depth of international knowledge, in addition to being able to provide the financial resources necessary to support a strategy of internationalization. In seeking VC backing, entrepreneurs should remember that the intangibles offered by the VC matter and should be considered.

Limitations and Future Research

Like all research, there are several limitations of the study that subsequently offer opportunities for future research. First, the data were collected from U.S. ventures in the communications high-technology industry that had undergone an IPO between 1996 and 2000. Further testing is needed to examine the generalizability to other industries and time periods. Given the extraordinary market conditions in the late 1990s and the surge in VC funding (Pricewaterhouse Coopers, 2007), it is possible that the quicker time to IPO for these firms (Chang, 2004) heeds our understanding of the subsequent impact of the VC partner on new venture internationalization. Another limitation relates to the operationalization of the variables. Measuring intangible resources such as knowledge and reputation can be challenging and there are many different ways to do so in the literature. Although we have chosen the operationalizations that we feel best fit the context of our study, future research should contrast alternatives. Also, our study addressed only two intangible resources that might be of value to a venture seeking to internationalize. While we did include a control variable for TMT international experience, as many previous studies have identified its importance in new venture internationalization, there may be other alternative explanations that we have not considered. Last, the study is conducted as of the IPO year for the new ventures in the sample. A longitudinal analysis that examines the declining or increasing impact of VC relationships over time would be welcomed.

Given the intriguing results of our study, many other research questions remain for future research. How do VCs influence other strategies undertaken by their portfolio firms? For example, do VCs impact a product differentiation or low-cost strategy? In what other ways do VCs offer influence? What implication do VCs ultimately have on the performance of international new ventures? Although the existing literature infers a positive relationship between new venture internationalization and performance (Bloodgood et al., 1996; Lu & Beamish, 2001; McDougall & Oviatt, 1996; Zahra et al., 2000), the relationship has not yet been tested within the manifold influence of VCs. Another interesting research question is whether or not the impact of VCs on new venture internationalization is dependent upon key characteristics of the new venture, such as the prior international experience of the TMT.

Conclusion

The purpose of this study was to further explore the complex relationship between VCs and new venture internationalization. Using a resource-based perspective, we considered the individual and joint impact of VC reputation and knowledge. Our results suggest that on an individual basis, both resources lead to higher levels of new venture internationalization; however, the more interesting finding of our study was the presence of an interaction among the VC resources and new venture internationalization. The international knowledge possessed by a VC is most positively related to new venture internationalization when the VC is also reputable. Thus, VCs do serve as an important catalyst to new venture internationalization.

A key implication of our study is that intangible resources can be leveraged and vicariously exploited through external partnerships such as a VC. Thus, new ventures that are typically considered to be resource constrained can vicariously exploit external resources in order to achieve larger scale strategies such as internationalization. Our study further supports the resource-based view by highlighting the importance of resources and, more specifically, how the bundling of resources can add value. While the resource-based view tends to focus on the resources sourced

internally, our results suggest the dual importance of considering external resources as well. Last, in terms of the VC literature, our study demonstrates the multiple intangible benefits that VCs can provide their portfolio companies.

REFERENCES

Anand, V., Glick, W.H., & Manz, C.C. (2002). Thriving on the knowledge of outsiders: Tapping organizational social capital. Academy of Management Executive, 16, 87-101.

Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. Journal of Business Venturing, 18, 105-123.

Arthurs, J.D. & Busenitz, L.W. (2005). Dynamic capabilities and venture performance: The effects of venture capitalists. Journal of Business Venturing, 21, 195-215.

Audretsch, D.B. (1998). Agglomeration and the location of innovative activity. Oxford Review of Economic Policy, 14, 18-30.

Bansal, P. & Clelland, I. (2004). Talking trash: Legitimacy, impression management, and unsystematic risk in the context of the natural environment. Academy of Management Journal, 47, 93-103.

Barney, J.B. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17, 99-120.

Baum, J.A.C. & Silverman, B.S. (2004). Picking winners or building them? Alliance, intellectual, and human capital as selection criteria in venture financing and performance of biotechnology startups. Journal of Business Venturing, 19, 411-436.

Bell, J.H.J. (1995). The internationalization of small computer software firms. European Journal of Marketing, 29, 60-75.

Bloodgood, J.M., Sapienza, H.J., & Almeida, J.G. (1996). The internationalization of new high-potential U.S. ventures: Antecedents and outcomes. Entrepreneurship Theory and Practice, 20, 61-76.

Brush, C.G. (1995). International entrepreneurship: The effect of firm age on motives for internationalization. New York: Garland Publishing, Inc.

Burgel, O. & Murray, G.C. (1998). The international activities of British start-up companies in high-technology industries: Differences between internationalisers and non-interuationalisers. In P.D. Reynolds,

W.D. Byrave, N.M. Carter, S. Manigart, C.M. Mason, G. Meyer, & K. Shaver (Eds.), Frontiers of Entrepreneurship Research (pp. 447463). Babson Park, MA: Babson College.

Burgel, O. & Murray, G.C. (2000). The international market entry choices of start-up companies in high-technology industries. Journal of International Marketing, 8, 33-62.

Carmeli, A. & Tishler, A. (2004). The relationships between intangible organizational elements and organizational performance. Strategic Management Journal, 25, 1257-1278.

Carpenter, M.A., Pollock, T.G., & Leary, M.M. (2003). Testing a model of reasoned risk-taking: Governance, the experience of principals and agents, and global strategy in high-technology IPO firms. Strategic Management Journal, 24, 803-820.

Chang, S.J. (2004). Venture capital financing, strategic alliances, and the initial public offerings of Internet startups. Journal of Business Venturing, 19, 721-741.

Chetty, S.K. & Wilson, H.I.M. (2003). Collaborating with competitors to acquire resources. International Business Review, 12, 61-81.

Cohen, J., Cohen, P., West, S.G., & Aiken, L.S. (2003). Applied multiple regression/correlation analysis for the behavioral sciences (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Coviello, N.E. & Jones, M.V. (2004). Methodological issues in international research. Journal of Business Venturing, 19, 485-508.

Coviello, N.E. & Munro, H.J. (1995). Growing the entrepreneurial firm: Networking for international market development. European Journal of Marketing, 29, 49-61.

Coviello, N.E. & Munro, H.J. (1997). Network relationships and the internationalisation process of small software firms. International Business Review, 6, 361-386.

Daily, C.M., Certo, S.T., & Dalton, D.R. (2000). International experience in the executive suite: The path to prosperity? Strategic Management Journal, 21, 515-523.

De Clercq, D., Fried, V.H., Lehtonen, O., & Sapienza, H.J. (2006). An entrepreneur's guide to the venture capital galaxy. Academy of Management Perspectives, 20, 90-112.

Deephouse, D.L. (2000). Media reputation as a strategic resource: An integration of mass communication and resource-based theories. Journal of Management, 26, 1091-1112.

Dimov, D. & DeClercq, D. (2006). Venture capital investment strategy and portfolio failure rate: A longitudinal study. Entrepreneurship Theory and Practice, 30, 207-223.

Dimov, D.P., Shepherd, D.A., & Sutcliffe, K.M. (2007). Requisite expertise, firm reputation, and status in venture capital investment allotment decisions. Journal of Business Venturing, 22, 481-502.

Dunning, J.H. (2000). The eclectic paradigm as an envelope for economic and business theories of MNE activity. International Business Review, 9, 163-190.

Fernhaber, S.A., Gilbert, B.A., & McDougall, P.P. (2008). International entrepreneurship and geographic location: An empirical examination of new venture internationalization. Journal of International Business Studies, 29, 267-290.

Florin, J., Lubatkin, M., & Schulze, W. (2003). A social capital model of high-growth ventures. Academy of Management Journal, 46, 374-384.

Fombrun, C.J. (1996). Reputation: Realizing value from the corporate image. Boston: Harvard Business School Press.

Fombrun, C. & Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. Academy of Management Journal, 33, 233-258.

Fombrun, C.J. & Van Riel, C.B.M. (2004). Fame & fortune. Upper Saddle River, NJ: Prentice Hall.

Franko, L.G. (1989). Global corporate competition: Who's winning, who's losing, and the R&D factor as one reason why. Strategic Management Journal, 10, 449-474.

Fried, V.H., Bruton, G.D., & Hisrich, R.D. (1998). Strategy and the board of directors in venture capital-backed firms. Journal of Business Venturing, 13, 493-503.

Fried, V.H. & Hisrich, R.D. (1995). The venture capitalist: A relationship investor. California Management Review, 37, 101-113.

George, G., Wiklund, J., & Zahra, S.A. (2005). Ownership and the internationalization of small firms. Journal of Management, 31, 210-233.

Gompers, P.A. (1996). Grandstanding in the venture capital industry. Journal of Financial Economics, 42, 133-156.

Gorman, M. & Sahlman, W.A. (1989). What do venture capitalists do? Journal of Business Venturing, 4, 231-248.

Grant, R.M. (1996). Towards a knowledge-based theory of the firm. Strategic Management Journal, 17, 109-122.

Gulati, R. & Higgins, M.C. (2003). Which ties matter when? The contingent effects of interorganizational partnerships on IPO success. Strategic Management Journal, 24, 127-144.

Hair, J.F., Jr., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). Multivariate data analysis (5th ed.). Upper Saddle River, NJ: Prentice Hall.

Hill, C., Hwang, P., & Kim, W.C. (1990). An eclectic theory of the choice of international entry mode. Strategic Management Journal, 11, 117-128.

Jaasskelainen, M., Maula, M., & Seppa, T. (2006). Allocation of attention to portfolio companies and the performance of venture capital firms. Entrepreneurship Theory and Practice, 30, 185-206.

Johanson, J. & Vablne, J.E. (1977). The internationalization process of the firm: A model of knowledge development and increasing foreign market commitments. Journal of International Business Studies, 8, 23-32.

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

Klein, B. & Leffler, K.B. (1981). The role of market forces in assuring contractual performance. Journal of Political Economy, 89, 615-641.

Kobrin, S.J. (1991). An empirical analysis of the determinants of global integration. Strategic Management Journal, 12, 17-31.

Kotha, S., Rindova, V.P., & Rothaermel, F.T. (2001). Assets and actions: Firm-specific factors in the internationalization of U.S. internet firms. Journal of International Business Studies, 32, 769-791.

Kuemmerle, W. (2001). Go global--or no? Harvard Business Review, 79, 37-49.

Lerner, J. (1995). Venture capitalists and the oversight of private firms. Journal of Finance, 50, 301-318.

LiPuma, J.A. (2007). "Corporate venture capital and the international intensity of portfolio companies," McGill International Entrepreneurship Conference, Los Angeles.

Lu, J.W. & Beamish, P.W. (2001). The internationalization and performance of SMEs. Strategic Management Journal, 22, 565-586.

MacMillan, I.C., Kulow, D.M., & Khoylian, R. (1989). Venture capitalists involvement in their investments-extent and performance. Journal of Business Venturing, 4, 27-47.

Makela, M. & Maula, M.V.J. (2005). Cross-border venture capital and new venture internationalization: An isomorphism perspective. Venture Capital An International Journal of Entrepreneurial Finance, 7, 227-257.

McDougall, P.P. (1989). International versus domestic entrepreneurship: New venture strategic behavior and industry structure. Journal of Business Venturing, 4, 387-400.

McDougall, P.P. & Oviatt, B.M. (1996). New venture internationalization, strategic change, and performance: A follow-up study. Journal of Business Venturing, 11, 23-40.

McDougall, P.P., Oviatt, B.M., & Shrader, R.C. (2003). A comparison of international and domestic new ventures. Journal of International Entrepreneurship, 1, 59-82.

McDougall, P.P., Shane, S., & Oviatt, B.M. (1994). Explaining the formation of international new ventures: The limits of theories from international business research. Journal of Business Venturing, 9, 469-487.

McGrath, R.G. & MacMillan, I.C. (1995). Discovery-driven planning. Harvard Business Review, 73, 4-12.

Oviatt, B.M. & McDougall, P.P. (1995). Global start-ups: Entrepreneurs on a worldwide stage. Academy of Management Executive, 9, 30-45.

Peng, M.W. (2001). The resource-based view and international business. Journal of Management, 27, 803-829.

Pfeffner, J. & Salancik, G.R. (2003). The external control of organizations. Stanford, CA: Stanford University Press.

Podolny, J.M. (1994). Market uncertainty and the social character of economic exchange. Administrative Science Quarterly, 39, 458-483.

Porter, M.E. (1980). Competitive strategy: Techniques for analyzing industries and competitors. New York: The Free Press.

Porter, M.E. (1986). Competition in global industries: A conceptual framework. In M.E. Porter (Ed.), Competition in global industries (pp. 15-60). Boston: Harvard Business School Press.

Porter, M.E. (1998). On competition. Boston: Harvard Business School Press.

Preece, S.B., Miles, G., & Baetz, M.C. (1998). Explaining the international intensity and global diversity of early-stage technology-based firms. Journal of Business Venturing, 14, 259-281.

Pricewaterhouse Coopers. (2007). MoneyTree Report. http://www.pcmoneytree.com

Ranft, A.L. & Lord, M.D. (2000). Acquiring new knowledge: The role of retaining human capital in acquisitions of high-tech firms. The Journal of High Technology Management Research, 11, 295-319.

Rao, H. (1994). The social construction of reputation: Certification contests, legitimation, and the survival of organizations in the American automobile industry: 1895-1912. Strategic Management Journal, 15, 29-44.

Reuber, A.R. & Fischer, E. (1997). The influence of the management team's international experience on the internationalization behaviors of SMEs. Journal of International Business Studies, 28, 807-825.

Reuber, A.R. & Fischer, E. (2002). Foreign sales and small firm growth: The moderating role of the management team. Entrepreneurship Theory and Practice, 27, 29-45.

Robinson, K.C. (1999). An examination of the influence of industry structure on eight alternate measures of new venture performance for high potential independent new ventures. Journal of Business Venturing, 14, 165-187.

Robinson, K.C. & McDougall, P.P. (2001). Entry barriers and new venture performance: A comparison of universal and contingency approaches. Strategic Management Journal, 22, 659-685.

Rugman, A.M. & Verbeke, A. (2004). A perspective on regional and global strategies of multinational enterprises. Journal of International Business Studies, 35, 3-18.

Ruhnka, J.C., Feldman, H.D., & Dean, T.J. (1992). The "living dead" phenomenon in venture capital investments. Journal of Business Venturing, 7, 137-155.

Sambharya, R.B. (1996). Foreign experience of top management teams and international diversification strategies of U.S. multinational corporations. Strategic Management Journal, 17, 739-746.

Sapienza, H.J. (1992). When do venture capitalists add value? Journal of Business Venturing, 7, 9-27.

Sapienza, H.J., Autio, E., George, G., & Zahra, S.A. (2006). A capabilities perspective on the effects of early internationalization on firm survival and growth. Academy of Management Review, 31, 914-933.

Sapienza, H.J., Manigart, S., & Vermier, W. (1996). Venture capitalist governance and value added in four countries. Journal of Business Venturing, 11, 439-469.

Sharma, D.D. & Blomstermo, A. (2003). The internationalization process of Born Globals: A network view. International Business Review, 12, 739-753.

Shrader, R.C., Oviatt, B.M., & McDougall, P.P. (2000). How new ventures exploit trade-offs among international risk factors: Lessons of the accelerated internationalization of the 21st century. Academy of Management Journal, 43, 1227-1247.

Steensma, H.K., Marino, L., Weaver, K.M., & Dickson, P.H. (2000). The influence of national culture on the formation of technology alliances by entrepreneurial firms. Academy of Management Journal, 43, 951-974.

Stinchcombe, A.L. (1965). Social structure and organizations. In J.G. March (Ed.), Handbook of organizations (pp. 142-193). Chicago: Rand McNally.

Stuart, T.E. (2000). Interorganizational alliances and the performance of firms: A study of growth and innovation rates in a high-technology industry. Strategic Management Journal, 21, 791-811.

Sullivan, D. (1994). Measuring the degree of internationalization of a firm. Journal of International Business Studies, 25, 325-342.

U.S. Small Business Administration. (1992). The state of small business. Washington, DC: U.S. Government Printing Office.

Wijbenga, F.J., Postma, T.J.B.M., & Stratling, R. (2007). The influence of the venture capitalist's governance activities on the entrepreneurial firm's control systems and performance. Entrepreneurship Theory and Practice, 31, 257-277.

Wiklund, J. & Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. Strategic Management Journal, 24, 1307-1314.

Williamson, O.E. (1996). The mechanisms of governance. New York: The Free Press.

Zaheer, S. (1995). Overcoming the liability of foreignness. Academy of Management Journal, 38, 341-363.

Zahra, S.A., Ireland, R.D., & Hitt, M.A. (2000). International expansion by new venture firms: International diversity, mode of market entry, technological learning, and performance. Academy of Management Journal, 43, 925-951.

Zahra, S.A., Matherne, B.P., & Carleton, J.M. (2003). Technological resource leveraging and the internationalization of new ventures. Journal of International Entrepreneurship, 1, 163-186.

Zahra, S.A., Neubaum, D.O., & Huse, M. (1997). The effect of the environment on export performance among telecommunications new ventures. Entrepreneurship Theory and Practice, 26, 25-46.

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Table 1
Descriptive Statistics and Pairwise Correlations (N=93)

		1	2
	Mean	.09	.08
	SD	.28	.27
1.	IPO year dummy (1996)	--	
2.	IPO year dummy (1997)	-.09	--
3.	IPO year dummy (1998)	-.13	-.13
4.	IPO year dummy (1999)	* -.23	* -.21
5.	New venture age	-.05	-.04
6.	New venture int'l experience	.10	-.04
7.	New venture size	-.10	-.05

8. VC international knowledge ([dagger])		-.09	-.13
9. VC reputation		.03	-.17
10. New venture internationalization		.16	.04
		3	4
	Mean	.16	.35
	SD	.37	.48

1. IPO year dummy (1996)			
2. IPO year dummy (1997)			
3. IPO year dummy (1998)		--	
4. IPO year dummy (1999)		** -.33	--
5. New venture age		-.07	.02
6. New venture int'l experience		-.12	.02
7. New venture size		.05	-.01
8. VC international knowledge ([dagger])		-.02	.14
9. VC reputation		** -.29	-.03
10. New venture internationalization		.14	-.18
		5	6
	Mean	3.48	1.17
	SD	1.33	1.35

1. IPO year dummy (1996)			
2. IPO year dummy (1997)			
3. IPO year dummy (1998)			
4. IPO year dummy (1999)			
5. New venture age		--	
6. New venture int'l experience		.01	--
7. New venture size		-.12	.05
8. VC international knowledge ([dagger])		-.09	* .24
9. VC reputation		.08	-.05
10. New venture internationalization		.08	* .25
		7	8
	Mean	245.78	.43
	SD	542.84	.63

1. IPO year dummy (1996)			
2. IPO year dummy (1997)			
3. IPO year dummy (1998)			
4. IPO year dummy (1999)			
5. New venture age			
6. New venture int'l experience			
7. New venture size		--	
8. VC international knowledge ([dagger])		.17	--
9. VC reputation		.20	-.09
10. New venture internationalization		.06	** .28
		9	10

	Mean	.11	.00
	SD	1.83	.82
1. IPO year dummy (1996)			
2. IPO year dummy (1997)			
3. IPO year dummy (1998)			
4. IPO year dummy (1999)			
5. New venture age			
6. New venture int'l experience			
7. New venture size			
8. VC international knowledge ([dagger])			
9. VC reputation		--	
10. New venture internationalization		.12	--

* p <.05: ** p <.01.

([dagger]) variable has been transformed.

Table 2
Tobit Regression Results (Dependent Variable: New Venture Internationalization)

	Model 1	
	Coef.	S.E.
Control variables		
IPO year dummy (1996)	.80	(.71)
IPO year dummy (1997)	.80	(.72)
IPO year dummy (1998)	.94	(.56)
IPO year dummy (1999)	-.41	(.49)
New venture age	.17	(.14)
New venture international experience	.25	(.14)
New venture sire	.00	(.00)
Independent variables		
VC international knowledge		
VC reputation		
VC international knowledge x VC reputation		
Constant	-2.02 **	(.72)
Log likelihood	-91.99	
Likelihood ratio Chi-square	11.62	
Change in likelihood ratio Chi-square		

	Model 2	
	Coef.	S.E.
Control variables		
IPO year dummy (1996)	1.01	(.64)
IPO year dummy (1997)	1.40 *	(.69)
IPO year dummy (1998)	1.34 *	(.57)
IPO year dummy (1999)	-.31	(.46)
New venture age	.18	(.13)
New venture international experience	.20	(.13)
New venture sire	.00	(.00)
Independent variables		
VC international knowledge	.65 *	(.29)
VC reputation	.22 *	(.11)

VC international knowledge x VC reputation			
Constant	-2.04	**	(.66)
Log likelihood	-88.04		
Likelihood ratio Chi-square	19.51		
Change in likelihood ratio Chi-square	7.89	*	

	Model 3		
	Coef.		S.E.
Control variables			
IPO year dummy (1996)	.72		(.61)
IPO year dummy (1997)	1.02		(.67)
IPO year dummy (1998)	.98		(.54)
IPO year dummy (1999)	-.34		(.43)
New venture age	.20		(.12)
New venture international experience	.26	*	(.12)
New venture sire	.00		(.00)
Independent variables			
VC international knowledge	.62	*	(.26)
VC reputation	.15		(.10)
VC international knowledge x VC reputation	.37	*	(.16)
Constant	-1.88	**	(.61)
Log likelihood	-85.62		
Likelihood ratio Chi-square	24.36		
Change in likelihood ratio Chi-square	4.85	*	

* p < .05; ** p < .01 (n = 93) unstandardized estimates are reported.