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Venture capitalist-induced relational fit and new venture performance: a Dutch biotech comparative case analysis

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ABSTRACT

Venture capitalists contribute financially as well as non-financially to new venture development. Their non-financial support consists of both direct strategic advice and indirect advice via networking. But the effectiveness of this advice is more dependent on its acceptance than on its nature. The acceptance of the advice of a venture capitalist by the entrepreneurs has been demonstrated to depend on the latter's perception of fairness in their relationship with the venture capitalist. In this study, we demonstrate that more dimensions of relational fit than only the perception of fairness of entrepreneurs in their relationship with a venture capitalist play an important role in their relational fit, i.e. goal congruence and complementarity of competences and cognitions. Additionally, this study shows that venture capitalists can improve their relational fit to entrepreneurs and thereby the new venture development by taking some fit improving measures like bonding, avoiding forced decisions and a too large overlap of knowledge, adherence to shared norms of conduct and heterogeneity of the knowledge exchanged.

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KEYWORDS

Venture capitalists; relational fit; fit improving measures; new venture performance

1. Introduction

High-growth entrepreneurial ventures are recognized as a key source of net jobs, productivity, growth and wealth creation for national economies (Sternberg and Wennekers 2005; Van Praag and Versloot 2008). These new ventures are often started based on their unique knowledge of an innovative concept pivotal for creating a competitive advantage, in line with the knowledge based view (Kogut and Zander 1993; Grant 1996). However, these firms often lack the complementary resources – for example, finances, knowledge and competences – to develop that unique knowledge into a marketable product or service (Dierickx and Cool 1989; Yli-Renko, Autio, and Sapienza 2001). Furthermore, their networks at the start of new venture development are often highly undeveloped (Stinchcombe 1965) and almost overlapping with the entrepreneur's social network. Accordingly, as these ventures are new to the industry, they are suffering from the liability of unconnectedness (Powell, Koput, and

Smith-Doerr 1996) implying that their lack of inter-organizational relationships makes it very difficult for entrepreneurs to gain access to needed complementary knowledge and competences. Faced with these difficulties, entrepreneurs often turn to venture capitalists who contribute to their new venture development not only financially but also non-financially (Timmons and Bygrave 1986; Sapienza 1992; Colombo and Grilli 2010). However, the decision of venture capitalists to invest in a new venture is often based on the reputation of the alliance partner(s) the entrepreneurs already have (Stuart, Hoang, and Hybels 1999; Ozmel, Reuer, and Gulati 2013).

The non-financial support of venture capitalists to new ventures is identified to consist of three main activities: monitoring, strategic advice and networking (Sapienza, Manigart, and Vermeir 1996; Wijbenga, Postma, and Stratling 2007). Venture capitalists need to monitor new ventures in order to assess their deficiencies in knowledge and competences and assist them accordingly, which in turn depends on the openness of the information exchange between them (Sapienza 1992; Kaplan and Strömberg 2001; Van den Berghe and Levrau 2002; Bottazzi, Darin, and Hellmann 2008). The assistance provided by a venture capitalist consists of both direct strategic advice, possibly via membership of the board of directors of the new venture (Fried, Bruton, and Hisrich 1998; Clarysse, Knockaert, and Lockett 2007; Winton and Yerramilli 2008), and indirect advice by networking and linking the entrepreneur to its network partners possessing relevant complementary knowledge and competences (Bygrave 1987). Empirical evidence shows, however, that experienced and renowned venture capitalists are better in providing this assistance than others but only to inexperienced entrepreneurs (Sapienza 1992; Stuart, Hoang, and Hybels 1999; Gompers et al. 2010; Ozmel, Reuer, and Gulati 2013). Furthermore, other studies have demonstrated that the direct strategic advice provided by venture capitalists is not always considered useful by entrepreneurs (Barney et al. 1996) or it might often be refused (Becker and Hellman 2003), and that its contribution to new venture success is absent (Busenitz, Fiet, and Moesel 2004). Instead, the success of new ventures is demonstrated to depend on the entrepreneurs' perceptions of fairness in their relationships with venture capitalists (Sapienza and Korsgaard 1996; Busenitz, Fiet, and Moesel 2004). The acceptance by a new venture of the advice given by a venture capitalist seems more important for its successful development than the advice itself. This implies that the possibilities of venture capitalists of providing effective non-financial support to new ventures depend heavily on their relational fit. A better relational fit of a venture capitalist to a new venture would stimulate a more open exchange of information between them, which enables the venture capitalist to better monitor the new venture and to provide the entrepreneur with more acceptable direct and indirect advice and thereby to contribute more effectively to the new venture's successful development. Subsequently, the question of interest is: How can experienced venture capitalists stimulate the relational fit with inexperienced entrepreneurs and thereby stimulate successful new venture development?

In the context of experienced venture capitalist-inexperienced entrepreneurs relationships (Gompers et al. 2010), the contribution of this study to the insights obtained by Barney et al. (1996) and Busenitz, Fiet, and Moesel (2004) is twofold. First, it delves deeper into the concept of relational fit and derives the effects of more types of relational fit than only that of perceived relational fairness on the (un)successful development of inexperienced entrepreneurs. Second, various fit improving measures are derived from the distinguished types of relational fit that may be taken by experienced venture capitalists to improve those types of relational fit to inexperienced entrepreneurs. Both contributions matter for improving

venture capitalists' performance: while venture capitalists tend to follow similar institutionalized rules when selecting start-ups, they differ significantly in how (well) they fulfil their 'coaching' role (Fitza, Matusik, and Mosakowski 2009; Colombo and Grilli 2010; Croce, Martí, and Murtinu 2013).

In Section 2, the theoretical framework of relational fit between venture capitalists and their client entrepreneurs is elaborated together with the measures that may be taken by venture capitalists to improve this fit. In the same section, propositions are derived. These propositions are empirically explored. Therefore, the data collection and data analysis methods applied are described in Section 3. The data have been collected on the relations of four Dutch venture capitalists, exclusively specialized in early stage financing of start-ups in the biotech industry, with inexperienced entrepreneurs in that industry. This selection was made in order to comply with the conditions under which venture capitalists can provide effectively non-financial support to new ventures, namely being an experienced venture capitalist in the industry dealing with inexperienced entrepreneurs (Gompers et al. 2010). The results of the case analyses are presented in Section 4. A discussion of the theoretical and managerial implications and limitations of the results obtained is presented in Section 5. The conclusions to be drawn are presented in Section 6.

2. Theoretical framework

2.1. Background

Research on how venture capitalists create value for new ventures focuses on their monitoring role and deals mostly with challenges stemming from information asymmetries (Kaplan and Strömberg 2001; Van den Berghe and Levrau 2002; Bottazzi, Darin, and Hellmann 2008): not only the actual competences and the value of the business propositions of the new venture are difficult to evaluate, but entrepreneurs may also stick to inefficient projects to protect their private returns at the expenses of the shareholders' returns (Gompers 1995). Venture capitalists can use a variety of formal contractual monitoring tools, but contracts remain to a certain extent incomplete (Van den Berghe and Levrau 2002) due to the strong uncertainties surrounding firm activities in high-tech sectors. The literature on monitoring by venture capitalists has so far largely neglected the specific characteristics of the knowledge that venture capitalists need to observe. Knowledge is often equated to information, while only a limited share of the knowledge possessed by entrepreneurs can be codified. The not codified or not codifiable knowledge, that is their tacit knowledge, is much more difficult to observe and communicate and could represent 'hidden action' (Amit, Brander, and Zott 1998) even when the entrepreneur has all incentives to share it with the venture capitalist. In this context, effective communication between venture capitalists and entrepreneurs profits mostly from open, trust-based relations, as revealed by the insights stemming from research on organizational learning (Nooteboom 2000). Such relations are necessary to enable the venture capitalist to monitor effectively the new venture's knowledge base and competences and to give timely strategic management and networking advice. This collaborative type of relation can hardly be understood simply from strategic economic incentives alone, but requires the consideration of the social elements of the specific interaction at hand. Along this line, Busenitz, Fiet, and Moesel (2004) have revealed the role played by perceived procedural justice as a pre-condition for a mutual learning cooperation.

A complementary set of evidence shows that at first entrepreneurs are even quite hesitant to accept venture capital, especially in Europe, because of their fear of loss of control over their venture (Berggren, Olofsson, and Silver 2000; Giudici and Paleari 2000; Becker and Hellman 2003). Moreover, venture capitalists often include special contractual clauses in investment agreements that allow them to gain some control over the new venture (Kaplan and Strömberg 2001), mostly via membership of the board of directors of the new venture, by replacing the CEO and/or recruiting a vice-president sales and marketing (Fried, Bruton, and Hisrich 1998; Hellmann and Puri 2002; Clarysse, Knockaert, and Lockett 2007; Winton and Yerramilli 2008). If entrepreneurs agree upon such an influence of the venture capitalist in the board of directors of their new venture, the original board members still may try to pursue their own former business strategy and withstand the influence of the venture capitalist's board member(s) via ingratiation and persuasion behaviour (Westphal 1998) or even social distancing (Westphal and Khanna 2003). This implies for venture capitalists that a collaborative relation with their selected entrepreneurs can hardly be taken for granted, but requires instead high levels of efforts.

In sum, while the importance of open relations between venture capitalists and entrepreneurs is by now recognized, the reasons behind the challenges of establishing such a relation remain partially understood because of the multiple dimensions involved. There is a clear need to consider these multiple dimensions of the openness of these typical relations, and to relate them to specific measures that venture capitalists can take to leverage each dimension. For these reasons, this study is based on Scholl (2003), who investigated the relation between openness of inter-personal relationships and the effectiveness of teamwork. He conceptualized the effectiveness of teamwork to be related to five types of relational fit between its members. As new venture development is the result of the effectiveness of teamwork by members of the new venture and the venture capitalist, the model developed by Scholl (2003) is relevant for this study as well. The model has already been successfully applied in another context of corporate ventures and the financial and non-financial support provided by their corporate parents (Weber and Weber 2007). However, the stimulation of the five types of fit by means of fit improving measures applied by (corporate) venture capitalists was not taken into account in that study.

The five types of relational fit identified by Scholl (2003) are: conative fit, affective fit, normative fit, fit of 'know what' and fit of 'know how'. In this study, the relational fits of 'know what' and 'know how' are taken together in one type 'competence and cognitive fit' because knowledge, skills and competences are strongly intertwined concepts and highly correlated (Weber and Weber 2007). Conative, affective and normative fit refer to the perceived compatibility of both parties' goals, and their perceptions of relational fairness, emotions and norms and values, respectively. Competence and cognitive fit refers to the perceived complementarity of both parties' competences and knowledge. This is described next in more detail.

2.2. Relational fit

The first dimension of relational fit concerns conative fit, which is about two parties' intention to cooperate and follow perceived compatible goals (Gemünden et al. 1999) in cases that entail conflict of interest. Conative fit has a large impact on the success of a relationship (Sykes 1990). The intention to cooperate, especially of the new venture, depends on the perception of fairness in the venture capitalist-new venture relationship. Without such a

perception, the new venture is likely to feel dominated (Cable and Shane 1997), withhold information (Utset 2002), and delay the implementation of initiatives (Korsgaard, Schweiger, and Sapienza 1995). Therefore, the congruence of goals and the entrepreneurs' perception of fairness in their relation with the venture capitalists are both important dimensions of their conative fit and are related to the new venture's successful development. Accordingly, the following proposition can be derived.

P1: Conative fit (perceived goal congruence and fairness) is positively related to new venture development.

Competence and cognitive fit is about the perceived content similarity of the two parties' abilities and cognitions. The former fit refers to shared tacit knowledge and the latter fit refers to shared explicit knowledge (Nooteboom 2000; Weber and Weber 2007). The shared tacit and explicit knowledge should represent only a limited overlap (not too small and not too large) of both parties' knowledge bases. Such a limited overlap enables them to specialize in the development of different types of knowledge and thereby to exploit their comparative advantages and add maximum value to the cooperative process without losing their ability to cooperate (Cable and Shane 1997). Van den Berghe and Levrau (2002) report evidence that a minimal knowledge of the industry is perceived as useful by venture capitalists in their relationships with entrepreneurs as more specialized knowledge is not needed. De Clercq and Dimov (2008) also suggest that there is no unequivocal positive effect of prior industry knowledge. So, a good competence and cognitive fit of a venture capitalist to an entrepreneur resembles a limited perceived overlap of their tacit and explicit knowledge bases, which stimulates the successful development of the new venture (Nooteboom et al. 2007). A bad competence and cognitive fit resembles either a too large or too little overlap of the knowledge bases of the venture capitalist and the entrepreneur involved, both stimulating the unsuccessful development of the new venture. So, competence and cognitive fit represents the perceived complementarity of the two parties' knowledge bases instead of their compatibility and has an inverted U-relationship with the distance between their knowledge bases (Nooteboom et al. 2007). However, the risk of a wrong assessment of a new venture's potential and growth perspective by the venture capitalist increases rapidly with an increasing distance between the knowledge bases beyond the optimal point of their complementarity. This will deter the venture capitalist from engaging in a collaborative relationship with the entrepreneur beyond the optimal point of complementarity of their knowledge bases. The remaining left part of the inverted U-relationship until the optimal point of complementarity reflects a positive relationship between the perceived complementarity of the competences and cognitions of the venture capitalist and the entrepreneur and the new venture's development. Accordingly, the following proposition can be derived.

P2: Competence and cognitive fit (perceived complementarity of competences and cognitions) is positively related to new venture development.

Affective fit is about the perceived functional compatibility of emotions of two parties. Scherer and Tran (2001) emphasize the importance of emotions for communication in new, insecure and untested relationships like new venture–venture capitalist relationships. This observation is confirmed by Scholl (1996, 2003) who argues that an affective fit positively influences knowledge transfers by promoting mutual trust and openness. Weber and Weber (2007), focusing on the merger and acquisition literature about post-acquisition integration, found evidence on the negative implications of organizational and personal misfits between

two merging partners. On the other hand, if two parties perceive a mutual affective fit, trust is stimulated and thereby the willingness to cooperate is increased. Antecedents of a positive perception of affective fit are personally chosen rather than role-prescribed behaviour and a demonstration of interpersonal care rather than enlightened self-interest (McAllister 1995). The venture capitalist's valuation of the compatibility of emotions with the new venture indicates affective fit. Accordingly, the following proposition can be derived.

P3: Affective fit (perceived compatibility of emotions) is positively related to new venture development.

Normative fit is about the similarity of two parties' norms and values. Norms refer to standards of behaviour that are based on widely shared beliefs of how group members are expected to behave in a given situation (Elster 1989; Fehr and Fischbacher 2004). According to Weber and Weber (2007), the similarity of norms stimulates knowledge transfer between venture capitalists and new ventures because 'they feel they ought to do so, because they see benefits for both parties, and because they expect the other party to cooperate equally'. Similar claims were already made by Sapienza (1989) and Timmons and Bygrave (1986) who observed convergent norms and values to be strongly valued by both venture capitalists and portfolio companies (Cable and Shane 1997). The influence of shared norms is, however, not expected to have a straightforward positive effect on knowledge transfer. In line with knowledge-based theory, diversity is an important pre-condition for the ability to create new knowledge (Cohen and Levinthal 1990; Weber and Weber 2007). Differences between the organizational culture of a venture capitalist firm and that of a new venture are conceived to reflect differences in their personnel's attitudes and norms (Weber and Weber 2007). Using differences in organizational culture as a proxy for normative fit, a connection can be made to Flynn and Chatman (2001), who give an explanation for the lack of a simple positive relation between high organizational culture similarity and knowledge transfer as observed by Weber and Weber (2007).

Flynn and Chatman (2001) distinguish between the strength and content of an organization's culture. Organizational cultural strength refers to the extent to which employees adhere to norms and values, while organizational cultural content refers to the differences in norms and values among employees. The impact of organizational culture strength on the extent to which individuals share knowledge with one another depends more on the shared way of knowledge sharing (i.e. conduct) than on the content of the knowledge shared (Flynn and Chatman 2001). Strong organizational norms may improve the effectiveness of knowledge transfer by a higher level of agreement about the manner in which knowledge should be shared or generated. However, if those norms constrain the new venture from sharing knowledge not compatible with earlier knowledge (in terms of content), then it will hamper the transfer of valuable knowledge. In sum, shared organizational norms ideally emphasize adherence to shared norms, without dictating both parties what to share (i.e. homogeneous knowledge). Strongly shared norms on adherence and weakly shared norms on homogeneity of content indicate a high normative fit between a venture capitalist and an entrepreneur, which is positively related to the successful development of the new venture. A high normative fit reflects an open relationship with many discussions about the content of the information exchanged and a low risk of turning into a sour relationship due to those many discussions. In other words, a high normative fit reflects that discussion and consensus forming between two

parties are valued as more important than enforcing one's will upon another. Thus, the following proposition has been derived.

P4: Normative fit (adherence and heterogeneity) is positively related to new venture development.

2.3. Relational fit improving measures

We now relate the conative, competence and cognitive, affective and normative fit of a venture capitalist and an entrepreneur, through their underlying dimensions, to measures that can be applied by the venture capitalist to improve these fits. These measures represent non-exhaustive empirical specifications of the multifaceted appearances of the four types of fit defined and their underlying dimensions discerned.

The measures to improve the conative fit should stimulate perceived goal congruence and/or improve the perceived fairness by the entrepreneur.

To stimulate perceived goal congruence, four different measures are identified (Arthurs and Busenitz 2003). First, bonding, which refers to the entrepreneur's investment of personal wealth into the venture, decreases the likelihood that the entrepreneur behaves in a way that would hamper long-term success in favour of short-term benefits. Secondly, by contractual obligations in the financial agreement the same objective can be realized. The third measure is to motivate the entrepreneur in a more positive way by cooperating on common goals. Through the provision of financial incentives for meeting certain goals, the entrepreneur is stimulated to cooperate. The last measure is to take up a more active role in the new venture's decision-making process. Closer interaction reduces the likelihood of self-interested behaviour (Bottazzi, Darin, and Hellmann 2008).

The relative power of two cooperating parties is described as perceived fairness (Cable and Shane 1997; Busenitz, Fiet, and Moesel 2004). Measures that stimulate the creation of perceived fairness address two issues, namely consideration of the new venture's input and influence regarding decision-making. The consideration of input refers to the extent to which a venture capitalist includes the entrepreneur in the strategic decision-making process and the influence over decisions refers to the extent to which the entrepreneur's input is reflected in the final decision (Korsgaard, Schweiger, and Sapienza 1995). Measures related to the first issue are the encouragement of new ideas development and avoiding forced decisions. Measures related to the second issue are being receptive to compromises and actively showing the benefits aimed at (Fiet et al. 1997).

Affective fit is a main determinant in the mutual selection process of both the venture capitalist and the entrepreneur (Bygrave and Timmons 1992; Cable and Shane 1997). But also during the value creating process, measures can be identified that improve the information transfer based on the perceived functional compatibility of emotions. Three measures are used to influence interpersonal relations between the venture capitalist and the entrepreneur. First, by intensification of the contact with key-employees of the new venture, venture capitalists try to influence the entrepreneur's perception of their personal care for the new venture. Secondly, informal contact such as dinners and trips serve to improve personal relations (Steier and Greenwood 1995). Thirdly, venture capitalists can make use of the possibility to change the positions of the individuals they introduced to the management of the new venture or the position of the investment manager involved when problems related to affective fit become too large. These three measures can be taken

by venture capitalists to improve their affective fit (perceived compatibility of emotions) to new ventures.

Venture capitalists usually also take their competence and cognitive fit to entrepreneurs into account during the selection phase. This fit is enabled by their focus on new ventures in one particular industry and their explicit knowledge of that industry. Furthermore, also their experience in the industry contributes to their cognitive domain. During the value creating process venture capitalists will further enlarge their cognitive domain by tapping into the (technological) cognitive domains of entrepreneurs. They do this in order to be better able to monitor the new ventures and provide the entrepreneurs with better strategic advice and network partners. To that end their investment managers will read literature, visit congresses and hire external advisors (Christensen 2006) and diversify the investment teams. As venture capitalists are more experienced and knowledgeable with respect to new venture development than the entrepreneurs themselves, the largest challenge for venture capitalists is to avoid a too large overlap of their (technological) knowledge bases. In that case, the entrepreneurs may feel overwhelmed, controlled and denied as experts in their technological field and will accept less easily the advice given by the venture capitalist leading to less competence and cognitive fit (in terms of complementarity) between them. So, the measures taken by venture capitalist to improve their competence and cognitive fit to entrepreneurs easily overshoot this purpose with negative effects as a result. A too little overlap of knowledge bases is hardly an issue as it will deter a venture capitalist from engaging in a collaborative relationship with an entrepreneur because of the risk involved with the assessment of the new venture's potential and growth perspective.

Measures that improve the normative fit of a venture capitalist to a new venture should aim at strengthening shared norms and preserving the heterogeneity of individual norms (Flynn and Chatman 2001). Shared norms stimulate knowledge sharing because the venture capitalist and the entrepreneur will be motivated to work in a mutually accepted way on common goals. This can be influenced by the venture capitalist, who controls the necessary financial resources, via finance allocation to those activities of the new venture that contribute to these common goals like senior management does in corporate venturing (Christensen and Raynor 2003). Preservation of the heterogeneity of individual norms can be stimulated by the venture capitalist by avoiding that the entrepreneur accepts advice or knowledge that is incompatible with their norms. Active stimulation by the venture capitalist of the entrepreneur towards sharing diverse information and different opinions contributes to the preservation of heterogeneity of individual norms. Both measures can be taken by venture capitalists to improve their normative fit (adherence and heterogeneity) to new ventures.

In order to explore the propositions and the various fit-improving measures in further details, data on experienced venture capitalist-inexperienced entrepreneur relations are derived and analysed. The research design and the methods of data collection and analysis are described next.

3. Research methods

3.1. Research design

In order to gain some insight into whether the theoretical framework of several types of relational fit of venture capitalists to entrepreneurs and various fit improving measures that may be taken by venture capitalists to support new venture development does provide a potentially fruitful avenue for further research, a small comparative case study has been set up.

The reason for conducting a comparative case study of the stated propositions is the following. The derived relations apply only to the specific subset of experienced venture capitalist-inexperienced entrepreneur relationships (Gompers et al. 2006). This limitation of the empirical domain represents a set of additional selection criteria based on characteristics of venture capitalists and new ventures for which such a priori information may not exist or is very difficult and costly to obtain. Without these demarcations of the populations of venture capitalists and the new ventures in their portfolios to sample from, the results obtained will be structurally biased even when control variables for the qualities of venture capitalists and entrepreneurs are included in the analyses performed. Selection of experienced venture capitalists and their inexperienced entrepreneurs from a sufficiently large sample of venture capitalists and their overall new ventures based on the data collected bears the risk of resulting in very small samples again. Only when a huge sample of venture capitalists and their overall new ventures is obtained, large samples of experienced venture capitalists and inexperienced entrepreneurs in their portfolios may be derived from it. So. in order to find out whether or not an appropriate large sample study¹ might be fruitful and worth the effort needed and the difficulties and disappointments encountered, the prevalence of the proposed effects has been first explored for some empirical cases where these selection criteria are fulfilled.

This situation is represented by Dutch venture capitalists exclusively active in early stage financing of Dutch biotech firms. This empirical situation has been chosen because the Dutch biotech industry is rather young and still small as its development took off since the implementation of the BioPartner Program of the Dutch government in 2000 (Van der Valk, Chappin, and Gijsbers 2009). As the Dutch biotech industry consists of relatively many new ventures (corporate, academic and independent start-ups) and very few late-stage ventures, risks for venture capitalists of investments in companies within this industry are very large. Only very experienced venture capitalists will do so. So, venture capitalists exclusively active in the Dutch biotech industry should be very capable in order to survive and thus are the 'experienced' venture capitalists sought for. Furthermore, as the Dutch biotech industry contains relatively many new ventures (The Decision Group 2012), the chance that inexperienced entrepreneurs have entered a relationship with one of these experienced venture capitalists is quite large. Therefore, the comparative case analysis is focused on Dutch venture capitalists exclusively active in early stage financing of the Dutch biotech industry and their relational fit to inexperienced entrepreneurs in that industry.

In April 2008, only four Dutch venture capitalists and three Dutch seed capitalists were exclusively active in the Dutch biotech industry. Of these seven companies, one venture capitalist and one seed capitalist worked intensively together and are considered to act as one. Another seed-capitalist was reviewed, but later removed from the study because of its short track record and lack of experience. Consequently, the number of potential cases to be investigated was reduced to five. Later on, one venture capitalist declined to cooperate in this research. Ultimately, four cases were empirically investigated in this study: two venture capitalists, one company acting as a venture capitalist as well as a seed capitalist and one seed capitalist.

3.2. Data collection

Data on the several types of fit and fit improving measures have been obtained for successful and unsuccessful new ventures founded by previously inexperienced entrepreneurs via semi-structured interviews with a senior investment manager working for each of the four seed and venture capitalists willing to cooperate. These investment managers were asked to take a retrospective view on a specific recently successful and unsuccessful new venture in the seed/venture capitalist's portfolio; that is, specific new ventures being 3–5 years in the seed/venture capitalist's portfolio, which showed a (un)successful business development during the years 2006 and 2007. For the relational fits and fit improving measures applied, the investment managers were asked to review the situation in 2005, typically coinciding with the start of the relation. In this way, it was attempted to preserve the notion of causality over time (Bryman 2008).

Closed questions were used to ask for valuations of the perceptions of the four types of fit to the specific successful and the specific unsuccessful new venture in the portfolio of each seed/venture capitalist interviewed and the perceived utilization of the fit improving measures discerned before on five-point scales. Additional open questions were used to ask interviewees for plausible arguments and illustrations from practice for each valuation of the perceived fits and perceived utilizations of fit improving measures with respect to the selected specific new ventures. This was done to reduce their inclination to provide socially desirable and thus biased answers (Bryman 2008).

3.3. Data analysis

The collected data are presented in separate tables for the four types of fit of each venture capitalist to each entrepreneur and the fit improving mechanisms deployed by that venture capitalist. In order to extend the method of data triangulation (Yin 2003) to more than three cases and to minimize subjective interpretations of the data by the researchers, the comparison of these scores has been systemized via two methods similar to those applied in Moors and Faber (2007).

Since we compare relations between each venture capitalist and the entrepreneurs of the specific successful and unsuccessful new ventures the comparisons we make are less likely to be affected by the issue of sorting (Sørensen 2007; Colombo and Grilli 2010) than direct comparisons of venture capitalists' success rates.

Method 1 concerns the differences between the successful and unsuccessful new ventures reported by the four respondents regarding the four types of fit. As every type of fit to the entrepreneur of the successful as well as the unsuccessful new venture was rated by each venture capitalist on five-point scales (1 = no fit; 5 = very close fit), the differences in scores for each type of fit can vary between 0 and 4 for each pair of successful and unsuccessful new ventures. If the average and majority of these differences for the four venture capitalists are in the range of 0-1.5, 1.5-3 and 3-4 then the coincidence of the difference in each type of fit with the success and failure of start-ups is interpreted as non-existent (0), positive (+) or very positive (+ +). If the average and majority do not fall in the same category the coincidence is interpreted as being caused by outliers and non-existent (see Section 4.1)

Method 2 concerns the coincidence of the differences between successful and unsuccessful new ventures reported by the four venture capitalists regarding each type of fit with

the intensity of associated fit improving measures taken by the venture capitalists. In order to assess the coincidence of the intensity of each fit improving measure applied and the difference in fit associated with that measure, a pattern analysis was developed and applied. For each type of fit that was found in the previous analysis to coincide with the success and failure of new ventures, the differences in fit between the two new ventures scored by each venture capitalist were expressed as below (-) or above (+) the average difference for all four venture capitalists. Also the intensity scores (1 = not applied; 5 = fully applied) for each fit improving mechanism were expressed as below (-) or above (+) the average intensity score for all responding venture capitalists. Subsequently, a 2×2 cross-table of the below and above average categories of the intensity scores of each fit improving measure and those of the difference in the associated type of fit was created with occurrences of responding venture capitalists as cell values. If (i) only the diagonal cells contain occurrence counts, and (ii) if the distribution of those counts over the diagonal cells corresponds with the marginal distribution of occurrence counts of below and above the average difference for the type of fit concerned, then either a positive or a negative coincidence is discerned. If one or both conditions mentioned are not fulfilled, then the coincidence is interpreted as non-existent (see Section 4.2).

4. Results

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4.1. Types of relational fit

In this section, we analyse the extent to which the relations of the venture capitalists and the previously inexperienced entrepreneur of the specific successful (S) and unsuccessful (U) new ventures in their portfolios were characterized by different types of fit. Table 1 reports the data obtained on the four types of fit identified in Section 2.1 and the results of *Method 1*.

In terms of conative fit, competence and cognitive fit and normative fit, all venture capitalists perceived a clear difference in fit between the typical successful and the unsuccessful new ventures in their portfolio. A difference in affective fit was hardly perceived by the venture capitalists and, accordingly, a coincidence of affective fit and the success of a new venture could not be discerned. For the venture capitalists and new ventures studied, the conative, competence/cognitive and normative fits identified before are relevant types of relational fit to measure the match between them. The role of affective fit in measuring this match has not become clear yet. The results show that high competence/cognitive, normative and especially conative fits are associated with successful new ventures, while low values of these fits are associated with unsuccessful new ventures. Furthermore, these three types of fit are positively associated with one another, which can be derived from Table 1 by applying Method 2. For the time being, the results in Table 1 provide some support for P1, P2 and P4 but not P3.

Table 1. Four types of fit: data and analysis.

Types of fit	S. 1	U. 1	S. 2	U. 2	S. 3	U. 3	S. 4	U. 4	Method 1
Conative fit	5	1	4	2	5	3	5	1	+/++
Competence/cognitive fit	5	2	5	5	4	2	4	2	+
Affective fit	3	3	4	2	3	3	4	2	0
Normative fit	4	2	5	2	5	2	5	2	+

The results on competence and cognitive fit are in line with those obtained by Nooteboom et al. (2007), who found that there should be a limited/optimal cognitive distance between the knowledge bases of collaborating parties in order to facilitate optimal knowledge transfer/exchange and learning. If the cognitive distance is too small, both parties hardly differ in knowledge bases leaving little to learn from one another. If the cognitive distance is too large, both parties involved are not able to learn from each other due to a lack of absorptive capacity (i.e. overlap of knowledge bases) for new knowledge (i.e. non-overlapping knowledge bases). Accordingly, beyond the point of optimal distance between the competences and cognitions of a venture capitalist and an entrepreneur, the venture capitalist will not engage in a collaborative relationship with an entrepreneur making a competence and cognition fit absent. This is due to the rapidly increasing risk for the venture capitalist of making a wrong assessment of the new venture's potential and growth perspective.

The results on normative fit are in line with those obtained by Flynn and Chatman (2001), who argue that teams function more effectively and efficiently when there is a strong adherence to collective norms (i.e. code of conduct) while allowing for a large heterogeneity of the content of the conduct (i.e. heterogeneity of the knowledge transferred/exchanged). Flynn and Chatman's heterogeneity of the content of the conduct is closely related to competence and cognitive fit. With a small distance between knowledge bases, the knowledge exchanged will become very homogeneous with little to learn while with a large distance between knowledge bases, the knowledge exchanged will become so heterogeneous that it is not understood. Flynn and Chatman'strength of collective norms (i.e. degree of adherence to shared/collective norms of conduct) is closely related to conative fit. Perceived unfairness of the relation by the entrepreneur will deteriorate the adherence of that entrepreneur to collective norms and by that open relations. Furthermore, without goal congruence the strength of collective norms will also deteriorate because the common goals become unclear and self-interested behaviour increases.

4.2. Fit improving measures

We now turn to the measures taken by venture capitalists to stimulate their fit with new ventures. In Section 2.2, we identified measures for each type of fit that increase that specific fit. The data and results reported in Table 2 indicate the extent to which each measure was used by each venture/seed capitalist in its interactions with the specific successful and unsuccessful new ventures in its portfolio. Given the results in Table 1, Table 2 focuses only on the conative, cognitive and competence, and normative types of fit.

We relate the intensity of use of each measure to the difference in fit between the entrepreneurs of the successful and unsuccessful start-ups in each venture capitalist's portfolio. A high/low intensity of use of a measure and a large/small difference in fit indicates a relatively positive sensitivity of the successful start-up to that measure. A high/low intensity of use of a measure and a small/high difference in fit indicates a relatively negative sensitivity of the entrepreneur of the successful start-up to that measure. These coincidences are derived by means of *Method* 2. Each positive and negative coincidence found between a fit improving measure and a difference in fit is flagged in Table 2 by reporting the line corresponding to the measure in bold.

Differences in conative fit to the entrepreneurs of the successful and the unsuccessful new ventures seem to be clearly positively related to bonding and avoiding forced decisions.

Table 2. Use of different fit improving measures: data and analysis.

Mechanisms	VC 1	VC 2	VC 3	VC 4	Method 2
Conative fit					
Conative fit in case of successful start-up	5	4	5	5	
Conative fit in case of unsuccessful start-up	1	2	3	1	
Difference successful-unsuccessful	4	2	2	4	
Bonding	5	3	3	4	+
Contractual obligations	4	3	4	4	0
Financial incentives	5	5	5	5	0
Active role	2	4	1	4	0
Stimulate new ideas	2	2	2	4	0
Avoid forced decisions	5	1	3	4	+
Compromise	5	3	4	2	0
Show benefits	4	4	5	4	0
Competence and cognitive fit					
Comp. and cogn. fit in case of successful start-up	5	5	4	4	
Comp. and cogn. fit in case of unsuccessful start-up	2	5	2	2	
Difference successful-unsuccessful	3	0	2	2	
Diversified team	3	5	3	4	0
Visiting congresses	3	5	3	3	_
Reading literature	4	5	4	3	0
Hiring external advice	1	3	1	1	-
Normative fit					
Normative fit in case of successful start-up	4	5	5	5	
Normative fit in case of unsuccessful start-up	2	2	2	2	
Difference successful-unsuccessful	2	3	3	3	
Financial resource allocation	3	5	4	4	0
Active stimulation	5	4	5	4	0

Bonding stimulates convergence of goals by ensuring that the entrepreneur is financially committed to the long-term success of the venture. Avoiding forced decisions is a way for the venture capitalist to avoid that the entrepreneur feels overwhelmed in terms of power and perceives instead fairness in the collaboration.

Differences in competence and cognitive fit seem to be clearly negatively related to hiring external advice and visiting congresses. When venture capitalists hire external advice themselves and visit congresses, this creates too much overlap of the venture capitalist and new venture's knowledge bases and undermine their complementarity. The result is a smaller difference in competence and cognitive fit of the venture capitalist to the entrepreneurs of the successful and unsuccessful new ventures

Differences in normative fit show no coincidence with any of the identified fit improving measures. Therefore, other fit improving mechanisms should be investigated in future research in order to better understand the differences in normative fit to entrepreneurs of successful and unsuccessful new ventures perceived by venture capitalists.

From the scores given by the four investment managers it appears that the measures, which stimulate the largest differences in relational fit of the venture capitalists to the entrepreneurs of the selected successful and unsuccessful new ventures in their portfolio, are: bonding, avoiding forced decisions and avoiding too much overlap of knowledge bases by seeking no or very little advice from external experts in the venture capitalist's network and visiting no or very few congresses by venture capitalists. Hiring external advice and

visiting congresses by venture capitalist create too much overlap with the (technological) knowledge bases of entrepreneurs whereby the latter may feel overwhelmed, controlled and/or denied as experts in their technological fields and accept less easily the advice given by venture capitalists.

5. Discussion

5.1. Theoretical implications

Our results are in line with those of Busenitz, Fiet, and Moesel (2004), but also extend them. As illustrated, relational fit of an experienced venture capitalist to an inexperienced new venture consists of more dimensions than only the perceived fairness of their relation. Goal congruence, cognitive and competence complementarity, adherence to shared norms of conduct and heterogeneous knowledge exchange between a venture capitalist and a new venture are also important dimensions of relational fit and related to the successful development of the new venture.

The second theoretical contribution indicated by the results is that experienced venture capitalists can actively influence and strengthen their relational fit to inexperienced entrepreneurs by executing some particular fit improving measures. However, only 4 of the 14 investigated fit improving measures are found to have significant effects. But as the investigated fourteen fit improving measures derived from other studies (see Section 2.2) do not represent an exhaustive set, other not investigated fit improving measures may (have) work(ed) as well besides the four measures found significant in this study.

With only 4 out of the 14 investigated fit improving measures having significant effects, there is virtually no evidence of systematic common method bias in the data and results obtained (Podsakoff et al. 2003). This is further supported by the fact that the patterns of differences in conative, competence and cognitive and normative fit between the specific successful and unsuccessful new ventures in the portfolios of the interviewed venture capitalists differ significantly.

To summarize, the case data presented in this study indicate that further research into the roles of the different types of relational fit discerned by Scholl (2003) and the fit improving measures taken by venture capitalists in the successful development of the new ventures of inexperienced entrepreneurs might produce promising results. In this research, special attention should be paid to the role of the theoretically discerned dimension of affective fit in the creation of relational fit as this is not clear from the case data presented in this study.

5.2. Managerial implications

The managerial implications for experienced venture capitalists supporting inexperienced entrepreneurs in their business development are twofold, as indicated by the preliminary and tentative results of this study.

First, strategic management and networking advice given by a venture capitalist will only contribute to the successful development of a new venture if accepted by the board of directors of the new venture. This applies also to proposals of replacing the CEO or hiring a vice-president sales and marketing as found significant by Hellmann and Puri (2002). Without acceptance by the board of directors of the new venture the advice of the venture capitalist may easily become ineffective. The acceptance of this advice is strongly related to the transparency and equality of the collaborative relationship between the venture capitalist and the entrepreneur in multiple dimensions of relational fit. Venture capitalists can actively improve their relational fit to entrepreneurs by taking fit improving measures such as bonding and avoiding forced decisions and a too large overlap of (technological) knowledge bases. By doing so, venture capitalists will be better able to effectively support the successful business development of new ventures.

Secondly, if entrepreneurs do not appear receptive to the fit improving measures taken by a venture capitalist in terms of improvements of relational fit, this is already an early warning of a low degree of acceptance of the strategic management and networking advice of the venture capitalist by those entrepreneurs and thus of their prospective unsuccessful business development. So, venture capitalists do not have to await actual unsuccessful business development but can discharge those ventures much earlier from their portfolios. Accordingly, venture capitalist can reduce their losses of prolonged investments in unsuccessful new ventures within their portfolio considerably.

5.3. Limitations

As the results presented in this study are derived from only four cases and indicative in nature, they need to be validated in the future. Further research should be based on large samples of experienced venture capitalists and inexperienced entrepreneurs in their portfolios. Only then, the results obtained will contribute to our understanding of how experienced venture capitalists (can) add (more) value to the new ventures started by inexperienced entrepreneurs in their portfolios. In such large sample based research, several other issues not accounted for in this study should be addressed.

First, the large samples should contain longitudinal data like in Busenitz, Fiet, and Moesel (2004) in order to assess the causality of the relations found significant. In this study, we attempted to preserve this causality in the data collection from the four interviewed senior investment managers, but a limitation of this approach concerns possible biases due to memory decay. Therefore, the presumed causalities need to be assessed again.

Secondly, more fit improving measures that might be taken not only by experienced venture capitalists, but also by inexperienced entrepreneurs should be investigated next to the fourteen measures derived in this study, of which only four were found to coincide with relational fit.

Thirdly, besides the venture capitalist's perception of the relationship between the venture capitalist and the entrepreneur also the entrepreneur's perception of that relationship regarding their mutual fit and the intensities of fit improving measures executed by the venture capitalist should be incorporated in the research design and data analyses. Barney et al. (1996) found that differences in perceptions between venture capitalists and entrepreneurs of the value adding services offered by venture capitalists are not uncommon. As each party will act on its own perceptions, differences in the perceptions of relational fit between venture capitalists and entrepreneurs may deteriorate the effectiveness of the formers' value adding services.

Fourthly, individual measurement for each new venture rather than unmatched measurement for pairs of unsuccessful and successful new ventures of the different types of fit and their associated fit improving measures should be applied. Individual measurement of these variables may stimulate respondents to differentiate their valuations for unsuccessful and successful new ventures in their portfolios more than would appear from unmatched measurements of these variables for both types of new ventures. Also the effect of sorting by venture capitalists will then become more evident (Sørensen 2007; Colombo and Grilli 2010).

Fifthly, the actual performance of unsuccessful and successful new ventures should be measured separately, preferably on an interval or ratio scale, in order to be able to test whether the now presumed differences in performance are significant and indeed related to the differences in individually measured valuations of the different types of fit and their associated fit improving measures.

Finally, the relations between performance, different types of fit and their associated fit improving measures for successful and unsuccessful new ventures by inexperienced entrepreneurs should be controlled for various contextual variables like, among others, the size of the venture capitalist's portfolio of such new ventures, the venture capitalist's experience with providing value adding services to the entrepreneurs of such new ventures, the venture capitalist's network position, being an early or late stage investor, the stage of development of the new venture, the entrepreneur's experience of the collaboration with the venture capitalist, the quality of the new venture's board of directors, and the new venture's network position(s).

6. Conclusions

The results obtained provide a first preliminary answer to the research question of this study: How can experienced venture capitalists stimulate the relational fit with inexperienced entrepreneurs and thereby stimulate successful new venture development? As found before by Busenitz, Fiet, and Moesel (2004), this study also shows that the perceived fairness of the relationship between an 'elite' venture capitalist and an inexperienced entrepreneur stimulates their relational fit, which makes it easier for the entrepreneur to accept advice given by the venture capitalist and thereby for the venture capitalist to provide their value adding services, both resulting in a more successful development of the new venture. But also the creation of goal congruence via bonding of the entrepreneur and an optimal complementarity of knowledge bases (cognitions and competences) by avoiding too much (technological) knowledge acquisition by the venture capitalist strengthen their relational fit. Additionally, the development of strong collective norms about how to treat each other without dictating one's opinions to the other contributes considerably to their relational fit. So, relational fit of an experienced venture capitalist to an inexperienced entrepreneur consists of more than the perceived fairness of their relation. It concerns a balancing act of an experienced venture capitalist and an inexperienced entrepreneur in order to create an optimal distance in their relationship regarding the use of power by the venture capitalist, the complementarity of their knowledge bases and their way and content of communication. This is why experienced venture capitalists are able to add value via their services to inexperienced entrepreneurs. Due to these entrepreneurs' little experience with managing a new venture, a beneficial distance between the knowledge bases of the inexperienced entrepreneurs and the venture capitalists involved enables the former to learn from the latter. On the other side, due to their extensive experience of collaborating successfully with inexperienced entrepreneurs, experienced venture capitalists are able to shape processes of conduct and communication that are acceptable for inexperienced entrepreneurs and stimulate them to accept their

advice. Furthermore, these venture capitalists can execute several fit improving measures that support the balancing act of experienced venture capitalists and inexperienced entrepreneurs in order to create a better relational fit.

These preliminary results are derived from a very few, but correctly selected experienced venture capitalists active in early stage financing of Dutch bio-tech firms and must be analysed again in future research in order to assess their validity. Such research should address also several issues not taken into account in this study and should be based on large samples of experienced venture capitalists and inexperienced entrepreneurs in their portfolios, along the lines we have suggested in the discussion of our own results.

Note

An appropriate large sample study refers not only to the correct selection of cases included in the study but also to the specification of appropriate control variables (see Section 5).

Disclosure statement

No potential conflict of interest was reported by the authors.

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