The Deal Structuring Stage of the Venture Capitalist Decision-Making Process: Exploring Confidence and Control
by G. Tyge Payne, Justin L. Davis, Curt B. Moore, and R. Greg Bell

This exploratory study examines the deal structuring stage of the venture capitalist decision-making process. Here, the primary issues of concern are investor confidence and potential control of a venture in relation to the level of financing the investor provides and the structure with which the funding is delivered. Confidence comes in support of the entrepreneur, the venture itself, or a combination of the two, prior to capital transfer, but after the initial “invest or not invest” decision has already occurred. Findings support a multicriteria perspective of the pre-investment decision-making process and a distinct difference between entrepreneur confidence and venture confidence in the deal structuring stage.

Introduction
Venture capitalist (VC)-backed ventures have proven to be more successful (i.e., higher growth, longer survival) than non-VC-backed ventures (Gupta and Sapienza 1992; Sandberg 1986). However, even though VC-backed firms tend to be more successful than those financed in other ways, these firms

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still commonly fail to survive or achieve a positive return on investment (Timmons 1994). Some sources suggest that failure rates could be as high as 60 percent (Zacharakis and Meyer 2000). In an attempt to reveal the factors leading to successful ventures and because new ventures have proven to be important drivers of economies (Mason and Harrison 1999; Gorman and Sahlman 1989), VCs have been extensively studied in the entrepreneurship field for the last several decades (e.g., Alhorr, Moore, and Payne 2008; MacMillan, Siegel, and Narasimha 1985; Tyebjee and Bruno 1984).1

Despite numerous studies examining topics such as capital transfer, methods for identifying investment opportunities, and the criteria used by VCs in the investment decision (e.g., Bygrave 1987; MacMillan, Zemann, and Narasimha 1987; Bruno and Tyebjee 1985; Chan 1983; Hoban 1976), the extant literature has failed to provide a clear and comprehensive understanding of VCs and the investment decisions they make. In particular, there is uncertainty surrounding the factors influencing the investment decisions made by VCs at different stages of the decision-making process (Hall and Hofer 1993). Hall and Hofer (1993), using a series of interviews and a verbal protocol analysis, determined that in the proposal screening stage of venture evaluation, VCs do not use the strategy of the proposed business, financial factors, nor the characteristics of the entrepreneur as major decision criteria. They suggested that such evaluation criteria are usually examined more extensively at later stages of the VC decision-making process such as the project evaluation and/or the deal structuring stages. In other words, the factors and characteristics primarily influencing VC decisions may differ dramatically from one stage of the decision-making process to another.

After probing previous studies that have examined the investment decision criteria of VCs (e.g., Davila, Foster, and Gupta 2003; Fried and Hisrich 1994; Hisrich and Jankowicz 1990), there appears to be little research that has considered the factors and characteristics of the entrepreneur and/or venture at different stages of the decision-making process. To partially address this gap in existing research, this study is geared toward determining what characteristics or factors are important to VCs during the deal structuring stage of the VC decision-making process. More specifically, this study seeks to ascertain how VC evaluations and perceptions influence the financial investment levels they award the ventures and how these awards are structured. From a VC’s perspective, a better understanding of these decision-making processes can hopefully enable more prudent decisions regarding investments and stages of funding. For entrepreneurs, understanding how VCs make decisions might improve their chances of receiving relatively higher levels of financing or in larger quantities at the outset; a higher level of financing is desired as it enables a greater level of flexibility on the part of the entrepreneur.

Here, the financing of the deal is multifaceted; it involves not only the amount being delivered to the entrepreneur but the stages involved with the funding as well. Generally speaking, the amount of funding is likely to be largely endogenous to the individual venture (Hamilton and Nickerson 2003). Such things as industry, current stage of development, expected rate of return, and market

1Throughout this article, the term venture capitalists (VCs) is used to represent several types of resource holders or investors including angel investors, private equity investors, and managers of venture capital funds for private venture capital firms.
demands will all influence the absolute value of the funding delivered initially and totally. However, these levels are based on the VC’s perceptions of the venture and the entrepreneur vis-à-vis alternative ventures or business opportunities, and many of the questions regarding the minimal level of expected returns and other decision criteria used in the “invest or not invest” decision have already been addressed in previous stages of the VC decision-making process (e.g., Zarakakis and Meyer 2000; Cable and Shane 1997). Thus, the deal structuring stage is more specifically concerned with how to structure the delivery of funds rather than determine the likelihood of success or failure. The primary research question, then, is how do these arrangements vary across ventures and what key variables influence these differences.

Drawing primarily on the theoretical arguments of agency theory and the resource-based view of the firm (RBV), this study proceeds as follows: First, arguments are developed for the direct effects of confidence and control on venture-financing levels and structural arrangements. The hypotheses presented in this section follow previous works in the entrepreneurship literature but are geared toward the deal structuring stage of the decision-making process. Here, entrepreneur confidence refers to the perceived level of certainty that the entrepreneur will act in a proper and effective way with regard to the venture. Thus, entrepreneur confidence largely presumes that in future dealings, the entrepreneur will pursue mutually compatible interests in the relationship with the VC, rather than act opportunistically (Shepherd and Zarakakis 2001; Das and Teng 1998). In addition to confidence in the entrepreneur, a second type of confidence is developed, which is discussed as venture confidence. Venture confidence refers to the faith the VC has in the venture itself, including the value and potential of its products, services, and/or markets (MacMillan, Zemann, and Narasimha 1987; Tyebjee and Bruno 1984). Here, confidence is directly contrasted to trust; we argue that trust is primarily a component of the post-investment relationships, rather than pre-investment decisions.

Finally, we consider control and its impact on financing decisions. Control is a regulatory process where standards are erected to ensure more predictable behaviors in the pursuit of some desired outcome (Leifer and Mills 1996). When considering the venture capitalist–entrepreneur (VC–E) relationship, control is used to elicit cooperative behaviors from the entrepreneur and ensure that the invested capital and other resources are being properly utilized. Thus, the potential for increased levels of control would likely result in relatively higher financing levels or when the venture needs more development.

Following the development of the hypotheses, the methodological approach and testing procedures of this exploratory study are explained. Specifically, the survey methods, the operationalization of key variables, and the data used for empirical analyses are discussed. Then, the results of the generalized least squares (GLS) and multivariate regression analyses are given, which were used to test the hypotheses across four different financing dependent variables; two dependent variables are associated with the amount of financing being delivered to the venture and two are associated with the structure of the financing. Finally, the study is concluded with a discussion of the basic findings, limitations of the current research project, and recommendations for future research. Overall, this study contributes to the entrepreneurship literature by addressing more fine-grained issues associated with VC funding decisions concerning financing levels and deal structure.
The literature examining the investment decision of the VC firm has been segmented into two primary parts: (1) the pre-investment perspective; and (2) the post-investment perspective (MacMillan, Zemann, and Narasimha 1987). The pre-investment literature focuses on factors influencing the investment decision of the VC. The post-investment literature, on the other hand, examines any issues related to the VC, entrepreneur, and/or funded firm, after the initial investment of capital. However, to facilitate the development of more specific hypotheses and easier interpretation of findings, researchers have further segmented the VC investment process into multiple stages (e.g., Silver 1985; Tyebjee and Bruno 1984). One such study, Hall (1989), described the VC management process using eight stages: (1) generating a deal flow; (2) proposal screening; (3) proposal assessment; (4) project evaluation; (5) due diligence; (6) deal structuring; (7) venture operations; and (8) cashing out. Of these, our primary focus is on stage six, which involves structuring of the pre-investment deal specifics. In stage six, which follows the “invest or not invest” decision made in stage five, the VCs determine how much funding to deliver, in how many stages to deliver the funding, and how much involvement and control are warranted in the VC–E relationship.

Stage six represents the culmination of portions of the previous four stages, including the screening, assessment, evaluation, and due diligence of the proposal/project. Throughout stages two through six, VCs constantly attempt to determine the potential success or failure of a particular venture by evaluating a number of different criteria, including (1) the entrepreneur/team skills and capabilities; (2) product/service attractiveness; (3) market conditions and competition; and (4) potential financial returns (Zacharakis and Meyer 2000). These criteria work together in leading to the fifth stage decision of whether or not to invest, and then to a decision of the amount of capital and involvement that should be invested in a given venture. However, as previously stated, these criteria may differ in their level of significance to the actual decision depending on the stage of the decision-making process (Hall and Hofer 1993). Following Zacharakis and Meyer (2000), along with numerous related studies (e.g., MacMillan, Siegel, and Narasimha 1985; MacMillan, Zemann, and Narasimha 1987; Tyebjee and Bruno 1984), the discussion now turns to three key criteria used to determine the level of financing offered by the VC and how the financing should be structured: confidence in the entrepreneur, confidence in the venture, and potential control of the VC over the venture.

Trust versus Confidence in the Pre-investment Decision Process

Much of the entrepreneurship research has recently been centered on post-investment actions and relationships in VC research rather than pre-investment decision criteria. For instance, a central topic of discussion in the literature examining VCs has been the VC–E relationship. Leading scholars suggest that the VC–E relationship is an essential determinant of the success of ventures (Shepherd and Zacharakis 2001; Cable and Shane 1997; Sapienza and Korsgaard 1996) and may be considered more important to the venture than the actual capital provided (Timmons and Bygrave 1986). Furthermore, these studies demonstrate that the VC is involved in many aspects of the venture following the initial investment decision; VCs tend to involve themselves in the ongoing monitoring of the venture, the
structuring of compensation, the development of external networks, as well as providing access to expertise, heightened reputations, and other intangible resources (Davila, Foster, and Gupta 2003).

Indeed, the VC–E relationship is very important to the success of ventures and, therefore, the evaluation of the entrepreneur or entrepreneurial team is one of the key decision criterion used by VCs in the decision-making process (Hall and Hofer 1993). However, the inconsistencies and ambiguities surrounding the VC–E relationship make the investment decision very difficult for the VC (Manigart et al. 2000; Amit, Brander, and Zott 1998). For instance, there are certain characteristics of agency theory present in the VC–E relationship. The structuring of compensation and the monitoring of entrepreneur practices are both good examples of agency issues in the VC–E relationship (Eisenhardt 1989; Jensen and Meckling 1976). However, the VC–E relationship evolves with changes in the stage of the venture, entrepreneur experience, and VC levels of involvement (Sapienza and Timmons 1989), with the development of trust being a central part of this evolution. Because of this, issues such as self-interest and moral hazard might be of much less concern.

Recently, trust has been extensively used in the research on the VC–E relationship (e.g., Goel and Karri 2006; Howorth and Moro 2006; Neergaard and Ulhøi 2006; Welter and Smallbone 2006; Zahra, Yavuz, and Ucbasaran 2006; Sapienza and Korsgaard 1996). However, the definition of trust has been composed from multiple perspectives (Dirks and Ferrin 2001), each with important theoretical implications, yet still unable to fully explain VC trust. For instance, Lewis and Weigert (1985) viewed the concept of trust as a purely cognitive process where one party determines, through either objective or subjective criteria, those persons or entities in which they find trustworthy. Other research has taken a more conservative approach by defining the concept as a simple acceptance of vulnerability to another party (Rousseau et al. 1998). Mayer, Davis, and Schorman (1995, p. 715) defined trust in a similar way describing it as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other party will perform a particular action important to the truster.”

Though the development of the role of trust in VC investments has been affluent, this definitional issue with trust is problematic when considering the pre-investment stage decision-making process. This is because, relative to the post-investment stage, little vulnerability is present. Thus, we argue that trust in the VC–E relationship primarily occurs after financial investment is made, assuming neither party defects. Once the initial monetary investment is made, the VC becomes much more vulnerable to the entrepreneur’s actions. Similarly, the entrepreneur becomes vulnerable to the VC in providing some form of ownership and/or control (depending on the contract agreed upon between the two parties). However, even with the presence of trust and control in the post-investment relationship between the VC and entrepreneur, a different dynamic is present than in the pre-investment relationship. In the pre-investment relationship, neither party has fully committed to the other, so there is a relatively minimal level of vulnerability. For although some degree of investment in the relationship has occurred prior to the actual investment (e.g., time, information), trust is not as prevalent at this stage. However, a certain level of confidence in the entrepreneur and/or venture by the VC must be present for the VC to even consider a future investment. Confidence, therefore, is a factor contributing to the likelihood and extent the VC will trust the entrepreneur with higher levels of financing. So,
though perceptions of certainty persist throughout the ongoing relationship, the contract constitutes a highly visible and substantial act of trust beyond what has been previously required. Thus, we utilize the term “confidence” to resolve this issue. It is this distinction between trust (of primary importance in the post-investment relationship) and confidence (of primary importance in the pre-investment relationship) that this study seeks to differentiate.

The distinction between trust and confidence is of utmost importance in gaining a better understanding of how VCs determine levels of funding. Whereas the concept of trust basically implies an acceptance of vulnerability to another party, confidence is the perceived level of certainty that the entrepreneur will act in a proper and effective way with regard to the venture and the VC–E relationship. The term “perceived,” in the above definition, indicates a phenomena taking place prior to actual investment, which would be the most significant act of trust in the partner. Consequently, trust tends to be primarily a post-exchange (i.e., post-investment) phenomenon in the context of the VC–E relationship. Confidence, alternatively, is most important in the pre-investment stages of venture financing.

Entrepreneur and Venture Confidence

RBV provides a useful perspective to investigate how VC’s gauge the attractiveness of a venture. Alvarez and Busenitz (2001), following the works of Chrisman, Bauerschmidt, and Hofer (1998) and Conner (1991), propose that RBV is an important and effective means of addressing such entrepreneurial questions as those proposed in this study. RBV suggests that the successful exploitation of a new product or service is dependent on such resources as access to enabling technologies, a capable management team, and sufficient stakeholder support (Choi and Shepherd 2004). Therefore, the presence of durable and immobile resources (Amit and Schoemaker 1993), such as those listed above, increases the VC’s level of confidence and, subsequently, the VC’s willingness to invest in the venture.

Fiet (1995) examined strategies used by VCs to minimize risk, viewing market and agency risks as two separate forms of risk in the mind of an investing VC. This suggests that, from a VC’s perspective, there are two separate forms of confidence: (1) the confidence given to a person or persons (i.e., the entrepreneur or entrepreneurial team), which is largely discussed in the previous section; and (2) the confidence the VC has in the likelihood of venture success based on nonhuman based resources, such as product attributes (Jones and George 1998). This second type of confidence, termed venture confidence, is also based on a number of other criteria that are used by VCs in the investment decision-making process such as market attractiveness and competition (Hall and Hofer 1993; MacMillan, Zemann, and Narasimha 1987).

Building on these arguments, we suggest that the level of VC confidence is related to the deal structuring and financing levels. First, entrepreneur confidence, or the level of certainty placed in the actions of the person or persons involved in the venture, is expected to be positively related to the level of venture financing but negatively related to the extent of structure planned. In other words, if the VC feels confident in the motivations, skills, and capabilities of the entrepreneur or entrepreneurial team, then higher levels of funding will be offered to the entrepreneur initially and totally, all else being held equal. Furthermore, this confidence in the entrepreneur or entrepreneurial team can serve as a motivator for investment by the VC even when the confidence of the VC in
the venture itself is not high. Formally, the first hypothesis is delivered in two parts and states,

**H1a:** A VC's initial confidence in the entrepreneur prior to investment is positively related to the amount of venture financing.

**H1b:** A VC's initial confidence in the entrepreneur prior to investment is negatively related to the financing structure for the venture.

Regarding venture confidence, we presume that extensive evaluations and due diligence have already taken place prior to the deal stage of the process. Thus, the prerequisites associated with the VC firm have been minimally met. For instance, the VC stipulations regarding geographic location, stage of development, and familiarity with the technology, product and/or market have been previously determined as viable for investment (Elango et al. 1995). What remains for the VC in the deal structuring stage is to determine at what level to finance the venture and how to stage the investments. So, in addition to the level of confidence given to the entrepreneur/team, the characteristics of the venture must be considered vis-à-vis other investment opportunities to determine the confidence the VC has in the venture itself (Patel and D'Souza 2008). These characteristics can be assessed by examining the product, its relation to other existing products in the industry, the potential growth of the market, other competition, the industry environment, and other risk factors. Basically, the argument is that as confidence in the venture's characteristics and its likelihood of success increases, so will the VC's willingness to extend more capital to the entrepreneur/team.

Based on the above arguments, the second hypothesis suggests that the level of VC confidence in the venture's characteristics is directly related to the level and structure of the venture financing provided. So, in addition to the perceptions and/or reputations of the entrepreneur, the confidence the VC has in the likelihood that the proposed venture will be successful (i.e., positive returns on investment) based on the venture characteristics will influence the financing decision. Furthermore, though high levels of entrepreneur confidence can often make up for lower levels of venture confidence, the opposite can also be true. In the deal structuring stage of the process, a relatively high level of confidence in the venture should be present because it has already passed several critical stages of VCs' evaluation. However, at this point, VCs are comparing the specific venture with others that also have high potential for success and must determine which of these ventures warrant the most amount of funding from the VC firm. Formally, hypothesis two states,

**H2a:** A VC's confidence in the potential success of the venture is positively related to the amount of venture financing.

**H2b:** A VC's confidence in the potential success of the venture is negatively related to the financing structure of the venture.

**Venture Capitalist Control**

Research has noted the active role of VCs in ventures through the use of various control mechanisms, advice, and/or personal interaction, ultimately leading to an increased value of the venture firm (Sapienza and Gupta 1994; Bygrave and Timmons 1992; MacMillan, Kulow, and Khoylian 1989). Similarly, Cable and Shane (1997) suggested that control mechanisms (i.e., penalties for defection) are necessary for cooperation when trust is absent. Additionally, numerous authors have viewed control
as a substitute for trust (e.g., Cable and Shane 1997; Williamson 1975). This is not suggesting that trust and control are one in the same, but that, as the presence of one increases, the need for the other diminishes. Specifically, Wright and Robbie (1998) accentuated the importance of trust in their study that found that an increase in the level of trust reduces the need for formal control mechanisms. The use of both trust and control is more logical given that both of these are present at all times, in some form, in the VC–E relationship once investment is made by the VC into the venture. Indeed, Shepherd and Zacharakis (2001) proposed that the two variables (trust and control) be considered simultaneously in the development of a better understanding of “confidence.” Applying these ideas to the pre-investment deal structuring stage, it seems necessary to examine levels of control along with confidence because control may serve as a safeguard in situations where confidence is lacking, thus impacting the decision-making processes of the VC and the resulting impact on the amount of financial investment given and structure of the deal.

Most research examining the VC–E relationship examines internal governance issues and protection against agency concerns (Barney and Busenitz 1996; Sapienza and Gupta 1994; Amit, Glosten, and Muller 1990). An agency theory perspective argues that the separation of ownership and control leads to additional costs to the venture (Jensen and Meckling 1976). Thus, the VC would benefit from installing governance mechanisms to protect against opportunistic behavior and moral hazard. However, as previously mentioned, the VC–E relationship is a unique type of relationship. In other words, VCs do not always transfer all control to the venture entrepreneurs; rather, most VCs integrate various control mechanisms into the arrangement.

Though many different control mechanisms can be used, a clear understanding of control is needed to fully understand the importance of this variable to the VC–E relationship, and the decision processes leading up to the establishment of the contract. Leifer and Mills (1996, p. 117) define control as “a regulatory process by which the elements of a system are made more predictable through the establishment of standards in the pursuit of some desired objective or state.” This definition is used as the basis for the development of the third hypothesis and inherently includes an agency theory perspective where control can facilitate cooperation in the relationship and/or allow for the monitoring of the entrepreneur’s actions. Furthermore, the definition acknowledges the single objective that is a mutual goal of both parties.

Several control mechanisms have become generally accepted by VCs to encourage goal alignment and cooperation of the entrepreneur(s). Some of the more common mechanisms include (1) dilution of the entrepreneur’s equity in the venture (Sahlman 1990); (2) the ability to make managerial changes (Barney and Busenitz 1996; Hoffman and Blakely 1987); (3) the ability to make changes to compensation structures (Sahlman 1990); (4) rights to allocate cash flows (Kaplan and Stromberg 2001); (5) the ability to stage financing or build co-investing structures (Steier and Greenwood 1995); and/or (6) the ability to build in management stock ownership requirements or limits. Generally speaking, the VC utilizes such mechanisms to minimize the risk associated with the venture investment. For instance, by utilizing staged funding, the VC has the ability to provide only a portion of the total amount of financing in several incremental stages. As a result, if the venture exceeds expected risk levels, the VC can avoid investing more capital into a stale venture.
Risk to the VC is minimized when the optimal level of goal alignment is achieved through the combination of governance mechanisms and reward structure. To increase the likelihood of cooperation by the entrepreneur, control is exerted, resulting in reduced risk, as perceived by the VC (Shepherd and Zacharakis 2001). However, the transfer of risk in this relationship once again is unique in comparison with traditional principal/agent risk transfer. Whereas agency theory makes no assumptions of the vested interest of the agent in the success of the firm, the emotional and personal investment of the entrepreneur to the firm is likely accompanied by a desire for the success of the venture. Transfer of risk must be handled delicately as changes in equity ownership can often result in suboptimal results (Amit, Brander, and Zott 1998) without consideration for the emotional investment of the entrepreneur.

In the pre-investment stages, the VC must evaluate the level of control that will be present in the post-investment decision stages. It is logical, then, to believe that as the VC reduces its risk through the implementation of VC–E-based control mechanisms, the level of financing will increase, but the extent of financial control will decrease. Thus, relational control mechanisms are built into the contract to ensure that proper levels of control exist and to provide a greater level of certainty to the principal, as determined by the confidence that the VC has in the entrepreneur and venture attributes. This leads to the third hypothesis:

\[ H3a: \text{A VC’s control over the entrepreneur and the venture is positively related to the amount of venture financing.} \]

\[ H3b: \text{A VC’s control over the entrepreneur and the venture is negatively related to the financing structure of the venture.} \]

Methodology
Study Design
Following the tailored methodology recommendations of Dillman (2000), a survey was designed and pretested, then sent to the venture managers of 95 venture capital firms identified in the Texas Venture Capital and Private Equity Directory (2003). Since common method variance is often considered a problem in single-source survey research, we took measures to reduce the potential of its effect in the survey design by using different response scales and different style questions to create “methodological separation” (Podsakoff et al. 2003, p. 887). There were a total of 39 respondents, representing approximately a 41 percent firm-level response rate. After eliminating incomplete questionnaires from the sample, we were left with 26 usable responses. Subjects were asked to provide detailed information pertaining to their own investing firms and investment decision-making processes. Responses were based on the two most recent financing decisions in which the individual respondent was personally involved. Thus, the level of analysis is the specific venture investment decision of the VC investor (effective \( N = 52 \)).

Measures
The primary variables and constructs considered in this study include (1) confidence of the investing VC in the entrepreneur/team; (2) confidence of the investing VC in the venture; (3) the extent of control available to the VC over the venture; (4) amount of venture financing, both initial and total; and (5) the number of stages planned to deliver the financing. The confidence and control constructs were initially developed following previous works that examined the decision criteria used in new venture evaluation and were modified according to industry expert (i.e., practicing venture capitalists) recommendations and pretesting. Additionally, model control variables
of investing firm age, investing firm size, type of investor, stage of the venture, and industry of venture were initially included in the analyses.

Confidence. As previously argued, confidence can be based on the characteristics of the entrepreneur/team and on the specific venture factors (e.g., product/service characteristics, macro-environmental setting, or competition levels). Four different characteristics for the entrepreneur confidence construct and six for the venture confidence construct were presented to the respondent. For the entrepreneur/team characteristics, the following were used: (1) extensive capabilities, skills, and/or formal education; (2) entrepreneurial personality; (3) leadership ability; and (4) respect of third parties. These specific characteristics were adapted from the following scholarly works: Gartner and Starr (1999), Hall and Hofer (1993), and Zacharakis and Meyer (2000). An example of a survey item for this variable is: “To what extent was the following characteristic present in the entrepreneur/team: The respect of third parties.” Responses were based on a Likert-type scale ranging from very low presence of the characteristic to very high presence of the characteristic. For the confidence in the venture construct, the following variables were similarly used: (1) core product/service is proprietary; (2) core product/service is superior to existing products/services; (3) potential growth/size; (4) low threat of competition; (5) stability of venture firm’s environment; and (6) overall risk. The venture confidence items primarily follow the works of Sapienza and Gupta (1994) and Shane and Cable (2002). The survey items were the same format as the questions related to confidence in the entrepreneur. An example of a survey item is: “To what extent was each factor present in the venture idea or product/service: potential growth.”

For each entrepreneur or venture characteristic, the VCs were asked to evaluate (1) the extent to which the characteristic was present in the entrepreneur or venture (1 = very low, 5 = very high); and (2) the extent to which that characteristic was given consideration in the financing decision (1 = not considered, 5 = very much). These scores were multiplied to give a weighted score for each item. After weighting, the items were averaged to create a global measure for the confidence in the entrepreneur/team variable (Cronbach’s alpha = 0.82) and confidence in the venture variable (Cronbach’s alpha = 0.75). The combining of these items was supported by exploratory factor analysis, using principal components and a varimax rotation, on the items evaluating both parts of the question. The results of the factor analysis are shown in Table 1.

Control. Control has been measured by examining the dictation of management by the VC firm (Barney and Busenitz 1996; Hoffman and Blakely 1987), stock ownership regulations for management and the entrepreneur (Sahlman 1990), and the ability to change compensation structures (Sahlman 1990). Here, the VC respondents were asked, “Prior to the initial investment decision, to what extent did you consider each of the following issues in your decision to fund the venture?” The following issues were arranged in a 7-point Likert scale (1 = none, 7 = a great amount): (1) ability to change the management structure; (2) ability to change the compensation structure; (3) ability to adjust ownership structure; and (4) ability to influence the strategic decisions of the venture. These factors served as an aggregate predictor of the “VC control” variable (Cronbach’s alpha = 0.81).

Financing Amount and Financing Structure. Entrepreneur confidence, venture confidence, and control are used to
<table>
<thead>
<tr>
<th>Variable</th>
<th>Extend Characteristic Was Present in Entrepreneur/Team or Venture?</th>
<th>Extent Characteristic Was Considered in Decision?</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Entrepreneur</td>
<td>Venture</td>
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<tr>
<td>Capabilities, Skills, and Education</td>
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<td>Entrepreneurial Personality</td>
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<td>Overall Risk</td>
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*aLoadings are bolded to highlight differences.*
predict two different venture-financing outcomes. These two types include the amount of financing and the structure of the venture financing contributed by the VC firm. Each of these types is measured in two ways, making four total dependent variables. First, the measurements for amount of venture financing focus on the actual monetary investment of a VC into a new venture and are measured as (1) the monetary investment initially given to the venture; and (2) the total monetary investment planned, given adequate progress is made. Second, venture-financing structure focused on the arrangement with which the funds provided by the VC were to be distributed to the entrepreneur/venture and were measured by: (1) the ratio of the initial amount to the total amount planned; and (2) the number of financing stages planned.

The three dependent variables utilizing questions of financing (initial financing, total financing, and percentage of financing delivered initially) are based on the following three questions: (1) “In U.S. dollars, what was the amount of the initial (first) investment amount?”; (2) “In U.S. dollars, what was the amount of the total investment planned (given adequate progress)?”; and (3) “How many stages of financing were planned?”

Model Control Variables. VC firm age, VC firm size, type of investor, industry of venture, and venture stage were initially included in the analyses as control variables. First, because of potential variations in experience and resources, the age and size of the investing firm were controlled. However, because of the extremely high correlation between these two variables, we chose to include only one of these variables, VC firm age, in further analyses. Second, the type of investor, be it angel investors, private equity investors, or managers of private venture capital funds, was controlled through the use of a single binomial variable. Managers for private venture capital firms were categorized in one group, all others types in the other. This was to control for differences in style or venture targets. For instance, angel investors have been shown to invest at an earlier stage than venture capitalists (Elitzur and Gavious 2003).

Additionally, a binomial variable to control for ventures operating in the high technology industries, such as software development or telecommunications, was included in the analyses. This follows the arguments of several scholars who have suggested that the risk and uncertainty levels associated with young organizations are likely to be particularly high among those in the high technology fields (Aldrich and Fiol 1994). Specifically, technology companies tend to require larger resource commitments and longer developmental time frames than other types of new ventures (Baum and Silverman 2004; Juma and Payne 2004; Shane and Stuart 2002).

We also included the stage of the venture as a control since venture stage has been demonstrated to be of importance to VC financing decisions (e.g., Sapienza and Timmons 1989). VCs can become involved in a venture at various stages, including the seed stage or the later rounds of refinancing; the extent of involvement and type of contributions of the investor may range accordingly (Carter and Van Auken 1994; Ruhnka and Young 1987). Although we do not deliver formal hypotheses, we expect that in the deal structuring stage of the decision-making process, the stage of the venture will be not be directly related to the level of financing but will be negatively associated with the extent of structure established for the venture. In other words, later-staged ventures will not have as long-term financial commitments and will be held on a shorter tether of financing. Following previous classifications of venture stage, the
respondents were asked to categorize the venture into one of the following five stages at the time the financing decision was made: seed financing, startup, first stage, late stage/expansion, and bridge/acquisition. These stages were numerically ordered from one to five for testing purposes.

Finally, one of the dependent variables used in other models was included in the other models. For the two levels of financing dependent variables, the number of planned stages was included as a control variable. Likewise, for the structure dependent variables, the total financing level was included.

Analyses and Results

Means, standard deviations, and correlations for the variables are presented in Table 2. Variance inflation factor (VIF) scores were conducted to test for the possibility of multicollinearity among the data. The mean VIF for the independent variables was 1.28, with a high of 1.42; these values are well below the accepted value of 10 and indicate that multicollinearity should not be problematic. Also, a Harman’s one-factor test and a scale item trimming test were conducted. Neither test demonstrated evidence that common method variance should be problematic with seven factors and four factors emerging for these tests, respectively.

The hypotheses were tested in two ways: GLS regression and multivariate regression. First, because our survey asked about two separate venture decisions from a single respondent, there is a potential for within-unit correlation that may impact findings. Therefore, we initially used a random effects GLS regression technique to test the hypotheses. The choice of random versus fixed effects was based on the Hausman test. The results of the GLS regression analyses are shown in Table 3.

Following the GLS regressions, a Breusch and Pagan Lagrangian multiplier test for random effects was employed for each model. This test showed that there is no significant within-unit correlation for any of the models except for those regressing on the initial investment dependent variable; this suggested that for most of the models, we would get equivalent results from ordinary least squares regression techniques. Therefore, we employed multivariate regression because it allows for the testing of each independent variable across multiple equations simultaneously, thus accounting for the fact that the equations, particularly the dependent variables, are not completely independent. Based on our hypotheses and similar to Table 3, we arranged the dependent variables according to their types: level of financing and the structure of the deal (Tables 4 and 5, respectively). Two models are given for each dependent variable, followed by the multivariate findings. The first set of models of Tables 4 and 5 (Models 1 and 3) give the results of the control variables regressed on the dependent variables. Model 5 in both tables then shows the overall results for the multivariate regression, when only including the control variables. The multivariate scores show the overall F statistics for the independent variables across the two models; this shows the overall impact each independent variable

2Note that the measure of VC firm age was highly skewed; an inverse transformation helped normalize the distribution.
3Because of similarity in results using both types of regression analysis, we primarily focus on the multivariate regression results in our discussion of the results. Note that although within-unit correlations were found to exist for the initial investment dependent variable models, there is little difference in the overall findings.
Table 2
Descriptive Statistics and Pairwise Correlations of Variables\(^a\)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Investing Firm Age</td>
<td>0.1607</td>
<td>0.1750</td>
<td>—</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 High Tech Venture</td>
<td>0.3462</td>
<td>0.4804</td>
<td>0.065</td>
<td>—</td>
<td></td>
<td></td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Private VC Firm</td>
<td>0.3333</td>
<td>0.4758</td>
<td>0.222</td>
<td>0.235(^*)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Venture Stage</td>
<td>2.870</td>
<td>1.360</td>
<td>—0.266(^*)</td>
<td>—0.374(^**)</td>
<td>—0.253(^*)</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Ent Confidence</td>
<td>16.75</td>
<td>5.094</td>
<td>0.050</td>
<td>—0.016</td>
<td>0.272(^***)</td>
<td>0.046</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Venture Confidence</td>
<td>14.53</td>
<td>4.364</td>
<td>0.066</td>
<td>0.241(^*)</td>
<td>0.195</td>
<td>—0.179</td>
<td>0.400(^**)</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Venture Control</td>
<td>4.505</td>
<td>1.185</td>
<td>0.046</td>
<td>0.159</td>
<td>0.266</td>
<td>—0.085</td>
<td>—0.044</td>
<td>0.255(^*)</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Initial Investment (1,000)</td>
<td>10,772</td>
<td>16,012</td>
<td>—0.121</td>
<td>—0.261(^*)</td>
<td>—0.109</td>
<td>0.363(^**)</td>
<td>0.246(^*)</td>
<td>—0.217</td>
<td>0.061</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Total Investment Planned (1,000)</td>
<td>23,555</td>
<td>26,384</td>
<td>—0.161</td>
<td>—0.124</td>
<td>0.239(^*)</td>
<td>0.116</td>
<td>0.298(^***)</td>
<td>—0.210</td>
<td>—0.155</td>
<td>0.700(^****)</td>
<td>—</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Ratio of Initial to Total Investment Planned</td>
<td>0.4922</td>
<td>0.3413</td>
<td>—0.120</td>
<td>—0.194</td>
<td>—0.454(^****)</td>
<td>0.414(^**)</td>
<td>—0.011</td>
<td>0.076</td>
<td>0.038</td>
<td>0.430(^**)</td>
<td>—0.093</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>11 Financial Stages Planned</td>
<td>2.241</td>
<td>1.027</td>
<td>0.207</td>
<td>0.085</td>
<td>0.528(^****)</td>
<td>—0.356(^**)</td>
<td>0.002</td>
<td>0.132</td>
<td>0.061</td>
<td>—0.364(^**)</td>
<td>0.013</td>
<td>—0.609(^****)</td>
<td>—</td>
</tr>
</tbody>
</table>

\(^a\)N = 52.

\(^*\)p ≤ .10.

\(^**\)p ≤ .01.

\(^***\)p ≤ .05.

\(^****\)p ≤ .001.

VC, venture capitalist.
### Table 3
GLS Regression Analyses for Financing Levels and Financing Structure

<table>
<thead>
<tr>
<th>Variables</th>
<th>Initial Financing</th>
<th>Total Financing</th>
<th>Percent of Total</th>
<th>Planned Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
<td>Model 4</td>
</tr>
<tr>
<td>Investing Firm Age</td>
<td>-0.08</td>
<td>-0.17</td>
<td>-1.12</td>
<td>-1.33</td>
</tr>
<tr>
<td>High Tech Venture</td>
<td>-0.98</td>
<td>-0.52</td>
<td>-0.86</td>
<td>-0.38</td>
</tr>
<tr>
<td>VC Firm</td>
<td>0.61</td>
<td>0.13</td>
<td>2.14*</td>
<td>1.90**</td>
</tr>
<tr>
<td>Venture Stage</td>
<td>1.81**</td>
<td>1.34</td>
<td>1.14</td>
<td>0.69</td>
</tr>
<tr>
<td>Planned Stages</td>
<td>-1.87**</td>
<td>-1.68**</td>
<td>-0.01</td>
<td>0.09</td>
</tr>
<tr>
<td>Total Investment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneur Confidence</td>
<td>2.17*</td>
<td></td>
<td>1.85**</td>
<td></td>
</tr>
<tr>
<td>Venture Confidence</td>
<td>-1.77**</td>
<td></td>
<td>-1.69**</td>
<td></td>
</tr>
<tr>
<td>Venture Control</td>
<td>-0.07</td>
<td></td>
<td>-1.10</td>
<td></td>
</tr>
<tr>
<td>Wald $\chi^2$</td>
<td>11.32*</td>
<td>18.96*</td>
<td>8.14</td>
<td>17.13*</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.234</td>
<td>0.357</td>
<td>0.170</td>
<td>0.308</td>
</tr>
</tbody>
</table>

*a coefficient used for independent variables, $N = 52$.

*p $\leq .05$.

**$p \leq .10$.

***$p \leq .01$.

****$p \leq .001$.

VC, venture capitalist.
Table 4
Results of Multivariate Regression Analyses for Amount of Financing

<table>
<thead>
<tr>
<th>Variables</th>
<th>Initial Financing</th>
<th>Total Financing</th>
<th>Multivariate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
</tr>
<tr>
<td>Investing Firm Age</td>
<td>-0.18</td>
<td>-0.28</td>
<td>-1.36</td>
</tr>
<tr>
<td>High Tech Venture</td>
<td>-1.41</td>
<td>-0.88</td>
<td>-1.05</td>
</tr>
<tr>
<td>VC Firm</td>
<td>1.15</td>
<td>0.35</td>
<td>2.52**</td>
</tr>
<tr>
<td>Venture Stage</td>
<td>1.23</td>
<td>0.83</td>
<td>0.77</td>
</tr>
<tr>
<td>Planned Stages</td>
<td>-2.44**</td>
<td>-2.14**</td>
<td>-0.36</td>
</tr>
<tr>
<td>Entrepreneur Confidence</td>
<td></td>
<td></td>
<td>2.55**</td>
</tr>
<tr>
<td>Venture Confidence</td>
<td></td>
<td></td>
<td>-2.40**</td>
</tr>
<tr>
<td>Venture Control</td>
<td>0.54</td>
<td>-0.93</td>
<td>3.20</td>
</tr>
<tr>
<td>$F$</td>
<td>3.077**</td>
<td>3.218***</td>
<td>1.947*</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.251</td>
<td>0.375</td>
<td>0.175</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>0.124</td>
<td>0.136</td>
<td></td>
</tr>
</tbody>
</table>

*a t coefficient for individual dependent variable models, $F$ for multivariate models, $N = 52$.

* $p \leq .10$.
** $p \leq .05$.
*** $p \leq .01$.
**** $p \leq .001$.

VC, venture capitalist.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Percent of Total</th>
<th>Planned Stages</th>
<th>Multivariate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
</tr>
<tr>
<td>Investing Firm Age</td>
<td>0.39</td>
<td>0.48</td>
<td>0.16</td>
</tr>
<tr>
<td>High Tech Venture</td>
<td>0.20</td>
<td>-0.07</td>
<td>-1.12</td>
</tr>
<tr>
<td>VC Firm</td>
<td>-3.11*</td>
<td>-3.45**</td>
<td>3.61**</td>
</tr>
<tr>
<td>Venture Stage</td>
<td>2.31***</td>
<td>2.25***</td>
<td>-2.17***</td>
</tr>
<tr>
<td>Total Investment</td>
<td>0.21</td>
<td>0.61</td>
<td>-0.36</td>
</tr>
<tr>
<td>Entrepreneur Confidence</td>
<td>0.25</td>
<td></td>
<td>-0.98</td>
</tr>
<tr>
<td>Venture Confidence</td>
<td>1.00</td>
<td></td>
<td>0.47</td>
</tr>
<tr>
<td>Venture Control</td>
<td>1.07</td>
<td></td>
<td>-0.54</td>
</tr>
<tr>
<td>$F$</td>
<td>4.448*</td>
<td>3.214*</td>
<td>5.033*</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.326</td>
<td>0.374</td>
<td>0.354</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>0.048</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a t coefficient for individual dependent variable models, $F$ for multivariate models, N = 52.

*p ≤ .01.

**p ≤ .001.

***p ≤ .05.

****p ≤ .10.

VC, venture capitalist.
has on the dependent variables when considered simultaneously.

Although the age of the investing firm and the industry control variable are not significantly related, there is evidence that the investors labeling themselves as private venture capital firms tend to differ from other kinds of investors. These results indicate that private venture capitalists tend to invest more total amounts of capital (Table 4, Model 3) but give less initially as a percentage of the total amount planned (Table 5, Model 1). In a related fashion, the private venture capital firms tend to plan more rounds of financing (Table 5, Model 3). Overall, our findings support previous research regarding the difference in investing patterns between private venture capitalists and other types of investors (e.g., Elitzur and Gavious 2003). Also, as we expected, the stage of the venture was an important variable in the various models. Our results suggest that venture stage does not influence total financing levels but does influence financial structuring. Basically, our findings show that later-stage ventures will get a larger percentage of funding up-front and will have fewer planned stages of funding.

The second set of models in both Tables 4 and 5 (Models 2 and 4) includes the independent variables to test the hypotheses. H1 argues that high initial confidence in the entrepreneur/team is related to greater levels of financing but lower, less extensive deal structures. Overall, there is a positive relationship between the level of entrepreneur confidence and the levels of financing ($p \leq .05$, Table 4, Model 6); this lends support for H1a. However, there is no significant relationship for the structure dependent variables. Thus, H1b was not supported. Although significant, we found the relationship between venture confidence and financing to run in the opposite direction of H2a. According to these findings, as the level of venture confidence goes up, the level of capital allocated to the venture goes down. Similar to the findings for H1b, H2b was also not supported; no significant relationship was found between venture confidence and the deal structure. Finally, we did not find support for H3, which hypothesized a relationship between venture control and the amount of financing or the structure of the deal.

**Discussion**

The usual limitations exist with respect to studies using perceptual, cross-sectional data. However, considerable care was taken with the development of the survey in order to attend to such concerns as reliability and validity. For instance, utilizing multiple objective dependent variables is expected to reduce the danger of percept–percept effects. Of course, improvements to the study, such as gaining a larger sample and paired responses from both the venture capitalist and the entrepreneur, would be preferred. Additionally, longitudinal data measuring confidence and control prior to the final decision and then after the financing decision is made would be ideal.

This exploratory study is also limited with regard to its post hoc nature. By asking VCs to report on their reactions and thoughts prior to the financing decision, the study is opened up to potential post hoc rationalization bias. However, by asking about only the VC’s most recent decisions, the level of post hoc rationalization is minimized since many of these ventures are still ongoing. Thus, a possible limitation inherent in the study is the potential survivor bias that comes with requesting information from the VC on their most recent venture investments. In other words, inherently embedded in this data collection procedure was the elimination of any ventures that did not have a positive “invest or not” decision in stage five of the pre-investment process. As a result, perfor-
mance and likelihood of investment estimates do not reflect a random sample of start-up ventures. However, it should be noted that though this might limit the generalizability of the study to all start-up ventures, the focus of the current study was on the funding amount and structure decision, not the decision of the VC to fund or to not fund a particular venture.

Finally, it should be noted that the nature of some of our outcome variables regarding overall financing levels may be related to the specific type of venture being funded. In other words, some ventures simply require more funding compared with others based on their nature. Though our inclusion of the high technology variable controls for this to a certain extent, the realization that ventures differ in their individual needs cannot be ignored (Hamilton and Nickerson 2003). Future studies of this kind could match up similar ventures according to product, stage, and industry, then compare outcomes at both stage five, the invest or not decision stage, and stage six, the deal structuring stage. Such matched pair studies have been utilized in previous research to examine outcomes such as fraudulent financial reporting (e.g., O’Connor et al. 2006) or illegal trading behavior (e.g., Davis, Payne, and McMahan 2007).

Despite these limitations, this study makes two key theoretical contributions to the academic field of entrepreneurship and the results indicate some key areas of interest concerning the VC financing decision. First, building on the extensive literature on trust in the VC–E relationship (e.g., Zahra, Yavuz, and Ucbasaran 2006; Sapienza and Korsgaard 1996), we theoretically argued that there is a distinction between confidence and trust, and that these concepts have a different impact on VC decisions depending on the stage of the decision-making process. Second and most importantly, we developed the argument that confidence can come in two forms (one based on the characteristics of the entrepreneur or entrepreneurial team and the other based on venture characteristics), and that each of these types impact VC financing decisions differently.

Empirically, our findings lend support to these arguments. The empirical findings suggest that VCs place an emphasis on the entrepreneur/team when determining the level of financing; this tends to support much of the current entrepreneurship literature arguing for the importance of the entrepreneur/team in the VC financing decision-making process (e.g., Shane and Cable 2002). However, running contrary to our expectations, the confidence in the venture itself shows a negative relationship to the level of financing. Though these differences tend to support our arguments regarding the two different types of confidence, the meaning behind these contradictory findings is somewhat elusive. Perhaps, with greater levels of confidence in the venture, there is less need for high levels of financing. In other words, ventures with more proprietary products/services, attractive markets, and lower levels of competition are perceived to need less capital to make it to a profitable status. An alternative interpretation of these findings would be that as the levels of confidence in the venture rise, the level of perceived risk and possible return are reduced. Given multiple investment opportunities, the VCs in our sample may choose to invest more money in ventures with the possibility of higher returns. Thus, less money is available to the “safer” investments.

Although we hypothesized that VC control would play a role in the amount of financing and the structure of the deal, we did not find a significant relationship between level of control and any of the dependent variables. We see three possible explanations for this insignificant finding: (1) the variance explained by the venture control variable does not appear
because other variables are explaining it; (2) the survey respondents did not necessarily distinguish between control, planned stages, and the private VC firm control variables; or (3) control was not as large or a real consideration during this stage of the process. Following the first explanation, the level of control may be accounted for by other variables such as the planned stages variable, the stage of the venture, and the private VC firm control variable. However, after consideration, we believe that the third explanation may be most accurate; it is likely that because we are only examining the ventures that VCs have already decided in which to invest, that a form of survival bias may exist that limits the number of ventures that require high levels of control. In other words, we suggest that the lack of significant findings for control may come because the VC has previously determined the need for control to be problematic and this impacted the decision to not invest in the previous stage of the pre-investment decision process. So whereas increasingly high levels of control may be negatively related to venture-financing levels, it may be that high levels of control will more likely result in a decision to not invest in the venture at all.

Related to venture control, our empirical results demonstrate that the stage of the venture is an important variable for determining how the deal is structured. Clearly, the later-stage ventures need less extensive support, thus, the VC will tend to plan less stages in the financing delivery. Basically, ventures in later stages seem to elicit larger portions of capital in single or very few stages; this is likely due to the lower risk levels involved in the more advanced venture stages. However, we did not detect a relationship between later stages of the venture and total financing. This would indicate that the VC makes financing decisions on a case by case basis, rather than by stage; this follows previous research suggesting that the total amount of funding is likely largely endogenous to the individual venture (Hamilton and Nickerson 2003). Future research should continue to explore how different criteria may be utilized to greater or lesser extents according to venture stage, as well as other venture characteristics such as industry. For instance, one could take a configurations perspective of ventures such that multiple characteristics could be considered holistically regarding their influence on VC deal structuring decisions (Payne 2006; Short, Payne, and Ketchen 2008).

In order to examine the face validity of these empirical results, we conducted eight field interviews of VCs that were not included in our original sample. Generally, the interviewees suggested that these preliminary results were in line with their practical experiences in venture financing. Furthermore, we found considerable consensus among the interviewed VCs that they do indeed differentiate between confidence in the venture and confidence in the entrepreneur. As Jeffrey Bussgang at Flybridge Capital Partners explained, “...in my experience, VCs definitely view confidence in the investment and entrepreneur in a linked but distinct manner and use both factors to drive decisions.”

To help explain why VCs place greater emphasis in their confidence levels in entrepreneurs over their confidence in new venture ideas when making financing decisions, Ralph Stow of Valeo Capital suggested, “since VC money is usually the most expensive money you can find, I would submit that the better quality deals probably need less funding because they are (1) possibly bankable; or (2) the entrepreneur has

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some money to put into the deal as well.” In fact, this same VC reported that his financing considerations were strongly influenced by the leadership ability and “personality” of the entrepreneur, as well as the respect of the entrepreneur with relevant third parties (e.g., bankers, suppliers, customers). On average, this VC considered the aspects of the entrepreneur more important than the characteristics of the specific venture concept being proposed. Similarly, Tommy Glenn, an angel investor in Fort Worth, Texas reported that, in addition to the leadership ability of the entrepreneur and reputation with relevant third parties, the entrepreneur's skills and education were more important than characteristics of the business concept such as the competitive environment and overall risk of the venture.

In addition to these arguments, several VCs suggested that a primary reason for the divergence between venture confidence and entrepreneur confidence financing levels may be related to the timing and the degree in which change processes are likely to occur in these two important new venture components. When interviewed, some VCs suggested that new ventures are a bundle of ideas that undergo their most intense internal process and structural changes after receiving venture financing. On the other hand, VCs generally consider entrepreneurs to experience their most significant learning and internal changes after they have exited a new venture. This may help explain why many VCs suggest confidence in an entrepreneur supersedes confidence in a new venture. Indeed, as Alexander Muse, a Texas venture capitalist and founder of http://www.texasstartupblog.com, puts it, “the ideas that an entrepreneur begins with will almost assuredly be different in the future. Very few early stage business plans weather reality intact, but a great team can mold a flawed plan into something great.” Keith Benjamin of Levensohn Venture Partners also placed greater importance in entrepreneur confidence in stating, “in light of the number of investments VCs make, they may not have the time or inclination to change out the CEO of the new venture to see if faltering performance was due to market forces or leadership deficiencies.” Therefore, given the number of changes likely to occur after a VC has agreed to invest in a new venture, it is understandable to see the premium VCs place in the right personnel leading a new venture during the deal structuring stage over that of the new venture idea itself.

In another interview, a respondent who wished to remain anonymous replied that a lack of confidence in the entrepreneur was an overriding issue that he weighted heavily in his decision criteria. In fact, he associated the entrepreneur's abilities and “trustworthiness” as the primary concerns for making an investment decision. He used the example of Herb Kelleher and Southwest Airlines, stating that the original business idea behind Southwest Airlines was almost laughable given the poor performance, increasing consolidation, and high levels of competition found across the U.S. airline industry. However, Kelleher’s charisma and intellect were perceived as more important than the nature of the venture. The same respondent further described his experience with successful business ventures that were “basically extensions or slight improvements” on existing concepts and “almost boring” as being further indications of the higher importance of the entrepreneur's characteristics when compared to the business concept being proposed.

Conclusion

Venture investors play an important role in the entrepreneurial process, one that sustains and generates economic growth (Bygrave and Timmons 1992).
Therefore, it behooves us as entrepreneurship scholars to study and understand the complexities that surround the VC investment decision-making process. This exploratory study attempts to address this complex issue by examining three direct evaluation criteria from a pre-investment VC perspective. First, drawing on the substantial literature on trust in the VC–E relationship, we develop a new construct termed entrepreneur confidence. This construct is differentiated from a second new construct, termed venture confidence, which is based on the perceived certainty of the VC in the characteristics of the venture itself rather than the entrepreneur or entrepreneurial team. Our third criterion, termed venture control, builds on agency theory arguments to represent the active role of VCs in venture operations through the use of control and monitoring mechanisms.

In addition to conceptual development of these criteria, we develop and test these new constructs using a small sample of VCs. We find support for the two distinct types of confidence and their individual impact on VC financing decisions. Confidence in the entrepreneur, as we expected, shows a positive linear relationship to the level of financing delivered to the venture. However, confidence in the venture shows a negative relationship to the level of venture financing. Although we do not find support for control as a key decision-making criterion in our sample, we offer up some explanations and opportunities for future research that can explore these issues more thoroughly. Finally, we note that the stage of the venture is paramount in understanding how VCs make decisions. In summary, our study makes a unique contribution to the entrepreneurship literature by examining the previously unexplored issues of confidence and control in the important pre-investment decision-making process of VCs.

References


Welter, F., and D. Smallbone (2006). “Exploring the Role of Trust in Entre-