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ESSAYS ON CROSS-BORDER VENTURE CAPITAL A Grounded Theory Approach

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ABSTRACT

In this doctoral dissertation, cross-border venture capital investments and syndication are studied from a grounded theory perspective. During recent years, cross-border venture capital has become an economically important phenomenon. Scholarly inquiry into the subject, however, has remained scarce. Employing a grounded theory approach, the present study attempts to contribute to this emerging stream of literature by investigating mechanisms of how cross-border investment syndicates are created and held together, and how cross-border venture capitalists influence the internationalization of portfolio firms.

In this study, venture capital is studied from the viewpoint of the scholarly field of entrepreneurship, within which new venture financing can be viewed as part of the research stream on new venture formation. Venture capital fuels the entrepreneurial process and can critically facilitate economic development, thus being an area of research with high societal relevance. Cross-border venture capital has been found to have an important role in entrepreneurial finance, particularly in markets with a limited supply of domestic venture capital. On the venture level, prior anecdotal evidence indicates that cross-border venture capitalists can provide portfolio firms with important assistance in internationalization.

The dissertation includes five essays. The main focus of the dissertation is in answering the question: "How are cross-border venture capital syndicates formed and held together, and how do the investors of such syndicates affect the internationalization of portfolio companies?" The grounded theory method is used in the empirical part of the dissertation, and prior to this, two essays discuss the use of the method, supporting the empirical essays.

The first essay initiates an introduction to the grounded theory methodology and sets the stage for a review of the related research process. As is typical for methodology review papers, the viewpoint of one paradigm is selected. However, other possibilities for paradigmatic lenses to grounded theory are recognized, and the present work is appropriately positioned in the paradigmatic field.

The second essay presents a detailed account of the phases of conducting grounded theory research. Both of the methodology essays have a focus on the field of research of entrepreneurship. A review of more than 200 entrepreneurship papers that use the grounded theory method was performed to assess the use of this method in entrepreneurship research. Eight of these papers were selected for a detailed analysis. Throughout the two essays, we draw on our analysis and point out exemplary practices from the analyzed articles, as well as alternatives for choices in research design and areas for further improvement. In the second essay, an appendix presents a summary of the analysis of the eight exemplary papers.

The three latter essays of the study are empirical and investigate cross-border venture capital finance employing the grounded theory method. The first empirical essay investigates the formation of cross-border syndicates, especially the role of a local venture capital investor in obtaining cross-border investors. The findings imply that a local venture capitalist can be of critical importance to the development of the portfolio firm, and that the most important roles of this local investor in obtaining cross-border investors lie in providing the venture with knowledge and social capital in the local market and assisting in operational management. International social capital of the local investor can also be of crucial significance in obtaining a cross-border investor.

The second empirical essay discusses the holding together of a cross-border syndicate, especially the factors that influence investors' level of commitment. Results of the essay imply that changes in the expected value of the portfolio firm will affect the commitment levels of investors. If the expected financial returns from the investment decrease, the motivation of the investors to allocate effort and invest more in the development of the venture also decreases. We also found that there are three key moderators to this focal effect: distance, embeddedness, and financial importance that relate to the investor. More specifically, three components of distance between the investor and the investee increase the aforementioned focal effect: geographic distance, cultural distance, and location in a different country. The embeddedness of the investor in business networks in the vicinity of the venture also moderates the focal effect, as does the financial importance of the investment to the venture.

The third empirical essay discusses the effects that cross-border venture capital investors have on the internationalization of their portfolio firms. Results of this essay imply that a cross-border investor's entrance into a syndicate creates both endorsement benefits and significant transaction costs. Transaction costs stem from the relative difficulty of communication and decision-making for distant firms and people. If the cross-border investor has good fit with a target market selected in the venture's internationalization strategy, the investor may provide significant benefits by decreasing the liabilities of foreignness faced by the venture in the foreign market. For instance, the investor may be able to provide important endorsement in the market, important knowledge about the market, and social capital therein. The investor will exert isomorphic pressure that helps the venture to achieve legitimacy in the new market and thus positively affect its development. Such pressure creates isomorphic transformation, which means here that the venture will become more like its peers in the new market. This leads to the venture gaining more legitimacy, that is, better acceptance in that market. If, on the other hand, the cross-border investor does not have a good market fit, it may exert such isomorphic pressure that the venture is driven to internationalize its operations in markets that are not optimal to its internationalization strategy. This can naturally be a detriment to the venture.

The dissertation's results have a number of implications for both scholarly inquiry and the immediate practice of venture capital. The results imply new insights into international, interorganizational network building and management, and the effect of such networks for further internationalization. The results also open and point out avenues for new research and reveal important implications for practitioners.

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The beginning of knowledge is the discovery of something we do not understand.

- Frank Herbert

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M.M.M.

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1 INTRODUCTION

1.1 Background

The venture capital industry has experienced considerable growth over the long term. Taking an example from the United States, inflows into venture capital funds increased from approximately USD 0.1 billion in the mid-1970s to about 11 billion in 2003 (National Venture Capital Association and Thomson Venture Economics, 2004). The volatility of fundraising has been extremely high, with much higher levels of fundraising occurring in recent years. In 2000 the industry saw a dramatic peak of about USD 110 billion, followed by a rapid decline to USD 47 billion in 2001 and further decline since, even though the rate of decline appears to have slowed (cf., Gompers and Lerner, 2000a; PWC Moneytree Survey, 2004).

Despite the fact that the venture capital industry has been characterized by highly volatile fundraising and investments around the year 2000 and earlier (Gompers and Lerner, 2000a), and thus by uncertainty about the future, there is wide agreement that the general macroeconomic role of venture capital is important in any given case (Megginson, 2004). Venture capital firms fuel the growth of high-risk entrepreneurial companies and are an important support to innovation (Kortum & Lerner, 2000). We can expect that they will continue to do this and thereby fuel the growth of national economies (Megginson, 2004).

Many of today's multinational companies, such as Apple, Intel, and Microsoft, were backed by venture capitalists prior to their public listings. Venture capital and the advice in managing ventures that is often associated with venture capital investments is pivotal to bringing innovations to the market rapidly (cf., Bygrave & Timmons, 1992). Venture capital-backed companies have created close to one third of the total market value of all public companies in the United States (Gompers & Lerner, 2001).

Since the early 1990s, the media and policymakers have shown increasing interest towards the venture capital industry. Even during the recent years of economic recession, the general interest in venturing-related subjects has remained high (European Venture Capital Association, 2003). As a longer-term observation, the argument can be made that the venture capital industry is increasingly important for the national economies of industrialized countries (Gompers & Lerner, 2000a, 2003).

The long-term growth of inflows of money into venture capital funds and disbursements (investments) into portfolio companies has been punctuated by two periods of very rapid growth: First, in the United States, since 1979 the "prudent man" rule has allowed pension funds to invest into high-risk assets. Investments made in that year grew almost eightfold in just four years (Gompers & Lerner, 2000a). Second, the venture capital market experienced an explosive expansion in the late 1990s. From 1997 to 2000, fundraising in the United States grew sixfold to about USD 110 billion, and disbursements' pattern of growth was similar (Seppä, 2003). Worldwide, the venture capital market has grown dramatically over the last decade. The total value of venture capital invested grew rapidly over the period 1995–2000 from USD 41 billion to 177 billion, with total fundraising growing from USD 44 billion to 225 billion (Megginson, 2004).

The long downtrend in the public equity market after the Nasdaq collapse of Spring 2000 caused a large drop in venture capital activity (Seppä, 2003). Venture capital fundraising and disbursements into portfolio companies slowed as quickly as they had grown over the preceding few years, dropping by 60 percent from 2000 to 2001 in the United States.

Despite the recent plunge in inflows to venture capital funds after the collapse of the high-technology stock market, one can assume that the industry is currently in the midst of a substantial, long-term uptrend. (This assumption is based on knowledge of the contemporary build-up of the venture capital industry in industrial countries, which is significant to the extent that a retreat to pre-1990s investment levels would appear to be very unlikely.)

Figure 1 illustrates the development of venture capital investments, including both the sharpness of the pike and the preceding long-term rising trend. Figure 1's information from the U.S. market well reflects the development of venture capital industries in other industrial countries (Baygan, 2003a, 2003b, 2003c, 2003d, 2003e, 2003f, 2003g), even though some countries saw a slower drop.

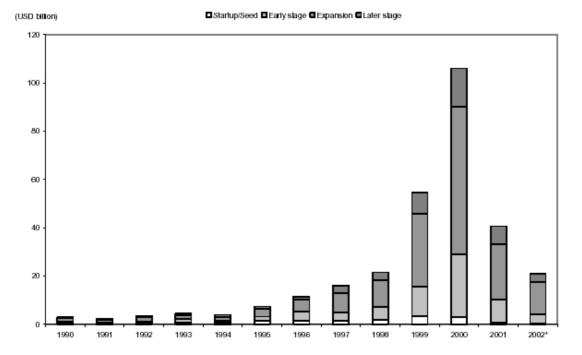


Figure 1: Venture Capital Investments in the United States by Financing Stage, 1990–2002. Source: Baygan (2003g). Estimates for 2002. Note: According to the PWC Moneytree Survey (2004), the realized figure for 2002 is USD 21.4 billion and the estimate for 2003 is USD 18.2 billion.

Cross-border venture capital investments – the core of this dissertation's focus and defined here as those venture capital investments that are managed by a venture capitalist from a country foreign to the portfolio firm – have also experienced significant growth. According to Lockett and Wright's (2001) estimation, non-domestic venture capital investments as a percentage of all venture capital investments increased from 11 percent in 1992 to 23 percent in 1998 across the industry in Europe as a whole. In fact, at the peak of venture capital investments, some countries saw a higher combined total of inflows and outflows of cross-border venture capital than the total of domestic venture capital (Baygan & Freudenberg, 2000).

Cross-border investors have had important roles in growth-oriented, high-risk new ventures in several markets where the domestic supply of venture capital was limited (Baygan & Freudenberg, 2000; Dossani & Kenney, 2002; Maula & Mäkelä, 2003; Mayer et al., 2002). Recognizing the importance of cross-border venture capital, a number of countries have taken steps to stimulate and foster this form of investment (Maula & Mäkelä, 2003).

Cross-border venture capital is important in that it can not only improve the efficiency of the global venture capital market, but also reduce the relative importance

of the domestic *supply factors* in favor of domestic *demand factors*, examples of demand factors being innovation, risk-taking, creativity, and entrepreneurship (Baygan & Freudenberg, 2000; Maula & Mäkelä, 2003). Indeed, cross-border venture capital would appear to be particularly important for countries with limited venture capital supply. Data presented by Baygan and Freundenberg (2000) bear this out: compared to all other countries in Europe, at the peak of venture capital investments Denmark, Finland, and Ireland had the highest share of cross-border venture capital investments of all venture capital investments made in their companies. All three countries have relatively small domestic venture capital markets (Baygan & Freudenberg, 2000).

In this study, data come from entrepreneurial companies that have started in Finland. We wish to investigate the building and holding together of *cross-border* venture capital syndicates and the effects of cross-border investors on their portfolio ventures in the setting of portfolio companies started in countries with small venture capital markets. (Syndication in venture capital is the joint investment of two or more investors into a single portfolio firm on the same financing round. By cross-border syndication, we refer to venture capital syndication where investors manage their investments from different countries.)

According to Baygan and Freudenberg (2000), the share of cross-border venture capital investments of all venture capital investments made into Finland was 43 percent in 1999 (see also Maula & Mäkelä, 2003). In Finland, cross-border venture capitalists are often involved in the largest syndicated venture capital investment rounds, and it has been predicted that their role will remain high (Cardwell et al., 1999; Rönkkö, 2001). Taken together, Finland would appear to provide an exemplary setting for a study of this scope.

1.2 The Scholarly Inquiry of Venture Capital

How has the scholarly community responded to the growing importance of venture capital to the global economy? Until the early or mid-1990s, venture capital was a relatively understudied area compared to its likely economic importance. It being an understudied field may have been due to the difficulties many researchers faced in obtaining data or databases that would offer a readily prepared set of observations sufficient for the requirements of academic inquiry. The rise of venture capital industries around the world has certainly contributed to the increase in

researchers' interest, and subsequently the amount of research on venture capital. Most notably, venture capital has been addressed from the viewpoints of management researchers¹, especially those focused on the field of entrepreneurship, and of financial economists². Recently, some important studies by sociologists have used the venture capital context³.

Previous research has investigated several areas of venture capital finance, including topics such as the value-added of venture capitalists (Hellmann & Puri, 2000, 2002; Sapienza, 1992), venture capital investment process (MacMillan et al., 1985, 1987; Sahlman, 1990), contracting and agency issues (Admati & Pfleiderer, 1994; Sapienza & Gupta, 1994; Sapienza & Korsgaard, 1996), syndication (Lerner, 1994; Lockett & Wright, 2001; Seppä et al., 2003), and initial public offerings of venture capital companies (Barry et al., 1990; Gompers & Lerner, 1998; see Seppä, 2003).

Areas remain where inquiry into venture capital research can be taken deeper, resulting in new and important contributions to our knowledge. The intersection of research on international business issues and venture capital finance offer many questions that can prove to be very fruitful (Gompers & Lerner, 2003). Specifically, the cross-border syndication of venture capital investments and the effects of this activity on portfolio firms is one example of an area where important research problems can be found.

Research on the syndication of venture capital investments has mainly focused on the structures of syndication networks (Bygrave, 1987; Sorenson & Stuart, 2001) and motives to syndicate investments (cf., Lerner, 1994; Lockett & Wright, 2001; Seppä, 2003). Research on cross-border venture capital is scarce (see Baygan & Freudenberg, 2000; Cumming, 2002; Meyer & Shao, 1995; Wright et al., 2002). There is no prior research on the dynamics and operating logics of venture capital syndication in a cross-border setting. Moving to an international context typically induces changes to various aspects of business, and it can also significantly affect venture capital investing. Both academics and practitioners can benefit from increased knowledge in this intersection.

This dissertation is a study presented as a collection of essays that seeks to address some of the most notable questions in the intersection of venture capital and cross-border business activity, using grounded theory as its methodological approach. These questions pertain to the building of a cross-border syndicate – and especially to

the role of a local venture capital investor in it; to antecedents and drivers of the commitment of cross-border venture capital investors in cross-border syndicates; and the ways in which cross-border investors affect the internationalization behavior of their portfolio firms. The selected method in the essays is grounded theory building, which we introduce in a later section. Further to the scholarly contribution of this study, two essays dedicated to advancing the grounded theory method in entrepreneurship research are presented. These essays provide to the dissertation supplementary information on the research method employed in the empirical essays.

Given the lack of earlier studies in the aforementioned areas of specific and practical importance to cross-border venture capital syndication (cf., Gompers & Lerner, 2003; VentureOne, 2002), the questions outlined appear to point out fertile areas for research.

1.3 Research Setting and Questions

This doctoral dissertation's general research question is: "How are cross-border venture capital syndicates formed and held together, and how do the investors of such syndicates affect the internationalization of portfolio companies?". We use the grounded theory method in the dissertation. Two first essays of the dissertation introduce the method in detail. Empirical essays of cross-border venture capital are presented after the two methodology essays.

The goal of the methodology essays is to introduce the use of the grounded theory method in entrepreneurship research, emphasizing the paradigmatic position of grounded theory and illustrations of exemplary practices, alternative choices in research design, and pointers for further improvement that stem from recent entrepreneurship research employing the grounded theory method.

For the venture capital-related area of interest, three research problems are chosen. First, pertaining to the problem of how cross-border syndicates are formed, in Essay III we study the research question of "What is the role of a local venture capital investor in obtaining cross-border venture capital investors?". Second, regarding the holding together of cross-border syndicates, in Essay IV we study the commitment of investors. Specifically, the essay explores the question of "What factors drive investor commitment in cross-border venture capital syndicates?". Third, regarding the influence of cross-border syndicates' investors to the internationalization of portfolio companies, in Essay V we study the research question of "What roles do cross-border

venture capitalists play regarding the internationalization of new ventures that have their primary markets in a foreign country?". In particular, the influence of cross-border investors on the choice of internationalization markets and different ways these investors reduce liabilities of foreignness are studied.

Taking the existing literature into account, the above research questions on cross-border venture capital are positioned so that there are significant opportunities for added contribution. We are using the grounded theory method to study the areas where limited inquiry has been conducted.

1.4 Research Methods and Design and Data Collection

The essays' method of inquiry is grounded theory. Grounded theory is conducted following the methodological approach presented by Eisenhardt (1989), Strauss and Corbin (1998), and Yin (1994). Key justifications for the use of the grounded theory method include the newness of the investigated phenomena as well as the complexity that pertains to this study of international interorganizational transactions. Existing theories seemed inadequate to the field and, judging with hindsight, our results also support the view that a fresh approach was needed. A grounded theory approach can be appropriate to provide such fresh view (Hitt et al., 1998). Moreover, grounded theory research most typically employs qualitative data. In studying new phenomena, the richness of qualitative data can often make it possible to present better-grounded models that may also be used for further statistical testing (Birkinshaw, 1997; Eisenhardt, 1989).

To counteract the potential effects of limitations of the study, we have sought to follow carefully the most rigorous practices of grounded theory research. Many areas for improvement for grounded theory studies presented in Essays I and II are taken into consideration and the improvements put into use in the three empirical essays⁴. The grounded theory method, including its analysis practice as we use it in accordance with the roadmap set by the above authors, is reviewed in detail in Essays I and II, and only a brief introduction is provided here.

Grounded theory research, conducted as outlined in the approach that the twin papers review, begins by formulating a research problem and building a base of relevant background knowledge of prior scholarly literature on key topics, literature on potentially relevant theories, and knowledge of the way of practice in the studied area. Sampling should be "theoretical," meaning that variation in key attributes will

be purposefully sought. Our conduct of theoretical sampling has had an explicit emphasis on the reliability of the study, as well as generalizability of the results and other aspects of validity.

A multiple case approach was considered to be of crucial benefit here, as it allows for the "replication logic" (Yin, 1994) and increased potential for generalization. An in-depth analysis of the qualitative evidence was conducted to allow insights emerge in the fashion of "analytic generalization" (Yin, 1994). Triangulation of data types was made use of. As is typical for qualitative research in general (Eisenhardt, 1989), the analysis phase overlapped the data collection phase.

Within- and cross-case analyses were employed in the way outlined by Eisenhardt (1989). Iterative rotation between data, emerging theory, and our knowledge of prior literature were employed in the analysis process, and propositions along with a figure on the resultant model were explicitly presented in each essay. Tables summarizing the content of our data and analysis (see Eisenhardt, 1989) were extensively used.

As noted already by Eisenhardt, typical outcomes of grounded theory inquiry are theories explaining specific phenomena and having relatively little of grand-scale abstraction; relatively few papers even in the very top of publication outlets have result to "grand" theory (1989: 547). In this dissertation, however, an attempt has been made to present as strong as possible contributions to theory.

The empirical design of the essays employs data from high-technology ventures that have received cross-border venture capital. Case selection and the choice of the unit of analysis were conducted on theoretical grounds (Eisenhardt, 1989), as detailed in the essays. All ventures are of Finland-origin, and some have moved their headquarters to the United States.

The empirical essays are based on several types of evidence, with interviews being the primary type. Interview data come from nearly sixty interviews, the exact number depending on the essay. The interviews were conducted from June to August 2002. The aforementioned number of interviews includes a pilot study of twelve interviews. Other types of evidence used includes observations and documentation of various types: company websites, press releases, news from the most important newspapers, magazines, web services, and the Venture Xpert database produced by Securities Data Company. In the essay on investor commitment, we also extracted estimates from a professional geographical service to obtain geographical distances

separating two locations. We also used Hofstede's (1980, 1983) indices of national culture.

1.5 Structure of the Dissertation

The remainder of this introductory chapter is structured as follows. The next section provides an overview of prior literature that is relevant to the present work and positions venture capital within a context of scholarly inquiry. The subsequent section presents brief summaries of the essays and their key results. Thereafter, the final section of the chapter ties together the contributions of the dissertation and its implications for research and the practice of venture capital and entrepreneurship. Limitations of the study are also discussed therein, and an analysis of validity and reliability of the dissertation is presented.

The remainder of the dissertation comprises the essays, which are entitled:

- (I) Grounded Theory in Entrepreneurship Studies: Feasibility of the Method and the Design of Research⁵
- (II) The Grounded Theory Method: Field Work, Analysis, and Reaching Results⁶
- (III) Attracting Cross-Border Venture Capital: The Role of a Local Investor⁷
- (IV) Commitment of Venture Capital Investors in Cross-border Syndication Networks⁸
- (V) Cross-border Venture Capital and New Venture Internationalization: An Isomorphism Perspective⁹

2 AN OVERVIEW OF RELEVANT LITERATURE

The objective of this section is to position the venture capital discourse in a larger domain and to provide a brief introduction to the most relevant parts of the underlying literature on the venture capital topics of the study.

Due to the nature of the grounded theory research method, all literature and theories that ultimately are relevant cannot be identified and recognized prior to conducting the analysis of data. Grounded theory research, however, needs to present a sufficient overview of this literature (Dougherty, 2002). In this dissertation, a review of literature that is relevant for single essays is reviewed in those essays, and this section of the introductory chapter provides an overview of the domain of the entire dissertation.

We begin with an account on the larger domain of entrepreneurship, from the disciplinary viewpoint of which we address venture capital in this study, discussing the position of venture capital research in this discourse. Thereafter, we introduce those parts of literature that are relevant from the viewpoint of our venture capital research problems. These include literature on the syndication of venture capital and on cross-border venture capital investments. A review on the value-added of venture capitalists is also included, because this is a central part of the venture capital literature and has relevance to all empirical essays in the study.

2.1 Scholarly Venture Capital Discourse Within the Entrepreneurship Domain

Venture capital could be viewed, and has been viewed, from a number of disciplinary perspectives, including those of economics, sociology, and management (Acs & Audretsch, 2003). In this dissertation, it is viewed from that of entrepreneurship. What is entrepreneurship, then? In the following, we define entrepreneurship and briefly introduce major streams of research within the field, and position the study of venture capital therein, providing a detailed definition of venture capital finance.

Proposed definitions for entrepreneurship are numerous. Some scholars have posited that entrepreneurship focuses on newness and novelty in terms of new markets, new products, and new processes as the drivers of wealth creation (Daily et al., 2002; Lumpkin & Dess, 1996; Sharma & Chrisman, 1999). Taking a somewhat

different stand, Shane and Venkataraman (2000) suggested that the discovery and exploitation of profitable opportunities is the foundation of wealth creation by entrepreneurship (see also Kirzner, 1973, 1979, 1992; Koppl & Minniti, 2003). From this viewpoint, entrepreneurship thus involves bundling resources and deploying them to create new organizational and industry configurations (Schoonhoven & Romanelli, 2001; see also Alvarez, 2003; Alvarez & Busenitz, 2001). Hence, the entrepreneur can be viewed as a decision-maker, innovator, and builder of organizations (Hitt & Ireland, 2000). The two viewpoints both agree that opportunity recognition is at the heart of entrepreneurship (McCline et al., 2000). Indeed, the potential to create and the realization of additional wealth is accumulated to firms and individuals that have superior skills in sensing and seizing entrepreneurial opportunities (Teece, 1998).

Many views could be taken to the classification of issues within "entrepreneurship," including those of theories of the firm, self-employment, industrial clusters, technological change, and job creation (cf., Acs, 1996). The number of research streams within the field of entrepreneurship is, indeed, large: for instance, scholars have studied traits and motivations of entrepreneurs (cf., Palich & Bagby, 1995), births and deaths in the organizational ecology (Hannan & Freeman, 1984; cf., Aldrich, 1999), the processes of formation of new ventures, including opportunity identification, strategy formulation, and resource assembly (cf., Cooper, 2003), and factors affecting performance (Gimeno et al., 1997). Moreover, a stream on corporate entrepreneurship (cf., Burgelman, 1983) has been concerned with how new ventures can be developed with an objective of making established firms more innovative (Cooper, 2003).

Cooper (2003) distinguished three areas that have received notable attention within the stream of research into the processes of new venture formation: new venture financing (cf., Bygrave & Timmons, 1992), the roles of new ventures in innovation (Acs & Audretsch, 1990), and the roles of business networks in venturing activity (cf., Larson, 1992; Stuart, 2000). In the following, we discuss a key form of venture financing, *venture capital*, the main topic of this dissertation.

Venture capital, as other types of venture financing, fuels the process of entrepreneurship (Casson, 1990) and can critically facilitate positive outcomes, such as innovation and job creation (Amit et al., 2000; Gompers & Lerner, 2000a; Gompers & Lerner, 2003). Venture capitalists have a number of ways to directly and indirectly promote positive outcomes. In addition to financial resources, venture

capitalists typically provide nonfinancial value-added to their portfolio companies – a role reviewed in detail below in the section "Research on Value-added by Venture Capitalists."

Numerous definitions have been used for venture capital. The U.S. National Venture Capital Association (2002) defined venture capital as "money provided by professionals who invest alongside management in young, rapidly growing companies that have the potential to develop into significant economic contributors." Wright and Robbie (1998) defined venture capital as the investment by professional investors of long-term, unquoted, risk equity finance in new firms where the primary reward is an eventual capital gain, supplemented by dividend yield.

Several authors have defined venture capital only in terms of making financial investments and gaining capital rewards (for a summary of definitions for venture capital, see Maula, 2001). Thus, the notable value-added that venture capitalists bring to their investee ventures (cf., Gorman & Sahlman, 1989; MacMillan et al., 1989; Sapienza, 1992; Sapienza et al., 1996) is not addressed in these definitions.

Gompers and Lerner (2000a: 3-4) suggested a view of venture capital as a process: "Venture capital can be viewed as a cycle that starts with the raising of a venture fund; proceeds through the investing in, monitoring of, and adding value to firms; continues as the venture capitalist exists successful deals and returns capital to their investors; and renews itself with the venture capitalist raising additional funds." This definition takes into account the important role of venture capitalists not only as financial investors, but as value-adding agents (cf., Barney et al., 1996; Gorman and Sahlman 1989; Hellmann and Puri, 2000, 2002; MacMillan et al., 1989; Sapienza, 1992; Sapienza et al., 1996).

As stated in the "Background" section, venture capital is defined in this dissertation as (1) the investment by professional investors of long-term, unquoted, risk equity finance in new firms where the primary reward is an eventual capital gain, supplemented by dividend yield, and (2) the monitoring of the investments and adding value to investee firms.

An important feature of venture capital relates to the organization of investment activity (Sahlman, 1990). Venture capital is typically organized into limited partnerships that govern funds professionally managed by general partners and their associates. The capital is provided by limited partners, who typically are institutional investors. The general partners are compensated from the funds' returns,

and also by a fixed fee on capital under management (Gompers & Lerner, 1999); the limited partners benefit from the rest of the returns. The funds have a limited lifecycle, typically ten years; extensions are often introduced, however (Sahlman, 1990). At the liquidation of investments, funds are returned to limited partners as portfolio firm shares or cash (Gompers & Lerner, 1998).

In the United States, a distinction is made between "venture capital" and "private equity." Private equity refers not only to what we termed venture capital above, but also to acquisitions, buyouts, mezzanine and distressed debt investments, as well as a variety of hybrid financing instruments such as venture factoring and leasing (cf., Gompers & Lerner, 2000a).

2.2 Syndication of Venture Capital Investments

A general definition of a *syndicate* was provided by Wilson (1968: 119) as "a group of individual decision makers who must make a common decision under uncertainty, and who, as a result, will receive jointly a payoff to be shared among them." Syndication is commonplace in both equity and debt financial markets. In these markets, syndicates are groups of investors that make and implement a joint investment decision at the same time (see Wilson, 1968, Seppä, 2003). In venture capital, syndication is typically defined as a joint investment of two or more investors into a single portfolio firm on the same financing round (see Bygrave, 1987; Lerner, 1994). As indicated in the "Background" section, this definition is used in the dissertation. In syndicates, venture capital investors typically work together to provide different kinds of value-added to the venture (Lockett & Wright, 2001), an effect discussed in the next section.

The syndication of venture capital investments has attracted attention from a number of scholars (see Admati & Pfleiderer, 1994; Brander et al., 2002; Bygrave, 1987, 1988; Lerner, 1994; Lockett & Wright, 2001; Manigart et al., 2002a; Moesel et al., 1997; Sorenson & Stuart, 2001). This stream most notably focuses on rationales to syndicate investments and benefits of syndication (see Lerner, 1994; Lockett & Wright, 2001), the structure of syndicates (Wright & Lockett, 2003) and syndication networks (Bygrave, 1987; Sorenson & Stuart, 2001), and the performance of investments and investors (cf., De Clercq & Dimov, 2003; Seppä et al., 2003).

Rationales to syndicate that have been presented in the literature can be classified as follows: (1) increased capability to make accurate investment decisions,

(2) increased capability to add value to investee firms, (3) increased deal-flow, (4) social reasons pertaining to network position, (5) "window dressing," and (6) risk sharing. These are now briefly explained.

Improved decision-making accuracy refers to the assertion that an investment decision shared by several investors is more likely to be a correct decision than that made by a single investor (Sah & Stiglitz, 1986). Value-add is an important feature of venture capitalists, reviewed below in a separate section. Sharing information on potential deals, or "deal-flow," refers to the investment possibilities that a venture capitalist gets to review (see Bygrave, 1987). Venture capitalists will need to have a large set of investment proposals to maximize their chances of finding the best investment targets. "Social reasons" refers to the fact that syndication can reflect venture capitalists' need to elevate and maintain their social status in investment networks (Podolny, 2001). "Window dressing" (Lakonishok et al., 1991; Lerner, 1994) refers to a phenomenon in which a venture capitalist attempts to become established as a more prestigious industry actor by participating in later-round investments, where the probability for the investee firm's success is higher. The expected return, however, is naturally lower. The risk sharing rationale (Markowitz, 1952; cf., Lockett & Wright, 2001) is rather obvious as a potential motivation to syndicate.

In the venture capital syndication literature, Bygrave (1987) found that key determinants of the extent of syndication include innovativeness, technology, stage, and industries in which the venture capitalist was an expert. According to his study, the degree of uncertainty present in the investment explains the extent of networking more than the amount of capital invested. Even though Wilson's (1968) decision-making model predicts that risk sharing is a key motivation for syndication, Bygrave found that the motivation for the firms to syndicate arises primarily from the need to share information, arguing in favor of the resource-dependence theory (Pfeffer & Salancik, 1978) in explaining syndication activity. In his view, venture capital firms exchange information with each other in order to identify promising investment opportunities, to obtain commitments and value-added in governing the ventures, and to legitimize themselves as more renowned investors.

Bygrave (1987) considered industry specialization an important attribute of venture capitalists that entrepreneurs should consider when deciding which venture capitalist they would like to obtain as an investor. He also noted that information is

relayed effectively in venture capitalists' strong collaboration networks, and made the point that entrepreneurs should be conscious of this.

In another paper, Bygrave (1988) further investigated the linkage between the degree of uncertainty and co-investment. He posited that uncertainty is particularly high in investments in ventures with a high level of innovativeness. The results support the view that one reason to syndicate is to facilitate the transmission of information, and that syndication is more common when there is more uncertainty associated with the investment.

Lerner (1994) discussed overcoming informational asymmetries and "window dressing" as rationales of syndication. When there are several parties making an appraisal of each others' willingness to invest in a firm, the decision to invest or not, as stated above, may be superior to that made by only one party (Sah & Stiglitz, 1986). Second, existing investors in a venture, presumed to have superior information on the value of the venture compared to that of the new investors, have an incentive to overstate the venture's value when organizing a round with new investors (see Akerlof, 1970). The only way to avoid this potential adverse selection is for the existing investors to hold their equity share constant (Admati & Pfleiderer, 1994), and as a result, later-round investments have to be syndicated. Third, venture capitalists may syndicate to obtain enhanced reputation of successful exits by participating in later-round joint financings (with lower returns) to merely be able to participate in the forthcoming exit. This is the "window dressing" phenomenon introduced above (cf., Lakonishok et al., 1991).

Lerner (1994) found that experienced venture capitalists primarily syndicate first-round investments with colleagues that have a similar level of experience. According to his results, later-round investments are syndicated with both experienced and less experienced venture investors. He also argued that syndication is, indeed, an important method for avoiding the problem of adverse selection. That is, he argued that syndication is important in avoiding choices other than the best alternatives from investment prospects. The results provided support for the view that the aforementioned rationales are important in syndication. Brander et al. (2002) maintained that the rationale for syndication that other venture capitalists provide complementary skills and knowledge to add value is more powerful than that of improving the selection from the pool of deals.

Lockett and Wright (2001) identified risk sharing as a generally important rationale to syndicate, but noted that in the case of venture capitalists investing in early-stage investments, the resource-based motivations, that is, superior investment selection and nonfinancial value-added, are more important. Manigart et al. (2002a) argued that risk sharing is the most important rationale, but that the propensity to syndicate is higher when the importance of the resource-based motivations is higher. They state that syndication practices are more important in investments into young firms than in investments into more established companies. Results of De Clercq and Dimov (2003) supported financial and informational motivations as rationales for syndication. These results further support the view that entrepreneurs should not consider venture capitalists as a homogenous group in terms of their value-adding capabilities. For scholarly research, the syndication rationales issue appears to present a difficult puzzle.

Taken together, the literature on rationales to syndicate has been rather extensive, but some issues keep employing researchers. Various motivations for syndication have been argued for, presented above as the six rationales. Disparities are clearly present in researchers' thoughts as to which proposed motivations to syndicate are the most important ones to study and in their results on which ones best fit real-life venture capital business.

The other important part of syndication literature pertains to the *social structure of syndication networks*. The social structure influences the flow of information and the propensity of exercising syndication. Sorenson and Stuart (2001) studied patterns of syndication and spatial distribution of venture capital investments in the United States. Their results indicated that geographical borders and centrality in social networks – roughly, the number and quality of relationships in a network – considerably affect venture capitalists' capability to operate (see also Seppä et al., 2003). The effect of network centrality is a basic tenet of economic sociology (Podolny, 1993, 1994), where the quality of a relationship is commonly operationalized by the degree of centrality of the dyad partner. Sorenson and Stuart's results indicate that it is commonplace to facilitate social networks in the venture capital community by syndicating investments. Information is transmitted far less efficiently to geographically distant actors than to proximate ones, but syndication networks can relay information across geographical and industry boundaries that

usually strongly cluster information within them. Syndication thus expands the radius in which social exchange can effectively be conducted.

Sorenson and Stuart found that venture capitalists that occupy central positions in syndication networks more often invest in spatially distant companies. While the most "prestigious" venture capital firms can be taken as being the most central firms (Seppä et al., 2003), this result may imply that if an investment is obtained from far away, it is relatively likely that the investor is a prestigious one (depending on the share of "prestigious" investors from all long-distance investors). A central position in syndication networks is also positively associated with the possibilities of establishing new syndication relationships.

Anand and Piskorski (2001) studied the effects of financial resources and positions in syndication networks on establishing relationships. They found that venture capital firms in central network positions can establish relationships regardless of their financial position. Firms that are peripheral in the networks can only establish relationships if they possess relatively large financial resources. The results imply that centrally positioned venture capitalists can sustain their positions over time.

Wright and Lockett (2003) studied venture capital syndicates viewing them through a lens of interfirm alliances. They shed light on the important issue of managing syndicates from the viewpoints of the lead and non-lead investors. They found that lead investors typically have larger equity stakes and that the syndicated investment agreement enshrines the rights of the participants rather than specifies their behavior. Moreover, in the governance of a syndicate, the lead investor typically has specific powers that are important in ensuing timely decisions. The study raises the issue of non-legal sanctions as key means to mitigate opportunistic behavior by dominant equity holders in alliances generally. Wright and Lockett's work does not incorporate into discussion aspects of cross-border syndication, a limitation explicitly acknowledged.

De Clercq and Dimov (2003) found that the amount of syndication at the initial round of investments is negatively associated with investment *performance*, and suggested that knowledge is relatively tacit in nature (Nonaka, 1994) in early rounds of investment, and thus the involvement of several investors will make productive knowledge exchange more challenging. They also found that the effect of the overall number of investors on investment performance is positive.

Seppä et al. (2003) found that venture capital firms occupying central network positions can increase their "market share" of initial public offerings of portfolio companies in subsequent years. The results support the social structural notion that firms' network positions drive their future positions. Moreover, the study documented that syndication networks are rigid in their changes and barriers to enter them are high.

To sum, the above introduction to literature on motivations to syndicate, the structure of syndicates and syndication networks, and the performance of syndicates offers relevant background knowledge for the study of cross-border venture capital syndication. It does not, however, provide many significant insights for the operating logics of cross-border syndicates and leaves important questions on the dynamics of such syndication untouched. Prior literature on syndication implies that for ventures starting from countries with a limited venture capital market, cross-border investors may often be needed to have central investors, because cross-border investors that invest in far-off ventures may relatively often be those in a central position (Sorenson & Stuart, 2001). Thus, they may also be those with a central position in the future as well (Seppä et al., 2003). Such investors are also likely to be those that have other potent portfolio firms and who, thus, may have learned how to help ventures perform well (Seppä et al., 2003).

While venture capital is a distinct type of investing (see section "Scholarly Venture Capital Discourse within the Entrepreneurship Domain" for a definition of venture capital), and cross-border aspects often bring their own flavor to business, there is reason to believe that new insights into syndication could be obtained by a detailed study of cross-border venture capital.

2.3 Research on Value-added by Venture Capitalists

A large base of literature has been developed since the beginning of the 1990s on the nonfinancial value-added provided by venture capitalists, that is, value-added that is received in addition to financial capital (cf., Barry et al., 1990; Brav & Gompers, 1997; Busenitz et al., 2004; Landström, 1990; MacMillan et al., 1989; Maula, 2001; Megginson & Weiss, 1991; Rosenstein et al., 1993; Sapienza, 1992; Sapienza et al., 1996). Value-added relates to the domains of all empirical essays of this study, most notably those of Essays III and V, which discuss the contributions of a local venture capitalist in attracting cross-border investors and the roles of cross-

border venture capitalists in the internationalization of portfolio firms. To reiterate, value-added by venture capitalists has such generality in its relevance for the study that it will be reviewed as a separate topic in this introductory chapter.

As mentioned above in the chapter, the value-added of venture capitalists can take many forms and is generally one of the key factors that distinguish venture capital from many other types of investments (cf., Gorman & Sahlman, 1989; MacMillan et al., 1989; Maula & Murray, 2001; Mäkelä, 2002; Rosenstein et al., 1993; Sapienza, 1992; Sapienza et al., 1996). Value-added by venture capitalists can occur, among others, in the forms of monitoring performance, industry-specific business expertise, expertise in managing a venture generally, credibility signals, and access to contact networks for recruiting and obtaining investors, lawyers, auditors, investment banking services and industrial partners. Benefits offered by corporate venture capitalists also include those of industry-specific R&D vision and related expertise, as well as the direct provision of technology and sales channels. The corporate venture capitalist may also provide a context for testing and be the first client.

In a stream of literature considering the overall participation and value-added of venture capitalists, Gorman and Sahlman (1989) found that venture capitalists spend somewhat more than a half of their time monitoring the portfolio companies, and they have board seats in about a half of the companies. Venture capitalists spent some 80 hours per year on-site with each company and some 30 hours in frequent telephone conversations concerning the venture. Gorman and Sahlman (1989) also found that venture capitalists were most active in early-round investments. Venture capitalists seemed to have supported the founding about a half of the companies that they monitor. The authors also found that the most usual way to contribute to the venture was to help raise additional funding. Recruiting and strategic analysis were also mentioned as important roles. Operational planning and providing a network of contacts were also listed as contributions of venture capitalists.

When venture capitalists are not satisfied with the progress at the firm, they may replace some key managers. Gorman and Sahlman (1989) documented that venture capitalists do – as perceived in common anecdotal knowledge – consider the management team a vital resource of the firm (see Penrose, 1959). When failure of the firm occurs, they very often view that the management team has the primary blame.

In another influential study, MacMillan et al. (1989) built on Gorman and Sahlman's results (referring to a prior conference presentation by Gorman and Sahlman, 1986). MacMillan et al. used a factor analysis to distill four distinct areas of venture capitalists' involvement: "development and operations," "management selection," "personnel management," and "financial." The explorative results indicate that venture capitalists were most involved in acting as "sounding boards" to the entrepreneurs and, as found by Gorman and Sahlman (1989), in the financial aspects of the ventures, such as obtaining sources of further financing, and monitoring financial performance. The venture capitalists were least involved with some aspects of managing operations such as selecting vendors, developing production techniques, soliciting customers and distributors, and drafting marketing plans.

MacMillan et al. (1989) employed a cluster analysis to study the activity levels of venture capitalists. The analysis resulted in a grouping of venture capitalists in three sets that the authors labeled "laissez faire involvement," "moderate involvement," and "close tracker involvement." The authors plainly concluded that varying involvement levels exist because the investors choose to adopt these different profiles of participation. In summary, the study supports the viewpoint that venture capitalists' involvement levels do have significant variation. While Gorman and Sahlman (1989) reported more activity in the early investment rounds, MacMillan et al. (1989) did not find a correlation between activity and the context.

Sapienza's (1992) results, based on survey and interview data, include that strategy, level of innovation, uncertainty about the environment, and the level of experience of managers affect the value of venture capitalists' value-added. The value of their involvement was greatest in cases where the innovation pursued by the venture was high, contacts between the lead investor and the chief executive of the venture were frequent, communication was open, and conflict was rare between the CEO and the venture capitalists. The stage of the venture and the experience of the CEO were not strongly correlated with the value of involvement. The value of involvement was strongly associated with the performance of the ventures.

Rosenstein (1988) studied board work in venture capital-supported firms. Findings include that the venture board, in which active venture capitalists normally are represented, typically has outsiders rather than acting management in controlling positions and significantly participates in the strategic work of the venture.

Furthermore, the results posit that external board members typically have a close working relationship with the venture management team.

Rosenstein et al. (1993) found that venture capitalists from the most prestigious U.S. venture capital firms were perceived as adding more value than those with a less prestigious affiliation. According to the authors, entrepreneurial firms with prestigious venture capitalists have relatively more venture capitalists on their boards. In practice, the boards of ventures very often include only one venture capitalist from one venture capital firm. The most prestigious investors may be both most willing to syndicate their investments and most able to attract syndication partners.

On average, the CEOs involved in Rosenstein et al.'s (1993) study did not state that they valued venture capitalists' advice any higher than that of other board members. However, CEOs with a prestigious venture capitalist as the lead investor did value the advice from their venture capitalist board members significantly higher than that of other outside board members. Rosenstein et al. concluded that generally, venture capitalists make a "worthwhile but not outstanding contribution" in boards of ventures. This result can be taken to support the notion that there is variation in the level of venture capitalists' value-added.

Barney et al. (1996) found that entrepreneurs with relatively extensive experience value both operational and higher-level advice from venture capitalists less than the more inexperienced entrepreneurs, and that the venture's current performance is not related to the value assigned to investors' advice. Sapienza et al. (1996) found that venture capitalists see strategic involvement, defined as providing financial and business advice, as the most important of their roles. The second most important item was interpersonal roles, defined as acting as a mentor and confidant to the CEOs, and the third most important role was the networking role, that is, contacts to other firms and people.

In a study using European data, Harrison and Mason (1992) found that UK entrepreneurs rate "sounding board" and strategic activities as the most important contributions of venture capitalists, and they are more dependent on their assistance than from that of other investors. A study with survey data from Sweden implied that entrepreneurs rate access to capital, to venture capitalist competence, to networks, and to moral support as most important (Fredriksen et al., 1990).

Hellmann and Puri (2000) found that venture capital financing has an association with a significant reduction in the time required for ventures to bring

products to market. Hellmann and Puri (2002) showed that venture capital financing is related to the degree of professionalization of ventures through a variety of measures.

Taken together, nonfinancial value-added by venture capitalists is an area that has received much attention from several scholars to date. A number of studies have examined this value-added, and some have even questioned the existence of value-added (Rosenstein et al., 1993; Sapienza, 1992), but there is a rather clear picture now that venture capitalists can provide some positive value-added (Sapienza et al., 1996). The literature most notably focuses on charting the different forms and vehicles of value-added and their role in the selection of preference regarding different investors. In summary, the body of literature has been relatively exhaustive and provides strong support for the often-stated anecdotal position that venture capitalists can provide important nonfinancial value-added to their investee ventures.

In this study, the empirical essays investigate the value-added of local venture capitalists in creating cross-border syndicates, examine the impact of cross-border venture capitalists on the internationalization of their portfolio companies, among others, and make contributions to the value-added literature.

2.4 Cross-border Venture Capital

An important definition is restated for this literature review section: in this dissertation, *cross-border venture capital investment* is defined as a venture capital investment that is managed by the venture capitalist from a country different than that of the portfolio firm's headquarters. The country of the headquarters is said to be *domestic* to the firm. Building on this logic, this dissertation refers to *cross-border venture capital syndication* as a venture capital syndicate where not all investors operate from the same country. Investments by multinational venture capital firms that are managed from the investee firm's domestic country, are omitted from the scope of cross-border venture capital investments. Only syndicates with a cross-border investment constitute a cross-border syndicate.

Considering the practical importance of multinational venture capital investing noted above, literature on the cross-border aspects of venture capital finance is remarkably scarce. Academic studies of this very thin stream include those of Meyer and Shao (1995), Cumming (2002), Cumming and MacIntosh (2003), Wright et al. (2002), and Pruthi et al. (2003). These papers are reviewed here.

Meyer and Shao (1995) noted that possibilities to invest across national borders offer venture capitalists more opportunities to diversify their portfolio. They stressed that investing in distant targets may involve notable agency costs for the investor and argue that special funds are formed to manage cross-border venture capital investments. They also suggested that a government-sponsored firm be established to participate in lowering agency costs by offering market-rate financing or guaranteed loans. The authors' approach was a U.S. oriented and emphasized the difficulties that U.S. entrepreneurs may encounter in finding cross-border financiers.

Cumming (2002) found that U.S. venture capitalists use a variety of financing forms when financing Canadian firms, whereas they predominantly use convertible preferred equity within the United States. He suggested that this is attributable to institutional differences between the countries. In continuation, Cumming and MacIntosh (2003) iterated that U.S. venture capitalists' patterns of exit differed from those of their Canadian counterparts, and suggested differences in institutional and legal environments to account for this.

Wright et al. (2002) studied the internationalization of Western venture capitalist activity in India, finding that investment decision-making differs between Indian financiers, cross-border financiers investing in India, and U.S. financiers investing in their home market. Pruthi et al. (2003) studied venture capital in India, showing that cross-border venture capitalists there are more involved on the strategic level and domestic ones on the operational level of steering portfolio firms. The authors pointed out, however, that according to their analysis several of the paper's results may not be valid for geographical generalization across venture capital markets.

In addition to the abovementioned papers that have an academic orientation, an OECD research report (Baygan & Freudenberg, 2000) is also relevant in that it investigated the inflows and outflows of venture capital in OECD countries. It found that venture capital markets tended to be more active in countries where barriers to entrepreneurship were lowest.

In a study relevant to the present dissertation and some potential implications for cross-border investing, also reviewed above, Sorenson and Stuart (2001) illuminated the role of geography and network centrality as highly affecting venture capitalists' capability to obtain information and thus to operate. Even though the study only included U.S. data, it is interesting from the viewpoint of cross-border venture

capital, because it provides this new field with interesting insights from economic sociology.

Addressing venture capital syndication from a sociological viewpoint, Sorenson and Stuart (2001) argued that information is transmitted far less efficiently to geographically distant actors than to proximate ones. To reiterate, Sorenson and Stuart argued that the concentrated flow of information contributes, in effect, to the localization of venture capital investments. They also found that syndication facilitates the diffusion of information across geographical and industry boundaries. They showed that venture capitalists in central network positions have better access to information from distant sources and thus can have a larger radius of investments.

Taken together, the research reviewed above can clearly only scratch the surface of the cross-border aspects of venture capital. Given the contemporary, high-level and practical importance of the cross-border dimension of the industry, increased academic attention is called for. Incorporating the cross-border aspect into investigations of a business phenomenon can introduce a whole new set of important questions, and this should be the case in venture capital, where various issues to study remain.

Questions calling for study after the aforementioned research include, for instance: how are cross-border syndicates with cross-border venture capitalists built; how are geographically and culturally distant investors managed as participants of cross-border syndicates; how does the typical value-added of a cross-border investor differ from that of a domestic one and how does a venture best exploit the resources of a distant investor; which risks, if any, result from the multinational nature of an investment syndicate; how do venture capitalists reciprocate syndication offers in a cross-border environment; what differences are there in how the lead investor is determined in a multinational setting; and what are the different geographical, cultural, and other determinants in the formation and performance of cross-border syndicates. All in all, questions that have vital practical relevance and that nevertheless have received little scholarly attention are abundant only in the cross-border context of venture capital.

The essays of this study importantly build on the various understudied aspects of cross-border venture capital. A research project was launched into cross-border venture capital in 2002, and as a result three essays from it are presented in this doctoral dissertation. These essays are organized around three core questions that are

part of what was outlined above: what is the role of a local venture capital investor in building obtaining cross-border investors, what factors drive investor commitment in cross-border venture capital syndicates, and what roles do cross-border venture capital play in the internationalization of new ventures.

In the future, scholars will see a more saturated field of cross-border venture capital research. A well-developed body of knowledge on the operating dynamics of cross-border syndicates will be one key component of this research field. For its part, this dissertation makes an attempt to open possibilities for continued contributions to this relatively new area of study.

3 SUMMARY OF THE ESSAYS

This section presents a summary of the key results of the five essays. All essays have been prepared to meet the requirements of the specific publications and conferences for which they were intended ¹⁰. All three empirical essays pertain to the field of cross-border venture capital syndication and the effects of investors on portfolio companies' internationalization. All rely mainly on the newness of their research question in their justification of the grounded theory method. In their conclusions they also discuss the implications to both practice and continued scholarly inquiry.

Beyond the issues that unite the three empirical essays, a summary is provided in the following subsections. The two methodology essays, for their part, have much in common, which is reviewed separately below. The presentation and discussion of the theoretical and managerial implications of the essays' results and suggestions for future research are excluded from the summaries but included in the last section of this introductory chapter.

3.1 Grounded Theory in Entrepreneurship Studies: Feasibility of the Method and the Design of Research

Essay I is the first of the twin essays that introduce the grounded theory research process, emphasizing the method's application in entrepreneurship research. The essays' scope is limited to the building of grounded theory via case studies. Introductions to both single case and multiple case designs are included.

The key contributions of the essay are to explicitly locate grounded theory in the field of qualitative research methods, to discuss the several paradigmatic approaches that appear to be possible in using the grounded theory method, and to provide a clear presentation of conducting grounded case research in entrepreneurship from the viewpoint of a selected paradigmatic approach, one of the positivistic paradigms that also has traces of postpositivism. All paradigms that are viewed to have relevance are discussed in detail. An explicit stance is taken in the important definition of case study and its relation to grounded theory. Case study is viewed as a choice of *object of study*, and not a research method. Grounded theory is perceived as a research method. It is noted that the term "case study" is often used even as a general euphemism for "qualitative research."

The essay outlines situations where the grounded theory method is feasible or advantageous. Thereafter, the pre-fieldwork phases of planning and designing the study are reviewed. The next essay introduces the remaining phases of the grounded theory process. Throughout the essay, examples from grounded theory entrepreneurship research are provided to illustrate appropriate uses of the method and areas for improvement.

3.2 The Grounded Theory Method: Field Work, Analysis, and Reaching Results

In Essay II, the discussion on building grounded theory is continued by discussing procedures of field work and data analysis, linking observations from the data and the emerging theoretical framework with prior literature, and formulating propositions as embodiments of the findings.

This essay presents a summary of a survey and analysis of grounded theory papers in entrepreneurship. For this study, more than 200 entrepreneurship papers from 1996–2003 employing the grounded theory method were reviewed, and eight articles from highly regarded publication outlets were selected for detailed study, as noted in the essay's appendix. We present a summary of the analysis in the appendix. The summary introduces a table that covers a broad set of important methodological attributes and choices of the eight papers. As with the first essay, exemplary practices and areas for improvement are reviewed throughout the text, and here, we strongly rely on the detailed analysis as well as the larger review of relevant papers.

Together, the two methodology essays detail the research method used in the remainder of the dissertation. Their contribution is in pointing out exemplary practices for conducting research, alternatives available for research design and areas for further improvement, and in illustrating the use of the method in entrepreneurship research.

3.3 Attracting Cross-border Venture Capital: The Role of a Local Investor

An important issue in the cross-border syndication of venture capital investments is the role of domestic venture capital investors in the formation of multinational syndicates. How do local investors affect obtaining cross-border investors? In the emergence of cross-border venture capital syndicates, local venture

capitalists often enter the venture first, followed by co-investments from cross-border venture capital investors in later rounds.

Essay III relates to local venture capitalists by focusing on the aforementioned role of theirs in the creation of cross-border venture capital syndicates. In particular, it studies how local investors – their actions, knowledge, social capital, and reputation – affect the cross-border investment readiness of the venture, that is, its degree of maturity for receiving cross-border venture capital investments. Social capital, in essence, refers to resources created by contacts between people, companies, or other actors (Nahapiet & Ghoshal, 1998)¹¹.

The essay's resultant model posits that a local venture capital investor has an important role in providing ventures advice on operational management and in contributing social capital and market knowledge in the local environment, market knowledge being a component of what can be termed "local organizing knowledge" (versus "foreign organizing knowledge," which can be needed in internationalization). These roles are often viewed as important contributions of local investors in particular, and the existence of a competent local investor as a provider of these benefits will increase the venture's cross-border investment readiness.

The essay's results suggest that the importance of the local investor's roles is mitigated when the entrepreneurial team possesses strong entrepreneurial experience. The effect of the local investor's knowledge of local markets and market contacts is also mitigated if the home market is not crucial for the growth of the enterprise. Our evidence also suggests that the prominence of the local venture capitalist as a good-quality investor has signaling value to the cross-border venture capitalist about to make an investment decision. Prior entrepreneurial experience of the management team also has a direct positive effect on cross-border investment readiness. Cross-border investment readiness implies that cross-border investments are feasible, and thereby improves the likelihood of such investments occurring. Finally, the international social capital connecting the local investor to cross-border ones facilitates the formation of cross-border investment syndicates.

3.4 Commitment of Venture Capital Investors in Cross-border Syndication Networks

Essay IV develops a model of the factors that influence investor commitment to portfolio firms. Results support the notion having intuitive appeal that changes in

expectations concerning an investee firm's prospects influence investor commitment. If the expected financial returns from the investment decrease, the motivation of the investors to allocate effort and invest more in the development of the venture also decreases. This relationship is moderated by three factors: distance of the investor from the investee, the investor's embeddedness in the co-investors' networks, and the financial significance of the investment.

The distance factor includes dimensions of geographical and cultural remoteness and foreignness in terms of nationality. A large distance separating the investor and the investee appears to increase the sensitivity of investor commitment to changes in expectations. Embeddedness of the investor refers to the frequency and other attributes of the focal investor's associations with venture capitalists and other key business actors operating in the vicinity of the investee firm. Finally, the relative amount of financial investment made seems to be relevant with regard to changes in expectations leading to changes in commitment. If an investment does not represent a great share of the capital under management of a venture capital investor, it appears to be relatively easy to relinquish commitment. The essay's insights are based on the so-called attitudinal and rational aspects of commitment, which are discussed from the viewpoint of commitment theory.

3.5 Cross-border Venture Capital and New Venture Internationalization: An Isomorphism Perspective

Essay V presents a study of ventures that have obtained a cross-border venture capital investor who actively participates in steering the company, and have their primary markets in a foreign country. Resulting propositions suggest that syndicates take on relatively high transaction costs that stem from their association with cross-border venture capitalists. These costs are higher than those resulting from local venture capitalists, as one can predict from anecdotal knowledge or from the transaction cost theory and studies of cultural and geographical effects in business.

Despite the inherent costs, cross-border venture capitalists provide endorsement benefits for ventures, decreasing their investee firms' liabilities of foreignness and increasing their legitimacy in a new market. Endorsement is provided via the venture's association with the investor's name and status. The concept of liabilities of foreignness refers to difficulties experienced by internationalizing

companies abroad. Legitimacy here refers to the degree to which the company is accepted in the new market.

The model holds that cross-border investors can exert isomorphic pressure, legitimizing the venture in markets proximate to the investors. In the essay's context, this means that investors can put pressure on the company to become more similar to its peers in the new market, and this will work to legitimize the venture in the market. Investors can help the venture in the target market by providing international social capital and by relaying business and legal knowledge in the new market ("foreign organizing knowledge"). Alternatively, they may drive the venture to internationalize into an "incorrect" market – a market that has not been recognized as a target market in the venture's internationalization strategy. Obviously, significant costs can potentially be induced if a venture is driven to internationalize its operations into such a market. Whether a cross-border investor has fit with the target foreign market will affect which scenario of the two will occur in the model.

Moreover, the emergent model implies that if the cross-border investor does not exert much isomorphic pressure, its effect will remain on the level of the endorsement benefits and transaction costs. The balance of these two effects again depends on the investor's fit with the target market. In instances where the investor has good fit with the focal market, our results imply that benefits of endorsement are relatively high and will outweigh the higher transaction costs.

4 DISCUSSION AND CONCLUSIONS

In this section, we attempt to provide a somewhat more detailed account of key conclusions than what is possible in the limited space of the essays. We review the combined contributions of the essays to literature and especially to existing theory. We also review practical implications of the study. Finally, we present avenues for continued research. In essence, the practical implications relate to the empirical essays only, and no significant avenues for research were pointed out in the grounded theory essays. Thus, the sections on practical implications and suggestions for further research only apply to the empirical essays.

4.1 Contributions of the Dissertation

4.1.1 Essays on the Grounded Theory Method

This study seeks to contribute to the venture capital field and more broadly to the body of social science literature and theory, and present a detailed review of the research method – grounded theory – thereby providing further contributions. The grounded theory method is presented in detail in the two grounded theory essays, which have a goal to contribute to the method's future use. The use of grounded theory in entrepreneurship research is given special emphasis, from which the exemplar articles are drawn. However, the essay's suggestions can be of use in all other fields of management and organizational research, as well as a number of other social science fields. The following describes how the essays address their objectives by explaining how the grounded theory method can be used in entrepreneurship research.

The grounded theory essays thoroughly position the method in the field of qualitative social science research and present a detailed review of the phases of the grounded theory process. The review of the phases is conducted in a similar manner as those presented in other articles examining the grounded theory process, such as the one by Eisenhardt (1989). The most central references for our essays are works by Eisenhardt (1989), Strauss and Corbin (1998), and Yin (1994). Our work differs from many key papers in that we explicitly recognize that there are several paradigmatic approaches from which grounded theory can be produced (Guba & Lincoln, 1994). The key ones that have been advocated in the literature include the positivistic paradigm (Glaser, 1992), which sometimes takes a more postpositivistic flavor

(Strauss and Corbin, 1994, 1998), and the constructivist paradigm (Charmaz, 2000). All viewpoints have their share of solid support arguments and counterarguments. We explicitly discuss the ontologies and epistemologies of these paradigms in the essays, providing detailed definitions.

In positioning grounded theory, we introduce a rather detailed and stringent framework of dimensions (Denzin & Lincoln, 1994a), along which research methods are located. One of the more specific issues that we touch on is the difference between "case study" and "grounded theory." Case study is a term that has often been used as an euphemism for the entire field of qualitative research (Locke, 2001). While it would be possible to define this term to refer to any selected research strategy employing case empirics, it would seem reasonable to define it as a selection of the *object of study* (Stablein, 1996; Stake, 1994) from which the empirics come. Based on a dedicated discussion in the first grounded theory essay, we adopt this definition for case study, and view grounded theory as a research method (see Denzin and Lincoln, 1994b).

Above, we have discussed our analysis of recent entrepreneurship papers that employ the grounded theory method. Both essays make use of this analysis throughout their reviews of feasibility domains of grounded theory and phases of the process. Contributions from this analysis and its use in the essays are (1) illustrations of situations in entrepreneurship research where the grounded theory method is an appropriate approach and can lead to top-tier publication, (2) pointing out exemplary practices in the various phases of grounded theory research, (3) illustrations of what choices are available for grounded theory authors in different circumstances, and (4) identification of areas where work could be further improved, enabling authors to target their work to even more demanding outlets, and ones that work to improve their standing.

The use of grounded theory-producing case studies appears to be on the increase in entrepreneurship. This trend was also noted by Bergmann Lichtenstein and Brush (2001). For this reason, we expect that a treatment of grounded theory that illustrates the method's uses in entrepreneurship could induce strong demand among readers.

4.1.2 Essays on Cross-border Venture Capital

The three latter essays investigate phenomena in cross-border venture capital investments and syndication, also providing insights into the literature streams of venture capitalists' value-added and the syndication of venture capital investments that were reviewed in an above section. The essays also have broader implications that are described in the next subsection.

The essays represent grounded theory research as performed from the standpoint of positivism, with notable traces of postpositivism in the spirit of Eisenhardt (1989), Strauss and Corbin (1998), Yin (1994), and the two grounded theory essays of the study. The umbrella question of the three essays is "How are cross-border venture capital syndicates formed and held together, and how do the investors of such syndicates affect the internationalization of portfolio companies?".

As stated in the beginning of this chapter, the three essays were specifically steered to address the following more detailed questions: "What is the role of a local venture capital investor in obtaining cross-border venture capital investors?", "What factors drive investor commitment in cross-border venture capital syndicates?" and "What roles do cross-border venture capitalists play regarding the internationalization of new ventures that have their primary markets in a foreign country?". The essays thus contribute to our understanding of interfirm dynamics in the formation of cross-border syndicates, the holding together of such syndicates, and to the effects that cross-border investors of cross-border syndicates have on the internationalization of their portfolio firms.

As grounded theory research from the above paradigm, the essays start with a research question, followed by the authors' application of their prior knowledge of the literature, and directing of the data collection and analysis where useful and interesting inquiry can be made (Eisenhardt, 1989). Literature that is important has been partly identified during the analysis process, as typical in grounded theory research. Consequently, the essays have been steered to emphasize the specific areas in cross-border venture capital where prominent propositions are formed (Eisenhardt, 1989, Strauss and Corbin, 1998).

The *first empirical essay (Essay III)* illustrates phenomena in the formation of cross-border syndicates with an emphasis on the role of a local investor. The main results are that a local venture capitalist can signal (Spence, 1973) the venture's extent of maturity for receiving cross-border investments. This maturity was termed the

venture's *cross-border investment readiness*, and could be viewed as increased legitimacy (Deephouse, 1996) as an investment target for cross-border investors. Previously, investment readiness has been discussed by Mason and Harrison (2001) and Baygan (2003c) in relation to start-ups' maturity for receiving venture capital investments in general.

The local investor sends a good signal (thus providing endorsement, see Stuart et al., 1999) if it is perceived by the cross-border investor to be a good provider of market and legal knowledge (cf., Johanson & Vahlne, 1990) in the "home base" (Kuemmerle, 2002), acting thus as a "sounding board" as documented by MacMillan et al. (1989). The local investor should also be able to provide good social capital (Nahapiet & Ghoshal, 1998) in the local environment to be appreciated by the cross-border investor. A local investor with these capabilities is viewed to have high quality (Gompers, 1996; Megginson & Weiss, 1991) in the eyes of cross-border investors. The dissertation advances the perception of the above effects as *local organizing knowledge* and *local social capital*, respectively (see Johanson & Vahlne, 1990; Yli-Renko et al., 2002). Capability of the venture management (Sapienza, 1992) and relevance of the home market (Kuemmerle, 2002) affect investment readiness via direct and moderation relationships. The international social capital (Yli-Renko et al., 2002) of the local venture capitalist to cross-border investor prospects facilitates the process of investment readiness actually leading to an investment.

Social capital is important for new ventures (Gulati & Higgins, 2003; Hite & Hesterly, 2001; Shane & Cable, 2002) and our results and those of Yli-Renko et al. (2002) support the generalizability of the importance of social capital to the cross-border context. Our results contribute the view that the endorsement from and the contacts of a prominent local (proximate) partner are beneficial for the formation of ties to more distant parties. The results on the importance of endorsement supports the well-documented account of Stuart et al. (1999).

Our results support the view backed by numerous studies that "foreign organizing knowledge," such as perceptions of market opportunities and problems, is important in internationalization (cf., Johanson & Vahlne, 1990). Our results extend the view into venture capital-financed new ventures by suggesting that legal knowledge, in addition to market knowledge, is an important component of the foreign organizing knowledge that venture capitalists can bring. And, in addition to

providing this knowledge, venture capitalists can importantly help provide social capital.

According to our findings, entrepreneurs cannot replace the required components of knowledge by studying books ("objective knowledge") and thus need outside help from people with "experiential knowledge" (Penrose, 1959), provided that they do not have extensive entrepreneurial experience. This finding supports the notion that experiential knowledge (Johanson & Vahlne, 1990) is a very important complement to objective knowledge, that is, knowledge that can be taught (Penrose, 1959).

The *second empirical essay (Essay IV)* studies how cross-border syndicates are kept together. The essay has been steered to the study of investors' commitment. Commitment (Becker, 1960) was identified in our analysis as a key factor influencing the cohesion of cross-border syndicates. The analysis was guided towards the issue of commitment upon finding that some firms in the data appeared to make what we regarded as either surprise changes or surprise inertia in their commitment levels. Lack of commitment, if sensed by potential new investors, may be a detrimental signal of the quality of the venture.

The essay's results are as follows. First, as might be intuitively expected, changes in the expectations regarding the potency of the venture affect investor commitment. This is the main effect of our resultant model. Two key dimensions of expected value are direct financial expectations (return on investment) and expectations that only indirectly bring a financial benefit. These were termed non-financial or strategic expectations and relate to issues such as learning, obtaining technology, or building a distribution network.

In the essay's model, three factors moderate the main effect described above. First, a large distance separating the investor and the investee will increase the main effect. We distinguish between three dimensions of distance: geographic and cultural distance and foreign nationality (Grinblatt & Keloharju, 2001; Kogut & Singh, 1988). Second, embeddedness of the investor in the social context (Granovetter, 1985) of the business actors in geographical vicinity of the investee will decrease the main effect. Third, financial importance of the focal investment to the investor will decrease the main effect.

Our results on commitment support generalization of prior findings on interorganizational commitment to cross-border venture capital investments. For

instance, Cullen et al. (1995) showed a link between the performance of international joint ventures and the commitment of their parent firms.

The result that expectations affect commitment is in line with prior research on venture capital, which argues that it may be purely rational for venture capital investors to terminate investments if the venture is not meeting the milestones or otherwise satisfying the expectations (Guler, 2002; Ruhnka et al., 1992). However, venture capitalists can also escalate commitment, nonrationally abiding by firms that would actually appear to no longer have good prospects (Birmingham et al., 2002; Guler, 2002; Ruhnka et al., 1992). An interesting insight for our results is that venture capitalists appear to take into account more than performance expectations: distance, embeddedness, and financial importance moderate. In other words, investors' commitment seems to be more volatile if they are distant, and less if they are embedded or the investment represents a significant share of their (or their fund's) total portfolio.

The findings related to the moderators expand current knowledge on commitment in venture capital syndicates. In behavioral finance, it has been argued that investors in stock markets favor geographically proximate investment targets (Grinblatt & Keloharju, 2001), and venture capitalists are known to take board seats relatively often from nearby firms compared with more distant ones (Lerner, 1995). Various effects of cultural proximity have been discussed, particularly in the international business literature, with some studies arguing that large cultural distance hinders cross-cultural business interaction (Jemison & Sitkin, 1986), while some argue that distance facilitates such interaction via providing access to complementary sets of routines and repertoires embedded in national culture (Morosini et al., 1998). Findings on embeddedness and financial importance expand our knowledge by illustrating ways in which these factors affect investor commitment in cross-border venture capital.

This study provides support for the generalizability of the insights to the context of cross-border venture capital and presents models that avail themselves to future statistical testing. Our use of the methodological approach of grounded theory has produced models that readily suggest structures that can be used in theory-testing. The essays also provide further insights from the analysis of rich qualitative data. These contributions may prove to be of high value, because it is likely that due to the distinctness of venture capital investing, the prior results listed above are not directly

importable to the venture capital context. It is characterized by factors such as close interacting between the investor and the investee via management participation, providing contacts, and endorsement (Bygrave & Timmons, 1992; Gompers & Lerner, 2000a; Stuart et al., 1999).

Cultural proximity may be much more important to venture capital investing than it is to, for instance, anonymous investing in stock exchange-quoted securities. Embeddedness (Uzzi, 1996, 1997) may be important because reputation (Shane & Cable, 2002) is very important for venture capital firms that need to be centrally positioned in syndication networks to obtain further syndication offers (Anand & Piskorski, 2001; Seppä et al., 2003).

The *third empirical essay (Essay V)* investigates the effects that cross-border venture capitalists have on the internationalization of such portfolio firms with primary markets in foreign locations. Existing research is nonexistent regarding such venture capitalist effects.

In the essay, a cross-border investor's projection of conformational pressure (DiMaggio & Powell, 1983) and its fit with the venture's selected internationalization target market (see Kwok & Reeb, 2000) are identified as important drivers of the outcome of the investor's general effect on internationalization. First, if a venture has a cross-border investor, costs of communications, management, and meetings are relatively high compared to those stemming from local investors. That is, geographical and cultural distance induce transaction costs (Dunning, 1988; Williamson, 1975, 1979). Cross-border investors can, however, provide endorsement (cf., Podolny, 1993, 1994; Stuart et al., 1999) to their portfolio ventures. In the context of investors' internationalization effects, this endorsement appears to be strongest when the investor has a good fit with the target market of internationalization of the venture. Fit here refers to the degree of embeddedness of the investor to the market such that it has good market knowledge and contacts therein. Investors appear to be most fit in markets where they have physical presence, including places from where the focal investment is managed and places from which the investor firm originates.

By exerting conformational pressure, investors can significantly affect ventures, producing an isomorphic effect (DiMaggio & Powell, 1983, Deephouse, 1996) that can institutionalize a portfolio firm in a market where the investor has good fit. Provided that the investor has fit with target internationalization markets of the

venture, the investor can powerfully legitimize the venture, decreasing the liabilities of foreignness (Zaheer, 1995; Zaheer and Mosakowski, 1997) it faces. The provision of contacts, market and legal knowledge, and endorsement are effects that work to decrease the liabilities. If, however, the cross-border investor does not have a good fit with the target internationalization markets of the venture, exerted pressure may drive the internationalization of the company into an incorrect market. The essay's results support the intuitive view that this effect, which counteracts the selected internationalization strategy, can produce significant disadvantages to the development of the venture. The essays' contributions to the sparse literature on cross-border venture capital (Meyer and Shao, 1995; Cumming, 2002; Cumming & MacIntosh, 2003; Wright et al., 2002; Pruthi et al., 2003) can be viewed as important, due to the literature's nonexistent attention to the essays' core issues.

The results of this essay provide support for using the lenses of the network theory of internationalization (Andersen & Buvik, 2002; Johanson & Mattsson, 1988) and the institutional theory to advance current theorizing. Davis et al. (2000) found support for institutional arguments in the context of the choice of international entry modes. The paper by Davis et al. is the one that, according to our knowledge, brings institutional approaches closest to such internationalization discourse that is of relevance to the essay. In other words, there is a large gap to be filled in the intersection of internationalization and investor support when looking at phenomena through the institutionalization lens.

As discussed above, key results regarding internationalization are that outsiders, network members, support internationalization. The "network theory of internationalization" (Johanson & Mattsson, 1988) has taken stands on the effects of companies' network affiliations on the selection of internationalization location (cf., Andersen & Buvik, 2002). According to the network view, firms need to internationalize in order to establish a needed base of relationships for securing externally controlled resources, and for maintaining a beneficial power-dependence relationship (Pfeffer & Salancik, 1978) with proximate actors. Networks can help internationalizing companies by exposing them to opportunities, the benefits of pooled resources, and learning (Chetty & Holm, 2000).

Our results support the further use of the network theory in explaining internationalization behavior. Our basic tenet is different, however, from that of the network theory: our study does not have the premise that firms acquire cross-border

partners because they wish to minimize their dependence of proximate partners. There is, though, support from our data of the intuitive notion that ventures can become less dependent on local venture capitalists when they obtain cross-border investors. For instance, local investors' relative importance in providing endorsement is likely to drop significantly if the local investor does not have significant international prestige. The study's findings discuss how cross-border partners can help ventures internationalize their operations.

It is re-emphasized that there is similarity to the network theory in that dependence of local partners is reduced and cross-border partner can thus offer benefits, the obtaining of which could become more costly if the focal actor did not have access to cross-border partners (because the local partners could then set a higher price for their effort). Once again, there is a caveat to this elaboration: it is in the interest of venture capitalists to help their portfolio ventures and thus, they may not be willing to refrain from contributing to the management of the venture, if they have retained faith in the future prospects of the company.

Several themes unite the empirical essays: distance (with most importantly its geographic and cultural dimensions), embeddedness, endorsement, and the roles of experiential knowledge and social capital in organizing international business.

4.1.3 Broader Implications of the Results on Venture Capital

On a more abstract level, the empirical essays contribute the following insights to international business networks and their internationalization. First, obtaining cross-border interorganizational ties may be facilitated by local affiliate actors that make sure the "home base" is in proper order and can thus support internationalization efforts. As a key effect, local actors signal cross-border ones on the focal actor's maturity for internationalizing its network, providing endorsement if their quality is high. Distant actors are likely to face more severe information asymmetries (Akerlof, 1970), and this creates a relatively high need for signaling.

Once an international interorganizational network has been assembled, commitment is needed to hold the joints together. It appears that distant actors that are not well embedded in social action in the vicinity of the focal actor are more likely to relinquish commitment as a response to declined expectations. To take a reverse angle, proximate actors with a high degree of network-embeddedness may even exhibit escalation of commitment, that is, a nonrational degree of continuing

commitment. Moreover, the economic importance of the bet put on the tie affects the volatility of commitment as a response to changed expectations. These insights on commitment may offer valuable implications for areas such as the management of international joint ventures and alliances and decision-making concerning subsidiaries in multinational corporations.

Finally, we present insights on the effects of an international interorganizational network on the further internationalization of the network. A cross-border network may offer important help or disadvantage for the expansion efforts of the focal actor to new geographic locations. Ties to distant actors may endorse the quality of the focal actor, especially in the case of actors that are about to expand from a location with limited markets. However, such ties are also likely to produce high costs from transacting across geographical and cultural boundaries.

Strong cross-border network partners may induce conformational pressure, pulling the focal actor to expand to areas in their geographical proximity. Such pressure may lead to increased legitimacy in the vicinity of the cross-border actor and can offer substantial benefits in the forms of knowledge and social capital. However, if the location of the cross-border partner is not the place where the focal actors *should* expand its operations, the pressure may lead to very high costs in cases such as firm internationalization, where it is important to strictly follow the optimal pattern for expansion.

4.2 Implications for Practice

The implications of the dissertation for the practice of entrepreneurship and venture capital are numerous. They are now reviewed first from the viewpoint of entrepreneurs, then from the viewpoint of local venture capitalists, and finally from that of cross-border venture capitalists. Overriding themes in the implications are choosing investee ventures, local venture capitalists, or cross-border venture capitalists, and efforts that the different parties can make to develop themselves as attractive investees or investors.

4.2.1 Implications for Entrepreneurs

Local investors are often very important for ventures that need to obtain crossborder venture capital. In building a cross-border syndicate, many ventures require support that only a local venture capitalist can well provide: they need "local organizing knowledge," that is, knowledge of local markets, such as knowledge of opportunities and problems. Local investors are also important in providing local contacts. Whenever the entrepreneurial team does not possess a significantly high level of prior entrepreneurial experience or experiential knowledge of expansion across borders, they may not be able to replace the value offered by local venture capitalists. In addition to local organizing knowledge and contacts, low relevance of the local market is a factor that may lower the benefit stemming from local venture capitalists. Moreover, local investors are important as providers of help in such decisions that are operational, not requiring board meetings, but still requiring assistance and support from a "sounding board," a role well filled by professional venture capitalists especially on early rounds when such advise is most often needed.

Finally, there are some rare ventures that can obtain cross-border venture capital without having a local investor. Entrepreneurs need to be cognizant that their firm might be in such position, if their combination of technology, products, services, markets, and other key factors affecting business is so lucrative that they have this opportunity. At the same time, entrepreneurs need to know that there still may be roles for venture capitalists to fill that are difficult to fill from foreign locations and by foreign people. The "home base" is often important for new ventures because the home market needs to be strong to support international expansion, or the "home base" is just felt as an important launching pad for foreign operations, even if the home market would be negligible. The latter effect may be created by the fact that entrepreneurs are a part of the social networks in the "home base" and entrepreneurs feel that they need some support from the local environment despite the low importance of the local market.

Once the venture has its "home base" in order for international expansion, or if the home base truly is irrelevant to the company, it is ready or mature for receiving cross-border investments in terms of having sufficient local support. At this point, entrepreneurs may crucially benefit from the contacts that their financiers have with cross-border investors. Moreover, in all this, the "signaling" effect of the local investors is important: the quality that cross-border investors associate with the local investors is an important message when cross-border investors are about to make the investment decision. In summary, the local investors should be able to provide as much value-added as possible.

When deciding about which cross-border investor can participate in a syndicate, both entrepreneurs and local investors should be wary. Changes in investors' expectations of a venture's prospects are naturally likely to affect their commitment to developing that venture. Entrepreneurs and local investors should, however, recognize that according to this study's results, some factors affect how expectations drive commitment: the dissertation distilled distance, embeddedness, and financial importance as such factors.

First, a large distance separating the investor from the investee is likely to increase the sensitivity of commitment to changes in expectations. Three dimensions, or components, of distance are relevant: geographic distance, "cultural distance," and foreignness, the last indicating whether the two parties are from different countries.

Second, the sensitivity of commitment to changes in expectations is decreased by the investor's embeddedness to social networks proximate to the investee. This means that if the investor is involved in syndication with other investors from the venture's location, or considering participation in such syndicates, it may not relinquish commitment so easily, because this might be interpreted in the social networks as the cross-border investor being too jumpy or insufficiently mature to commit to sufficient time periods. The role of the local investor is relevant in regard to embeddedness. By just its existence a local investor will increase the embeddedness of a cross-border investor. The cross-border investor may wish to preserve its chances of continued deal-flow from the local investor, and this may lessen the cross-border investors' willingness to relinquish commitment.

Third, the financial importance of the investment to the investor appears to decrease the sensitivity of commitment to changes in expectations. This finding supports earlier results that investors may escalate their commitment: they may irrationally stick to an investment even if its prospects have fallen. The finding here suggests that such escalation is most likely when the share of the focal investment of the portfolio of the investor is high.

In summary, the implications related to holding together a cross-border syndicate are that entrepreneurs should carefully consider whom they accept as a cross-border investor. If the venture management – a central party that is often viewed to have better knowledge of the true potential of their firm than outside investors – is faced by considerable uncertainty about the venture's true prospects, they should try to choose investors whose commitment has a relatively low sensitivity to changes in

expectations. These findings can be applied to local venture capitalists as well. Local investors represent a special case that has a notably small distance to the venture and a notably high level of embeddedness.

The dissertation's results on the effects of cross-border investors on portfolio ventures' internationalization also have implications for the selection of cross-border investors. Both entrepreneurs and local investors again have similar goals: they should try to obtain cross-border investors that can help the venture's internationalization as much as possible. For recognizing which cross-border investors are likely to be best, they should carefully examine the business of the venture and decide upon its internationalization strategy. The study's results strongly suggest that they should investigate objectives particularly in terms of the target markets of internationalization, and whether their new candidates for investors are both willing and able to help them expand there.

Results indicate that cross-border investors are generally most able to help internationalization into markets where they manage the investment. They may also be able to help internationalization to locations where they have other presence, for instance, a U.S. investor that manages a European investment from a European location can be of much help in expansion to the U.S. markets. In summary, it can be recommended that entrepreneurs and local investors accept cross-border venture capitalists that have significant presence in markets that are among the venture's key target internationalization markets. These cross-border venture capitalists can significantly help the expansion effort by providing business and legal knowledge in the foreign market ("foreign organizing knowledge") and contacts therein. This way, they will help the venture to achieve a "legitimate" position in a market in their vicinity – that is, to become accepted by businesses and people there. If this market, however, is not among those markets that are in the best interest of the venture (the investor does not have "fit" in those markets), significant disadvantages will naturally arise to the venture and the entrepreneurs.

The study's findings include that cross-border investors can put significant pressure on ventures to become similar with ventures operating in the same vicinity. This pressure can create the abovementioned effects. Whether the pressure will help or hinder the venture depends on the fit of the investor in the target internationalization markets.

If the cross-border investor does not exert much pressure, there still can be negative and positive effects for the portfolio firm. First, the costs of decision-making, traveling, and communicating are higher with cross-border interactions due to traveling time, time zone effects, and cultural differences. Second, the cross-border investor can, by its name, provide endorsement to the venture especially in its vicinity but also internationally.

Entrepreneurs and local investors should make sure that cross-border investors have appropriate fit and are willing to transform the venture into a format compatible in the target markets. Cross-border investors should be able to provide significant endorsement, "foreign organizing knowledge," and foreign contacts. They should also accommodate and help reduce the negative effects of time zones, traveling time, and cultural issues.

4.2.2 Implications for Local Venture Capitalists

Local venture capitalists need to know how they can contribute to their portfolio companies and syndicates within the context of cross-border venture capital. The account in the above subsection reviewed key benefits that local investors can effect. Investors should recognize that most of their investment prospects are firms that are likely to need a good local investor, but many of them may receive a saturated level of benefit from just one or two local investors. The best ventures stand the best chances for obtaining cross-border venture capital, and may not want a large number of local venture capitalists scattering the ownership of the venture. Thus, it is recommended that local venture capitalists make efforts to be among the first one or two local investors financing the most prominent ventures. What is not so obvious is that they should consider advising entrepreneurs seeking financing to not go about acquiring only cross-border parties as investors, because the abovementioned benefits are troublesome to produce from foreign locations and by foreign people due to the traveling time, time zone, and cultural effects mentioned above.

There are capability areas to which venture capitalists should target significant resources for improvement. When they are local investors to a venture, they should be able to provide the venture with sufficient knowledge of local markets and contacts in the local environment, including customers, technology partners, distributors, lawyers, accounting firms, and financiers. They should also be able to provide the venture with help in certain operational level decisions, that is, such "day-to-day"

decisions that do not require board meetings but still require the experience and expertise of the venture capitalist. Venture capitalists, obviously, should be good new venture developers.

Local venture capitalists need to have a very well-developed contact network of potential cross-border investors. Once their portfolio firm is mature for cross-border investments, they can market the investment to their cross-border network partners, significantly helping the firm stand out when cross-border investors are screening prospects. Finally, reputation is very important to local investors. They should constantly work to develop their level of value-added and "signal" cross-border investors that their level of professionalism in providing that value-added is high.

It was noted in the preceding subsection that both entrepreneurs and local investors should be careful when deciding which cross-border investor can participate in a syndicate. While entrepreneurs should be mindful of these effects, local venture capitalists should be as well. It is also in the local investors' advantage to have a committed cross-border investor in all cases when the focal investor firm wishes to stay committed to an investee venture. Cross-border investors that, according to the model presented in the essays' propositions, are less sensitive in their commitment to changes in expectations and should be chosen if there is considerable uncertainty about the venture's prospects (provided that it is possible to actually choose among cross-border investors). The model can also be applied to obtaining further local investors. The model indicates that such investors typically have a low sensitivity to changes in expectations and are thus relatively "safe" syndication partners.

Regarding the effects of cross-border investors on a portfolio venture's internationalization, entrepreneurs and local investors again have the same objectives that were reviewed above. To sum these up, they should decide on the key parts of the venture's internationalization strategy and choose cross-border investors that are considered to have appropriate fit in a given target internationalization market and willingness to transform the venture into a format compatible with that market. Cross-border venture capitalists should be able to provide significant endorsement, "foreign organizing knowledge," and foreign contacts.

4.2.3 Implications for Cross-border Venture Capitalists

Cross-border venture capitalists need to be cognizant of the benefits that local venture capitalists can bring and of the circumstances in which local investors are most needed. They can prepare for cases where no local investors are present by developing their cross-border and intercultural capabilities so that they can, whenever the need arises, replace as much as possible the help typically provided by a local investor. Supposedly, it is far more difficult for cross-border investors to have all relevant contacts in a foreign venture's "home base" than it is to have some market knowledge there. Continuing, the role of a local investor as provider of "day-to-day" managerial advice is probably the least difficult of a local investor's roles to be filled by a cross-border investor.

Cross-border venture capitalists need to recognize that cross-border investments into firms with no local investors are generally less risky if the entrepreneurial team has extensive entrepreneurial experience and if the "home base" of the venture is not very important. In rare cases, cross-border investors may even wish that there would be no local investors. Such cases may emerge for instance if the venture has technology that is believed to be groundbreaking and should be developed in secrecy and possibly by taking advantage of other technological competences in the cross-border investor's portfolio.

It is recommended that cross-border investors only invest if they perceive a venture as being mature for cross-border investments. Furthermore, cross-border venture capitalists need to develop good contacts to venture capitalists in locations known to have produced potent ventures. This will increase deal-flow.

The implications from the results regarding the holding together of cross-border syndicates for cross-border investors are that, if the cross-border investor perceives relatively high uncertainty about the venture's prospects, even more caution than usual should be exercised in their investment decision-making. This is because the use of staging of investments and other forms of contractual covenants is limited by what is considered appropriate by other participants, and potentially also by the escalation of commitment. Cross-border venture capitalists, as other venture capitalists, need to note that a short distance and social aspects such as embeddedness might make it more difficult to make reinvestment decisions purely on an economic basis.

It is in the interest of cross-border investors that they help their portfolio companies conduct successful internationalization into markets that are optimal as expansion targets. This means that the investors should only invest in ventures whose internationalization they can support. (Remember that according to the scope of the study regarding these results, we discuss investors that actively participate in the management of their portfolio firms.) The results indicate that cross-border investors can provide important support for internationalization to locations from which they manage the investment or to other locations in which they have a presence.

The results suggest that a cross-border investor should not invest in ventures that have their internationalization objectives elsewhere. If they do, they should make every effort to avoid steering the venture incorrectly toward their vicinity – unless, of course, consensus is reached at a later time that the location has become a beneficial internationalization target. Cross-border investors should be prepared to transform the venture into a format that is optimal for operating in the internationalization market. They should actively provide business and legal knowledge and contacts in the market.

4.3 Limitations, Quality, and Avenues for Further Research

The results of this dissertation suggest a number of pointers for continued research into cross-border venture capital and some other areas. Major avenues are briefly presented for the venture capital context and then for the broader domain of research in management and organizations. In the beginning, limitations are discussed and connected to the suggestions for further research to address the implications stemming from the limitations. In relation to these, we address the study's quality via a validity and reliability analysis.

4.3.1 Limitations of the Study and Validity and Reliability Analysis

A key limitation of the dissertation is that it used data from ventures that have started in Finland – a country with a relatively small venture capital market that is not nearly as mature as those of, for instance, the United States or the United Kingdom, and one with comparatively small markets for new technology products and related services. While prior comparative research testifies to the assertion that the operating logic of venture capitalists may be rather similar across countries (Manigart et al., 2002a; Sapienza et al., 1996), it can still be argued that countries with small venture

capital markets may be substantially different from others in terms of, for instance, the supply of venture capital (see the OECD reports by Baygan: 2003a, 2003b, 2003c, 2003e, 2003g). Thus, market maturity is a key dimension for which the domain of generalizability should be discussed. Note, however, that some of the results of the dissertation come from papers that take into account the difference in venture capital markets in their scope and primarily suggest generalizations to similar markets.

Scholars should also investigate possibilities to generalize across topical boundaries, meaning the external validity of the results in closely related international, interorganizational business collaboration, such as the management of international joint ventures (Cullen et al., 1995), international alliances (cf., Glaister & Buckley, 1999) and decision-making concerning subsidiaries in multinational corporations (cf., Birkinshaw, 1997). Testing across topics could critically help establish the significance of the study's theoretical implications, which are discussed in more detail below.

The abovementioned concerns pertain to external validity of the results in other geographical domains and domains of academic discourse than to the ones directly investigated in this study using its data. Other important factors of quality of a grounded theory study are the construct and internal validity and reliability (Eisenhardt, 1989; Yin, 1994: 32-38), which are discussed in more detail in the essays.

First, construct validity refers to the establishment of appropriate operational measures for the concepts studied. We used multiple sources of evidence and asked for comments from multiple researchers. While the author's contribution to the conduct of this study was clearly most dominant, there was another researcher involved to a large extent in the lengthy and laborious process leading from the start of research to deriving the propositions. However, the constructs of investment readiness in Essay III and distance in Essay IV may embody challenges for construct validity: In the case of investment readiness, we initially expected that it would difficult to get reliable answers from our respondents, and, indeed, when inquiring about the matter, we received lots of very positive appraisals also with companies with whom, according to our knowledge, prospects were not so high. Our evaluation of investment readiness hence is necessarily much dependent of our ability to be as objective as possible in our judgment. In the case of distance, challenges to validity can be induced by the fact that different distance measures that could be used in a

study such as this one are not greatly comparable with each other and it is, for instance, difficult to construct a summary attribute for "distance" that would constitute an appropriate operational measure for the intended concept. However, these two issues appear to be only areas of some difficulty with significance for the dissertation. Thus, our conception is that the construct validity of the study is high (see Yin, 1994: 32-35, 98).

Second, internal validity refers to the establishment of a causal relationship where certain conditions are shown to lead to others. The process of iterative rotation among data, literature, and the emerging theory (Eisenhardt, 1989; Yin, 1994) was very laborious and included a number of iteration rounds. We used a number of initial models and tabular displays (Miles & Huberman, 1994) in building explanations during our analysis. This process called for by Eisenhardt (1989) includes what Yin (1994: 106-110) introduced as matching evidence with propositions. In summary, we believe that the study has high internal validity (Yin, 1994: 32-35).

Third, external validity refers to the domain into which the results can be generalized. Replication (Eisenhardt, 1989; Yin, 1994) is the key logic with which external validity can be argued to exist in the results of a multiple case study. We believe that our rich data and in-depth analysis afforded strength to our results. The key way of generalizing from case studies is that of analytic generalization based on in-depth analysis of cases sampled in a theoretical – that is, purposeful – manner (Yin, 1994). Our theoretical sampling was, in our view, successful in that we had good variation in our data regarding the key dimensions and, generally speaking, we had rich data from the cases. As a result, we have belief in the external validity of the results (Yin, 1994: 32-36) to the domain suggested in the essay: cross-border venture capital and the internationalization of portfolio firms originating from countries with small markets for venture capital and their products and services. We believe that in addition, there results can have external validity in other venture capital domains or in those of other international interorganizational networks. However, due to the fact that all data were from Finland-origin companies, we do not have a strong base for suggesting generalizations to other kinds of countries than those with small markets. Along with other issues of research quality, the one of generalizability is discussed in more detail in the essays.

Fourth, reliability refers to the possibility to reobtain the results of a study by repeating it. Having reliability in mind, we have followed the practice of top papers

that employ grounded theory or a similar method (Amit & Zott, 2001; Birkinshaw, 1997; Brown & Eisenhardt, 1997; Edmondson et al., 2001; Eisenhardt & Bourgeois, 1988; Uzzi, 1997) and presented a full-length, detailed account of how we designed and conducted the study. This is beneficial for building reliability (Yin, 1994: 32-34, 36-38) and consequently, we believe that the study has high reliability.

Taken together, it is our conclusion that we have managed to carry out a research process whose initial design and stringent focus on a systematic and analytical execution have allowed taking substantial advantage of the benefits that the grounded theory method can offer.

4.3.2 *Pointers for Further Research*

To begin, a general and relatively obvious suggestion for all results is that future research could use statistical large-scale testing of the study's propositions, which should be well testable, provided that surveys or databases can provide the data and that measurement issues can be resolved. A key task for statistical testing following a grounded theory study is to thoroughly establish the domain into which the results can be generalized. Note, however, that it is not our purpose to belittle grounded theory research: we believe that generalizations can be suggested directly from a grounded theory study and that such research should be judged on its own merit (see Dougherty, 2002).

To continue, future studies should thoroughly investigate the issue of when can local investors be sufficient for a venture that aims for cross-border growth. For instance, are significantly prestigious local venture capitalists from countries of large and established venture capital markets sufficient for the internationalization of their portfolio companies? And if a cross-border investor still appears to be needed in such a case, how easy or difficult it is for top venture capitalists to obtain an appropriate cross-border investor from the optimal location? Other questions include: under which circumstances and how can cross-border investors provide the help that the local could best give, and to what extent can they do that? While the study's results hold that investors can best provide "foreign organizing knowledge" (cf., Johanson & Vahlne, 1990) in their vicinity, can global venture capital firms cover markets in which they do not have a better presence than others? For instance, if they have presence in all surrounding locations, their social embeddedness (Granovetter, 1985) could "reach" a location with no presence.

The possibilities of entrepreneurs to exploit the social capital (Nahapiet & Ghoshal, 1998) of network partners other than venture capitalists in investor acquisition and internationalization should be studied. Effects of social embeddedness should be studied in more detail within the context of entrepreneurs' and venture capitalists' networking (cf., Aldrich & Zimmer, 1986; Anand & Piskorski, 2001; Steier & Greenwood, 1995). Also important would be a detailed study into what exactly are the dynamics in the process of a cross-border network partner decreasing the liabilities of foreignness (Zaheer, 1995) faced by its internationalizing network partner. For instance, which kinds of embeddedness in the new markets' social networks does the internationalizing party gain in the long term as a result of the increased legitimacy (Deephouse, 1996) in the new market? Do venture capitalists help most in establishing a legitimate position in the eyes of that market's other venture capitalists, or do they more greatly help via influencing the views of customers in the market?

A more detailed account would be needed on the geographical distribution of the endorsement (Stuart et al., 1999) provided by cross-border investors. Our results suggest that endorsement is strongest in the vicinity of the investor. Which kinds of venture investors can provide significant endorsement only in their close vicinity, and how is the endorsement of others spread across geographical boundaries? Moreover, the effects of different dimensions of distance – geographical, cultural, and perhaps "psychic" distance and foreign nationality (Grinblatt & Keloharju, 2001; Kogut & Singh, 1988; Johanson & Wiedersheim-Paul, 1975) should be studied with a large-scale statistical inquiry that could provide important insights into these dimensions' effects on new venture internationalization behavior. Such study could provide both an illuminating description and in-depth analysis of the effects of venture capitalists.

Broader theoretical implications of the study could be further investigated, and such research could also involve detailed studies of the propositions and models of this dissertation in the field of venture capital. A number of suggestions are made from the viewpoint of international interorganizational relationships in general. For instance, endorsement effects of various kinds of affiliates of new ventures should be studied within a cross-border context, as should the capabilities of the various affiliates of providing the venture with "foreign organizing knowledge." In addition to venture capitalists, business organizations such as law firms, investment banking firms, consulting firms, accounting firms, and alliance partners can be important to

new ventures as network partners (Gompers & Lerner, 2000a), potentially providing knowledge of foreign markets, and possibly social capital. Inquiry into these effects could produce a more holistic view of the effects of a firm's networks on its internationalization, perhaps providing new viewpoints on the network approach to internationalization (Johanson & Mattsson, 1988). Such view would pivotally help in establishing the domain of external validity of the results presented in this dissertation.

The effects of local partners' international social capital (Yli-Renko et al., 2002) on their endorsement capabilities could be studied. Moreover, the effects of cross-border affiliates' local social capital in helping the focal firm establish presence on foreign markets and possibilities of using this social capital to produce international social capital for the internationalizing actor could be investigated to strengthen the evolving research stream on international social capital.

Regarding the commitment of actors (Becker, 1960) in cross-border networks, the roles that distance, embeddedness, and economic importance of the focal relationship should be studied. For instance, a detailed investigation into how cultural distance affects events in different kinds of syndicates could potentially offer interesting insights. Other factors could be incorporated in, for instance, a statistical study to investigate whether they have an effect, and to study the external validity of our model in cross-border venture capital, which has the aforementioned three moderators to the effect of expectation changes on commitment. The relevance of the different factors should be separately studied for different kinds of network partners, including affiliates such as alliance partners, financiers, customers, and investment banks.

The use of institutional theory (cf., DiMaggio & Powell, 1983) is advanced for research investigating the internationalization behavior of firms. In particular, more thorough study is needed into which of the various network actors can exert isomorphic pressure and under which circumstances are they likely to do so. Finally, a large-scale study is needed on the institutionalizing effects (Davis et al., 2000) on the internationalization patterns of firms (Johanson & Vahlne, 1977, 1990; Luostarinen, 1979). This could enable a broader insight into isomorphic pressure's effects on entry modes, target country patterns and other dimensions of internationalization behavior (cf., Johanson & Vahlne, 1977, 1990; Luostarinen, 1979).

¹ In the entrepreneurship and management stream of venture capital, the venture capital investment process was studied by, for instance, Birmingham et al. (2002); MacMillan et al. (1985); MacMillan et al. (1987); Muzyka et al. (1996); Shane and Cable (2002); Shepherd & Zacharakis (2002); Steier & Greenwood (1995); Tyebjee and Bruno (1984); Zacharakis & Meyer (1998, 2000); and Zacharakis & Shepherd (2001). The syndication of venture capital investments was studied by Brander et al. (2002); Bygrave (1987, 1988); De Clercq & Dimov (2003); Lockett & Wright (2001); Manigart et al. (2002a); and Wright & Lockett (2003). Value-added by venture capitalists was studied by Barney et al. (1996); Busenitz et al. (2004); Gorman & Sahlman (1989); Higashide & Birley (2000); MacMillan et al. (1989); Rosenstein et al. (1993); Sapienza (1992); and Sapienza et al. (1996). Crossborder venture capital or related issues were studied by Pruthi et al. (2003) and Wright et al. (2002). The relationship between the venture capitalist and limited partners was studied by Gifford (1997). Risk and return and valuation in venture capital were studied by Bowden (1994); Manigart et al. (2002b); and Ruhnka & Young (1991). Certification by venture capitalists and venture capitalist quality and reputation were studied by Amit et al. (1998). Control, governance, contracts, and the relationship between the venture capitalist and the entrepreneur were studied by Cumming (2000); Fiet (1995); Fried et al. (1998); Higashide & Birley (2002); Ruhnka & Young (1987); Sapienza & Gupta (1994); Sapienza & Korsgaard (1996); Sapienza et al. (2000); and Yoshikawa et al. (2004). The performance of venture capital backed companies was studied by De Clercq (2003) and Ruhnka et al. (1992). The performance of venture capital firms was studied by Bygrave (1989). Corporate venture capital was studied by Maula (2001); Maula and Murray (2001); Siegel et al. (1988); and Sykes (1990). Informal venture capital was studied by Mason and Harrison (1997, 2000). Public policy aspects were studied by Mason and Harrison (2001) and Timmons and Bygrave (1986).

² In the financial economics stream of venture capital, the venture capital investment process was studied by, for instance, Fried and Hisrich (1994); Gompers (1995); and Sahlman (1990). The syndication of venture capital investments was studied by Lerner (1994). Value-added by venture capitalists was studied by Gompers and Lerner (2000c) and Hellmann & Puri (2000, 2002). Crossborder venture capital or related issues were studied by Meyer and Shao (1995). The relationship between the venture capitalist and limited partners was studied by Black and Gilson (1998); Gompers and Lerner (1996, 1999); and Sahlman (1990). Risk and return and valuation in venture capital were studied by Cochrane (2001) and Gompers and Lerner (1997, 2000b, 2000c). Certification by venture capitalists and venture capitalist quality and reputation were studied by Barry et al. (1990); Gompers (1996); Gompers and Lerner (1998); and Megginson & Weiss (1991). Control, governance, contracts, and the relationship between the venture capitalist and the entrepreneur were studied by Admati & Pfleiderer (1994); Bergemann & Hege (1998); Hellmann (1998); Hsu (2004); Kirilenko (2001); Lerner (1995); Trester (1998); and Sahlman (1990). The performance of venture capital backed companies was studied by Brav & Gompers (1997). The performance of venture capital firms was studied by Cochrane (2001). Initial public offerings-related questions of venture capital backed firms were studied by Barry et al. (1990); Gompers (1996); Gompers and Lerner (1998); and Megginson & Weiss (1991). Corporate venture capital was studied by Gompers and Lerner (2000c). Public policy aspects were studied by Kortum and Lerner (2000).

In sociology, papers by Anand and Piskorski (2001) and Sorenson and Stuart (2001) relate to venture capital syndication; those of Podolny (2001) and Podolny and Feldman (1997) to venture capitalist prominence regarding network positions; and those of Stuart et al. (1999) to certification (endorsement) and initial public offerings. See Seppä (2003) for another classification of research on management-, economics-, and sociology-based approaches to the study of venture capital, which was of help in producing ours.

⁴ Examples of pointers of improvement in grounded theory research that have been taken into account in the empirical essays of this dissertation include the following. The research question is explicitly stated, justification for the grounded theory method has been introduced in detail, evidence source triangulation has been employed, advanced techniques of tabular displays are taken advantage of in the presentation, and sampling conducted in the spirit of appropriate theoretical sampling. Propositions are explicitly stated, and the overall structure of the reports has been designed with care. Several measures have been taken to maximize the quality of the research, and these are reported in the 'Methods' sections of the essays and in a dedicated section in the end of this introductory chapter. Following the practice of many top-tier grounded theory papers, the essays present a detailed account of the conduct of the research, using some length for its presentation. As the methods essays state, such account is often hoped for from qualitative research and improves reliability.

⁵ This essay is under second round review for publication in: *Handbook of Qualitative* Research Methods in Entrepreneurship, Helle Neergaard and John Parm Ulhøi (eds), Edward Elgar, forthcoming in 2005. An original single paper on the grounded theory process was redesigned into a format of two full-length chapters due to a request from the editors. This essay has appeared in the working paper series of the Software Business and Engineering Institute, Helsinki University of Technology.

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This essay has been submitted to *Venture Capital*. A prior version was presented at the Academy of Management Meeting 2003, Seattle, Washington, Entrepreneurship Division. The essay has appeared in the working paper series of the Software Business and Engineering Institute, Helsinki

University of Technology.

This essay has been submitted to Entrepreneurship Theory and Practice and the Entrepreneurship Research Workshop of the University of Nottingham Institute for Enterprise and Innovation. A previous version of the essay will be presented in the competitive paper series of the 2004 Academy of International Business Meeting, Stockholm. Another prior version was presented at the Doctoral Consortium of the 2003 Academy of Management Meeting, Seattle, Washington, Entrepreneurship Division. The essay has appeared in the working paper series of the Software Business and Engineering Institute, Helsinki University of Technology.

⁹ I plan to submit this essay to *Journal of International Entrepreneurship*. A previous version of the essay will be presented in the competitive paper series of the 2004 Academy of International Business Meeting, Stockholm. This essay has appeared in the working paper series of the Software Business and Engineering Institute, Helsinki University of Technology.

¹⁰ For instance, the two methodology essays are both expected to touch certain pre-specified issues within the scope of grounded theory research, but the requirements of the intended handbook publication, such as requirements set by the Editors due to the scopes of other chapters of the handbook, limit what can be discussed in the papers. For this reason, this introductory chapter of the dissertation presents the few remarks that we think will bring about enhanced cohesion.

¹¹ The concept of social capital is about who or which entities an actor can reach and how, which assets are created via relationship, and which resources provide shared meanings among actors (Nahapiet & Ghoshal, 1998). That is, in essence, social capital refers to the resources that are created by contacts between actors (Nahapiet & Ghoshal, 1998).

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