DO INSTITUTIONS HELP VENTURE CAPITALISTS TRUST NEW PARTNERS? EVIDENCE FROM CROSS-BORDER VENTURE CAPITAL SYNDICATES

Miguel Meuleman
Vlerick Leuven Gent Management School, miguel.meuleman@vlerick.com

Mikko Jaaskelainen
Aalto University

Markku V.J. Maula
Aalto University

Mike Wright
University of Nottingham

Recommended Citation
Meuleman, Miguel; Jaaskelainen, Mikko; Maula, Markku V.J.; and Wright, Mike (2011) “DO INSTITUTIONS HELP VENTURE CAPITALISTS TRUST NEW PARTNERS? EVIDENCE FROM CROSS-BORDER VENTURE CAPITAL SYNDICATES,” Frontiers of Entrepreneurship Research: Vol. 31 : Iss. 2 , Article 2.
Available at: https://digitalknowledge.babson.edu/fer/vol31/iss2/2
DO INSTITUTIONS HELP VENTURE CAPITALISTS TRUST NEW PARTNERS?
EVIDENCE FROM CROSS-BORDER VENTURE CAPITAL SYNDICATES

Miguel Meuleman, Vlerick Leuven Gent Management School, Belgium
Mikko Jääskeläinen, Aalto University, Finland
Markku V.J. Maula, Aalto University, Finland
Mike Wright, University of Nottingham, UK

ABSTRACT

Venture capital (VC) has become an increasingly international phenomenon but there is a dearth of research that looks at the process by which VC firms co-invest across borders. We aim to fill this gap by examining drivers of cross-border partner selection decisions with a particular focus on the impact of experience-based trust on cross-border partner selection decisions in VC syndicates. Further, we examine how this relationship is moderated by different aspects of the institutional environment. We analyze these issues by studying the selection of foreign VC firms by local VC firms in cross-border VC syndicates in Europe over the period 1997 to 2008. The total sample consists of 1021 VC investments in which 391 different local VC investors invited 302 different foreign investors. Our results indicate that the effect of experience-based trust on partner selection is negatively moderated by the extent of generalized trust and the level of legal protection offered by the host country. The effect of experience-based trust on partner selection decisions is positively moderated by the level of cultural distance between the host country and the country of the foreign partner. Implications for theory and practice are suggested.

INTRODUCTION

Venture capital (VC) investing has become increasingly international (Wright, Pruthi & Lockett, 2005). Yet, there remain major gaps in research on how the international context affects VC firms when they invest across borders. While the role of home country networks have been recognized as important for foreign expansion by VC firms (Guler & Guillén, 2010), one of the neglected issues in cross-border VC investments concerns the very beginning of a syndicated cross-border investment, the selection of foreign VC partners by local VC firms. A VC firm’s selection of appropriate alliance partners is a critical decision (Dacin, Oliver, & Roy, 2007; Dimov & Milanov, 2009). The choice of VC partner determines the skills, knowledge, and resources a portfolio firm will gain access to (Brander, Amit, & Antweiler, 2002; Seungwha, Singh, & Kyungmook, 2000). Further, firms entering syndicates face considerable uncertainty given the unpredictability of the behavior of partners and the associated costs of opportunistic behavior (Gulati, 1995). The selection of appropriate VC partners, therefore, is an important governance mechanism (Li, Eden, Hitt, & Ireland, 2008; Meuleman, Manigart, Lockett, & Wright, 2010).

In such conditions, trust plays an important role. The formation of trust, however, has been largely neglected in the VC internationalization literature. Previous research on international
alliance formation has highlighted the role of direct previous partner experience in facilitating the formation of trust (Madhok, 2006). The recent growth of VC internationalization may mean that VCs entering overseas markets have limited experience of working with syndicate partners. The formation of initial trust by VCs may therefore also play an important role. Limited attention has been paid to the nature, level, and degree of initial trust across international borders and the impact this generates for cross-border partner selection decisions (Zaheer & Zaheer, 2006).

We focus on one important driver of initial trust, that is, the institutional cues that enable one actor to trust another without firsthand knowledge (McKnight, Cummings, & Chervany, 1998). This institutional basis of trust comprises the legal, political and social systems that support the monitoring and sanctioning of social behavior. Following Scott (1995), we consider the regulatory and cognitive aspects of institutions and examine how these contribute to the formation of initial trust between potential partners in a cross-border VC syndicate.

The novel contribution of this paper is, therefore, examination of the role of trust in VC international syndication decisions. Specifically, the main research question we address is: How do experience-based and institutional-based trust drive partner selection decisions in a cross-border VC context? We hypothesize that the probability of cross-border VC syndication between two VC firms increases with the extent of experience-based trust based on direct previous interaction in prior investments. Further, we hypothesize that this relationship will be moderated by three aspects of the institutional environment that influence initial trust levels 1) the regulatory environment 2) the level of generalized trust between countries, and 3) cultural distance between the host country and the foreign country.

These issues are empirically examined by studying partner selection decisions by local VC firms in cross-border VC syndicates in Europe in the period 1997 to 2008. We construct a unique, novel dataset from a variety of sources including VentureXpert, Zephyr, Eurobarometer and globalEDGE. The total sample consists of 1021 VC investments in 12 European countries in which 391 different local VC investors invited 302 different foreign investors from 14 European countries. Following Sorenson and Stuart (2008), we employ a case-control research design to analyze the data.

The rest of this paper is organized as follows. First, we discuss the theory and provide our theoretical framework and related hypotheses. Second, we introduce the research setting of our study. The following section outlines the data and method used in the analyses. Next, we present the findings from the empirical analyses. Finally, we discuss our findings, conclude and outline potential avenues for future research.

**Theoretical Framework and Hypotheses**

**Partner Selection Decisions in Cross-Border VC Syndicates**

Interfirm collaborations are a widespread phenomenon. In the context of VC investing, VC firms frequently collaborate through the formation of syndicates in which multiple investors provide financing for a venture (Manigart et al., 2006). The practice is a prevalent feature of the VC industry, as approximately 40%-80% of all investments made by venture capitalists are syndicated. Recent internationalization of VC (Wright, Pruthi, & Lockett, 2005) has been accompanied by widespread cross-border syndication. In a cross-border VC syndicate, local investors team up with foreign investors to invest in a portfolio company. Foreign venture capitalists can provide substantial
internationalization support for portfolio companies that need to expand across national borders from a country with a limited domestic VC market (Mäkelä & Maula, 2008). Further, raising VC from foreign investors has important implications for new venture development. Ties to foreign VCs facilitate exits in a foreign market by reducing information problems thereby improving access to foreign financing (Jääskeläinen & Maula, 2006).

Despite the importance of cross-border VC investments, little prior research addresses drivers of interfirm relationship formation between local VC firms and cross-border VC firms. One important driver of the formation of interfirm relationships identified in the alliance literature is experience-based trust or direct previous partner experience (Das & Teng, 1998; Gulati, 1995; Gulati & Gargiulo, 1999). Several studies have shown direct previous partner experience to be one of the main drivers of partner selection decisions (Chung, Singh & Lee, 2000; Stan & Rowley, 2002). In the context of VC, previous studies also support the role of direct previous partner experience in the formation of investment syndicates among VC firms (Meuleman, Manigart, Lockett, & Wright, 2010; Sorenson & Stuart, 2008).

Previous studies of partner selection decisions have mostly focused on experienced-based trust (Gulati, 1995; Gulati & Gargiulo, 1999; Li et al., 2008). Experience-based trust evolves gradually over time through repeated successful interaction and has to be carefully nurtured. A major implication is that creating a foundation of trust is a slow, time consuming and expensive process requiring a significant investment of resources – financial, temporal, and managerial (Madhok, 2006; Mayer & Davis, 1995; Ring & Van de Ven, 1992). Given cultural, language and institutional differences, building trust becomes even more challenging when forming interfirm relationships across borders (Hitt, Dacin, Levitas, Arregle, & Borza, 2000).

Even though several trust theorists have stated that trust develops gradually over time through repeated interactions (Blau, 1964; Madhok, 2006), new partners often exhibit high levels of initial trust (Kramer, 1994). One important driver of initial trust is based on institutional cues that enable one actor to trust another without firsthand knowledge (McKnight et al., 1998). Institution-based trust reflects the security one feels about a situation because of guarantees, safety nets, or other structures (Zucker, 1986). Zucker (1986) argues that the institutional basis of trust is perhaps the most critical determinant of trust in society. The institutional basis of trust comprises the legal, political, and social systems that support the monitoring and sanctioning of social behavior. In a similar vein, Lane and Bachmann (1996) posit that the development of trust in interfirm business relationships depends on shared expectations shaped by the institutional environment in which the actors are embedded. Various scholars from different disciplines have found that the level of trust differs significantly across nations, with consequences for the functioning and the success of national economies (Bottazzi, Da Rin, & Hellmann, 2009; Fukuyama, 1995). In the context of VC contracting, Bottazzi et al. (2009) show how the institutional environment influences trust formation in cross-border investment deals. How country differences in institutional-based trust impact partner selection decisions in a cross-border context has received limited attention however (Zaheer & Zaheer, 2006).

To examine cross-border partner selection decisions in the context of VC investing, we consider the interplay between experience-based trust and aspects of the institutional environment that influence initial trust levels. More specifically, we argue that experience based trust will be the main driver of cross-border partner selection decisions. We hypothesize that this relationship will
be moderated by different aspects of the institutional environment. Our conceptual framework appears in Figure 1.

**Experience-Based Trust and Cross-Border Partner Selection Decisions**

Firms prefer to work with partners with whom they have previous experience because it reduces the risk and uncertainty associated with interorganizational exchange (Chung, Singh, & Lee, 2000; Gulati & Gargiulo, 1999; Hagedoorn, 2006; Podolny, 2001). Experience-based trust reduces uncertainty surrounding a partner’s behavior and hence the transaction costs involved with screening potential partners, writing contracts and monitoring partners ex-post (Chiles & McMackin, 1996). Trust reduces the propensity to guard against opportunistic behavior by encouraging actors to adopt an orientation toward another actor that assumes the other party’s intentions and motives are benevolent (McEvily, Perrone, & Zaheer, 2003). Absent trust, monitoring and safeguarding are mechanisms to manage agency problems by influencing other’s behaviors and protecting oneself. Relying on trust entails relaxing oversight and granting autonomy to others. For example, one way trust reduces safeguarding is by allowing actors to accept incomplete contracts or agreements (McEvily et al., 2003). By reducing efforts and investments in taking precautions against potential losses, trust liberates resources that can be put to more productive use (McAllister, 1995). In some situations, trust may be the primary organizing principle, such as when monitoring and formal controls are difficult and costly to use (McEvily et al., 2003). This will be especially important in an international context as distance makes monitoring for VCs more difficult (Sorenson & Stuart, 2001). We argue, therefore, that experience-based trust will drive partner selection decisions in cross-border syndicates. Hence:

**H1:** There is a positive relationship between the extent of experience-based trust and the probability of a new alliance between a local VC firm and a foreign VC firm.

**Institutional-Based Trust and Partner Selection Decisions**

In recent years, scholars from different disciplines have explored the notion that the level of trust differs significantly across nations, with consequences for the functioning and the success of national economies (Fukuyama, 1995). In this vein, Lane and Bachmann (1996) draw attention to the underlying institutional foundations of trust in society. They posit that interfirm relationships are rarely characterized by spontaneous individual-level trust based on interactions among people. Rather, the development of trust in interfirm business relationships depends on shared expectations, which are shaped, at least in part, by the institutional environment in which the actors are embedded.

Entering a foreign country is surrounded by uncertainty as institutional conditions in foreign countries might be very different from those in the home country (Barkema, Bell, & Pennings, 1996; Guler & Guillén, 2007). Institutional-based trust might help overcome these barriers. Institution-based trust means that actors believe the necessary institutional structures are in place to enable one to act in anticipation of a successful future endeavor (Shapiro, 1987; Zucker, 1986). Trusting intentions at the beginning of a relationship may be high because of high institution-based trust levels (McKnight et al., 1998). Bruton et al. (2005) describe three important aspects of the institutional environment for international VC investing: normative, regulatory, and cognitive. Institutional theory argues that similarities and differences in VC behavior around the world result from the configuration of normative, cognitive and regulatory institutions in each country (Hoskisson, Eden, Lau, & Wright, 2000). In the following paragraphs, we focus on the impact of
regulatory and cognitive aspects of the institutional environment for the trusting intentions of foreign VCs when joining cross-border VC investments.

A key aspect of the institutional environment in which VC firms operate is the regulatory framework of a country (Black & Gilson, 1998; Bottazzi, Da Rin, & Hellmann, 2008; Bruton et al., 2005; Jeng & Wells, 2000; Lerner & Schoar, 2005). The nature of economic activity within a country’s borders depends on the quality of its regulatory context (Baumol, 1990), particularly with regard to how its regulatory system protects the rights and outcomes of those who undertake business-related activities (Bowen & De Clercq, 2008). Such protection is informed by critical issues, such as a lack of government corruption, the efficiency and integrity of the judicial system, the risk of expropriation and contract modification, and the presence of a strong “rule of law” (Cumming, Schmidt, & Walz, 2010; La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1998).

There are two major reasons why experience-based trust might become less important for cross-border partner selection decisions for higher levels of regulatory protection of the host country environment. First, in the context of interfirm collaborations, contractual control constitutes an important source of trust in partner cooperation (Das & Teng, 1998; Parkhe, 1993). Foreign VCs joining cross-border syndicates may use contractual rigidity to make sure that contingencies are covered and opportunism is deterred. This has important implications for the extent of trust that a foreign VC firm will have in a local VC firm as it partly relies on contractual control to reduce the risk of cooperation (Das & Teng, 1998). Higher levels of regulatory protection might, therefore, offer a substitute for experience-based trust to deal with potential opportunistic behavior. Second, as the extent of legal protection in the host country increases, scope for managerial expropriation within the portfolio company will decrease. The need to closely monitor the underlying investment will therefore be lower (Burkart, Panunzi, & Shleifer, 2003). As foreign VCs often rely on the host VC to monitor the portfolio company, the trust they will need to have in the local partner performing this function appropriately will be lower. In summary, a higher level of legal protection in the host country environment will lower the need for experience-based trust. Hence:

H2: The positive relationship between the extent of experience-based trust and the probability of a new alliance between a local VC firm and a foreign VC firm is moderated by the level of regulatory protection of the host country environment, such that the relationship is weaker at higher levels of regulatory protection of the host country environment.

Cognitive processes constitute a second important aspect of the institutional environment. Cognitive processes build from the culture of a society and shape individuals’ views of what is possible and what actions should not be considered (Scott, 1995). National cultures are often represented by building on the concept of values. Values refer to desirable goals and to the modes of conduct that promote these goals. They serve as standards to guide the selection, evaluation, and justification of behavior, policies, and events (Smith & Schwartz, 1997). A country’s generalized trust represents a first important dimension of the cognitive institutional environment (Fukuyama, 1995; North, 1990). It captures expectations of people’s reliability in terms of fulfilling their promises, the predictability of their behavior, and the fairness of their actions when they have the ability to behave opportunistically (Zaheer, McEvily, & Perrone, 1998). Generalized trust also represents the set of values that create expectations of honest behavior among social actors (Fukuyama, 1995). Macro-level studies of trust indeed emphasize that countries differ with respect to how much their actors trust one another (Knack & Keefer, 1995). High-trust countries have a positive view of human nature, in that economic actors are more likely to believe in others’
benevolent behavior, whereas in low-trust countries, business relationships are managed with formal contracts and other deterrence tools.

The incomplete nature of economic exchange contracts – such as those for setting up cross-border syndicates – means that people are more likely to bear the risk of entering such contracts if their exchange partners are trustworthy (Lorenz, 1999). Absent generalized trust, economic actors must monitor one another’s behavior and develop tools for sanctioning, which prevent any benefits of mutual cooperation or investing (Arrow, 1974; Fukuyama, 1995). Thus, generalized trust lubricates social relationships (Putnam, 2000) and increases people’s willingness to engage in economic transactions with others. Accordingly, we argue that a country’s level of generalized trust will increase initial trust levels and hence reduce the need to rely on experience-based trust for partner selection decisions. Therefore, we expect:

**H3:** The positive relationship between the extent of experience-based trust and the probability of a new alliance between a local VC firm and a foreign VC firm is moderated by the level of generalized trust, such that the relationship is weaker at higher levels of generalized trust.

A second dimension of the cognitive processes underlying the institutional environment is the cultural distance between countries (Kogut & Singh, 1988). There are several reasons why experience-based trust might be more important for cross-border partner selection decision the higher the cultural distance between potential partners in a cross-border syndicate. First, the effect of cultural distance on transaction costs and the governance of international operations has been recognized (Kogut & Singh, 1988). Within the international business literature, most studies have theorized that cultural differences between home country and host country increase transaction costs which derive from a lack of understanding of the norms and values that govern social exchange (Tihanyi, Griffith, & Russell, 2005). Relying on trusted partners might help to reduce these transaction costs (Giannetti & Yafeh, 2010). Experience-based trust reduces uncertainty surrounding a partner’s behavior and hence the costs involved in screening potential partners, writing contracts and monitoring partners ex-post (Chiles & McMackin, 1996). Second, the higher the cultural distance, the more difficult it will be to develop common values and norms for the collaboration and to strengthen much-needed socialization for maintaining or revitalizing existing trust (Das & Teng, 1998; Luo, 2002). Cultural distance seems to have a negative effect on interpersonal and interorganizational trust (Luo, 2002). Further, the higher the cultural distance between two parties, the fewer common foundations there will be to build trust upon. Chen et al. (1998) maintain that partners with different cultural background tend to use different trust forms (e.g., cognitive vs. affective). McAllister (1995) suggests that partners will be more cooperative if they share a similar trust form and more opportunistic if they employ a different form.

In general, given the long time required to nurture trust with new partners and the higher level of transaction costs between partners of culturally distant countries, we expect that VCs will mainly rely on cross-border partners with whom they have direct previous partner experience when the level of cultural distance is high. Hence:

**H4:** The positive relationship between the extent of experience-based trust and the probability of a new alliance between a local VC firm and a foreign VC firm is moderated by the cultural distance between the local VC firm and the foreign VC firms, such that the relationship is stronger for higher levels of cultural distance.
DATA AND METHODS

Empirical Setting: Cross-Border VC Syndication in Europe

The foregoing hypotheses are empirically examined in the context of partner selection decisions of local VC firms inviting foreign VC firms to join cross-border VC syndicates in Europe over the period 1997 to 2008. From the early nineties onwards, the total number of cross-border deals has increased steadily in Europe. Tykvova and Schertler (2011) show that within the period of 2003–2008, more than 54% of cross-border deals have been syndicated between foreign and local investors in a sample of developed nations. As the VC industry has been internationalized across countries, with substantial differences in the pace of industry development and the institutional environment in which VC firms operate, this setting is particularly interesting to study our research questions.

We construct a unique, novel dataset from a variety of sources to examine these issues. At the investment level, an exhaustive data set on investments and syndication relationships is obtained from carefully combined records of VentureXpert and Bureau van Dijk’s Zephyr database. We combined and checked records from these two datasets to make sure that we did not underestimate the existing network connections between local and foreign VC firms. The total sample consists of 1021 VC investments in 12 European countries in which 391 different local VC investors invited 302 different foreign investors from 14 European countries. We use this data to calculate experience-based trust and characteristics of the VC firms involved in the cross-border syndicates. To measure variables related to the institutional environment, we rely on different datasets. First, we measure generalized trust using data from the Eurobarometer survey (Bottazzi, 2009). Second, in order to measure regulatory protection, we use the legality index (Cumming, Fleming, & Schwienbacher, 2006). Finally, to measure cultural distance, we rely on the World Value Survey.

Hypothesis Testing Procedure

Following Sorenson and Stuart (2008), we employ a case-control selection procedure. We model the probability that two VC organizations from different countries meet in a ‘triad’ in which two nodes represent VC firms and the third node represents the underlying investment located in the host country. Therefore, the lead host VC firm-underlying VC investment-(potential) foreign syndicate partner triad is our units of analysis. In all models, we analyze the probability that a local lead investor chooses a particular foreign syndicate member to participate in a particular VC transaction. The dependent variable is the decision outcome as to whether or not a specific foreign VC firm was selected by an assigned local lead investor to join a cross-border syndicate.

Our case sample contains all realized ties – that is, every instance in which a local lead VC firm actually invited another foreign VC firm to invest in a target company in the host country and that foreign VC firm accepted the invitation. We matched these cases on a 1:5 ratio with a set of controls – co-investment ties with potential syndicate partners that could have occurred but that did not. The control triads matched the same lead VC firm and target company with an investor that did not join the syndicate (i.e. an unrealized tie). We chose these VC investors from a restricted set of VC firms located in the same country of the foreign partner finally chosen. We only included those VC investors that had invested earlier in a cross-border syndicate. In total, our sample includes 6126 observations – 1021 cases and 5105 controls.

Adopting a case-control methodology requires modification of the estimation procedure to adjust for the potential bias introduced by sampling on the dependent variable (Sorenson & Stuart,
A preferred approach for matched case-control designs is the inclusion of a fixed effect for each case and set of matched controls. Since we have a binary dependent variable, we estimated a conditional logistic regression grouped on the lead VC firm–underlying VC investment side of the triad. Grouping cases and controls effectively eliminates the problem of the effects of the common elements shared by the cases and controls (here, the attributes of the lead VC firm and the characteristics of the underlying investment) producing unbiased and efficient estimates of the effects conditional on these unobserved factors.

Variables

Our dependent variable is binary and equals 1 if for a particular VC transaction the local lead VC investor selects a specific foreign VC investor as a syndicate member, and 0 if it does not. The independent variables measure experience-based trust, regulatory protection of the host country environment, generalized trust and the cultural distance between the local and the foreign VC firm. Control variables are added.

First, experience-based trust is operationalized by including a dummy indicating whether the lead investor and a potential partner firm had jointly participated in a syndicate before the focal cross-border VC transaction (Sorenson & Stuart, 2008). Second, the regulatory protection of the host country’s environment is measured by the legality index (Berkowith, Pistor, & Richard, 2003; Cumming et al., 2010). The higher the legality index, the more favorable a country’s legal framework is for undertaking business. Third, in order to measure generalized trust, we adopted the approach of Guiso, Sapienza and Zingales (2009) of using the Eurobarometer survey data of bilateral trust among nations. This measure is based on how much citizens of one country say they trust the citizens of each other European country. As the effect of trust might not be linear, we include a dummy which takes the value 1 if more than 70% of the individuals of a specific country say they trust people a lot from the other country. We include both a dummy for the extent of trust from the foreign nation towards the host nation (generalized trust foreign to host) and a dummy for the extent of trust from the host nation towards the foreign nation (generalized trust host to foreign). Fourth, following Giannetti and Yafeh (2010) who study the effect of cultural differences in the context of international debt syndicates, cultural distance is operationalized using the cultural indices developed by Inglehart (1997) and Inglehart and Baker (2000). The cultural distance between a pair of VC investors is measured as the Euclidean distance between the traditional vs. secular/rational and the survival vs. self-expression orientations of their respective countries.

Several control variables are included in the analyses. First, we include a measure that captures whether an indirect tie exist between a local VC firm and a foreign VC firm, in other words, these firms have not invested together in the last five years, but each of them has invested in some other target with a common third party (Sorenson & Stuart, 2008). Second, to measure the extent of industry fit between the focal investment and the foreign partner’s experience, we include the industry distance measured as 1 minus the share of investments of the foreign VC firm in the same industry in which the target company operates (Bottazzi et al., 2009) (target industry distance partner). We make a distinction between 6 industries. Third, to measure how different the local lead VC firm and the foreign VC are in terms of their industry focus, we include the squared norm of the distance between two vectors, where each dimension contains the share of investment made in specific industry categories (Sorenson & Stuart, 2008) (partner industry distance). Lastly, to measure the overall investment experience of the foreign VC firm, we include both the cumulative number of previous investments of the foreign partner (experience partner) and the cumulative number of previous investments of the foreign partner in the host country (host country experience partner). We take the logarithm of these two experience measures as these variables are highly skewed.
The summary statistics for the variables included in the analyses are shown in Table 1. The correlations between all variables used in the regression analyses are below 0.70.

**RESULTS**

Table 2 presents conditional logistic estimates. All models are statistically significant and have reasonable pseudo-R². Model 1 only includes the control variables. Having an indirect tie with the foreign VC, is not significantly related to partner selection even though the coefficient has the expected sign. In line with the expectations, the higher the target industry distance of the foreign partner, the less likely a foreign partner will be selected to join the cross-border syndicate. The higher the distance in the overall industry focus of the local VC firm and the foreign partner, the less likely the foreign VC firm will be selected to join the syndicate. The more investment experience the foreign VC has, the more likely it will be selected to join the syndicate. The coefficient is positive and highly significant. Experience of the foreign partner with the host market of the target firm is not significantly related to being selected as a syndicate member.

In Model 2, experience-based trust is introduced. The effect of experience-based trust is positive and highly significant in line with hypothesis 1. In Models 3, 4, 5 and 6, different interaction terms are introduced to test hypotheses 2, 3 and 4. The continuous variables used as components of an interaction term are centered to reduce multicollinearity (Cohen, Cohen, West, & Aiken, 2003). The models exclude the so-called ‘main effects’ of the variables used to assess the institutional context, because they do not vary within matched sets of cases and controls; main effects automatically drop out of the model. In Model 3, the interaction effect between experience-based trust and the regulatory protection of the host country environment is introduced. The coefficient has the expected negative sign and is significant in line with hypothesis 2. Experience-based trust becomes less important for partner selection decisions when the host country environment offers higher levels of legal protection. In Model 4, both interaction effects between experience-based trust and generalized trust are introduced. The results indicate that only the generalized trust of the foreign partner to the host has a significant impact. The coefficient is negative in line with hypothesis 3. Experience-based trust seems less important for partner selection decisions when the foreign country shows a higher level of trust toward the host country. In Model 5, the interaction effect of cultural distance is introduced. In line with hypothesis 4, the coefficient is positive and significant. Experience-based trust becomes more important for partner selection decisions, the higher the cultural distance between the host country and the foreign country. In Model 6, all the interaction effects are introduced simultaneously to test the robustness of the model. The effects remain unchanged providing support for hypotheses 1, 2, 3 and 4.

**DISCUSSION AND CONCLUSION**

In this paper we have contributed to addressing the research gap concerning the process by which VC firms co-invest across borders. In so doing, we contribute to theoretical understanding of how experience-based trust and institutions interact and jointly facilitate cross-border collaboration. Specifically, we extend previous research that has examined the role of experience based trust to consider the interplay between experienced based trust and the initial trust that is influenced by institutional conditions on the cross border partner selection decision. Using a novel, hand-collected dataset involving the selection of foreign VC firms by local VC firms in cross-border VC syndicates in Europe during the period 1997 to 2008, we find that the effect of experience-based trust on partner selection is negatively moderated by the extent of generalized
trust and the level of legal protection offered by the host country and is positively moderated by the level of cultural distance between the host country and the country of the foreign partner.

Our analysis that examines the interacting roles of experience-based trust and institutional context as drivers of cross-border syndicate tie formation extends prior research in several ways. First, by explicitly focusing on the interplay of experience-based trust and institutional context driving partner choices in cross-border VC syndication, we contribute to the emerging research on VC syndication that has considered the influence of context but only the role of geographic and industry distance, and differences in regional and industry VC market ‘heat’ within the US (Sorenson & Stuart, 2008). Beyond the VC context, our study also contributes more broadly to the understanding of the impact of the broader institutional context and the role this plays for initial trust formation in cross-border alliance partner selection decisions, which has hitherto been neglected. By focusing on three dimensions of the institutional cues that enable one actor to trust another without firsthand knowledge we are able to obtain fine-grained insights into of the drivers of initial trust in these cross-border partner selection decisions. Second, previous studies have examined features of the institutional environment that influence VC firms’ foreign market entry decisions (Guler & Guillén, 2011). We add to this stream of literature by showing how some of these institutions facilitate or constrain the formation of cross-border syndicate networks. As such, our study extends previous research regarding the governance of interfirm collaborations (Li et al., 2008; Meuleman et al., 2010) and shows that partner selection is a key governance mechanism used to deal with some of the transaction costs associated with the institutional environment.

Our study also provides opportunities for further research. First, we have focused on the European context. Therefore, replications in other contexts could be useful to test whether these findings are generalizable globally or to cross-international border investment by US VC firms. Second, in contrast to Sorenson and Stuart (2008) who examined cross-region syndication in one country, we considered cross-country syndication. While these represent two distinct levels of cross-border VC activity (and the institutional differences are more pronounced in the cross-country analysis), it could be an interesting research question whether cross-region syndication could provide a learning experience that may build human and social capital that can be transferred to cross-international border investment (Meyer, Wright, & Pruthi, 2009). Third, the trust established with cross-regional partners may then lead to these partners embarking upon cross-international border VC activity, particularly if one of the regional partners has international experience that the other does not have. Such learning and trust building as a basis for internationalization from cross-regional domestic activity may be especially relevant in large countries like the US where there may also be important institutional differences between regions that have to be adapted to. Further research in this area would add to understanding of the role of home country networks for investing abroad (Guler & Guillén, 2010).

CONTACT: Miguel Meuleman; miguel.meuleman@vlerick.com; (T): +3292109770; (F): +3292109790; Center for Entrepreneurship, Vlerick Leuven Gent Management School, Reep 1, 9000 Gent, Belgium.

REFERENCES


Figures and Tables

Figure 1
Trust and Cross-Border Partner Selection Decisions

Table 1
Sample Description

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience-based trust</td>
<td>6126</td>
<td>0.05</td>
<td>0.22</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Regulatory protection</td>
<td>6126</td>
<td>20.47</td>
<td>0.77</td>
<td>17.13</td>
<td>21.67</td>
</tr>
<tr>
<td>Generalized trust foreign to host</td>
<td>6126</td>
<td>0.55</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Generalized trust host to foreign</td>
<td>6126</td>
<td>0.60</td>
<td>0.49</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Cultural distance</td>
<td>6126</td>
<td>0.90</td>
<td>0.42</td>
<td>0.13</td>
<td>2.26</td>
</tr>
</tbody>
</table>

Control variables

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect tie</td>
<td>6126</td>
<td>0.45</td>
<td>0.50</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Target industry distance partner</td>
<td>6126</td>
<td>0.77</td>
<td>0.29</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Partner industry distance</td>
<td>6126</td>
<td>0.51</td>
<td>0.45</td>
<td>0</td>
<td>2.00</td>
</tr>
<tr>
<td>Experience partner</td>
<td>6126</td>
<td>51.53</td>
<td>153.77</td>
<td>0</td>
<td>1362</td>
</tr>
<tr>
<td>Host country experience partner</td>
<td>6126</td>
<td>4.08</td>
<td>14.34</td>
<td>0</td>
<td>190</td>
</tr>
</tbody>
</table>
Table 2
Conditional Logit Estimates of Tie Formation

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Coef.</th>
<th>S.E.</th>
<th>Coef.</th>
<th>S.E.</th>
<th>Coef.</th>
<th>S.E.</th>
<th>Coef.</th>
<th>S.E.</th>
<th>Coef.</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experience-based trust (ET)</td>
<td>3.92***</td>
<td>0.27</td>
<td>3.95***</td>
<td>0.27</td>
<td>4.46***</td>
<td>0.53</td>
<td>3.99***</td>
<td>0.28</td>
<td>4.29***</td>
<td>0.58</td>
</tr>
<tr>
<td>Regulatory protection × ET</td>
<td>-0.61*</td>
<td>0.36</td>
<td></td>
<td></td>
<td>-0.72*</td>
<td>0.41</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generalized trust foreign to host × ET</td>
<td>-1.69*</td>
<td>0.77</td>
<td></td>
<td></td>
<td>-1.52*</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generalized trust host to foreign × ET</td>
<td>0.89</td>
<td>0.70</td>
<td></td>
<td></td>
<td>1.19</td>
<td>0.73</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural distance × ET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.17*</td>
<td>0.69</td>
</tr>
</tbody>
</table>

Control variables

<table>
<thead>
<tr>
<th></th>
<th>Coef.</th>
<th>S.E.</th>
<th>Coef.</th>
<th>S.E.</th>
<th>Coef.</th>
<th>S.E.</th>
<th>Coef.</th>
<th>S.E.</th>
<th>Coef.</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect tie</td>
<td>0.14</td>
<td>0.11</td>
<td>0.08</td>
<td>0.12</td>
<td>0.08</td>
<td>0.12</td>
<td>0.08</td>
<td>0.12</td>
<td>0.08</td>
<td>0.12</td>
</tr>
<tr>
<td>Target industry distance partner</td>
<td>-3.35***</td>
<td>0.18</td>
<td>-3.08***</td>
<td>0.19</td>
<td>-3.08***</td>
<td>0.19</td>
<td>-3.08***</td>
<td>0.19</td>
<td>-3.08***</td>
<td>0.19</td>
</tr>
<tr>
<td>Partner industry distance</td>
<td>-1.33***</td>
<td>0.15</td>
<td>-1.15***</td>
<td>0.15</td>
<td>-1.16***</td>
<td>0.15</td>
<td>-1.15***</td>
<td>0.15</td>
<td>-1.16***</td>
<td>0.15</td>
</tr>
<tr>
<td>Experience partner</td>
<td>0.37***</td>
<td>0.03</td>
<td>0.19***</td>
<td>0.03</td>
<td>0.19***</td>
<td>0.03</td>
<td>0.19***</td>
<td>0.03</td>
<td>0.19***</td>
<td>0.03</td>
</tr>
<tr>
<td>Host country experience partner</td>
<td>-0.01</td>
<td>0.04</td>
<td>-0.01</td>
<td>0.05</td>
<td>-0.01</td>
<td>0.05</td>
<td>-0.01</td>
<td>0.05</td>
<td>-0.01</td>
<td>0.05</td>
</tr>
<tr>
<td>Log-Likelihood</td>
<td>-1426</td>
<td>-1168</td>
<td>-1167</td>
<td>-1166</td>
<td>-1167</td>
<td>-1167</td>
<td>-1167</td>
<td>-1167</td>
<td>-1167</td>
<td>-1162</td>
</tr>
<tr>
<td>P-value of log likelihood test</td>
<td>&lt;.0001</td>
<td>&lt;.0001</td>
<td>&lt;.0001</td>
<td>&lt;.0001</td>
<td>&lt;.0001</td>
<td>&lt;.0001</td>
<td>&lt;.0001</td>
<td>&lt;.0001</td>
<td>&lt;.0001</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Pseudo-R2</td>
<td>0.24</td>
<td>0.37</td>
<td>0.38</td>
<td>0.38</td>
<td>0.38</td>
<td>0.38</td>
<td>0.38</td>
<td>0.38</td>
<td>0.38</td>
<td>0.38</td>
</tr>
<tr>
<td>N</td>
<td>6126</td>
<td>6126</td>
<td>6126</td>
<td>6126</td>
<td>6126</td>
<td>6126</td>
<td>6126</td>
<td>6126</td>
<td>6126</td>
<td>6126</td>
</tr>
</tbody>
</table>

† p<0.10, *p<0.05, **p<0.01, ***p<0.001, one-tailed tests for hypotheses, two-tailed test for controls.