RESOURCES AND RELATIONSHIPS IN ENTREPRENEURSHIP: AN EXCHANGE THEORY OF THE DEVELOPMENT AND EFFECTS OF THE ENTREPRENEUR-INVESTOR RELATIONSHIP

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We develop a theoretical model, grounded in exchange theory, about the process through which relationships between entrepreneurs and investors develop and influence the growth of new ventures. Our theory highlights the multifaceted relationships that entrepreneurs and investors share—comprising both affective and instrumental dimensions—and the bidirectional exchanges of social and financial resources that build these relationships over time. An exchange theory perspective sheds light on the emergence of different patterns of relationship development over time and how different kinds of resource exchange contribute to new venture growth, contingent on the core problems that a venture faces at a given stage of development. We discuss implications of an exchange perspective on resources and relationships in entrepreneurship for theory, research, and practice.

When you ask people what investors need to make an investment decision, people will inevitably say that they look for the business plan, or a pitch presentation. But, there are actually all these other "events" that occur outside of talking through the business plan or watching a pitch presentation. Investors will meet the entrepreneur for dinner, they'll go on a trip to a conference together, they'll meet for impromptu coffee discussions. . . . There are all these "dates," and these events are an important part of the investment decision process (O. Ammar, entrepreneur and angel investor, personal communication).

The life of an entrepreneurial venture is unpredictable, with at least half of new ventures failing within five years (Aldrich & Ruef, 2006). To reduce the likelihood of failure and succeed in building a new business, entrepreneurs must acquire a diverse set of resources (Van de Ven, Polley, Garud, & Venkataraman, 1999). Financial resources enable entrepreneurs to fund product development, deploy marketing campaigns, and recruit and hire talented employees. Financial resources alone, however, are insufficient for

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building a business. Entrepreneurs also must acquire social resources, such as access to partners and advice to help hone the strategic position of the venture (Coase, 1937; Connor & Prahalad, 1996; Grant, 1996; Kogut & Zander, 1992).

Entrepreneurship scholars have long underscored the importance of relationships between entrepreneurs and investors for enabling the transfer of resources (Aldrich & Zimmer, 1986). Relationships are conduits through which financial and social resources flow, promoting the growth of new ventures and aiding investors in profiting from their investments (e.g., Ehrlich, De Noble, Moore, & Weaver, 1994; Sapienza & Korsgaard, 1996; Shane & Cable, 2002; Steiner & Greenwood, 1995). When a match of opportunity and resources occurs, an entrepreneurial venture is likely to thrive, yielding a return for investors and entrepreneurs alike (Kerr, Lerner, & Schoar, 2011). Without relationships between investors and entrepreneurs, however, ventures lack access to the resources they need, increasing the odds of failure (Shepherd & Zacharakis, 2001).

Despite the importance of the entrepreneurinvestor relationship for facilitating resource exchange, there has been limited theorizing about the process through which relationships develop in the entrepreneurial context or about the conditions under which relationships help or hinder a new venture's progress. Existing research on the entrepreneur-investor relationship (e.g., Ehrlich et al., 1994; Sapienza & Korsgaard, 1996; Shane & Cable, 2002; Steiner & Greenwood, 1995) provides a useful foundation, but a lack of theory about the process of relationship development limits scholars' understanding in several ways. First, existing work primarily emphasizes the instrumental bonds that connect an investor and an entrepreneur, such as how an investor evaluates the potential return of an investment in a venture or how an entrepreneur navigates the terms of a financial investment (e.g., MacMillan, Zemann, & Subbanarasimha, 1987; Robinson, 1987; Tyebjee & Bruno, 1984). This focus on the instrumental dimension is not surprising, given that the transfer of financial resources between investors and entrepreneurs is an impactful and well-documented event. Yet instrumental expectations and commitments likely make up just one facet of the multidimensional bond that can connect an investor and an entrepreneur. Because affective phenomena play an important role in entrepreneurship more generally (e.g., Baron, 2008; Cardon, Wincent, Singh, & Drnovsek, 2009; Chen, Yao, & Kotha, 2009; Huang & Pearce, 2015; Mitteness, Sudek, & Cardon, 2012) and in the development of interpersonal relationships specifically (e.g., Byrne, 1971; Krackhardt, 1992; Lawler, 2001), theory is needed to explain how affective relational elements might also influence the flow of resources between entrepreneurs and investors. Further, because affective and instrumental relational dimensions are often intertwined in the workplace (e.g., Casciaro & Lobo, 2008; Joshi & Knight, 2015), it is important to explore how the interplay of affective and instrumental concerns influences the development of the entrepreneur-investor relationship.

Second, existing research typically depicts the entrepreneur-investor relationship from one of two perspectives. From the first perspective, the entrepreneur is the protagonist, seeking the attention and support of potential investors. This research stream (e.g., Kirsch, Goldfarb, & Gera, 2009; Zacharakis, Erikson, & George, 2010; Zott & Huy, 2007) provides insights into how entrepreneurs signal the value of their ventures. From the second perspective, the investor is the protagonist, seeking to make accurate decisions about which new ventures warrant investment. This research stream (e.g., Higashide & Birley, 2002; Navis & Glynn, 2011; Parhankangas & Landstrom, 2004) provides an understanding of how investors interpret information about ventures. Each perspective sheds

light on one side of the entrepreneur-investor relationship, yet neither perspective alone can address the intrinsically bidirectional dynamics of relationship development (Blau, 1964; Emerson, 1976; Kenny, 1994). Theory is needed to connect these perspectives, explaining how entrepreneurs and investors act in concert to jointly shape their relationship over time.

Third, researchers, to date, have focused on two discrete stages—the beginning and the end—of the relationship between entrepreneurs and investors. In research on the beginning of the relationship, scholars have identified factors that lead investors and entrepreneurs to become aware of one another (e.g., Burton, Sorensen, & Beckman, 2002; Chong & Gibbons, 1997; Walker, Kogut, & Shan, 1997). In research on the end stage, scholars have highlighted factors that predict the formalization of the relationship through an investment round (e.g., Florin, Lubatkin, & Schulze, 2003; Shane & Cable, 2002; Venkataraman, 1997). Missing in the literature, however, is theory about the developmental process that unfolds between these stages. Accounting for this process is essential for understanding why and when entrepreneurs and investors exchange different resources and how resource exchange contributes to growth across different stages of the life of a new venture.

In this article we seek to advance understanding of entrepreneurship by developing a theoretical model, grounded in exchange theory (e.g., Blau, 1964; Cropanzano & Mitchell, 2005; Emerson, 1976; Homans, 1958), of the development and effects of the entrepreneur-investor relationship. We propose that the exchange process through which relationships develop has important implications for the growth of a new venture. Our article provides a novel framework for studying relationships in entrepreneurship and contributes to the literature in three ways.

First, our theory accounts for both the instrumental and affective dimensions that characterize the relationship between an entrepreneur and an investor. Accounting for both dimensions, and their interplay, helps explain the flow and effects of different kinds of resources—financial and social—between an entrepreneur and an investor. Our model thus builds on growing interest in the role of affect in entrepreneurship (e.g., Baron, 2008; Cardon et al., 2009) and complements traditionally rational models of entrepreneur and investor relationships.

Second, with its grounding in exchange theory, our model enriches existing theory by accounting for the bidirectional nature of this important tie. Consideration of different forms of reciprocal exchange as building blocks of relationships reveals how entrepreneurs and investors enact their relationship in concert, thus extending existing unidirectional perspectives that focus either on the entrepreneur or on the investor, but not on the interaction between the two.

Third, our theory extends existing research by explaining the process of relationship development that occurs between initiation and formalization and, perhaps, beyond. Our model is process focused, depicting a relationship as something that strengthens over time through resource exchange and feedback loops. A process-focused perspective sheds light on how a relationship can be strengthened or weakened over time through the dynamics of resource exchange.

Below we first provide an overview of the key principles of exchange theory. We then introduce and describe our conceptual model, which comprises propositions about (1) the initial inputs to a relationship, (2) the process of relationship development through resource exchange, and (3) the ways relationships relate to new venture growth. We conclude by discussing implications of our model for theory and research on entrepreneurship.

THE DEVELOPMENT OF THE ENTREPRENEUR-INVESTOR RELATIONSHIP

To develop new theory about the entrepreneurinvestor relationship, we draw from exchange theory, which is considered one of "the most influential conceptual paradigms for understanding workplace behavior" (Cropanzano & Mitchell, 2005: 874). The term exchange theory refers to several perspectives (e.g., Blau 1964; Emerson, 1976; Homans, 1958; Thibaut & Kelley, 1959) that have roots in different disciplines (e.g., economics, sociology, psychology) but share a "frame of reference that takes the movement of valued things (resources) through social processes as its focus" (Emerson, 1976: 359). Although exchange theory has not played a prominent role in the entrepreneurship literature to date, it provides a strong foundation for understanding the role of relationships in this context because the movement of resources is a fundamental aspect of interactions between investors and entrepreneurs (Shane & Cable, 2002).

Central to exchange theory is the transfer of resources between two people, with a resource being something that another person values (Cropanzano & Mitchell, 2005). Because the value of a resource is determined by how much it rewards another person, its value is inherently tied to a relationship (Emerson, 1976). This relational conceptualization of resources is powerful because it encompasses a wide range of different kinds of objects, abilities, and behaviors (e.g., Foa & Foa, 1980). Exchange theory differentiates between two umbrella categories of resources (Cropanzano & Mitchell, 2005). The first, which we term financial resources, includes resources that have a relatively direct and measurable financial value. In the context of entrepreneurship, people most commonly exchange financial capital (i.e., financial investment in a new venture) and new venture equity (i.e., share of the value of a new venture). The second umbrella category, which we term social resources, includes those resources that, although lacking a clear financial valuation, are rewarding to a given exchange partner. In refining social capital theory, Adler and Kwon (2002) described three subcategories of social resources: information, influence, and solidarity (cf. Sandefur & Laumann, 1998). Each of these is relevant in the context of entrepreneurship. For example, entrepreneurs and investors value market knowledge and strategic advice (information); referrals, recommendations, and enhanced reputations (influence); and feelings of being a part of "the next big thing" (solidarity; e.g., Cohen & Dean, 2005; Rose, 2014; Schürmann, 2006; Shepherd & Zacharakis, 2001). An exchange is a bidirectional transfer of financial or social resources that is, to some degree, reciprocal—each party expects to give and to receive (Emerson, 1976). As we discuss in more detail below, this reciprocity may or may not be in kind (i.e., parties give and receive the same type of resource) or in temporal proximity (i.e., parties give and receive simultaneously). To constitute an exchange, however, there must be a bidirectional transfer of value (Blau, 1964).

Whereas an exchange is the discrete transfer of resources between two people, a relationship is the bond of commitments and expectations that two people have toward one another. Exchanges can be thought of as discrete events nested within continuous relationships that are developing and changing over the course of time, partly as a function of exchanges (Cropanzano & Mitchell, 2005; Sahlins, 1965). Exchange theorists—like

those who study social networks (e.g., Casciaro & Lobo, 2008; Ibarra, 1992) and trust (e.g., McAllister, 1995)—acknowledge that relationships comprise two core dimensions. The instrumental dimension of a relationship reflects task-relevant commitments and expectations—the extent to which two people are committed to and expect to benefit from advancing one another's task-relevant goals. The affective dimension of a relationship reflects personal and socioemotional commitments and expectations—the degree to which two people are committed to one another's personal and emotional welfare and hold one another in positive regard. These dimensions—the instrumental and the affective—are conceptually distinct but can be intertwined. For example, close friends who start a new venture together could simultaneously have a strong affective and instrumental relationship. Because relationships provide governance for resource exchange (Sahlins, 1965), the degree to which entrepreneurs and investors share instrumental and affective expectations has important implications for the exchange of resources between the two.

Building on these foundations of exchange theory, we develop a model of how relationships between entrepreneurs and investors develop and influence new venture growth. Figure 1 presents an overview of our theory, which comprises three components. First, our model explains how the conditions that characterize early encounters between investors and entrepreneurs serve as inputs to the process of relational development. Second, our model explains how the affective and instrumental dimensions of a relationship develop over time through the dynamics of resource exchange. Third, our model explains the implications of these relational dynamics for the growth of a new venture.

The Seeds of a Relationship: Entrepreneur Signaling Behavior in Context

We begin by describing the behaviors and context of early encounters between entrepreneurs and investors, which seed a relationship with initial affective and instrumental expectations. Given that attracting the attention of investors is a major challenge for entrepreneurs, scholars (e.g., Stinchcombe, 1965) have traditionally addressed early interactions from the perspective of the entrepreneur. Specifically, existing research highlights that entrepreneurs

engage in two kinds of impression management and signaling behavior—interpersonal signaling and informational signaling (Chen et al., 2009; Kirsch et al., 2009; Zott & Huy, 2007)—in their attempts to attract the attention of investors who are generally reluctant to commit their limited resources (Hellmann, 2002; Schoonhoven & Romanelli, 2001). Interpersonal signals provide insight into the entrepreneur's behavioral style and how the entrepreneur might work with others. Positive interpersonal signals include demonstrating a communicative stance and openly engaging with questions, mirroring an investor's views, and expressing similar implicit theories about entrepreneurship (Kim & Aldrich, 2005; Sapienza & Korsgaard, 1996; Vissa, 2011). Informational signals address the quality of the venture and the likelihood that it will advance. Informational signals can focus on the venture itself, such as data about customer acquisition, financial information, or technology demonstrations (Tyebjee & Bruno, 1984; Zott & Huy, 2007), or on the entrepreneur's abilities, such as education, credentials, or evidence of past entrepreneurial success (MacMillan, Siegel, & Narasimha, 1986).

The degree to which an entrepreneur engages in interpersonal and informational signaling likely has implications for the initial strength of the affective and instrumental dimensions of the entrepreneurinvestor relationship. By influencing the attributions that entrepreneurs and investors make about one another's personal characteristics, the degree to which early interactions between the two comprise interpersonal signaling likely shapes the degree to which their initial relationship is laden with affective content. When an entrepreneur signals warmth, friendliness, and cooperativeness, an investor is likely to form initial expectations that working with the entrepreneur will be emotionally rewarding (McAllister, 1995). Research suggests that feelings of attraction form quickly when two people interact (Ambady, Hallahan, & Rosenthal, 1995; Casciaro & Lobo, 2008). Friendly and warm behaviors may contribute to initial perceptions by an investor that the entrepreneur will be a source of positive affect, which is central to attraction (Byrne, 1971).

In addition to these direct effects that contribute to initial positive affect, interpersonal signaling behavior also has important symbolic content (Zott & Huy, 2007) that can trigger different relational prototypes—expectations about how two people will interact and work with one another (Elsbach & Kramer, 2003). In their inductive study

Intermediate stage
Refining ideas, implementing Expanding operations, scaling Value of social resources for new venture growth Venture outcomes New venture growth P12 P13 Current stage of development financial resources social resources Transfer of Transfer of P14 (+) -Relationship development through exchange Economic exchange Social exchange - P9 (+) - P8 (+) processes Early stage Exploring ideas, planning processes - Pll (+) -P10Affective relationship Instrumental relationship P7 (+) Relational structure (dyad or group) tor new venture growth Value of financial resources **P**6 P1 (+) -Inputs to relationship В3 Investor type (angel or VC) Ρ4 interpersonal signaling informational signaling Initial entrepreneur Initial entrepreneur

FIGURE 1 An Exchange-Based Model of the Entrepreneur-Investor Relationship

of signaling behavior during Hollywood screenwriting pitch meetings, Elsbach and Kramer (2003) found that creative workers' behavior, in conjunction with producers' reactions, signaled to producers the collaborative potential of a relationship between the two. In a similar way, an entrepreneur's use of interpersonal signals during early encounters may contribute to an investor's initial expectations for affective benefits from interacting with an entrepreneur. Importantly, we are not suggesting that the use of interpersonal signals renders instrumental concerns irrelevant, nor are we suggesting immutability of these concerns over time. Rather, the early use of interpersonal signals strengthens the initial affective relationship between the two.

Proposition 1: During initial encounters, the use of interpersonal signals by an entrepreneur is positively related to the initial strength of the affective dimension of a relationship with an investor.

Whereas interpersonal signaling primes the initial affective dimension of a relationship, informational signaling likely influences the initial instrumental dimension. Informational signals address one of the foremost questions in an investor's mind: How financially rewarding might a partnership with this particular entrepreneur be? Signals of the viability of the venture and of the promise of the entrepreneur aid an investor in making an informed decision about the risk and possible return of placing valuable resources in the hands of a given entrepreneur. As above, in addition to substantive content, informational signaling behavior also has symbolic content (Zott & Huy, 2007) that can shift an investor's focus to instrumental concerns. Informational signals may trigger a prototype of an entrepreneur-investor relationship that is heavily instrumental and centered on the financial viability of the venture. Subsequent advancement in the relationship is contingent on further assessments of the quality of the venture. However, at this juncture, initial informational signals strengthen the initial instrumental dimension.

> Proposition 2: During initial encounters, the use of informational signals by an entrepreneur is positively related to the initial strength of the instrumental dimension of a relationship with an investor.

Reflecting the bidirectional nature of relationships, it is important to consider how an entrepreneur's behavior fits with the concerns that are most salient for a given investor. Our model thus explains how two contextual characteristics of early encounters—the type of investor and the type of relational structure—moderate the effects of entrepreneurial behavior.

Investor type. We have used "investor" so far to refer to any person or group of people intending to provide an early-stage venture with resources in exchange for a return of valued resources. It is important, however, to distinguish between two types of external investors (e.g., Sohl, 2003). Angel investors are wealthy individuals or groups of wealthy individuals working together who provide their own financial capital to early-stage ventures. Venture capitalists (VCs) are institutional investors who manage other people's financial capital, investing it in new ventures to earn a return for their clients and to claim a share of the profit for themselves. This intermediation aspect is the key distinction between VCs and angel investors (Brander, Amit, & Antweiler, 2002). VCs obtain capital from investors and, like bankers, are the intermediaries between these other investors and an entrepreneur, whereas angel investors directly invest their own capital (Amit, Brander, & Zott, 1998; Brander et al., 2002; Sohl, 2003).

The difference between angel investors and VCs likely has implications for the initial entrepreneurinvestor relationship. Because angel investors invest their own financial capital, they have greater freedom than VCs to consider interpersonal fit with an entrepreneur (Amit et al., 1998). VCs, who are beholden to external stakeholders, have less latitude than angel investors to seek affectively rewarding experiences (Aernoudt, 1999). While there are exceptions, and while many VCs do consider personal fit with entrepreneurs, researchers (e.g., Aernoudt, 1999; McKaskill, 2009) have shown that angel investors in particular cite affective rewards as a reason to participate in entrepreneurship. Because of their interest in not just achieving an instrumental end but also having a rewarding affective experience, angel investors are likely to be more receptive to interpersonal signals than are VCs. The effect of an entrepreneur's interpersonal signals may thus be stronger within an emerging bond with an angel investor than a VC, whose instrumental obligations trump affective concerns.

> Proposition 3: The type of investor moderates the effect of interpersonal signaling on the initial strength of the affective

dimension of the entrepreneur-investor relationship; the effect is stronger for relationships involving angel investors than relationships involving VCs.

In contrast, because VCs are stewards of others' financial capital, they are more likely to view entrepreneurs, foremost, as an investment vehicle. VCs have an explicit charge to maximize a return on their financial investments, and, thus, initial interactions with entrepreneurs are likely to be heavily laden with instrumental concerns. Irrespective of any idiosyncratic preferences, all VCs are responsible for others' capital and have a duty to return profit. As such, VCs are likely to be particularly receptive to informational signals that can help validate their decisions to clients. While informational signaling will also influence angel investors, VCs' relatively greater need to screen and evaluate the instrumental potential of new ventures increases their sensitivity to informational signals. An entrepreneur's informational signals may therefore have a stronger effect on the instrumental relationship during initial interactions with VCs than angel investors.

Proposition 4: The type of investor moderates the effect of informational signaling on the initial strength of the instrumental dimension of the entrepreneur-investor relationship; the effect is stronger for relationships involving VCs than relationships involving angel investors.

Relational structure. The salience of affective and instrumental concerns and, hence, the potency of interpersonal and informational signals also depend on the structural configuration of the emerging relationship between the entrepreneur and the investor (angel or VC). We differentiate between two configurations—dyadic and group—that are prevalent and that may moderate the effects of entrepreneurial signaling behavior. A dyadic structure is one in which a relationship emerges between two individuals—a one-to-one relationship between an entrepreneur and an investor. In many situations, encounters between a solo entrepreneur and an individual investor prompt a relationship between a new venture and an investment source. Consider. for example, Ingvar Kamprad, the founder of furniture retailer IKEA, who gained initial support and buy-in for his venture through dyadic interactions with an investor who shared his passion, vision, and work ethic (Torekull & Kamprad, 1998). A group

structure, in contrast, is one in which the connection between a new venture and an investment source emerges through interactions among more than two people, such as between one entrepreneur and an investor group or between multiple cofounders and investment partners. Consider the case of the social media company Twitter, in which cofounders Biz Stone, Evan Williams, and Jack Dorsey developed a relationship with Chris Sacca, one of the earliest angel investors in the company. Or consider Google cofounders Sergey Brin and Larry Page, who received an early \$100,000 investment from an investment team composed of Andy Bechtolsheim and David Cheriton. Both Twitter and Google are examples of group-based structures, in which the initial linkage between a new venture and an investment source is spread across several dyadic connections.

The degree to which interpersonal signals initiate an affective relationship is likely to be heightened within the context of a dyadic structure compared to a group structure. A dyadic structure is inherently interpersonal in that the entities—the new venture and the investment source—are the same as the individual people—the entrepreneur and the investor. Accordingly, relative to a group structure, the interpersonal affective fit of the parties in a dyadic structure is a more salient concern; for the entities to be a good match, the people must be a good match. An investor in a dyadic structure is likely to be especially receptive to interpersonal signaling, which directly addresses whether the individual is interpersonally compatible with the entrepreneur and whether working with the entrepreneur would be a positive or negative experience.

Proposition 5: The type of relational structure moderates the effect of interpersonal signaling on the initial strength of the affective dimension of the entrepreneur-investor relationship; the effect is stronger in dyadic structures than in group structures of investors and entrepreneurs.

Whereas interpersonal signaling addresses questions about interpersonal compatibility that

¹ For convenience, we use the terms entrepreneur and investor to refer to the new venture and the investment source, respectively, as entities, recognizing that entrepreneur can refer to one person or a cofounding team and that investor can refer to one person or an investment team. Our level of analysis is the relationship between two entities—a new venture and an investment source—both of which could take on a singular or plural form.

are more salient within a dyadic structure, informational signaling addresses the instrumental concerns that are likely to be more predominant in a group structure. A group structure comprises many possible relationships among the members of the new venture and the members of an investment entity. In contrast to a dyadic structure, where there is only one tie, the presence of multiple relationships in a group structure creates the potential for varying degrees of interpersonal attraction across the members of the entities. With potentially varying degrees of interpersonal attraction, attention likely shifts to information that is less subject to idiosyncratic preferences. As social psychologists have suggested, affective attraction is less likely to emerge if group consensus is needed, which can lead to a form of group-induced dissonance (e.g., Festinger, 1957; Matz & Wood, 2005). To reduce dissonance, members' attention may shift to the commonalities that unite them—the instrumental goals that brought them together in the first place. For a cofounding team, this might be a shared vision to address an important need or a goal to secure the next round of venture capital. For a group of investors, this is likely to involve agreed upon criteria for investment or a shared goal to realize profitable financial returns on their investments. This shift in focus to shared instrumental goals, rather than idiosyncratic feelings of interpersonal attraction, may increase the potency of informational signals, which speak directly to the viability of the entity as an investment vehicle.

Proposition 6: The type of relational structure moderates the effect of informational signaling on the initial strength of the instrumental dimension of the entrepreneur-investor relationship; the effect is stronger in group structures than in dyadic structures of investors and entrepreneurs.

Before moving to the next part of our model, we should note that the output of initial encounters is a preliminary bond that is neither purely affective nor purely instrumental. Rather, the bond is multidimensional and entails some degree of initial affective attraction and some degree of initial instrumental expectation. Our propositions therefore do not specify that a categorical "instrumental relationship" or "affective relationship" results from early interactions but,

instead, that the initial relationship is characterized by degrees of affective and instrumental commitment. Indeed, although the affective and instrumental dimensions of interpersonal relationships are conceptually distinct (e.g., Casciaro & Lobo, 2008), research suggests that these dimensions are often positively related. In particular, research suggests that interpersonal feelings of warmth and positive regard—the affective dimension of a relationship—can spill over and influence the degree to which two people view one another as capable of contributing to task-relevant goals—the instrumental dimension of their relationship. Research on exchange relationships between supervisors and subordinates, for example, indicates that initial affective bonds spill over to influence task-relevant perceptions and evaluations (e.g., Sparrowe & Liden, 1997). A burgeoning body of research in entrepreneurship suggests that positive affective displays by entrepreneurs can influence investors' evaluations of business viability (e.g., Baron, 2008; Cardon et al., 2009; Cardon, Zietsma, Saparito, Davis, & Matherne, 2005; Huang & Pearce, 2015; Mitteness et al., 2012). The feelings of interpersonal positivity that an entrepreneur and an investor hold for one another, thus, are likely to directly influence their initial instrumental bond.

> Proposition 7: The affective relationship between an entrepreneur and an investor strengthens the instrumental dimension of their relationship.

As we describe below, our model also suggests that the instrumental dimension can influence the affective dimension. However, whereas we posit that the affective dimension influences the instrumental dimension directly, our model specifies that the instrumental dimension shapes the affective dimension indirectly by contributing to the dynamics of social exchange, which feed back into the affective dimension.

Resource Exchange and the Development of the Entrepreneur-Investor Relationship

Exchange theorists make an important distinction between relationships and exchanges (e.g., Blau, 1964; Emerson, 1976; Sahlins, 1965). Yet the directionality of the link between relationships and exchanges has been ambiguous historically. In developing predictions about the interpersonal

dynamics that deepen relationships between entrepreneurs and investors, we draw from Cropanzano and Mitchell's (2005) perspective on exchange theory, which describes two ways relationships and discrete resource exchanges are related. First, relationships (i.e., commitments to and expectations about one another that two people hold) motivate exchanges between parties (i.e., bidirectional transfers of resources) when each person believes that the other can provide valuable resources through the exchange. Second, the outcomes of discrete exchanges flow back into a relationship and update the expectations that each person has for the other, refining their feelings of commitment. Because of these reciprocal dynamics, with relationships precipitating exchanges and exchanges feeding back into relationships, an exchange-based model can begin with relationships or exchanges. Our model reflects this interplay between relationships and resource exchange. As we explain below, our model begins with relationships and positions resource exchange as most proximal to new venture growth because it is, ultimately, the transfer and effective use of resources that influences growth. However, our model explains how instrumental and affective relationships, which may be weak or strong at the outset, further weaken or strengthen over time via the outcomes of exchange.

Financial resource exchange. We begin with the most studied aspect of the entrepreneurinvestor relationship: the exchange of financial resources. Traditionally, scholars have examined this exchange—especially the valuation process and how investors estimate the risks and rewards of an investment—from an economic perspective (e.g., Gompers & Lerner, 2001; Kaplan & Stromberg, 2001; Kerr et al., 2011; for a review see Dalton, Daily, Certo, & Roengpitya, 2003). An exchange theory lens, which delineates the relational context in which different kinds of resources are transferred. helps to further explain why transactions proceed in the ways they do and how the outcomes of these exchanges might strengthen or weaken the relationship between an entrepreneur and an investor. Specifically, the unique properties of financial resources elucidate why an instrumental relationship is necessary for financial resource exchange to occur between an entrepreneur and an investor.

Using an exchange theory perspective, Foa and Foa (1980) delineated six classes of resources (i.e., money, information, status, love, services, goods) and used a two-dimensional circumplex

model to account for the differences that underlie these resources. Concreteness describes the degree to which a resource is a tangible object versus an abstract concept. Highly concrete resources, such as a piece of equipment, can be physically transferred. Less concrete resources, such as feelings of solidarity or status, are abstract. Particularism describes how attached the value of a resource is to the context of a given exchange between parties. Highly particularistic resources are those—like solidarity or personal career advice—for which value is contextually defined and derived from the specific relationship in which they are exchanged. The value of advice, for example, depends on the idiosyncratic needs of a given person. Less particularistic resources, like money, have value irrespective of who the exchange partner is. The degree to which a resource is concrete (versus abstract) and particular (versus universal) has implications for exchange dynamics.

The primary financial resources that entrepreneurs and investors exchange—equity in a venture and financial investment capital—are both low in particularism and relatively low in concreteness. Financial capital, which retains its value regardless of the exchange partner, is the prototypical universal (as opposed to particularistic) resource. Further, concrete objects (e.g., currency, stock certificates) represent financial resources, giving a tangible object to exchange. Because of these properties, the transfer of financial resources generally occurs through a process of economic exchange, one of the two dominant forms of exchange (the other, social exchange, is described below; Cropanzano & Mitchell, 2005). An economic exchange process is one where resource transfers are governed by formal, negotiated terms (Blau, 1964; Molm, Peterson, & Takahashi, 1999). Terms are specified upfront and clearly establish expectations for what each party will give and receive, as well as the time frame for resource transfer (Molm et al., 1999).

Because the value of financial resources is less attached to a specific exchange partner, entrepreneurs and investors can exchange them with any partner. However, suitable partners—that is, partners likely to be mutually beneficial—are scarce in entrepreneurship and, as such, in high demand by many competing parties (Bhide, 2000; Hellmann, 2002; Schoonhoven & Romanelli, 2001), which creates opportunity costs for exchanging financial resources with one partner versus another. For an investor, entrusting limited

financial capital to one entrepreneur entails forgoing investing that capital in another who might be more likely to generate a return on investment. For an entrepreneur, entrusting equity—regarded as an early-stage entrepreneur's most precious resource (Eckhardt, Shane, & Delmar, 2006; Gompers & Lerner, 2001)—to an investor entails relinquishing some control of the venture (Wasserman, 2006) and sacrificing downstream value. Owing to the universalistic and scarce nature of these resources, entrepreneurs and investors likely only exchange them with partners expected to deliver instrumental value in return. The degree to which an entrepreneur and an investor are willing to exchange financial resources with one another is, thus, a function of their instrumental relationship—the extent to which they share expectations that resource exchange will advance their instrumental goals.

Proposition 8: The instrumental relationship between an entrepreneur and an investor is positively related to financial resource exchange; the stronger their instrumental bond, the more likely they will exchange financial resources.

Social resource exchange. The relational drivers and dynamics of exchange are different when the resources that entrepreneurs and investors exchange are social—that is, resources lacking a clear financial valuation, such as information, influence, and solidarity. From Foa and Foa's (1980) perspective, social resources are relatively more particularistic and less concrete than financial resources. Consider, for example, the transfer of strategic advice (from an investor to an entrepreneur) in return for being and feeling involved in growing an impactful new business (from an entrepreneur to an investor). The value of advice inherently depends on the challenges that a specific entrepreneur faces. Similarly, the reciprocated value of being and feeling involved in a venture inherently depends on the preferences and values of a given investor. It is unlikely that such an exchange of social resources would occur through the carefully negotiated and explicitly defined process of economic exchange described above. Instead, exchange theory suggests that social resources are typically transferred through a process of social exchange, where trust and normative expectations of reciprocity serve as governance mechanisms (Blau, 1964; Molm et al., 1999). The indeterminate nature of social resources—in which it may not even be immediately evident to both parties that a resource was transferred—renders a priori formally negotiated terms for governing the exchange impractical. Furthermore, the social resources given by one party (e.g., information) may be very different from those given by the other party (e.g., solidarity). The process of social exchange, which guides transactions through the assumption that value will be reciprocated in some way and at some time, enables the flow of these ill-defined resources. As Molm et al. noted, social exchange can only occur "if actors are willing to accept some temporary and short-term costs and uncertainty" (1999: 888).

Because trust is needed for the process of social exchange (Blau, 1964), the affective dimension of an entrepreneur-investor relationship—the degree to which the two are mutually committed to one another's personal and emotional welfare—may play an important role in motivating social resource exchange. In interpersonal contexts, positive feelings toward a counterpart lead to cooperative, prosocial, and helping behavior (George & Brief, 1992; Lyubomirsky, King, & Diener, 2005). Integrating research on positive affect with theories of informal exchange, Lawler (2001) theorized that affect plays a key role in sustaining processes of social exchange. Positive feelings toward others activate normative obligations to help those with whom one shares a positive relationship (Collins, 1990; Lawler, 2001; Niedenthal & Brauer, 2012). Further, interpersonal positivity provides a safe context in which partners can disclose problems, needs, or desires; disclosure can be a stimulus for the other partner to offer advice, guidance, and assistance. Supporting these ideas, in their research on how different relational dimensions shape the flow of advice, Casciaro and Lobo (2008) found that interpersonal affect is critical for the flow of social resources. We therefore propose that the affective dimension of the entrepreneur-investor relationship provides the trust needed for social exchange.

> Proposition 9: The affective relationship between an entrepreneur and an investor is positively related to social resource exchange; the stronger their affective bond, the more likely they will exchange social resources.

The instrumental dimension of a relationship may also play a role in motivating social resource exchange between an entrepreneur and an investor. If two people share task-relevant commitments and objectives, exchanging social resources may indirectly be instrumentally advantageous. For example, it might benefit an investor to give an entrepreneur advice if the investor believes the entrepreneur would be better able to generate high returns with the benefit of that advice. If the entrepreneur needs these social resources—or if the investor believes that the entrepreneur would benefit from them—sharing them could increase the likelihood the investor will realize the instrumental gains he or she believes could result from the partnership.

The degree to which the instrumental dimension enables the flow of social resources, however, likely depends on the degree to which the entrepreneur and investor also share an affective bond. The affective relationship provides a minimal interpersonal context to govern the exchange of social resources through reciprocity. In the absence of an affective bond, each party may be reluctant to expend the cost (e.g., in time and energy) of providing a social resource when uncertain about whether this value would be reciprocated by the other (Molm et al., 1999). Furthermore, as described above, an affective relationship provides a safe context in which entrepreneurs and investors can disclose their unique needs and desires to one another. An investor is most likely to provide an entrepreneur with a valuable social connection if the entrepreneur has disclosed a need or desire that could be met by the tie. This idea—that the affective dimension of a relationship moderates the effect of the instrumental dimension on social resource exchange—also fits with Casciaro and Lobo's (2008) findings regarding the provision of advice in the workplace. Two people are most likely to exchange advice, they found, in the context of a relationship comprising both affective and instrumental elements.

Proposition 10: The effect of the instrumental dimension of the entrepreneur-investor relationship on social resource exchange is moderated by the affective relationship; the greater the shared affective bond, the more likely a shared instrumental bond will lead to social resource exchange.

Exchange dynamics and change in relationships over time. We now turn to the processes through which the outcomes of resource exchange influence how the entrepreneur-investor relationship changes over time. As previewed above,

exchange theory describes a reciprocal interplay between relationships and discrete instances of resource exchange, with relationships precipitating exchanges and the outcomes of exchanges feeding back into relationships. If mutual expectations are met, instances of resource exchange can strengthen a relationship over time, serving as a foundation for durable and long-standing mutual obligations between parties (e.g., Blau, 1964). If mutual expectations are not met, however, instances of resource exchange can weaken a relationship, possibly degrading individuals' feelings of commitment and obligation to one another. In describing the reciprocal interplay of exchanges and relationships, Cropanzano and Mitchell (2005) used the analogy of a ladder. Each rung of the ladder represents a successful exchange between two people, and the height of the ladder represents the strength of their relationship. With each successful exchange, each partner in the relationship develops more strongly held expectations about and commitments to the other.

The dynamics of exchange and relationship development, however, may be unique within the context of entrepreneurship. In entrepreneurship, adapting Cropanzano and Mitchell's (2005) ladder analogy, the spacing between successive rungs on the ladder may be different for the affective and instrumental dimensions of the entrepreneurinvestor relationship. Given the relative ease and frequency of social resource exchange compared to financial resource exchange, there are more opportunities to advance and deepen the affective dimension than the instrumental dimension through small, incremental steps. Financial resource exchange, in contrast, occurs less frequently and under more carefully negotiated conditions. We explain here how repeated instances of social resource exchange can steadily strengthen the affective dimension of the entrepreneur-investor relationship over time. Later we address the process of change in the instrumental dimension, which we posit occurs through new venture growth.

Theories about personal relationships (e.g., romantic relationships, friendships) emphasize interpersonal disclosure as a key mechanism of relationship development (e.g., Altman & Taylor, 1973; Knapp, 1978; Lewis, 1972). Altman and Taylor's (1973) social penetration model, for example, portrays disclosure as the single most important mechanism for strengthening interpersonal relationships. Developing close relationships, according to this model, is like peeling away the layers of an onion. The outer

layers—the onion's skin—contain information that is publicly available about a person. The inner layers contain personal information, such as preferences, goals, and aspirations. To strengthen a relationship, each person must feel increasing comfort in taking interpersonal risks and candidly sharing sensitive information with the other (Altman & Taylor, 1973; Knapp, 1978).

For an entrepreneur and an investor, their affective relationship likely strengthens when each discloses needs to the other and when, in response, each plays a role in fulfilling the other's needs by exchanging valued social resources (Blau, 1964). The exchange of valued social resources provides a reinforcing feedback loop for the affective dimension of the relationship, with each person attributing the positive feelings associated with receiving valued resources to their interaction partner (Collins, 1990; Lawler, 2001). By reinforcing the interaction and the collaborative relationship as the drivers of such positive feelings, successful exchanges lead each person to perceive the relationship as an effective means of fulfilling future needs. Over time and across interactions, reciprocal social resource exchanges, as well as the positive feelings they engender, strengthen expectations about and commitments to the personal regard and emotional welfare of the other.

The ambiguity of social resource exchange—in which expectations are often ambiguous—opens the door, of course, to a weakening in the affective relationship between an entrepreneur and an investor. If the social ledger becomes asymmetrical because one party's expectations are not ultimately met, social exchange is incomplete, one party's commitment weakens, and the affective relationship between the two likely degrades. Relationship development is thus a dynamic process. An affective relationship contributes to disclosure and the bidirectional exchange of valuable social resources, and reciprocal and bidirectional social resource exchange strengthens mutual feelings of interpersonal affect.

Proposition 11: The exchange of social resources between an entrepreneur and an investor strengthens the affective relationship between them.

Note that, together, Propositions 10 and 11 indicate that the instrumental dimension can indirectly influence the affective dimension of the entrepreneur-investor relationship. Along with Proposition 7, regarding the spillover from the

affective to the instrumental dimension, this illustrates the potential crossover effects that can emerge between more affective interpersonal concerns and more instrumental concerns. Further, as we discuss in greater detail below, this interplay of the affective and instrumental dimensions can create reinforcing cycles—positive or negative—of relationship development through the mechanism of new venture growth.

Resource Exchange and New Venture Growth

We have suggested that entrepreneurs and investors form relationships with one another, in part, to fill resource needs, and we have suggested that different dimensions of their relationship motivate the exchange of different kinds of resources. We now explain how these different kinds of resource exchange contribute to new venture growth, positing that different kinds of resources may be most beneficial at different stages of new venture development and that venture growth is a mechanism connecting resource exchange to relationship development.

New venture growth. As a focal outcome, we consider new venture growth—a firm's progression across fundamental stages of development (e.g., Eisenhardt & Schoonhoven, 1990; Hambrick, MacMillan, & Day, 1982; Porter, 1980). New venture growth, above and beyond survival or firm performance (for a review see Ireland, Reutzel, & Webb, 2005), is one of the most important outcomes in entrepreneurship research (Cooper & Gimeno-Gascon, 1992; Kazanjian & Drazin, 1990; Quinn & Cameron, 1983). We draw specifically from scholars (e.g., Kazanjian & Drazin, 1990; Sapienza & Amason, 1993) who have conceptualized growth as a venture's progression from (1) an early stage of exploring ideas and formulating business plans to (2) an intermediate stage of refining ideas and implementing business plans and, finally, to (3) a late stage of expanding operations and scaling a business. In this tradition, growth is a venture's metamorphosis across developmental stages (e.g., Bygrave & Hofer, 1991; Quinn & Cameron, 1983; Shane & Delmar, 2004), rather than the rate of change in any one metric (e.g., sales growth). Progression across these three coarse stages is marked as a new venture encounters different clusters of problems (e.g., idea generation, idea implementation, business expansion) that must be resolved (Kazanjian & Drazin, 1990; Starbuck, 1971). Accordingly, the

progression of a venture across developmental stages is a useful way to understand the value of different types of resources and relationships for new venture growth.

Considering new venture growth as a progression across developmental stages is useful for a number of reasons (e.g., Sapienza & Amason, 1993; Zimmerman & Zeitz, 2002). First, new venture growth is of interest for both an entrepreneur and an investor, making growth an attractive outcome to consider for understanding the bidirectional dynamics underlying relationship development. Second, conceptualizing new venture growth in this way enables examination of the effects of the entrepreneur-investor relationship for ventures at different stages of development. Progression to the next stage is as relevant for a fledgling venture seeking to hone an idea and move to an intermediate stage of development as it is for a more mature venture seeking to scale operations and, perhaps, exit. A narrower outcome, such as growth in sales volume or in profit, might be more relevant for ventures at one stage of development than another (Eisenhardt & Schoonhoven, 1990). Third, a conceptualization of new venture growth as a progression through developmental stages, rather than, for example, a progression through financing rounds (e.g., seed stage, Series A, Series B), allows consideration of whether some ventures may benefit more from financial resources or social resources (e.g., Bygrave & Hofer, 1991; Quinn & Cameron, 1983; Shane & Delmar, 2004). Finally, this conceptualization accommodates building and testing theory about ventures as they cycle through stages multiple times, which is likely given that ventures often revise core ideas or business propositions many times.

Matching resources and problems. The idea that resource acquisition promotes new venture growth is not novel (Westhead, 1995; Westhead, Wright, & Ucbasaran, 2001). Researchers have shown that ventures benefit from both financial (e.g., Gompers & Lerner, 2001; Kaplan & Stromberg, 2001; Kerr et al., 2011) and social (e.g., Connor & Prahalad, 1996; Kogut & Zander, 1992) resources. Yet ambiguity abounds regarding which kinds of resources are most likely to accelerate new venture growth (e.g., Brush, Greene, & Hart, 2001; Greene & Brown, 1997; Lichtenstein & Brush, 2001). Our model helps to resolve this ambiguity by explaining how the benefits of different kinds of resources depend on how well those resources help address the distinct strategic problems a venture faces at a given developmental stage.

Although both financial and social resources, to some degree, can aid new venture growth across stages of development, the strategic problems that ventures at different stages of development face may amplify the value of different resources. Our propositions are reflected in the bottom of Figure 1, which depicts the relationships between social and financial resource exchange, respectively, and new venture growth across developmental stages.

Ventures at any stage of development inherently face uncertainty and ambiguity. However, the kinds of problems that mark different developmental stages bring different levels of ambiguity. As a venture progresses from an early to a late developmental stage, the knowledge-to-assumption ratio increases, thus reducing ambiguity. In the early stage of a venture, there is often only the basis of an idea—not a working prototype of a product or service. Ventures at an early stage of developmentdescribed as the searching and planning stage (Kazanjian & Drazin, 1990)—face significant ambiguity about the business idea, the degree to which one or more markets might be viable, and whether the business can be profitable. In the intermediate stage of a venture, entrepreneurs face problems of increasing precision. Ventures at this stage must further refine the business idea and test core assumptions by, for example, finding customers and suppliers and beginning to establish the credibility of the venture with relevant stakeholders (Lam, 1991; MacMillan et al., 1987; Sahlman, 1990). In the late stage of a venture, entrepreneurs face even less ambiguity as they wrestle with more well-defined problems. Latestage ventures focus on ramping up existing operations and moving the venture into a significant position in the industry (Eisenhardt & Schoonhoven, 1990). Although late-stage ventures still face challenges, and although success is not certain, of course, the problems these ventures face are relatively clearer than those that early- and intermediate-stage ventures face.

The value of social resources, such as strategic advice and referrals, may be amplified for ventures currently at an early developmental stage. The relational context and exchange process that underlie and govern the provision of social resources—the affective dimension of a relationship—are likely particularly helpful for new ventures that face significant ambiguity in products and uncertainty in strategic

positioning, and that have yet to establish a reputation as a viable business (Sapienza & Amason, 1993). Indeed, ambiguity is so great for an early-stage venture that it may not even be clear what specific problems exist or what decisions are most important to make. For instance, an entrepreneur may think that a product is the right solution for a subset of the target market, but it may not be clear how to demonstrate demand within a larger market. Neither the problem (is it an issue with the product, with the customer proposition, with market segmentation?) nor the solution (redesign the product or conduct more focus group interviews?) is clear.

The frequent, personal, and disclosing conversations central to a strong affective relationship provide the foundation for the frequent and informal exchange of social resources that can help to identify and devise solutions to important problems (Block & MacMillan, 1985; Churchill & Lewis, 1983). Rather than just emerging in response to specific requests, social exchange can happen through informal conversations and a "learningthrough-interaction" form of engagement (Gertler, 2003) that occurs when there is a strong affective attachment between two people. In short, the affective dimension and the social resources exchanged through the relationship provide the requisite variety that an early-stage venture needs to resolve high levels of ambiguity (Ashby, 1956; Weick, 1979).

The value of financial resources, on the other hand, may be amplified for late-stage ventures seeking to dramatically scale their footprints. Rather than having pressing needs to diagnose market- or product-related issues, late-stage ventures need financial capital to establish market share and maintain momentum and market position (Delmar & Davidson, 2000; Sapienza & Amason, 1993). Indeed, a substantial body of research suggests that acquiring financial capital is a major focus for entrepreneurs striving to dramatically grow their ventures (e.g., Casson, 1982; Cooper, Gimeno-Gascon, & Woo, 1994; Evans & Leighton, 1989; Lee, Lee, & Pennings, 2001). Financial resources are particularly useful for addressing relatively specific, structured, and well-formulated problems. Consider, for example, an investor providing financial capital specifically to hire a new head of operations or purchase a new warehouse. An entrepreneur can directly assign capital to address such problems and show accountability for the use of resources.

Although they still face uncertainty, late-stage ventures encounter relatively more well-defined problems than do early-stage ventures. Because the transfer of financial resources typically occurs through the defined process of economic exchange, late-stage ventures seeking to solve well-defined problems can do so relatively efficiently, with less interpersonal interaction than would be required for the process of social exchange (McFadyen & Cannella, 2004). Late-stage ventures thus benefit disproportionately from access to financial resources.

To be clear, we are not suggesting that late-stage ventures do not benefit from strategic advice, referrals, and other social resources. These resources—especially from knowledgeable investors—are helpful even for well-established companies. Yet compared to a fledgling venture entering an unknown market with an untested product, social resources are likely to be less indispensable for late-stage ventures. Similarly, we are not suggesting that early-stage ventures do not benefit from financial resources. Rather, we are suggesting that late-stage ventures benefit relatively more than do early-stage ventures from an infusion of financial capital, given its importance for scaling a business. To use an analogy, our argument that a venture's current developmental stage moderates the effects of resource exchange on venture growth is similar in structure to models that guide the design of different business school programs for students at different career stages. According to these models, early-career students (e.g., undergraduates) benefit most from programs that provide functional training, helping them to master the skills that are needed to solve technical problems in well-structured roles. Later-career students (e.g., executive MBAs) benefit most from programs that cultivate interpersonal skills, which are needed to navigate ambiguous corporate politics and influence a variety of stakeholders. Similar to this general logic, our theory suggests that an early-stage venture needs a different set of resources than does a later-stage venture because the problems that the ventures encounter are different.

Proposition 12: The relationship between social resource exchange and venture growth is moderated by current venture stage; social resource exchange is relatively more valuable for early-stage ventures than it is for late-stage ventures.

Proposition 13: The relationship between financial resource exchange and venture growth is moderated by current venture stage; financial resource exchange is relatively more valuable for late-stage ventures than it is for earlystage ventures.

New venture growth and relational development.

The advancement of a new venture through developmental stages can provide evidence that validates the expected instrumental value of the venture for entrepreneur and investor alike. Above we argued that the process of social resource exchange—provided that resource transfers are bidirectional and reciprocal-strengthens the affective dimension of the entrepreneur-investor relationship. How financial resource exchange strengthens instrumental relationships, however, is likely to be unique within the context of entrepreneurship. It is not the immediate transfer of financial resources (i.e., capital and equity) per se that strengthens the instrumental relationship. Because investors provide entrepreneurs with a highly universal and specific resource (i.e., financial capital) upfront but receive a less certain and as-yet-unrealized resource (i.e., equity) in return, there is an intrinsic asymmetry in the economic exchange process in entrepreneurship. An entrepreneur receives convertible value at the outset, but for an investor to secure the expected value of the exchange, a venture must meet or exceed expectations for growth and advancement. If it does not, the ultimate convertible value of the equity received by the investor in the transaction is misaligned with the value of the financial capital given by the investor, violating the terms of the exchange. Such a violation would likely precipitate a downward revision of the instrumental expectations that an entrepreneur and an investor have for one another.

The terms of an economic exchange are typically clearly specified, providing a firm grounding for expectations regarding new venture growth. Nonetheless, it is possible that the investor and the entrepreneur hold instrumental expectations beyond those in the negotiated terms of a given economic exchange or prize different indicators of growth (e.g., revenue growth, customer acquisition growth, personnel growth, website traffic growth). Hence, there is the potential—even in a well-negotiated economic agreement—for one party's assessment of growth to differ from the other's

assessment. For an exchange to be complete and to strengthen a relationship, the two must believe that value was reciprocated. Accordingly, it is each party's perceptions of growth that most proximally strengthen their instrumental relationship. These perceptions will be shaped by the economic exchange process, during which the two specify terms, identify milestones, and agree on metrics for assessing new venture growth.

Proposition 14: New venture growth that meets or exceeds expectations strengthens the instrumental relationship between an entrepreneur and investor.

Relationships in Motion: Developmental Trajectories and New Venture Outcomes

The feedback loops in our model—Propositions 11 and 14—explicate a process of relationship development driven by bidirectional resource exchange that is potentially reinforcing over time. These loops indicate that when entrepreneurs and investors exchange valuable resources with one another, their relationship strengthens. Successful social resource exchange strengthens their affective bond. Successful financial resource exchange, which occurs when venture growth meets or exceeds expectations, strengthens their instrumental bond. Our model thus suggests that the entrepreneur-investor relationship develops through a process of reinforcing loops in which the rich (in relationships) can get richer (in valuable resources, new venture growth, and, in turn, stronger relationships).

Yet the moderators in our model—investor type, relational structure, and current stage of venture development-indicate that entrepreneurs and investors can fall into different developmental trajectories. The "rich get richer" trajectory exemplifies one extreme—a virtuous cycle where entrepreneurs and investors receive reciprocal value from resource exchange, leading to stronger affective and instrumental bonds over time. A virtuous cycle likely begins, our model suggests, when an early-stage entrepreneur and an investor form an initial positive affective bond. This affective bond motivates the informal exchange of social resources. Provided the entrepreneur and investor reciprocate value and meet one another's expectations, social resource exchange steadily strengthens the bonds of affective commitment and trust between the two. By drawing on an investor's strategic advice and social connections, the entrepreneur is better equipped to resolve the high ambiguity and uncertainty that mark an early stage of development, and, accordingly, the entrepreneur has a better chance of progressing to the intermediate stage. Our model (per Proposition 7) suggests that a strong affective relationship between the entrepreneur and investor can strengthen their instrumental bond as well, and it indirectly increases the likelihood that the twoboth believing the other can help advance their instrumental objectives—will exchange financial resources. Having access to the social and financial resources that flow through a multiplex relationship, the venture is well equipped to address the challenges of the intermediate stage of development and grow. Growth, provided it meets or exceeds expectations, reinforces the instrumental relationship, further increasing the flow of resources between the two and increasing the likelihood the venture will continue to grow.

Not all entrepreneur-investor relationships will follow this virtuous cycle. At the opposite extreme, our model suggests that mismatches between entrepreneur behavior and the initial context, or between a venture's current developmental stage and resource exchange, can open the door to a vicious cycle. Consider an early-stage entrepreneur who aggressively pursues financial resources from an investor with whom the entrepreneur has only a weak affective tie. Although the venture may hold great promise, this entrepreneur faces significant ambiguity. The idea is unrefined or untested, the market is poorly understood and not validated, and it may not even be clear what assumptions need to be tested. Through savvy informational signaling, however, this entrepreneur might attract the instrumental interest of an investor willing to take a risk on a nascent venture and to engage in financial resource exchange, trading financial capital for equity through a negotiated economic exchange process. Without a strong affective relationship, however, it is unlikely the two will frequently exchange social resources. The investor is less likely to spend time and effort providing strategic advice or lending influence to the venture; doing so would forfeit opportunities to exchange these resources with other entrepreneurs with whom the investor has a stronger affective bond. With less access to advice and influence, the entrepreneur lacks those resources most needed for addressing the high

uncertainty and ambiguity of the early stage of venture development, making it less likely the venture will progress. Failing to meet or exceed the investor's expectations for growth can create a negative reinforcing loop in which downwardly revised instrumental expectations further decrease the likelihood the two will exchange the resources needed for the venture to grow.

The virtuous and vicious cycles described above depict two extreme trajectories of development. Given the uncertainty of entrepreneurship, any specific trajectory will fall between these two extremes. For example, an early-stage entrepreneur who has a strong affective relationship with an investor, and thus access to valuable strategic advice, might repeatedly fail to produce demonstrable new venture growth. Repeated setbacks would, our model indicates, reduce social resource exchange and weaken the affective relationship between the two. Nonetheless, because of the moderators in our model—and the reinforcing loops connecting reciprocal exchange with relational dimensions—an entrepreneur and investor can fall into a positive or negative reinforcing cycle.

IMPLICATIONS FOR ENTREPRENEURSHIP THEORY AND RESEARCH

Our theoretical model, grounded in exchange theory, makes several contributions to the entrepreneurship literature and suggests a number of corresponding directions for future research. A first key contribution of our model is its conceptualization of the entrepreneur-investor relationship as a multiplex tie comprising both affective and instrumental dimensions. Consideration of the affective dimension of the entrepreneur investor relationship, alongside the instrumental dimension, illuminates new directions for research on interpersonal and collective forms of affect in entrepreneurship and on the role of relationships within new models of financial investment in entrepreneurship.

Our theorizing builds on and extends the recent "affective turn" in entrepreneurship research (Baron, 2008) that has, to date, focused most heavily on individual feelings, particularly entrepreneur passion (e.g., Cardon et al., 2009; Chen et al., 2009). Some empirical findings from this perspective suggest that compared to perceptions of an entrepreneur's preparedness, perceptions of an entrepreneur's passion play a limited role in shaping investor decision making (Chen et al.,

2009). However, our model's interpersonal perspective on the role of affect in the entrepreneurial process presents an alternative view of how entrepreneur passion might influence investor decision making. Our model suggests that rather than simply being a part of a short-term persuasion process-in which entrepreneurs seek to persuade investors through a pitch of the viability of their ventures (Chen et al., 2009)—entrepreneurial displays of passion may be an important part of a longer-term relationship development process. Through emotional contagion (Barsade, 2002; Hatfield, Cacioppo, & Rapson, 1994), an entrepreneur's displays of passion—a high-energy, pleasant emotion—may spark shared feelings of positivity that help to foster interpersonal bonds and social integration (Knight & Eisenkraft, 2015). A positive relational bond, in turn, precipitates the exchange of valuable resources that contribute to the growth of the venture in the long term and an even stronger relationship. Testing this alternative relational perspective—in which affect influences the entrepreneurial process through relationships and resource exchange over time, rather than as part of single instances of persuasion—would require a longitudinal and field-based research approach.

Consideration of the affective dimension of the entrepreneur-investor relationship also illuminates intriguing questions about the efficacy of new models and sources of financial capital in entrepreneurship, such as crowdfunding, peerto-peer platforms, and one-to-many pitch competitions. These emerging models are often trumpeted as being attractive for early-stage ventures because they enable fledgling entrepreneurs who may have good ideas but little experience and limited access to traditional investors to secure the financial capital presumably needed to actualize their ideas. Our model raises questions, however, about whether these new models are able to provide early-stage ventures with the resources they need, given the highly ambiguous and uncertain strategic problems they face. These models, exemplified by the popular crowdfunding platform Kickstarter, provide a marketplace for exchanging financial resources through arm's-length and transactional relationships. However, these models are largely devoid of the interpersonal interactions that characterize traditional encounters between entrepreneurs and investors. Without such encounters and without opportunities for reciprocal disclosure,

these new investment models may cultivate instrumental relationships that lack bonds of affective commitment between entrepreneurs and investors. As a result, although they enable the exchange of financial resources, these models may be deficient in providing early-stage entrepreneurs with the social resources they most need to advance their ventures.

Research is needed to understand the conditions under which these new investment models are most effective. For example, are they most effective for entrepreneurs who are already embedded within traditional investment networks and, thus, already can access social resources? Might these models be most effective for a small subset of consumer products and services that can benefit from the type of financial capital and arm's-length social attention these platforms allow? Are new relational models emerging alongside these new investment models to provide early-stage entrepreneurs with social resources? These are all questions our theory provokes.

A second key contribution of our theory is its explication of relationship development and resource exchange as a bidirectional process. A view of relationship development as a bidirectional process extends existing theory and research, in which scholars have considered how entrepreneurs and investors perceive and approach one another but have neglected the bidirectional interplay of entrepreneurs' and investors' expectations and actions that comprise exchange. The bidirectional conceptualization we offer opens new avenues for research on how entrepreneurs establish the legitimacy of their ventures through impression management and on the affective expectations that investors might have when working with entrepreneurs.

Several scholars (e.g., Cornelissen & Clarke, 2010; Lounsbury & Glynn, 2001; Martens, Jennings, & Jennings, 2007; Zott & Huy, 2007) have posited that it is through the skillful use of impression management tactics—telling stories and positioning their ventures within a given institutional milieu—that entrepreneurs acquire legitimacy and obtain resources from investors. Our model incorporates these ideas but also implies that there may be limitations to the efficacy of savvy impression management behavior. In our model this behavior, which we refer to as informational signaling, establishes an investor's initial expectations for the viability of a venture and, thus, shapes

the instrumental dimension of the entrepreneurinvestor relationship. Our model aligns with the predictions of existing theory in suggesting that the instrumental relationship motivates resource exchange. However, our model further considers how the outcomes of an exchange will feed back into the relationship, either strengthening or weakening it. Through these feedback loops, exaggerated impression management behavior may, in effect, be risky for entrepreneurs. While an entrepreneur's stories and signals may form much needed early perceptions of legitimacy, these same stories and signals may set inflated and unattainable expectations for the near-term instrumental value of the venture. If the venture fails to meet or exceed these expectations, the instrumental relationship between the entrepreneur and the investor could be weakened. Moreover, if the investor suspects that the entrepreneur intentionally and knowingly created false expectations, there could be irreparable damage to the relationship between the two. Theory and research suggest that perceived integrity violations—where one party believes the other was intentionally misleading or deceiving-may be especially challenging to redress (Kim, Dirks, & Cooper, 2009).

Viewed through the lens of our theoretical model, research is needed to understand the longer-term effects of impression management behavior on venture outcomes through relational mechanisms. For example, perhaps there is a curvilinear relationship between impression management behavior and venture outcomes; entrepreneurs must establish legitimacy but must avoid setting unattainable expectations. Or perhaps effective long-term impression management requires establishing legitimacy on some dimensions while signaling awareness of vulnerability on other dimensions. Our model and discussion of the role of disclosure suggest that a balanced approach might stimulate a fruitful exchange process between an entrepreneur and an investor.

Our conceptualization of relationship development as a bidirectional exchange process also suggests that in addition to establishing the legitimacy of a venture within a particular institutional milieu, an entrepreneur's signaling behavior must address the idiosyncratic and affective expectations that a given investor holds. Although research exists on the negotiated process of economic exchange guiding financial resource exchange in entrepreneurship, the social

exchange process in entrepreneurship—particularly the affective expectations investors have—is relatively poorly understood. Because reciprocity is needed to strengthen relationships through a twoway flow of value, entrepreneurs who receive valuable strategic advice or social connections from investors must, in turn, provide investors with social resources, such as solidarity with a venture seen as "the next big thing" (Prowse, 1998). Yet little is known about the degree to which investors value different kinds of social resources or about how entrepreneurs can transfer social resources to an investor. For example, if an investor values being attached to a prominent venture, an entrepreneur may need to name the investor to a governance or advisory board—an action that would publicly attach the investor to the venture. Or perhaps an entrepreneur can deliver this value to an investor through informal actions, such as using "we" rather than "I" in discussions with the investor about the venture. Qualitative research would be especially useful for mapping the range of affective expectations investors have. Such research could provide valuable practical implications for entrepreneurs seeking investors and for delineating the different kinds of actions that meet investors' idiosyncratic expectations. In embarking on such an effort, entrepreneurship scholars might consider the literature on mentorprotégé relationships (e.g., Ragins & Scandura, 1999; Young & Perrewe, 2000). The range of social benefits and costs described in this research might provide a rich starting point for thinking about the affective expectations that exist in entrepreneurship.

A third key contribution of our theory is its portrayal of relationship development as a continuous process, potentially comprising many discrete instances of reciprocal resource exchange over time. Our theorizing enriches existing work that has focused on the initiation of relationships between entrepreneurs and investors and on the formalization of relationships through financial investment. Consideration of relationship development as a continuous process, of which initiation and formalization are a part, suggests directions for future research on how relationships between entrepreneurs and investors change over time.

Central to our theorizing about the process of relational development are the ideas that (1) different kinds of resources (i.e., social or financial) are especially valuable for ventures at different stages of development, and (2) feedback loops from successful resource exchange strengthen the entrepreneur-investor

relationship. Consideration of the various developmental cycles that can emerge as a result of these components of our model sheds light on why some partnerships strengthen over time, whereas others weaken and eventually fall apart. For instance, consider entrepreneurship during the dotcom boom (and bust) of the 1990s, as exemplified by the grocery delivery company Webvan. At an early stage of development, Webvan attracted significant instrumental interest from VCs, who poured financial resources—nearly \$400 million—into the company. By emphasizing the instrumental side of the entrepreneur-investor relationship, however, Webvan had less access to the social resources needed to resolve the high ambiguity associated with operating at the intersection of the established grocery market and the nascent web-based delivery market. Strategic missteps, which might have been avoided with greater access to social resources, contributed to Webvan's eventual bankruptcy. The example of Webvan illustrates that instrumental setbacks can weaken the instrumental relationship and also spill over to the affective relationship, however tenuous or strong these relationships may be.

As another example, consider a scenario where an investor and an entrepreneur develop differences in their beliefs about the strategic direction of a new venture. These disagreements might arise, for instance, from differing opinions on monetization strategies, personnel decisions, or exit strategies. An investor who provides valuable social resources to address such issues (e.g., strategic advice or referrals) would likely expect the entrepreneur to take and use these resources. If the entrepreneur does not implement the investor's ideas, however, the investor's affective expectations could be violated, damaging the affective relationship. A subsequent setback in the perceived growth of the venture could prove especially damaging. A primary implication of our model, which helps to understand these dynamics, is that it is critical to know when, in the developmental trajectory of a venture, different forms of resource exchange occur and the degree to which parties are meeting one another's expectations for exchange.

In a related vein, consideration of the full process of relational development suggests avenues for future research on how relationships between entrepreneurs and investors change over the course of time. Our explanation of the different motivations that VCs have, compared to angel investors, sheds light on one reason why, in addition to business motivations, angels may prefer investing in earlier-stage ventures. However, the relative value of the affective bond and instrumental bond with an investor changes as a venture grows, progressing across developmental stages. This suggests that the relationships that a venture needs may change over time in terms of the relative emphasis on affective and instrumental components. Research is needed to clarify whether successful ventures accomplish these changes best by redefining a given relationship or by selecting into and out of different relationships over time. Can entrepreneurs and investors maintain effective and valuable working relationships over time, shifting their focus on social and economic exchanges as a venture grows? Or is it better for entrepreneurs and investors to develop relationships with new partners who have the relational grounding-affective or instrumental—that facilitate the kind of resource exchange needed? As research on mentoring has suggested (Cotton, Shen, & Livne-Tarandach, 2011), entrepreneurs might consider maintaining a portfolio of connections to investors, each of whom provides access to unique resources. Research is needed to understand how relationships between entrepreneurs and investors change throughout the life of a new venture and whether this change occurs through selection, with old relationships ending and new relationships forming, or through redefinition, with old relationships shifting in their focus over time.

CONCLUSION

In a review of resource needs in the entrepreneurial process, Burggraaf, Floren, and Kunst wrote, "The entrepreneur and investor are bound to each other... the 'click factor' is essential: the right type of chemistry is needed between entrepreneur and investor" (2008: 69). Our theoretical model, grounded in exchange theory, explains the dual dimensions that characterize the entrepreneur-investor relationship, the different kinds of resource exchange that these dimensions motivate, and the process through which reciprocal exchange can—when expectations are met—contribute to relationship development over time. By considering resources and relationships, as well as processes of exchange, our theory can help guide future research and provide a better understanding of the entrepreneurial process.

REFERENCES

- Adler, P. S., & Kwon, S. W. 2002. Social capital: Prospects for a new concept. *Academy of Management Review*, 27: 17–40.
- Aernoudt, R. 1999. Business angels: Should they fly on their own wings? *International Journal of Entrepreneurial Finance*, 1: 187–195.
- Aldrich, H. E., & Ruef, M. 2006. *Organizations evolving*. London: Sage.
- Aldrich, H. E., & Zimmer, C. 1986. Entrepreneurship through social networks. In D. Sexton & R. Smiler (Eds.), The art and science of entrepreneurship: 3–23. New York: Ballinger.
- Altman, I., & Taylor, D. A. 1973. Social penetration: The development of interpersonal relationships. New York: Holt Rinehart & Winston.
- Ambady, N., Hallahan, M., & Rosenthal, R. 1995. On judging and being judged accurately in zero-acquaintance situations. *Journal of Personality and Social Psychology*, 69: 518–529.
- Amit, R., Brander, J., & Zott, C. 1998. Why do venture capital firms exist? Theory and Canadian evidence. *Journal of Business Venturing*, 13: 441–466.
- Ashby, W. R. 1956. An introduction to cybernetics. London: Chapman & Hall.
- Baron, R. A. 2008. The role of affect in the entrepreneurial process. Academy of Management Review, 33: 328–340.
- Barsade, S. G. 2002. The ripple effect: Emotional contagion and its influence on group behavior. *Administrative Science Quarterly*, 47: 644–675.
- Bhide, A. 2000. The origin and evolution of new businesses. Oxford: Oxford University Press.
- Blau, P. 1964. Exchange and power in social life. New York: Wilev.
- Block, Z., & MacMillan, I. C. 1985. Milestones for successful venture planning. *Harvard Business Review*, 63(5): 184–197
- Brander, J. A., Amit, R., & Antweiler, W. 2002. Venture-capital syndication: Improved venture selection vs. the value-added hypothesis. *Journal of Economics & Management Strategy*, 11: 423–452.
- Brush, C. G., Greene, P. G., & Hart, M. M. 2001. From initial idea to unique advantage: The entrepreneurial challenge of constructing a resource base. *Academy of Management Executive*, 15(1): 64–78.
- Burggraaf, W., Floren, R., & Kunst, J. 2008. *The entrepreneur* and the entrepreneurship cycle. Assen: Uitgeverij Van Gorcum.
- Burton, D. M., Sorensen, J. B., & Beckman, C. M. 2002. Coming from good stock: Career histories and new venture formation. Research in the Sociology of Organizations, 19: 229–262.
- Bygrave, W. D., & Hofer, C. W. 1991. Theorizing about entrepreneurship. *Entrepreneurship Theory and Practice*, 16: 13–22.

- Byrne, D. 1971. *The attraction paradigm.* New York: Academic Press.
- Cardon, M. S., Wincent, J., Singh, J., & Drnovsek, M. 2009. The nature and experience of entrepreneurial passion. Academy of Management Review, 34: 511–532.
- Cardon, M. S., Zietsma, C., Saparito, P., Davis, C., & Matherne, B. 2005. A tale of passion: A parenthood metaphor for entrepreneurship. *Journal of Business Venturing*, 20: 23–45.
- Casciaro, T., & Lobo, M. S. 2008. When competence is irrelevant: The role of interpersonal affect in task-related ties. Administrative Science Quarterly, 53: 655–684.
- Casson, M. 1982. The entrepreneur: An economic theory. Totowa, NJ: Barnes & Noble Books.
- Chen, X. P., Yao, X., & Kotha, S. 2009. Entrepreneur passion and preparedness in business plan presentations. Academy of Management Journal, 52: 199–214.
- Chong, L., & Gibbons, P. 1997. Corporate entrepreneurship: The roles of ideology and social capital. *Group & Organization Management*, 22: 10–30.
- Churchill, N. C., & Lewis, V. L. 1983. The five stages of small business growth. *Harvard Business Review*, 61(3): 30–50.
- Coase, R. H. 1937. The nature of the firm. *Economica*, 4: 386–405.
- Cohen, B. D., & Dean, T. J. 2005. Information asymmetry and investor valuation of IPOs: Top management team legitimacy as a capital market signal. *Strategic Management Journal*, 26: 683–690.
- Collins, R. 1990. Stratification, emotional energy, and the transient emotions. In T. D. Kemper (Ed.), *Research agendas in the sociology of emotions:* 27–57. Albany: State University of New York Press.
- Connor, K. R., & Prahalad, C. K. 1996. A resource-based theory of the firm: Knowledge versus opportunism. Organization Science, 7: 477–501.
- Cooper, A. C., & Gimeno-Gascon, F. J. 1992. Entrepreneurs, processes of founding, and new firm performance. In D. Sexton & J. Kasarda (Eds.), The state of the art in entrepreneurship: 301–340. Boston: PWS-Kent Publishing.
- Cooper, A. C., Gimeno-Gascon, F. J., & Woo, C. Y. 1994. Initial human and financial capital as predictors of new venture performance. *Journal of Business Venturing*, 9: 371–395.
- Cornelissen, J. P., & Clarke, J. S. 2010. Imagining and rationalizing opportunities: Inductive reasoning and the creation and justification of new ventures. Academy of Management Review, 35: 539–557.
- Cotton, R. D., Shen, Y., & Livne-Tarandach, R. 2011. On becoming extraordinary: The content and structure of the developmental networks of Major League Baseball Hall of Famers. Academy of Management Journal, 54: 15–46.
- Cropanzano, R., & Mitchell, M. S. 2005. Social exchange theory:
 An interdisciplinary review. *Journal of Management*, 31: 874–900.
- Dalton, D. R., Daily, C. M., Certo, C. T., & Roengpitya, R. 2003.

 Meta-analyses of financial performance and equity:

- Fusion or confusion? Academy of Management Journal, 46: 13–26.
- Delmar, F., & Davidson, P. 2000. Where do they come from? Prevalence and characteristics of nascent entrepreneurs. *Entrepreneurship and Regional Development*, 12: 1–23.
- Eckhardt, J. T., Shane, S., & Delmar, F. 2006. Multistage selection and the financing of new ventures. *Management Science*, 52: 220–232.
- Eisenhardt, K. M., & Schoonhoven, C. B. 1990. Organizational growth: Linking founding team, strategy, environment, and growth among US semiconductor ventures, 1978–1988. Administrative Science Quarterly, 35: 504–529.
- Ehrlich, S. B., De Noble, A. F., Moore, T., & Weaver, R. R. 1994. After the cash arrives: A comparative study of venture capital and private investor involvement in entrepreneurial firms. *Journal of Business Venturing*, 9: 67–82.
- Elsbach, K. D., & Kramer, R. M. 2003. Assessing creativity in Hollywood pitch meetings: Evidence for a dual-process model of creativity judgments. *Academy of Management Journal*, 46: 283–301.
- Emerson, R. M. 1976. Social exchange theory. *Annual Review of Sociology*, 2: 335–362.
- Evans, D. S., & Leighton, L. S. 1989. Some empirical aspects of entrepreneurship. *American Economic Review*, 79: 519– 535.
- Festinger, L. 1957. A theory of cognitive dissonance. Evanston, IL: Row, Peterson & Co.
- Florin, J., Lubatkin, M., & Schulze, W. 2003. A social capital model of high-growth ventures. Academy of Management Journal, 46: 374–384.
- Foa, U. G., & Foa, E. B. 1980. Resource theory. In K. J. Gergen, M. S. Greenberg, & R. H. Willis (Eds.), Social exchange: Advances in theory and research: 77–94. New York: Plenum Press.
- George, J. M., & Brief, A. P. 1992. Feeling good-doing good: A conceptual analysis of the mood at work-organizational spontaneity relationship. *Psychological Bulletin*, 112: 310–329.
- Gertler, M. S. 2003. Tacit knowledge and the economic geography of context, or the undefinable tacitness of being (there). *Journal of Economic Geography*, 3: 75–99.
- Gompers, P., & Lerner, J. 2001. The venture capital revolution. Journal of Economic Perspectives, 15: 145–168.
- Grant, R. M. 1996. Toward a knowledge-based theory of the firm. Strategic Management Journal, 17: 109–122.
- Greene, P. G., & Brown, T. E. 1997. Resource needs and the dynamic capitalism typology. *Journal of Business Venturing*, 12: 161–173.
- Hambrick, D. C., MacMillan, I. C., & Day, D. L. 1982. Strategic attributes and performance in the BCG matrix—A PIMS-based analysis of industrial product businesses. Academy of Management Journal, 25: 510–531.

- Hatfield, E., Cacioppo, J., & Rapson, R. L. 1994. Emotional contagion. Cambridge: Cambridge University Press.
- Hellmann, T. 2002. A theory of strategic venture investing. Journal of Financial Economics, 64: 285–314.
- Higashide, H., & Birley, S. 2002. The consequences of conflict between the venture capitalist and the entrepreneurial team in the United Kingdom from the perspective of the venture capitalist. *Journal of Business Venturing*, 17: 59–81.
- Homans, G. 1958. Social behavior as exchange. American Journal of Sociology, 63: 597–606.
- Huang, L., & Pearce, J. L. 2015. Managing the unknowable: The effectiveness of early-stage investor gut feel in entrepreneurial investment decisions. Administrative Science Quarterly, 60: 634–670.
- Ibarra, H. 1992. Homophily and differential returns: Sex differences in network structure and access in an advertising firm. *Administrative Science Quarterly*, 37: 422–447.
- Ireland, R. D., Reutzel, C. R., & Webb, J. W. 2005. Entrepreneurship research in AMJ: What has been published, and what might the future hold? Academy of Management Journal, 48: 556–564.
- Joshi, A., & Knight, A. P. 2015. Who defers to whom and why? Implications of demographic differences and dyadic deference for team effectiveness. Academy of Management Journal, 58: 59–84.
- Kaplan, S. N., & Stromberg, P. 2001. Venture capitalists as principals: Contracting, screening, and monitoring. American Economic Review, 91: 426–430.
- Kazanjian, R. K., & Drazin, R. 1990. A stage-contingent model of design and growth for technology based new ventures. Journal of Business Venturing, 5: 137–150.
- Kenny, D. A. 1994. Interpersonal perception: A social relations analysis. New York: Guilford Press.
- Kerr, W. R., Lerner, J., & Schoar, A. 2011. The consequences of entrepreneurial finance: Evidence from angel financings. *Review of Financial Studies*, 27: 20–55.
- Kim, P. H., & Aldrich, H. E. 2005. Social capital and entrepreneurship. Foundations and Trends in Entrepreneurship, 1(2): 55–104.
- Kim, P. H., Dirks, K. T., & Cooper, C. D. 2009. The repair of trust: A dynamic bilateral perspective and multilevel conceptualization. Academy of Management Review, 34: 401–422.
- Kirsch, D., Goldfarb, B., & Gera, A. 2009. Form or substance: The role of business plans in venture capital decision making. Strategic Management Journal, 30: 487–515.
- Knapp, M. L. 1978. Social intercourse: From greeting to goodbye. Boston: Allyn & Bacon.
- Knight, A. P., & Eisenkraft, N. 2015. Positive is usually good, negative is not always bad: The effects of group affect on social integration and task performance. *Journal of Applied Psychology*, 100: 1214–1227.
- Kogut, B., & Zander, U. 1992. Knowledge of the firm, combinative capabilities, and the replication of technology. Organization Science, 3: 383–397.

- Krackhardt, D. 1992. The strength of strong ties: The importance of philos in organizations. In N. Nohria & R. G. Eccles (Eds.), Networks and organizations: Structure, form, and action: 216–239. Cambridge, MA: Harvard Business School Press.
- Lam, S. S. 1991. Venture capital financing: A conceptual framework. *Journal of Business Finance & Accounting*, 18: 137–149.
- Lawler, E. J. 2001. An affect theory of social exchange. American Journal of Sociology, 107: 321–352.
- Lee, C., Lee, K., & Pennings, J. M. 2001. Internal capabilities, external networks, and performance: A study on technology-based ventures. Strategic Management Journal, 22: 615–640.
- Lewis, R. A. 1972. A developmental framework for the analysis of premarital dyadic formation. *Family Process*, 11: 17–48.
- Lichtenstein, B. M. B., & Brush, C. G. 2001. How do resource bundles develop and change in new ventures? A dynamic model and longitudinal exploration. *Entrepreneurship Theory and Practice*, 25: 37–58.
- Lounsbury, M., & Glynn, M. A. 2001. Cultural entrepreneurship: Stories, legitimacy, and the acquisition of resources. Strategic Management Journal, 22: 545–564.
- Lyubomirsky, S., King, L., & Diener, E. 2005. The benefits of frequent positive affect: Does happiness lead to success? Psychological Bulletin, 131: 803–855.
- MacMillan, I. C., Siegel, R., & Narasimha, P. S. 1986. Criteria used by venture capitalists to evaluate new venture proposals. *Journal of Business Venturing*, 1: 119–128.
- MacMillan, I. C., Zemann, L., & Subbanarasimha, P. N. 1987.
 Criteria distinguishing successful from unsuccessful ventures in the venture screening process. *Journal of Business Venturing*, 2: 123–137.
- Martens, M. L., Jennings, J. E., & Jennings, P. D. 2007. Do the stories they tell get them the money they need? The role of entrepreneurial narratives in resource acquisition. Academy of Management Journal, 50: 1107–1132.
- Matz, D. C., & Wood, W. 2005. Cognitive dissonance in groups: The consequences of disagreement. *Journal of Personality and Social Psychology*, 88: 22–37.
- McAllister, D. J. 1995. Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38: 24–59.
- McFadyen, M. A., & Cannella, A. A. 2004. Social capital and knowledge creation: Diminishing returns of the number and strength of exchange relationships. Academy of Management Journal, 47: 735–746.
- McKaskill, T. 2009. Invest to exit: A pragmatic strategy for angel and venture capital investors. Victoria, Australia: Breakthrough Publications.
- Mitteness, C., Sudek, R., & Cardon, M. S. 2012. Angel investor characteristics that determine whether perceived passion leads to higher evaluations of funding potential. *Journal of Business Venturing*, 27: 592–606.
- Molm, L. D., Peterson, G., & Takahashi, N. 1999. Power in negotiated and reciprocal exchange. American Sociological Review, 64: 876–890.

- Navis, C., & Glynn, M. A. 2011. Legitimate distinctiveness and the entrepreneurial identity: Influence on investor judgments of new venture plausibility. Academy of Management Review, 36: 479–499.
- Niedenthal, P. M., & Brauer, M. 2012. Social functionality of human emotion. Annual Review of Psychology, 63: 259– 285
- Parhankangas, A., & Landstrom, H. 2004. Responses to psychological contract violations in the entrepreneur-venture capitalist relationship: An exploratory study. Venture Capital, 6(4): 217–242.
- Porter, M. E. 1980. Competitive strategy: Techniques for analyzing industries and companies. New York: Free Press.
- Prowse, S. 1998. Angel investors and the market for angel investments. *Journal of Banking and Finance*, 22: 785–792.
- Quinn, R. E., & Cameron, K. 1983. Organizational life cycles and shifting criteria of effectiveness: Some preliminary evidence. *Management Science*, 29: 33–51.
- Ragins, B. R., & Scandura, T. A. 1999. Burden or blessing? Expected costs and benefits of being a mentor. *Journal of Organizational Behavior*, 20: 493–509.
- Robinson, R. B. 1987. Emerging strategies in the venture capital industry. *Journal of Business Venturing*, 2: 53–77.
- Rose, D. S. 2014. Angel investing: The Gust guide to making money and having fun investing in startups. Hoboken, NJ: Wiley.
- Sahlins, M. 1965. Exchange value and the diplomacy of primitive trade. In J. Helm, P. Bohannan, & M. D. Sahlins (Eds.), Essays in economic anthropology: Dedicated to the memory of Karl Polanyi: 95–129. Seattle: University of Washington Press.
- Sahlman, W. A. 1990. The structure and governance of venture-capital organizations. *Journal of Financial Eco*nomics, 27: 473–521.
- Sandefur, R. L., & Laumann, E. O. 1998. A paradigm for social capital. *Rationality and Society*, 10: 481–501.
- Sapienza, H. J., & Amason, A. C. 1993. Effects of innovativeness and venture stage on venture capitalist–entrepreneur relations. *Interfaces*, 23(6): 38–51.
- Sapienza, H. J., & Korsgaard, M. A. 1996. Procedural justice in entrepreneur-investor relations. Academy of Management Journal, 39: 544–574.
- Schoonhoven, C. B., & Romanelli, E. (Eds.). 2001. The entrepreneurship dynamic: Origins of entrepreneurship and the evolution of industries. Palo Alto, CA: Stanford University Press.
- Schürmann, S. 2006. Reputation: Some thoughts from an investor's point of view. Geneva Papers on Risk and Insurance—Issues and Practice, 31: 454–469.
- Shane, S., & Cable, D. 2002. Network ties, reputation, and the financing of new ventures. *Management Science*, 48: 364–381.
- Shane, S., & Delmar, F. 2004. Planning for the market: Business planning before marketing and the continuation of

- organizing efforts. *Journal of Business Venturing*, 19: 767–785.
- Shepherd, D. A., & Zacharakis, A. 2001. The venture capitalist–entrepreneur relationship: Control, trust and confidence in co-operative behaviour. *Venture Capital*, 3(2): 129–149.
- Sohl, J. E. 2003. The U.S. angel and venture capital market: Recent trends and developments. *Journal of Private Equity*, 6(2): 7–17.
- Sparrowe, R. T., & Liden, R. C. 1997. Process and structure in leader-member exchange. *Academy of Management Review*, 22: 522–552.
- Starbuck, W. H. 1971. Organizational growth and development. London: Penguin.
- Steiner, L., & Greenwood, R. 1995. Venture capital relationships in the deal structuring and post-investment stages of firm creation. *Journal of Management Studies*, 32: 337–357.
- Stinchcombe, A. L. 1965. Social structure and organizations. In J. G. March (Ed.), *Handbook of organizations*: 142–193. Chicago: Rand McNally.
- Thibaut, J. W., & Kelley, H. H. 1959. The social psychology of groups. New York: Wiley.
- Torekull, B., & Kamprad, I. 1998. *Leading by design.* New York: Wahlström & Widsrand.
- Tyebjee, T. T., & Bruno, A. V. 1984. A model of venture capitalist investment activity. *Management Science*, 30: 1051–1066.
- Van de Ven, A. H., Polley, D. E., Garud, R., & Venkataraman, S. 1999. *The innovation journey*. New York: Oxford University Press.
- Venkataraman, S. 1997. The distinctive domain of entrepreneurship research. Advances in Entrepreneurship, Firm Emergence and Growth, 3(1): 119–138.

- Vissa, B. 2011. A matching theory of entrepreneurs' tie formation intentions and initiation of economic exchange.

 Academy of Management Journal, 54: 137–158.
- Walker, G., Kogut, B., & Shan, W. 1997. Social capital, structural holes and the formation of an industry network. Organization science, 8: 109–125.
- Wasserman, N. 2006. Rich versus king: The entrepreneur's dilemma. Academy of Management Proceedings, 6: 1–6.
- Weick, K. 1979. The social psychology of organizing. Reading, MA: Addison-Wesley.
- Westhead, P. 1995. Survival and employment growth contrasts between types of owner-managed high-technology firms. *Entrepreneurship Theory and Practice*, 20: 5–27.
- Westhead, P., Wright, M., & Ucbasaran, D. 2001. Internationalization of private firms: Environmental turbulence and organizational strategies and resources. Entrepreneurship & Regional Development, 16: 501–522.
- Young, A. M., & Perrewe, P. L. 2000. The exchange relationship between mentors and protégés: The development of a framework. *Human Resource Management Review*, 10: 177–209.
- Zacharakis, A., Erikson, T., & George, B. 2010. Conflict between the VC and entrepreneur: The entrepreneur's perspective. Venture Capital. 12(2): 109–126.
- Zimmerman, M. A., & Zeitz, G. J. 2002. Beyond survival: Achieving new venture growth by building legitimacy. Academy of Management Review, 27: 414–431.
- Zott, C., & Huy, Q. N. 2007. How entrepreneurs use symbolic management to acquire resources. *Administrative Science Quarterly*, 52: 70–105.

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