THE ROLE OF GENDER IN ENTREPRENEUR-INVESTOR RELATIONSHIPS:

A SIGNALING THEORY APPROACH

Gry Agnete Alsos
Professor
Nord University Business School
P.O. Box 1490
NO8049 Bodø, Norway
Tel. +47 75517651
E-mail:gry.a.alsos@nord.no

Elisabet Ljunggren
Research Professor
Nordland Research Institute
P.O. Box 1490
NO8049 Bodø, Norway
Tel. +47 75411829
E-mail:elisabet.ljunggren@nforsk.no

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ABSTRACT

This study adopts a gender perspective to analyze funding decisions made by an investment fund that invests equity stakes in new ventures. Prior research has indicated that there is gender skewness in risk capital investments resulting from a combination of demand- and supply-side issues. We apply signaling theory to examine the interface between demand and supply to understand gender biases related to risk capital investments. In-depth analyses of decision documents from four investment cases show that gender plays a role in the signals that are communicated in the prefunding entrepreneur-investor relationship.

INTRODUCTION

Access to financial capital has been a core issue for researchers seeking to reveal the gendered aspects of entrepreneurial activity (Marlow & Patton, 2005; Minniti, 2009). Although there is little evidence of direct discrimination (Orser, Riding, & Manley, 2006; Verheul & Thurik, 2001), gender differences remain in entrepreneurs' access to financial capital (Alsos, Isaksen, & Ljunggren, 2006; Carter, Shaw, Lam & Wilson, 2007). Structural dissimilarities between male- and female-owned businesses explain some, but not all, gender differences in funding profiles (Carter et al., 2007). The gender skewness is particularly clear in the case of external equity capital (Orser et al., 2006). The Diana Project raised awareness of this issue, demonstrating that the proportion of women receiving venture capital funding is disproportionate to the share of women entrepreneurs (Brush, Carter, Greene, Hart, & Gatewood, 2002). They argued that this may be the result of demand-side issues, such as gender differences in human capital, social capital or growth aspirations, or differences between men's and women's ventures (Carter, Brush, Greene, Gatewood, & Hart, 2003). However, they also found support for the argument that supply-side issues such as male dominance among investors and venture capitalists and traditions related to investment in male-dominated industries contribute to the gender skewness (Greene, Brush, Hart, & Saparito, 2001). Hence, the relationship between the demand side (entrepreneurs) and the supply side (investors) should be a major concern for researchers seeking to understand how gender affects new venture financing.

The literature on gender and external equity capital has studied women as business owners (Becker-Blease & Sohl, 2007; Orser et al., 2006), as leaders (Brush, Carter, Gatewood, Greene & Hart, 2006) and, in a few cases, as investors (Harrison & Mason, 2007). These studies have given valuable insights into gender issues related to venture financing. However, as noted by Carter et al. (2007) in their study of bank lending to entrepreneurs, gender is embedded in entrepreneur-financier relationships in ways that are more complex than the visible differences between women and men. For instance, gender is mutually intertwined with human capital, social capital, industry context, technology, and venture ideas. Accordingly, gender should not be isolated as a separate variable but instead perceived as embedded in the relations in which entrepreneurs operate. Following Granovetter (1985, p. 481), who argued that "…economic action is embedded in structures of social relations," and acknowledging that these social relations are gendered (West & Zimmermann, 1987), we understand gender as always present when people act and interact. Thus, gender is embedded both in how society is structured and in individual choices (Lykke, 2010). Consequently, gender is embedded in entrepreneur-investor relationships and may be present in the communication between entrepreneurs and investors.

This study adopts a signaling theory approach to investigate how women and men present their venture concepts when approaching investors and how these signals are interpreted by the receiver. Signaling theory focuses on the credible communication of information to convey positive organizational attributes in situations with asymmetric information (Spence, 2002) and has been applied in studies on entrepreneur-investor relationships (Busenitz, Fiet, & Moesel, 2005; Davila, Foster, & Gupta, 2003; Elitzur & Gavious, 2003). Entrepreneurs can communicate credible signals regarding the venture's prospects and their commitment to attract the interest of venture capitalists and other potential investors (Busenitz et al., 2005). For instance, important signals to investors are the founder's individual reputation based on previous performance (Ebbers & Wijnberg, 2012), his or her own investment (Prasad, Bruton, & Vozikis, 2000), the perceived legitimacy of his or her top management team (Cohen & Dean, 2005), his or her social capital (Khoury, Junkunc, & Deeds, 2013), and engagement in trust-building behaviors (Maxwell & Lévesque, 2014).

Although several studies have adopted signaling theory to explain different aspects of the venture financing processes (see Connelly, Certo, Ireland, & Reutzel, 2011 for an overview), the gendered nature of signaling has received scant attention (see, e.g., Eddelston, Ladge, Mitteness & Balachandra, 2014; Murphy, Kickul, Barbosa & Titus, 2007; Nelson, Maxfield & Kolb, 2009). By adopting a gender perspective on signaling theory, this paper focuses on the gendered nature of the signaling process between entrepreneurs and investors and identifies some of the ways in which this process is gendered. The study is based on unique archival data, including information on the signals sent by entrepreneurs as expressed in business plans and investment prospectuses, in addition to information on how these signals are perceived and interpreted, as expressed in documents prepared for the investment fund board and in internal notes made by the investment fund's employees. Analyzing these data, we are able to gain knowledge on gender issues related to the signaler and the receiver that influence received signals and thereby investment decisions. The following research questions are addressed:

1. *How is gender embedded in how entrepreneurs signal the quality of their ventures in business plans and investment prospectuses presented to investors?*
2. *How is gender embedded in how signals are perceived by investors, and how does this influence investment decisions?*

The study employs a theory-building design, with the purpose of developing the understanding of the gender embeddedness of the signaling process. We aim to contribute to the literature in two ways. First, by analyzing the gendered aspects of signals sent (demand side) and of how signals are received and interpreted by an investment fund (supply side), we contribute to signaling theory by developing an understanding of how the signaling process is gendered in the context of new venture financing. Second, by focusing on the role of gender in the communication between entrepreneurs and investors, thereby adding to the literature seeking to debate the gender gap with respect to equity funding (Greene et al., 2001). Viewing gender as embedded in how people act and interact, we show how gender is constructed and reconstructed in the signaling process of venture financing, thereby potentially offering implications for financing decisions made by entrepreneurs and investors.

THEORETICAL FRAMEWORK

Signaling Theory

Signaling theory has recently gained prominence in studies of investment decisions and entrepreneur-investor relationships. In this context, the theory is concerned with reducing information asymmetry between entrepreneurs and investors using information signals. The management literature has been particularly concerned with how information asymmetries concerning latent and unobservable quality can be resolved (Connelly et al., 2011). Entrepreneurs have access to extensive information about their venture and its economic potential, to which potential investors do not have access (Leland & Pyle, 1977). This information asymmetry leads potential investors to receive less-than-perfect information (Downes & Heinkel, 1982). Consequently, investors demand reliable signals of venture quality to reduce uncertainty in investment decisions. However, information asymmetry is not a problem unique to investors. Entrepreneurs who cannot transfer viable information to investors about their ventures to dispel doubts concerning both their own legitimacy and the investors' potential earnings will experience difficulties receiving investor funding.

Connelly et al. (2011) identify four key constructs of signaling theory: signaler, receiver, signal, and feedback. *Signalers* are insiders who have information that outsiders cannot directly access. In this context, they are the entrepreneurs (Elitzur & Gavious, 2003), managers (Lester, Certo, Dalton, Dalton, & Cannella, 2006), or board chairs of ventures seeking equity capital. *Receivers* are outsiders who lack information that they would like to obtain, in this context, business angels (Prasad et al., 2000), venture capitalists (Busenitz et al., 2005; Mueller, Westhead, & Wright, 2012), IPO investors (Cohen & Dean, 2005; Lester et al., 2006) or others considering investing in the venture. *Signals* are the information sent from the signaler to the receiver to communicate information that is otherwise unobservable to the receiver, in this case information about venture quality. *Feedback* is the response to the received signal returned by the receiver to the signaler indicating the effectiveness of the signal. Thus, feedback can serve as the basis for signalers to adjust or refine their signals and to *re-signal* them to investors. Consequently, signaling can be viewed as a process through which signals are sent and received and interpreted and responded to, leading to new signals and interpretations.

Studies on information signals in entrepreneur-investor relationships have examined various types of signals; see Table 1 for an overview. Signals concerning the quality of the entrepreneur and the entrepreneurial team are typically related to human and social capital, reputation and track record, and commitment and investments made by the entrepreneurial team. For instance, competences of the top management team have been found to be related to the amount of capital raised through an IPO (Zimmermann, 2008), and the amount of equity invested by the entrepreneur was found to influence the probability of funding success in a crowdfunding setting (Ahlers, Cumming, Günther & Sweizer, 2015). Furthermore, entrepreneurs signal venture quality through product descriptions, intellectual property and past performance. Venture quality can also be signaled through the involvement of other investors, alliances or partners. Signals may be strong or weak, more or less honest and reliable; additionally, they may vary in their correlation with unobservable quality (Connelly et al., 2011). They also may vary in terms of richness and relevance (Busenitz et al., 2005). The effectiveness of signals depends on their observability and cost. Observability refers to the extent to which receivers can observe the signals sent. A particularly valuable competence of the entrepreneur will only have value as a signal if it can be communicated in a way so that investors can understand its value. Signal cost refers to how costly the signal is for the signaler. Costly signals are regarded as more credible as they are less likely to be fake (Lee, 2001). For instance, a certification or a patent are costly and credible signals on quality compared to descriptions of technology or routines.

INSERT TABLE 1 HERE

Although signals can be negative or positive and intentional or unintentional, signaling theory focuses primarily on actions taken by insiders to intentionally communicate positive but imperceptible qualities of a particular venture (Connelly et al., 2011). Consequently, signals depend on characteristics of the signaler and his or her venture, as signals representing real qualities appear more credible. Signaling can be used to compensate for constraints related to obtaining investor capital, and hence increase the chances of obtaining funding. Thus, signals sent by entrepreneurs to investors may differ depending on the spatial, cognitive or social proximity constraints experienced by the entrepreneur in relation to investors (Mueller et al., 2012). Entrepreneurs can deliberately use signals of quality to overcome venture-related factors that they expect investors to consider disadvantageous, such as an industry that the investor is less familiar with or the general lack of legitimacy related to women business owners (Murphy et al., 2007). Thus, there could be differences in the signals sent by male and female entrepreneurs to attract interest from investors.

However, the extent to which signals are valued also depends on receiver attention, i.e., the extent to which receivers actively look for signals (Connelly et al., 2011). Signals sent might either be received or not. Investors tend to look for a specific set of criteria (Mason & Stark, 2004), and signals not conforming to these criteria may not be seen as relevant. Further, signals are not only received but also interpreted and translated into perceived meaning, which may depend upon the knowledge and the social context of the receiver (Connelly et al., 2011).

Feedback has received less attention in the literature, but some studies have noted the importance of receivers giving signalers feedback on the effectiveness of the signals (Connelly et al., 2011). In entrepreneur-investor relationships, this feedback is an important part of the decision process, making the entrepreneurs change and improve their prospects during the process (Gulati & Higgins, 2003). Entrepreneurs can re-signal to investors to increase their legitimacy and better show how their venture fits to the investors' investment criteria.

Gender aspects related to signaling have been limitedly explored. However, some recent studies have indicated that gender has an impact on evaluations of venture investment proposals (Bigelow, Lundmark, McLean Parks, & Wuebker, 2014) and that capital providers reward male and female entrepreneurs’ business characteristics differently (Eddleston et al., 2014). In the following section, we will discuss how we expect gender to influence the signaling process in entrepreneur-investor relationships.

Gender, Venture Financing and Information Signaling

Acknowledging the embeddedness of gender in entrepreneur-investor relationships, there are several ways in which gender plays a role in this context. In this view, gender is seen as a social dynamic rather than a role, and the study of the influence of gender implies exploring how gender figures in social interaction (West & Zimmermann, 1987; Acker 1990), such as in the interaction between entrepreneurs and investors. Competence, for instance, is not purely a characteristic of a woman or a man, but socially constructed in the interactions influenced by the interpretations made by the actors involved (Pesonen, Tienari & Vanhala, 2009). Similarly, other characteristics of the entrepreneur, the team or the venture are also interpreted and given meaning in the interaction and communication between entrepreneurs and investors.

Building on the understanding of gender as embedded in the entrepreneur-investor relationship, our analytical framework includes the key elements of signaling—signaler, signal, receiver and feedback (Connelly et al., 2011)—along with the key categories of signals found in the previous literature. Following the arguments above, gender is embedded in all of the elements below.

Signalers may be male or female entrepreneurs, or teams consisting of both males and females. Although many studies have found that there are more similarities than differences between male and female entrepreneurs (Jennings & Brush, 2013), some studies have identified differences in human and social capital as one explanation for the gender gap in venture financing (Carter et al., 2003; Greene et al., 2001). Women acquire less business-related human capital (Fairlie & Robb, 2009), and have been found to have less entrepreneurial experience and experience from business financing (DeTienne & Chandler, 2007). Occupational segregation by industry and managerial level results in many women having less of the types of experiences that are highly valued by investors, such as management experience or experience in technology industries. Moreover, variations in social capital can have a negative impact on women's entrepreneurship (Renzulli, Aldrich, & Moody, 2000). Because of the tendency toward homophily, implying that people with demographic similarities associate with one another (Brashears, 2008), such variations may cause women entrepreneurs to be less likely to include investors and venture capitalists in their networks and to less frequently engage in investor network activities (Becker-Blease & Sohl, 2007). With less business- or finance-specific human and social capital, women entrepreneurs may perceive that their initial legitimacy is lower when they approach investors, and to overcome that disadvantage by communicating information about attributes of their ventures that investors are assumed to value. Because women have not occupied entrepreneurial roles as frequently as men, signals of their legitimacy as entrepreneurs are more difficult to communicate (Murphy et al., 2007). Consequently, women may have a greater need to signal their own and their ventures' legitimacy to compensate for the lower legitimacy associated with being a woman.

Signals may connote gender, which is well known from sociolinguistic research (e.g., Talbot, 2010). First, potential gender differences in human, social and financial capital play a role in determining the signals sent. Studies of debt financing have found that women entrepreneurs establish firms with significantly less financial capital than do men (Shaw, Marlow, Lam, & Carter, 2009). Furthermore, because access to funding by new and early-stage ventures frequently follows a "pecking order" in which entrepreneurs' own resources provide the initial funding (Myers, 1984), gender-based differences in access to venture capital may reflect differential access to financial capital at earlier stages of the funding pipeline (Harrison & Mason, 2007). Entrepreneurs' own investments serve as important signals to investors about the entrepreneurs' commitment and venture quality (Leland & Pyle, 1977; Prasad et al., 2000), with consequences for potential investors' evaluations of venture prospectuses. To compensate for lower financial capital, female entrepreneurs may send stronger, more positive information signals by showing that they are socially linked to high-credibility others who do not suffer from the same legitimacy constraints. Murphy et al. (2007) found that female entrepreneurs who utilize expert capital relationships, i.e., contacts with experienced professionals to signal legitimacy, are more likely to procure funding through formal channels such as banks and venture capitalists. Moreover, Becker-Blease and Sohl (2007) argue that the gender gap in the venture capital market can partly be explained by women business owners' lack of business angel involvement. Having a business angel 'on board' may serve as a strong signal of venture quality and expected return on investment. Hence, related to types of signals (cf. Table 1), the literature suggests that gender is embedded in the signals related to the entrepreneur/team (particularly human and social capital, and the entrepreneurs' own investment), the venture (particularly industry and firm characteristics), and relationship with investors.

Signals are valuable only in how they are interpreted by the *receiver*. Investors and venture capitalists are predominantly men (Brush et al., 2002). It has been argued that the male dominance among investors and in relevant industries have consequences for how male and female entrepreneurs seeking finance are received (Greene et al., 2001). Venture capitalists often have more experience with male-led venture projects; and together with their education, preferences and behavioral patterns this may result in mental models that are gendered (Nelson et al., 2009), which may influence how investors, as signal receivers, interpret the signals sent by male and female entrepreneurs. For instance, investors have been found to hold gendered ideas on the institutional model of a successful entrepreneur (Nelson et al., 2009). Hence, one can assume that the receivers apply a gender filter when they assess the signalers and their signals. This is supported by gender role congruity theory (as applied by, e.g., Eddleston et al., 2014).

Investors and investment funds are more familiar with certain industries because of their experience and strategic investment choices. Consequently, investors tend to have more knowledge about male-dominated industries (Greene et al., 2001) and are better able to judge the credibility of signals related to ventures in these industries (Nelson et al., 2009). Furthermore, stereotypical ascriptions imply that women entrepreneurs are perceived as having different goals, resources and behaviors than men, which investors may interpret as riskier investments (Greene et al., 2001). Moreover, venture capitalists have been found to favor entrepreneurial teams with members who have characteristics similar to their own (Franke, Gruber, Harhoff, & Henkel, 2006). This tendency toward homophily may lead male investors to disfavor women entrepreneurs. Consequently, women face stronger needs to signal their own and their ventures' legitimacy to compensate for structural barriers and stereotypical ascriptions.

Finally, receivers may send countersignals. This *feedback* can make entrepreneurs aware of their potential lack of legitimacy and allow them to adjust and refine their signals (re-signal) to compensate. However, gendered differences in experience among entrepreneurs and their teams may influence their ability to interpret such feedback and to re-signal effectively, and gender-based interpretations made by investors may result in different feedback being given to male versus female entrepreneurs.

Following the above discussion, this study analyses how gender is embedded in the characteristics of the entrepreneurs as signalers and in the signals sent, as well as in how signals are interpreted by the receivers. Further, acknowledging that signaling is a process, gender may also be embedded in the feedback given by the investor and the re-signaling made by the entrepreneurs. Next, the method and empirical data of this study are presented.

METHOD

Context

The study uses archival data from a small investment fund in Norway. When employing extant texts, it is necessary to contextualize them (Charmaz, 2006). The Norwegian VC industry is growing, but it remains small relative to GDP, compared with many other European countries (NVCA, 2011). According to the annual report of the Norwegian private equity and venture capital association (NVCA, 2011), there were 105 funds and 51 investment trusts in Norway in 2010. In addition, there are approximately 4,500 business angels (Menon, 2011). The venture capital/private equity industry in Norway is, as in many other countries, highly gender skewed on both the supply and demand sides. Venture capital funds usually work with male-dominated industries (Ljunggren & Foss, 2012). The sector distribution of venture capital fund portfolio companies in 2010 showed that ICT was by far the largest group, followed by the life sciences, petroleum and sustainable energy (NVCA, 2011).

The Investment Fund

This unique dataset consists of the entire archive from a small investment fund in Norway and includes business plans and investment prospectuses presented by entrepreneurs seeking funding, analyses and documents presented to the fund board, the fund manager’s informal notes with background material, and minutes from board meetings. The investment fund is a private-public partnership with a capital base of approximately 35 million NOK[1] (€ 4 million).[2] The purpose is "to make commercially motivated investments and/or subordinated debt in the early stages of innovative companies in the region based on the possibility of return" (Investment Fund Articles, §3). The fund has no specific industry profile and can invest in all types of ventures except real estate. During the period of this study, there were two different fund managers: a female (2005-2008) and a male (2008-2013). During the same period, the fund had two male trainees for 6-month periods. The fund board consists of seven members appointed by the fund's regional stakeholders. The board makes all investment decisions and decisions regarding investment strategies and investment criteria. Because Norway has a law requiring quotas for board members in private-public partnership organizations, 40 percent of the board members were women.

Data material

The fund considered 50 cases for investment between its start-up (2005) and the time we finished gathering our data (2013). This includes all cases that had been in contact with the investment fund that were regarded as interesting for the fund to evaluate. Among the evaluated cases, 19 resulted in investment. Two of these cases included women lead entrepreneurs, and the remaining cases included only male lead entrepreneurs. There were no gender mixed teams among the funded projects. Although the fund has considered a limited number of cases, the archive provides detailed information on signals sent by the entrepreneurs and signals received by the fund throughout the

[1] 1€ = 9.6 NOK, 1$ = 8 NOK.

[2] A precondition for access was to treat the fund and its clients with full discretion. Thus, all cases are altered for anonymity.

relationship between the entrepreneurs and the fund. Hence, it offers unique and valuable insights relevant for in-depth qualitative analyses related to the role of gender in signaling processes.

Using archival documents as the data source gives the advantage of data produced in real time, chronological data and data that reflect the information available to decision makers in the decision-making process. Hence, compared to retrospective data, archival information is not influenced by what occurred at later stages (e.g., whether the project was funded) and does not suffer from selective memory or other biases resulting from retrospective accounts. Archival information from business plans and investment prospectuses has previously been successfully used in studies of venture financing (Bruton, Chahine & Filatotchev, 2009; Kirch, Goldfarb & Gera, 2009; Martens, Jennings & Jennings, 2007; Zimmerman, 2008), but remains an under-utilized resource in new venture research (Forbes & Kirsch, 2011). Also previous studies of signaling by entrepreneurs seeking financing have utilized business plans and IPO and investment prospectuses as data sources (e.g., Daily, Certo & Dalton, 2006; Khoury et al., 2013; Parhankangas & Ehrlich, 2014; Zimmerman, 2008). Our study additionally analyzes the documents prepared by the investment fund concerning how the fund manager and board interpret the information delivered by the entrepreneurs. This allows for analyses not only of the signals sent but also of how those signals are received by the fund. Further, the written communication between the fund and the entrepreneurs during their relationship is included, which enables analyses of how signals and interpretations develop over time.

The data consist of archival material related to the investment cases of the fund, including:

- Material delivered by the entrepreneurs such as business plans, investment prospectuses, Power Point presentations and budgets
- Notes taken by the fund manager during meetings and conversations with the entrepreneurs
- E-mail correspondence between the fund manager and entrepreneurs
- The investment fund's evaluation of the investment cases
- Decision documents prepared for board meetings
- Memorandums and protocols from board meetings, including decisions made.

The volume of material varies across the cases, based on the duration of the relationship and other characteristics of the decision processes. In total, the material constituted approximately 2 shelf meters of papers, varying between a few to several hundred pages per case.

Sampling

The research design was structured to enable theory building. We employ a multi-case design with theoretical sampling (Eisenhardt & Graebner 2007); hence, the cases are selected because they illuminate the phenomenon in which we are interested. We conducted in-depth analyses of four of the investment cases evaluated and funded by the investment fund, selected based on the following criteria:

1. To avoid bias related to differences in project quality and to ensure the existence of a long-term relationship with signaling and re-signaling to analyze, all included cases should have *received equity funding* from the fund. The funded cases also have a longer relationship with the fund, and hence more documents to analyze to observe signals sent and received.
2. To ensure comparability among the cases, they should all have been in the *early phase* of establishment at the point of first contact with the fund.

3. To allow for cross-case contrasting, we sought a similar number of cases with women lead entrepreneurs and with men lead entrepreneurs.
4. To avoid excessive differences between the male and female cases related to other important aspects besides gender, we sought to obtain pairwise similar cases in terms of the size of the business and the required amount of funding.

Data Analysis

The material, including business plans, prospectuses, board meeting documents and internal documents from the investor fund, were divided between the two authors, each of whom coded the material, following one case at a time chronologically. Field notes were compared after 1/3 of the data coding and again near the end of the process to ensure that both researchers focused on the same issues. Differences were discussed and resolved, and the archival material was consulted again when necessary to fill in missing information. For the purpose of this paper, data are analyzed in detail by applying theoretical concepts from the literature (Eisenhardt & Graebner, 2007) as presented in the analytical framework. We searched for expressions and articulations that represented each of the signal categories both in the documents presented by the entrepreneurs (business plans, investment prospectuses) and in the documents presented by the investment fund, including interpretations of these signals (board documents, analyses, notes, minutes). Each case was first analyzed separately, after which a cross-case analysis was conducted. The analysis was iterative, oscillating between the literature and data. Beginning with a theoretical pre-understanding, the analysis was inductive, allowing themes that emerged from the data to be further elaborated upon (cf. Charmaz, 2006).

Case Descriptions

Case A: Fitness and spa center. The venture was established in 2007 by two women. When they approached the investment fund (in 2007), they had not yet begun to engage in production or sales. Entrepreneur A1 has private-sector experience in the field of well-being and fitness as well as in banking. Entrepreneur A2 has experience from the public sector, particularly within human resource management. When they approached the investment fund, their board consisted of Entrepreneur A1, a woman with a management position in an accounting firm, and a male board chair with experience in the oil and gas industry. The chair was described quite thoroughly in the case documents to the fund board (24 words), whereas the female business manager at an accounting firm was described less thoroughly (7 words). The notes from the fund manager to the board state: “The entrepreneurs have a good idea, but no experience with entrepreneurship.” Further, the following was noted about one of the potential (female) external shareholders: “She is an entrepreneur and is married to a physician.”

Case B: Health equipment. The health equipment firm was established by two female entrepreneurs in 2009. When they contacted the investment fund (in 2009), they were developing the product and had made some test sales. They were experienced nurses who taught at a nursing college. Their idea was a specially designed apron to be used by nurses to avoid the spread of infection. In the case documents to the fund board, the trainee at the investment fund noted, “...female nurses do not want to wear infectious protection unless it looks OK.” The entrepreneurs had participated in an innovation seminar were they presented their idea and received help to further develop it, e.g., by investigating its market potential. “The entrepreneurs' competence is a strength for the project as the idea originates from their experiences as nurses," the case documents stated. The venture had received a small amount of equity funding from another minor fund and a grant from a public agency. They had applied for more public funding. At the time they approached the investment fund, their board consisted of a board chair who was a lawyer (male), the manager of the incubator where the business was located (male), a specialist in protection against infection (male) and the two entrepreneurs (female).

Case C: News site. The firm was started in 2007 by two male entrepreneurs with background in journalism. Their business model was to produce local news, to provide free access for readers and to rely on advertising revenue as a source of income. By the time of the initial contact with the investment fund, they were at an early stage but had some customers. In the score sheet provided to the fund board, the entrepreneurs' strategy was described as "aiming for a trustworthy editorial product that attracts many readers and thereby becomes attractive for advertisers." They approached the investment fund shortly after launching their first issue of the news site. They needed additional financial capital because more time than expected was required to attract enough readers and to realize the necessary advertising revenue to fund the launch of new issues. The investment fund manager described the entrepreneurs as "knowing the journalism profession and being enthusiastic". The board consisted of a male chair, who is a business consultant (shareholder), one female business angel (shareholder), two male shareholders and the two entrepreneurs, who also hold shares. The investment fund manager described the firm's board as having complementary competences.

Case D: Online service. The venture was established in 2005. The entrepreneur is a portfolio entrepreneur who was well known in the community and had considerable experience in the media industry. When approaching the investment fund in 2006, he was still working on developing technological solutions. He was described by the investment fund manager as “trustworthy, serious and honest, and he has a strong drive that will enable success.” Further, the case documents for the fund board described him as having a relevant employment background: “… he has a good track record in establishing new business ventures. He has previously succeeded, he shows that he is serious, he has stamina and he has a focus on sales and marketing. The entrepreneur has a good understanding of the market and his customers.” The online service had private investors and had received a grant from a public agency. When the entrepreneur approached the investment fund, the firm’s board consisted of four men, all of whom were shareholders. In the prospectus, the entrepreneur stated, “at present the board members are too similar. We will be ambitious when recruiting new and better members to the board. They have to be critical, clear-thinking, and capable; some also need to have experience in international business.”

ANALYSIS AND RESULTS

Table 2 summarizes results from the data coding. It shows the signals sent as presented in business plans and financing prospectuses sorted along the main signal categories presented in Table 1; entrepreneur, team, investors, venture and partners/alliances. Furthermore, it presents signals perceived and interpreted by the investment fund as presented in analyses, board documents, notes and minutes from board meetings, sorted along the same main categories. Finally, where applicable, the fund's feedback is presented, together with the entrepreneurs' responses re-signaled to the investment fund. Below, we discuss how gender is embedded in the signals sent and received (see also Table 2).

INSERT TABLE 2 HERE

Gender Embedded in Signals Entrepreneurs Send

The first research question addresses how gender is embedded in the way in which entrepreneurs signal venture quality. In all cases, the entrepreneurs signal that their own competence is relevant to the venture. They all emphasize industry experience in their venture prospectuses. Additionally, the two female team cases present relevant education and relevant work experience from the public sector as signals of competence. In Case D, the entrepreneur signals entrepreneurial experience. In all cases, the extended team, often referred to as the board, is used to signal competence. Both of the female cases emphasize the competence of their male board chairs and focus on their board members' relevant experience. The male entrepreneur cases also emphasize the competence of their male board chairs. Furthermore, Case D reports limitations of team competence (lack of international experience, lack of heterogeneity) and signals ambitions to change the board to address these drawbacks. Thus, overall, the female and male entrepreneurs follow somewhat similar approaches to signaling related to entrepreneur and team competences. Because the entrepreneurs have different human and social capital, their signals appear different. The female entrepreneurs compensate for a lack of legitimacy as entrepreneurs (no entrepreneurial experience, limited private sector experience/management experience) by specifically emphasizing the relevance of the experience they do have and by underlining board members with such experience, particularly with respect to male board chairs. Male entrepreneurs also focus on their board members' competence. Case D seems to have the team with the strongest human and social capital and specifies weaknesses to increase signal credibility and the venture's legitimacy. Accordingly, the entrepreneur shows that he 'knows what it takes,' thus confirming the value of his experience.

In all cases, the entrepreneurs signal venture quality by reporting that other investors are interested. When they approached the investment fund, Cases C and D had other investors 'on board' who had invested and expressed interest in increasing their investment through a new share issue. This is a stronger and more credible signal, compared to the female Case A that signaled that they had interested investors who had not yet invested. However, the weaker signal of interested investors is nevertheless a signal of quality in contrast to Case B, which only had a minor ownership investment from another small investment fund and no contact with investors when they first approached the investment fund. All of the cases received feedback from the investment fund that they needed to obtain more equity. Case C re-signaled that they had approached existing and potential shareholders to increase equity capital. Case D ran parallel processes with the investment fund and a seed fund and secured increased investments from existing shareholders. Case A re-signaled that they had secured investments from two informal investors but had to request additional time to secure the second investor. Case B chose a strategy of attempting to secure a public grant to cover the capital requirements and took time to secure the capital needed to respond to the investment fund's conditions. Hence, the male entrepreneurial teams had spent more time securing investment capital before they first approached the investment fund and seemed to have clearer strategies on how to secure the funding required. However, the female Case A was also able to secure relatively large equity funding from informal investors before further negotiations with the investment fund.

With respect to venture characteristics, the two women-owned ventures are both related to feminine industries (i.e. industries with female work force and primarily female customers/end users), whereas the two men-owned ventures are in .com industries with a mixed customer base, while their entrepreneurs and employees are predominately male. Consequently, the signals of femininity are strengthened with the combination of female entrepreneurs and a feminine industry in the two first cases, whereas the two latter cases give a masculine impression in line with the gendered understanding of the ‘entrepreneur’ (Marlow & Swail, 2014). Cases A and C are directed toward the consumer market, Case B is directed toward the public sector, and Case D is a business-to-business concept. Cases A and D both signal clear—and ambitious—predictions of future sales and clear sales strategies to increase venture credibility. Case D signals strong international growth potential. Case B indicates ambitions by signaling opportunities to expand nationally, although the growth ambitions are not as strongly presented as in Cases A and D. Case C appeals to societal needs to break a market monopoly and the value of a local product. Case B focuses on the innovativeness of the product and how it will solve user needs. None of the cases places any emphasis on strategic alliances or partners. However, in re-signaling, the women entrepreneurs responded to perceived legitimacy constraints by initiating activities to get partners in place, especially to help test market interest.

To summarize, we find that gender is embedded in signals sent in several ways. First, to the extent that the male and female entrepreneurs differed in terms of human and social capital, they chose different strategies in presenting signals and compensating for limitations by focusing on other signal groups. Second, whereas male entrepreneurs followed a homophily strategy by engaging competent males similar to themselves as chairs of their boards, the women entrepreneurs chose a compensation strategy by engaging male chairs with complementary experience and competence. Third, gender is embedded in the signals related to the characteristics of the ventures. Fourth, due to more progress with other equity investors the two male cases appear more ‘professional’ and provides a faster response to feedback demanding additional equity capital, compared with the two female cases.

Gender Embedded in Signals the Investment Fund Receives

The second research question addresses how gender is embedded in how signals are received and interpreted by the investor and, therefore, in how they influence investment decisions. Table 2 indicates that not all signals sent are received by the investment fund and that missing signals may be interpreted as (negative) signals. This phenomenon is visible, for instance, with respect to human capital, particularly entrepreneurial experience. In both of the two female cases, decision documents specifically note that the entrepreneurs lack entrepreneurial experience. However, in Case C, in which the male entrepreneurs do not report entrepreneurial experience, this deficit is not mentioned. Instead, the fund’s documents focus on the entrepreneurs’ strong industry experience and that they are enthusiastic. Further, the documents do not mention that the technology is new to the entrepreneurs. In Case D, the entrepreneurial experience and track record of the male lead entrepreneur is emphasized as a key argument for investment and are interpreted as a strong signal that provides legitimacy to the potential of the venture. The entrepreneur’s track record is mentioned several times in the documents. He is considered serious, honest, and as a person with stamina, based on his entrepreneurial experience. However, the fact that the entrepreneur's industry experience was as a customer, is not noted by the investment fund. Instead, it is regarded as positive that he understands the market and the customers, and that he focuses on marketing and sales. This is different from Case B, in which both of the female entrepreneurs have experience in the public health sector where their potential buyers are. In this case, however, the entrepreneurs' experience is not advanced as a positive aspect in the investment fund's documents.

Other types of experience are also interpreted as positive signals. In Case A, the fund manager notes that one of the investors (the woman) is married to a physician, and this is perceived as positive, strengthening the venture's quality and the investor's legitimacy. Further, in Case A the sales competence of one of the female entrepreneurs is valued; she is described as "a good salesperson," something that the investment fund's board experienced when she presented the venture. However, public-sector experience, education, and experience in banking are not emphasized as particularly positive or relevant. Similarly, in Case B, the entrepreneurs' experience as nurses is mentioned as positive, but not treated as important. In both of these cases, the investment fund documents highlight the board chair as having a "good reputation" or being "well known." Thus, it seems that these entrepreneurs can build legitimacy through their male chairs. In Case C, it is specifically noted that "the chair has start-up and funding experience". In Case D, in which the entrepreneur signals a lack of persons with international experience in the board, the investment fund relies on that judgment. That the entrepreneur is aware of this limitation seems to give him legitimacy.

The investment fund has a positive opinion of the business ideas in all four venture-cases, remarking that there is a growing market in Cases A and D, and that there is a need for the product in Cases B and C. However, the strength of the competition is particularly emphasized in Case A, noting that there is already one very strong actor in the market. A similar situation related to Case C is interpreted as a need to break the market monopoly that exists locally. However, also in Case C, the investment fund highlights strong competition in the local market but regards it as a positive that the entrepreneurs employ a clear market strategy. It is further perceived negatively that, in this case, sales have not developed according to plan. Case D is interpreted as a venture that represents something new and has high growth potential, a global market, market growth and exit options. The fact that the entrepreneur has ideas for further development contributes to this judgment. The investment board documents further state: "This is most likely the most interesting business case in the region at the moment". It is noted that the entrepreneur has mentioned going public as an exit option.

Case D had investors in place when they approached the investment fund. Further, the entrepreneur was engaged in dialogue with a seed fund and was obtaining increased investments from business angels. These activities are regarded positively by the investment fund. Case C also had investors involved in the venture, although at a much smaller scale. Still, this seemed to increase legitimacy. For instance, the investment fund interprets the involvement of investors as a signal that it is likely that the entrepreneurs will be able to raise more financial capital, indicating that investors' reputation is a signal well received (cf. Janney & Folta, 2006). As mentioned above, the two female cases fell short with respect to investors. In Case A, this seemed to increase the risk perceived by the investment fund. But after showing that they were able to raise investor capital (re-signaling), the fund reported a stronger belief in the venture's potential. In Case B, the investment fund seemed to have no trust in the entrepreneurs' ability to raise investor capital, and hence they did not demand it. Instead, they accepted that the entrepreneurs planned to build the business step-by-step and to use public grants to raise capital, i.e., without bringing on new owners. Thus, it may appear that a pre-understanding of what can be expected from women entrepreneurs in female industries compared to male entrepreneurs in more masculine industries influenced the expectations that the investment fund had to the venture and, thus, what it demanded from the entrepreneurs.

As mentioned above, none of the cases emphasized alliances in their signals, and this was not an initial focus of the investment fund. However, when both women-led cases re-signaled that they were forming new alliances following the feedback, the fund manager interpreted this positively. Thus, it seems that signals concerning alliances can increase the legitimacy and signal quality of female business cases.

From these cases, we find that gender is embedded in how signals are interpreted by investors. First, because there are some differences in the signals sent, the cases are also evaluated differently. The fund considers and evaluates most of the entrepreneurs' signals. Further, as the women entrepreneurs had limited track-records and were not previously known to the investment fund manager or fund board, they were evaluated only by the signals that they sent. In contrast, the male entrepreneurs were previously known and were also evaluated according to other knowledge possessed by the investment fund manager or board members. Second, the findings illustrate how similar characteristics are interpreted differently depending on gender. Third, gendered expectations related to entrepreneurs are found to influence the demands made and thus the evaluation of a venture's prospects.

DISCUSSION AND CONCLUSIONS

The present study has applied signaling theory on investment decisions made by a small investment fund. The paper set out to reveal how gender is embedded in how entrepreneurs signal venture quality in the written material they present to investors and in what way gender is embedded in how signals are perceived by investors. The findings indicate that gender influences venture capital funding both related to how entrepreneurs signal venture quality and legitimacy and in how the fund (receiver) interprets those signals. The results show that gender plays a role, not only as differences between male and female entrepreneurs, but more importantly, in the interaction between entrepreneurs and investors where venture types, human and social capital, investor and partner relations, etc. are constructed as gendered. From the analyses, we have identified at least three ways in which signals between entrepreneurs and investors are gender embedded.

First, differences in financial, human and social capital between male and female entrepreneurs, give gender differences in the information they can signal. Such differences can be ascribed to gender divisions in education and work experience, and have previously been advanced as a factor leading to gender differences related to venture capital (Carter et al., 2003). This study shows that women seek to compensate for their lack of the most valued types of human and social capital by following at least two strategies. They signal the value of other types of human and social capital, such as the relevance of the experience they have, and they involve men who hold valued competencies as board members and, particularly, as board chairs (cf. Murphy et al., 2007). The male entrepreneurs seem to have a lesser need to use such compensatory signaling strategies. This is in line with Eddlestone et al.'s (2014, p. 18) findings that "…the gender of the sender plays an important role in determining how signals of entrepreneurial viability and commitment are compensated by capital providers," and further that men and women's signals of the quality of their ventures are rewarded differently (*op cit*).

Second, investors and investment funds are more familiar with some industries and types of ventures, due to their experience and strategic investment choices (Greene et al., 2001; Nelson et al., 2009). Since there are relatively large differences in relation to the industries and venture types pursued by male and female entrepreneurs (Elam, 2008), women with ventures in feminine industries (in terms of employees, customers and products) may have an increased need to find suitable and transferrable signals that can be received and interpreted positively by investors. In this study, one example was how industry experience in the "feminine" spa and fitness industry was less valued as a signal than industry experience from the more masculine petroleum industry, despite that the new venture idea was a fitness and spa center. Hence, in line with status expectations state theory, this can be interpreted as the (masculine) competence from the petroleum industry has higher status expectations than the (feminine) competence related to the spa and fitness industry, and that gender is a marker of social status in entrepreneur-financer relationships (Saparito, et al. 2013).

Third, stereotypical ascriptions of women and men influence interpretations of signals. As entrepreneurship remains a masculine domain, women must communicate their legitimacy more strongly to overcome the inherent gender bias in the interpretation of signals. The entrepreneur's gender and the gendered image of entrepreneurship seem to be part of the evaluation. This finding is in line with gender role congruity theory, explaining how gender stereotypes lead to different standards applied for women and men (cf. Eddlestone et al., 2014). Also, Saparito et al. (2013:854), in their study of bank-firm relationships, claim that "gender as a marker of social status should be considered as a distinct factor influencing" this relationship and that this has consequences for resource acquisition. In the cases presented here, we found that similar lack of experience, such as entrepreneurial experience, was interpreted differently for male and female entrepreneurs. Correspondingly, a similar signaling of experience was interpreted as a positive signal in one of the male cases but was not valued in one of the female cases. Further, the female entrepreneurs were described very differently from the 'typical' entrepreneur, particularly in one case. This is in line with Nelson et al.'s (2009:64) findings that VCs employ a gendered mental model "… in so far as it constructs a hierarchy of order along lines of gender, including notions of venture potential and venture success…". Consequently, women may have a stronger need to signal their own and their ventures' legitimacy to compensate for their lower perceived legitimacy related to being a woman. When women entrepreneurs compensate by signaling more 'masculine' elements such as growth ambitions or by including competent men on their teams (Murphy et al., 2007), this influences interpretations and seems to strengthen their legitimacy. Further, receivers ascribe meanings to groups of signals, i.e. different signals are aggregated and jointly interpreted (Connelly et al., 2011). Gender is also embedded in the aggregation of signals, in which gendered attributes are ‘added’ to other attributes, leading to different interpretations of, e.g., industry experience.

The results provide insights into the entrepreneur-investor relationship related to new business ventures and show that this relationship is gendered. Access to unique archival data, including information not only on the signals that entrepreneurs send, but also on how an investment fund interprets these signals, has proven valuable to gain insights into gendered aspects of the investment process. However, the study also has limitations, of which we highlight two. First, the data represent one small investment fund in Norway, and the available number of cases were limited. Hence, further studies are needed to validate and nuance our findings and theoretical contributions. Moreover, different types of investors seek out different criteria (Mason & Stark, 2004), and the gendered nature of the processes may vary among different contexts. Thus, further research is needed to examine other types of investors and other contexts. Second, investment decisions are not solely based on written documents but also include oral discussions among the fund’s board members. Information on the oral communication would have been beneficial to gain even further depth in the analysis. Similarly, to have information on the oral feedback given to entrepreneurs in meetings with the fund would have enriched the data. Studies including observation of meetings and oral dialogues between entrepreneurs and potential investors are warranted.

Despite these limitations, the study has important implications. The findings show that to understand the gender gap in new venture financing, one needs to understand how gender is embedded in the signaling taking place in entrepreneur-investor relationships. This study shows that the masculine norm of entrepreneurship influences investment decisions. Investors evaluate both male and female entrepreneurs in relation to characteristics more often held by men and neglect signals more often presented by women. Stereotypical gender ascriptions influence the interpretations of signals received, leading investment funds to interpret similar characteristics differently between male and female entrepreneurs. Although both demand- and supply-side issues are important, researchers should also examine the constructions of gender and entrepreneurship that occur in interactions between the demand and supply sides.

Moreover, the study informs signaling theory by showing how entrepreneurs' signals and receivers' interpretations are embedded in gender. Signaling theory has not previously considered how gender influences the signaling process. The results of this study suggest that a gender perspective can improve our understanding of this process, not only in entrepreneur-investor relationships but probably also in other types of signaling processes. In a broader perspective, signaling theory seldom discusses the social construction of signals that are taking place in the signaling process, which also may be related to other areas than gender, such as ethnicity, or social class.

Implications for investors are that they need to be aware of the embeddedness of gender in the signaling process to improve their decision-making. Such awareness is needed to ensure that funds do not discard good cases due to stereotypical ascriptions in interpreting signals. Furthermore, awareness may also reduce the risk that a fund will develop overly positive evaluations of the signals sent by male entrepreneurs with masculine venture ideas. Entrepreneurs approaching investors need to consider the criteria valued by an investment fund. Women entrepreneurs may need to be aware that they must signal their and their venture's quality more strongly to be evaluated similarly to men. Using more masculine signals might be helpful.

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Table 1 Categories of signals sent between entrepreneur and potential investors

Type of signal	Studies
Entrepreneur	
- Human and social capital	Kotha & George (2012), Mueller et al. (2012)
- Reputation and previous performance	Ebbers & Wijnberg (2012)
- Trust-building behavior	Maxwell & Lévesque (2011)
- Displayed passion	Cardon, Sudek, & Mitteness (2009)
- Entrepreneurs' own investment	Leland & Pyle (1977), Prasad et al. (2000), Bruton, et al. (2009)
Team (management and board)	
- Aggregated HC and SC	Certo (2003), Higgins & Gulati (2006), Mueller et al. (2012)
- Top management team legitimacy	Cohen & Dean (2005)
- Prestige	Lester et al. (2006), Certo (2003), Daily, et al. (2005)
- Team experience	Lester et al. (2006)
- Team/board heterogeneity and size	Filatotchev & Bishop (2002), Daily et al. (2005), Zimmerman (2008)
	Sanders & Boivie (2004), Daily et al. (2005)
- External board members	Zhang & Wiersema (2009)
- CEO background	
Investors	
- Investors equity ownership	Elitzur & Gavious (2003), Sanders & Boivie (2004), Daily et al. (2005), Bruton et al. (2009)
- Investors experience and reputation	Janney & Folta (2006)
- Private equity placements	Janney & Folta (2003), Janney & Folta (2006)
- Publicly backed equity finance	Mueller et al. (2012)
Venture	
- Products/services characteristics	Mueller et al. (2012)
- name	Lee (2001)
- Size and age	Daily et al. (2005)
- Firm growth	Davila et al. (2003)
- Patented IP	Mueller et al. (2012)
- Trading volume	Lee (2001)
- (Expected) returns	Lee (2001), Daily et al. (2005)
- Corporate governance characteristics	Sanders & Boivie (2004)
Alliances and partners	
- Strategic alliances	Gulati & Higgins (2003), Park & Mezias (2005), Khoury et al. (2013)
- Endorsement relationships	Gulati & Higgins (2003), Higgins & Gulati (2006), Khoury et al. (2013)

Table 2 Key elements of signaling in the four cases

Signaler	Signals sent	Signals interpreted	Feedback and re-signaling
Case A: Fitness and SPA center Two female entrepreneurs	*Entrepreneurs* Industry experience Relevant education Management experience Sales experience *Team (management/board)* 2 external board members: - Male chair experienced in the oil and gas industry - Female auditor and manager of accounting firm *Investors* Initial contact and interest from two informal investors: - male entrepreneur (property) - female entrepreneur (retail) Minor public grant *Venture* Unique concept targeting growing high end segment Specified competitive advantg. Specified sales goals *Partners/alliances* Agreement with property investor about premises	*Entrepreneurs* No entrepreneurial experience Good sales person Management experience Public sector experience *Team (management/board)* Limited experience in management and board The chair has a good reputation—" is a good man" *Investors* Male investor owns premises—vested interest Female investor is entrepreneur and married to a physician Minor public grant *Venture* Strong competition locally Good strategy Acceptable risk *Partners/alliances* Landlord also (potential) investor	*Feedback* Informal investors a condition—each must invest as much as the fund Entrepreneurs should reduce ownership to less than 50% *Re-signaling* Positive market response before opening Possibly increased grant from governmental support agency New female investor replaces the previous suggested investor Two investors increase amount invested, equal to investment fund Entrepreneur ownership down to 55% but will be reduced to 46% by selling shares to employees
Case B: Health equipment producer Two female entrepreneurs	*Entrepreneurs* Relevant education Long industry experience Explicit user knowledge Unique network *Team (management/board)* 3 external board members: - Male chair, lawyer - Male member, consultant - Male member, physician *Investors* Small post from private investment fund in place Minor public grant Applied for start-up grant *Venture* Innovative design, IPR under consideration	*Entrepreneurs* Experienced nurses No entrepreneurial experience Good industry network *Team (management/board)* The chair is well known *Investors* More financial capital needed—grant and/or equity *Venture* Potential growth company High risk—early stage	*Feedback* Increased equity condition for investment—more private equity needed Stockholder agreement has to secure the entrepreneurs engagement and some ownership *Re-signaling* Initial contact made with possible marketing alliance Will seek to increase financial capital

Signaler	Signals sent	Signals interpreted	Feedback and re-signaling
	Partners/alliances In business incubator	*Partners/alliances* (not considered)	
Case C: News site Two male entrepreneurs	*Entrepreneurs* Industry experience, product knowledge *Team (management/board)* Male chair, business consultant Female business angel Two males and the entrepreneurs *Investors* 9 investors, small shares *Venture* Local market need Attractive for advertisers Increasing number of visitors Breaking monopoly *Partners/alliances* None reported	*Entrepreneurs* Know the trade Enthusiastic *Team (management/board)* Chair has start-up and funding experience Board and management have complementary competencies No external board members *Investors* Positive to have investors on board but not emphasized in relation to e.g., competence *Venture* Local market Strong need locally Strong competition on advertising income Product welcomed in market *Partners/alliances* (not considered)	*Feedback* Fund investing under condition of more external capital *Re-signaling* Secure more external capital through new and existing investors, including family and friends
Case D: On-line service One male entrepreneur	*Entrepreneur* Portfolio entrepreneur Has extensive network Knows the industry *Extended team/board* Male chair, investor Three males (owners) Emphasize competence and seek competent board. Seek new, critical, bright and international experienced board members to increase heterogeneity *Investors* 4 investors 'on board'	*Entrepreneur* Trustworthy, good track-record. Well known and media profile. Knows the industry. Market oriented, lack international experience. Have ideas for further development of venture Is a "stayer," serious and honest Lead entrepreneur crucial for success of the venture *Extended team/board* Partners and board members have primarily contributed with financial capital. Need board member/manager with experience from international business *Investors*	*Feedback* Board needs to be supplemented with competence in international sales/ marketing and online sales, and should establish contacts with industrial actors in the market. New owners/more equity capital needed. Lead entrepreneur needs to focus on this venture *Re-signaling* More equity capital in place, owners increased their capital and seed fund invested

Signaler	Signals sent	Signals interpreted	Feedback and re-signaling
	2 new investors with good track record have shown interest *Venture* Interesting market segment Innovative business model and with little used market strategy Growing market Large international potential *Partners/alliances* None reported	Positive that the entrepreneurs are in dialogue with potential investors and seed fund – sharing the risk with the investment fund *Venture* Most likely one of the best cases in the region now. Extremely interesting case. Global market, large market opportunities and market growth. Exit options present. IPO is a valid option *Partners/alliances* (not considered)	