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CROSS-BORDER VENTURE CAPITAL INVESTMENT DECISION MAKING

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1 INTRODUCTION

This chapter introduces the topic and the questions surrounding it. First a small introduction to the study is presented. Then research questions and the objective of this study are defined. Finally, research methods of this study and the structure of this paper are described.

1.1 Introduction to the topic

Venture capital firms are financial intermediaries who raise money from investors and make equity investments in new, usually high-risk high-reward companies with immense growth potential (Tyebjee & Bruno 1984, Gompers & Lerner 1998a, Black & Gilson 1998). These intermediaries have been studied from various different angles and viewpoints (See e.g. Bygrave & Timmons 1992, Gompers & Lerner 2004), but the current literature lacks a study that merges together all the main factors behind venture capitalists' investment decisions, especially in an international context. Thus this study aims to shed light to define the factors that influence cross-border venture capital investment decision making and explore how they actually do influence cross-border investment decision making. The study focuses on an international context aiming to take no account to specific countries, but due to the dominance of the US focused research, a relatively vast amount of research discussed in this study focuses on the US - cross-border venture capital activities. However, European countries are also noted in the research this study discusses, implying that countries from other continents might not be as represented in this study as some others are.

The whole venture capital industry and venture capitalists originate to the year 1957, when American Research & Development (ARD) Company invested to a company founded by four MIT graduate students (Bygrave & Timmons 1992: 1–2, Gompers & Lerner 1998a). ARD was the first modern venture capital firm, which was formed as early as in 1946 (Gompers & Lerner 1998a, Jeng & Wells 2000). According to Bygrave and Timmons (1992: 1), by 1971 ARDs investment of 77,000 USD had grown to comprise 355 million USD in common stock.

Other investment examples that were greatly involved in the evolution of the venture capital industry ought to be noted as well: in 1975 Arthur Rock invested 1.5 million USD to Apple Inc. in search of concepts that will change the way people live and work (Bygrave & Timmons 1992: 2). At Apple's first public offering, that investment was valued at 100 million USD (Bygrave & Timmons 1992: 2). Federal Express received an investment of 25 million USD and in its first listing this investment was valued at 1.2 billion USD (Bygrave & Timmons 1992: 2). Both of these examples have changed the way we live and work in their own way, Apple through world-changing technology and Federal Express through dazzling logistics such as overnight delivery.

These legend-like companies have been followed with other great stories such as Sun Microsystems, Compaq Computer Corporation and hundreds of others (Bygrave & Timmons 1992: 2, Jeng & Wells 2000). According to Bygrave and Timmons (1992: 2) all of the stories mentioned above have one thing in common: venture capital, which they have obtained in early stages of their venture life. These companies have later been noted for their value creation through technological innovations and entrepreneurial ingenuity (Bygrave & Timmons 1992: 2). Thus, venture capital has for decades been in the center of forming new technological and non-technological innovations, as well as completely new markets and industries.

Sorenson and Stuart (2001) present that venture capital firms have been critical catalysts in the evolution of various new high-tech industries. Venture capital firms act as brokers between investors and entrepreneurs (Sorenson & Stuart 2001), meaning that they raise funds from institutional investors and rich individuals and spread these funds across a variety of usually new, high risk and potentially high reward ventures started by entrepreneurs. According to Gompers and Lerner (1998a), Jeng and Wells (2000), Stuart and Sorenson (2003) and Guler and Guillén (2010), the exit for a venture capital is often created by an initial public offering (IPO) for the venture, which creates pressure for the venture capital to succeed in its venture investments.

Venture capitalists have also begun to invest more and more internationally, across borders (Guler & Guillén 2010, Schertler & Tykvová 2010, Aizenman & Kendall 2011, Schertler & Tykvová 2012, Li & Zahra, 2012). According to Sorenson and Stuart (2001) however, most venture capitalists still tend to pursue very locally

centralized investment patterns, meaning that geographically the ventures invested in are still usually nearby the venture capital firm. Sorenson and Stuart (2001) explain this pattern with pre-investment activities such as the evaluation process, and post-investment activities such as monitoring, which both cost the venture capitalist tremendous amounts of time (Gompers & Lerner 1998a, Jeng & Wells 2000, Sorenson & Stuart 2001). However, the trend of investing venture capital across borders will keep growing, when venture capital firms start recognizing the benefits that can be gained with also distributing investments abroad (Mäkelä & Maula 2008).

The internationalization of venture capital firms arises questions, which this study aims to answer. Studies that investigate cross-border venture capital investment decision making from the venture capitalists perspective have been conducted (e.g. Schertler & Tykvová 2010, Guler & Guillén 2010, Aizenman & Kendall 2011, Schertler & Tykvová 2012), but no studies combining the main factors that influence the cross-border venture capital decision making were found when the research for this study began. According to Mäkelä and Maula (2008), little is known about what factors influence venture capital firms' cross-border investment decisions. Therefore, while constantly more investments are made by venture capitalists across national borders (Mäkelä & Maula 2008), it is important to explore the main factors influencing the decision making process with a multidimensional perspective.

1.2 Research questions and objectives

This research intends to study the factors that influence cross-border venture capital investment decision making. Studies regarding factors that influence either cross-border investments or investment decision making in venture capital organizations have been conducted, but current research presents a gap in the study which combines all of these factors together. Therefore, the research question aimed to answer in this study is as follows:

→ *What factors influence cross-border venture capital investment decisions?*

An additional sub question is also presented, aiming to answer how these factors influence cross-border investment decisions. This question is chosen to be answered, to more thoroughly understand the factors behind these investment decisions:

→ *How do the factors that influence cross-border venture capital investment decisions actually influence these decisions?*

1.3 Research methods

This study is conducted by reviewing existing literature. A literature review is chosen mainly because of scarce resources, which made gathering data for a further empirical analysis an incapable option. Therefore, this study is conducted strictly by analyzing existing literature and articles related to the topic.

However, articles have been analyzed and reviewed from a multidimensional perspective exploring both, most-known studies related to the topic as well as more practical empirical studies aiming to answer a more specific question related to the topic. This multidimensional perspective is taken when reviewing the literature in aim to ensure validity of this study and the answers it provides.

Despite the multidimensional perspective, articles discussed in this study have been evaluated strictly before choosing to be presented in this study. Articles that do not specifically provide more insights to the research questions presented have been marked out from this study. This aware choice has been made in margins of the page limit given as well as to ensure a more penetrating analysis to the aspects which are most relevant to the topic. More profound analysis also helps to more deeply understand the topic and the factors behind cross-border venture capital investment decision making.

1.4 Structure of the paper

The rest of the paper is structured as follows: chapter 2 explains venture capital organizations in general. After this, chapter 2 aims to describe why venture capital is a catalyst for technological development and an elaborator of new industries and

markets. The significance of venture capital is demonstrated by describing the effects venture capital has on employment and on the overall economy of a nation.

Chapter 3 aims to shed light firstly to the phenomenon of cross-border venture capital, secondly to the decision making behind venture capital investments and thirdly to the factors that influence cross-border venture capital investment decision making. Chapter 3 is structured to subchapters, in which the first subchapter intends to explain the cross-border venture capital phenomenon in general and explicate why cross-border venture capital investments are made. The following subchapters aim to profoundly review and analyze one by one the factors affecting cross-border venture capital investment decision making.

Chapter 4 concludes this paper, giving conclusions on the theoretical findings of this study. Secondly, chapter 4 presents the managerial implications of this study. Finally, the limitations of this study and areas for future research are presented in chapter 4.

2 VENTURE CAPITAL

This chapter is meant to shed light to the concept of venture capital, as well as to give the reader an explanation for why venture capital exists. The chapter is structured as follows: First, venture capital organizations are defined. Second, the chapter argues the importance of venture capital in terms of creating innovation, economic growth and new employment.

2.1 Venture capital organizations

Venture capital firms are financial intermediaries who raise money from investors and make equity investments in new, usually high-risk high-reward companies with immense growth potential (Tyebjee & Bruno 1984, Gompers & Lerner 1998a, Black & Gilson 1998). These companies are often small, rapidly growing high-technology companies that lack tangible assets and cash flow, but have potential for high growth and great profits (Black & Gilson 1998, Fenn & Liang 1998, Jeng & Wells 2000). According to Black and Gilson (1998), new ventures often need to obtain capital in the form of equity rather than debt because of the nature of their business. Early stage companies require great amounts of cash in their early stages to finance their growth, leaving debt-based finance inappropriate as it ties cash flows of the firm to other sources (Jeng & Wells 2000). Lerner (1995) argues that even in countries such as Germany where banks can hold equity in firms, they find it difficult to finance early stage venture firms.

Black and Gilson (1998) argue, that venture capital investors specialize in providing ventures a combination of financial capital, monitoring and advisory services and also reputational capital, which means the venture capitalist's ability to give the venture credibility within third parties. Jeng and Wells (2000) define that venture capital cover three types of investing: seed, startup and expansion investment, excluding buyout investments. Investments in seed and startup stages are often described mutually as early stage investments (Jeng & Wells 2000).

Hellman and Puri (2000) characterize venture capitalists as full-time professional investors who invest for their partnership funds. According to Hellman and Puri

(2000), venture capital firms tend to follow closely the technological and market developments of their competence to stay in the deal flow and to be able to make knowledgeable investment decisions. Fenn and Liang (1998) describe venture capital firms by quoting a venture capital database company VentureOne, located in San Francisco: “Professional, institutional venture capital limited partnerships generally managing over 20 million USD in assets making investments in privately held companies with a technological or retail/consumer basis.”

Venture capitalists often act as active investors, meaning that after investing to a venture they tend to monitor the progress of the firm and its’ strategic and investment decisions, as well as sit in the board of directors and issue further financing based on the completion of milestones (Fried & Hisrich 1994, Gompers & Lerner 1998a, Jeng & Wells 2000, Sorenson & Stuart 2001, Mäkelä & Maula 2008). Venture capitalists do not take part in the day to day management of their ventures, but they do embrace an active monitoring role in the venture (Wright & Lockett 2003). Venture capital firms tend to have more control over the venture than pure financial investors (Lerner 1995, Gompers & Lerner 1998a, Strömberg, 2009, Guler & Guillén 2010) and they often preserve important rights that allow them to interfere its’ ventures operations if necessary (Gompers & Lerner 1998a). According to Fried and Hisrich (1994), venture capitalists also act as producers of information, while gathering different kinds of information to base their initial investment decisions on.

Venture capital firms often supply their ventures also with other resources, such as access to consultants, investment bankers, lawyers and marketing experts (Gompers & Lerner 1998a, Hirukawa et al. 2011). Lerner (1995), Hellman and Puri (2000) and Strömberg (2009) also argue that venture capitalists are involved in their ventures providing them with valuable support and governance such as mentoring, strategic advice, monitoring, providing corporate governance, professionalization of the company and by recruiting senior management. This is also backed by Sorenson and Stuart (2001) and Guler and Guillén (2010), who present that venture capital firms tend to provide the venture organizational, managerial, industry and technology related expertise.

Hirukawa et al. (2011) argue, that the expertise venture capital firms provide to their ventures may be very valuable to new companies whose assets are typically not as extensive, as what the venture capitalists can offer them. According to Hellman and Puri (2000), ventures backed with venture capital can deliver their product(s) to the market faster than non-venture backed companies, which implicates that venture capital firms can aid new firms with marketing channels and customer relationship building. Also Cumming and Macintosh (2006) present that venture capitalists affect their ventures in ways such as influencing product market strategies. Aizenman and Kendall (2011) and Strömberg (2009) argue that venture capital directed investment may be influential especially in the innovation process of new firms.

Venture capitalists may liquidate their position in the ventures they have invested in by selling shares on the open market and then paying those yields to the investors in cash (Gompers & Lerner 1998b). Lerner (1994) and Gompers and Lerner (1998b) present, that venture capital firms tend to however make distributions of shares to investors in the venture capital fund. Venture capital funds have contractually determined a lifetime, which usually is around a decade (Black & Gilson 1998, Gompers & Lerner 1998a). A typical venture capital firm raises new funds every few years, depending on its previous performance (Lerner 1994, Gompers & Lerner 1998a, Schertler & Tykvová 2012). According to Lerner (1994), a venture capital firm typically operates several funds, or in other words, partnerships, at the same time.

Venture capitals are structured as limited partnership companies where the investors of the venture fund are limited partners in the company (Gompers & Lerner 1998a, Jeng & Wells 2000, Strömberg 2009). To maintain limited liability, investors must not take part the day-to-day management of the fund (Gompers & Lerner 1998a, Strömberg, 2009). According to Gompers (1996) limited partners receive periodic updates about the projects and ongoing investment activities by the venture capitalist, but they do not participate in the policy decisions. The limited partners are not allowed to withdraw their capital from the venture capital fund before the end of the fund life time (Strömberg 2009).

The most common financial instrument for a venture capital to fund ventures is either by direct equity investment (Gompers & Lerner 1998a, Gompers & Lerner 1998b) or

by convertible debts (Black & Gilson 1998, Hirukawa et al. 2011). The capital is invested to venture companies according to the venture capital funds fund strategy (Strömberg 2009).

2.2 The catalyst for economic development

Venture capital inceptioned after the 2nd World War (Bygrave & Timmons 1992: 1-2, Gompers & Lerner 1998a). Since then, it has had a great impact on the world economy. In terms of job creation, innovative products and services and dissemination of the entrepreneurial spirit its' contributions have been extensive (Sorenson & Stuart 2001, Lerner & Tåg 2013). New companies and industries funded and grown with venture capital have changed fundamentally the way we live and work (Bygrave & Timmons 1992: 2-3, Jeng & Wells 2000). Profounding examples such as Google, Apple, Amazon Microsoft, Federal Express, and Cisco have all began as ventures and relied on private equity financing in their early years (Gompers & Lerner 1998a, Jeng & Wells 2000, Aggarwal et al. 2012).

Venture capital companies, by backing ventures such as the ones mentioned above, have acted as catalysts and risk-takers and have so played a considerable role in the formation of completely new industries such as personal computers, biotechnology and overnight delivery (Bygrave & Timmons 1992: 2, Black & Gilson 1998).

Venture capital finance positively affects a country's economic growth, employment, innovative activity, stock market development and company performance (Bygrave & Timmons 1992: 2-4, Jeng & Wells 2000, Strömberg 2009). This is also presented by Gompers and Lerner (1998a) and Lerner and Tåg (2013), who argue that venture capital generates innovation and new employment, which further drives economic growth. As new high-tech industries funded with venture capital become important drivers of economic growth, access to venture capital funding may remarkably influence macroeconomic wealth of nations (Sorenson & Stuart 2001). Black and Gilson (1998) present that mature firms which began their journey with venture capital backing embrace a macroeconomic significance in the US economy.

Jeng and Wells (2000) argue via National Venture Capital Association annual study (1997) that between 1991 and 1995, ventures backed with venture capital increased their staffs on average 34% per year. According to Jeng and Wells (2000), at the same time, Fortune 500 firms decreased their staffing levels 4% per year. Venture capital has been considered so important for a country's economic growth that even many governments are making great efforts to generate an active venture capital market (Cumming & Macintosh 2006, Guler & Guillén 2010, Lerner & Tåg, 2013). According to Lerner and Tåg (2013) governments are trying to generate an active venture capital market either directly through government venture capital programs (Cumming & Macintosh 2006, Li & Zahra 2012), and/or indirectly through reconstructing their economic and institutional environment to support both local and foreign venture capital investments (Guler & Guillén 2010).

3 CROSS-BORDER INVESTMENT DECISION MAKING

The objective of this chapter is to define the main factors which scholars have previously argued to influence the cross-border venture capital investment decision making. The chapter is structured as follows: first, the cross-border venture capital investment phenomenon is explained in general. Secondly the chapter seeks to explain, why cross-border investments are performed. Thirdly, the chapter introduces different factors that are argued by multiple scholars to have an impact on cross-border venture capital investment decision making. These factors are then thoroughly discussed to explain, how they influence the decision making of venture capitalists.

3.1 Cross-border venture capital investment phenomenon

The change in the business model of venture capital firms from investing locally toward investing globally and across borders started to aggravate in the late 1990s (Aizenman & Kendall 2011). Little is known about what factors influence venture capital firms' cross-border investment decisions (Mäkelä & Maula 2008). Today venture capitalists from one country invest abroad while at the same time portfolio companies placed in the same country receive funding from other venture capitalists abroad (Schertler & Tykvová 2012). The decision to invest (especially abroad) in risky ventures is difficult, because once the investment is made, it is not liquid and its' success is reliant to entrepreneurs and managers of the venture (Tyebjee & Bruno 1984, Fried & Hisrich 1994). Thus, it is relevant to carefully evaluate the potential decision before it is made paying respect to several factors (Fried & Hisrich 1994).

Considering the cross-border aspect of venture capital investments, it can be in ways related to the theory of foreign direct investment, which seeks to explain aspects associated with the control exercised by a firm over the production of a good or a service in other locations than its home country (Guler & Guillén 2010). The other end of foreign direct investment is portfolio investment, which only seeks to invest funds abroad (Gompers & Lerner 1998b, Guler & Guillén 2010).

Somewhere in between lies cross-border venture capital investment, which cannot be specified directly as a foreign direct investment nor a portfolio investment (Guler &

Guillén 2010). Wright and Lockett (2003) compare venture capital, especially venture capital syndication, to an equity joint venture, where two companies have formed an equity-based investment alliance. Guler and Guillén (2010) argue that cross-border venture capital investment appears to have some of the qualities characterized in the literature as portfolio investments: venture capital is a financial intermediary operating between the entrepreneur and the ultimate investor (Tyebjee & Bruno 1984, Black & Gilson 1998, Gompers & Lerner 1998a), venture capital firm's goal is not to produce goods or services for profit but rather obtain a capital gain for the ultimate investor and lastly, the (foreign) ventures' management do not fully report to the venture capital firm.

However, venture capital firms behave as much more than a simple financial investment company also when investing abroad. Venture capital firms tend to provide the venture organizational, managerial, industry and technology related expertise (Lerner 1995, Gompers & Lerner 1998a, Sorenson & Stuart 2001, Guler & Guillén 2010, Hirukawa et al. 2011) as already previously discussed. Venture capital firms also tend to have more control over the venture than pure financial investors (Lerner 1995, Gompers & Lerner 1998a, Strömberg 2009, Guler & Guillén 2010).

Schertler and Tykvová (2012) argue that there are at least two reasons for venture capital firms to invest across borders: By crossing borders, venture capitalists take advantage of differences in risk-adjusted expected returns between their home country and the portfolio companies' countries (Mäkelä & Maula 2008). Secondly, venture capitalist firms invest abroad in hope of further deal flows and because of value-adding activities (Sorenson & Stuart 2001, Wright & Lockett 2003, Schertler & Tykvová 2012).

Sorenson and Stuart (2001) argue that a venture capitalist's age and experience are important drivers for a venture capital firm to invest in geographically distant places. Sorenson and Stuart (2001) continue, by presenting that as venture capital firms age and gain experience, their networks broaden between industries and across borders, their reputation grows leading other venture firms to bring good investment deals to them (Wright & Lockett 2003, Schertler & Tykvová 2010), they gain confidence in evaluating ventures and entrepreneurs, they may reduce the costs of monitoring by

becoming more experienced in this task (Wright & Lockett 2003) and they may become less dependent on their networks to gain information to evaluate potential ventures.

According to Sorenson and Stuart (2001), by gaining experience, venture capitalists also learn to evaluate business plans and separate good ideas one from bad ones (Fried & Hisrich 1994), leaving them with better internal information about a potential investment proposal. Therefore, as venture capital firms grow older and gain experience, they become more likely to invest into distant geographic locations, such as across national borders (Sorenson & Stuart 2001). A venture capitalist invests abroad when a higher expected return compared to domestic investment outweighs the cost of investment (Schertler & Tykvová 2012). These costs are likely to be higher for cross-border investment, than for a domestic investment, because of transaction and information costs, which may arise due to venture capital firms tend invest in risky ventures where information asymmetries between the entrepreneur and the venture capitalist often arise (Gompers & Lerner 1998a, Jeng & Wells 2000, Schertler & Tykvová 2010).

Many factors have been found by scholars to influence cross-border investment decision making: Schertler and Tykvová (2010, 2012) argue that economic factors (Gompers & Lerner 1998a, Black & Gilson 1998) and cross-border syndication (Sorenson & Stuart 2001, Wright & Lockett 2003, Mäkelä & Maula 2008) are drivers of cross-border investments. Sorenson and Stuart (2001) and Wuebker et al. (2015) present that social ties and information flow between venture capitalists' networks create value for investments to geographically distant locations. Aizenman and Kendall (2011) give findings of high-end human capital, business environment, military expenditure and good financial markets being factors that attract foreign venture capital. Black and Gilson (1998), Jeng and Wells (2000), Guler and Guillén (2010), Li and Zahra (2012) and Lerner and Tåg (2013) present that institutions such as technological, legal, financial and political ones may create innovative opportunities, protect investors' rights, facilitate exit and guarantee political stability, thus presenting venture capital investors a favorable investment location (Guler & Guillén 2010). These previous findings will be now more thoroughly analyzed and discussed.

3.2 Cross-border networks and syndication

Fried and Hisrich (1994) argue, that perceptual, emotional and cognitive processes must be taken into consideration when studying human decision making. According to Wuebker et al. (2015), networks influence venture capital investments in two ways: directly through personal ties and indirectly through social hierarchies. Wuebker et al. (2015) also argue, that surprisingly little is known about the role personal ties and relative status to other venture capital firms play in venture capital investment decision making. Wright and Lockett (2003), Sorenson and Stuart (2001), Mäkelä and Maula (2008) and Schertler and Tykvová (2010) present, that investment syndication between venture capitalists is an important and a prevalent component in the venture capital industry. According to Sorenson and Stuart (2001), social networks in the venture capital community, which are formed in the industry's investment syndicates, spread information across borders actively. Therefore, the influence of cross-border networks and deal syndication must be examined to understand the relationship between these networks and cross-border investment decision making in venture capital firms.

3.2.1 Cross-border social networks

Social networks (i.e. personal and professional relationships) are proven by several scholars to be important when considering cross-border investments: research suggests that both local and foreign relationships can enforce cross-border venture capital investment (Fried & Hisrich 1994, Sorenson & Stuart 2001, Shane & Cable 2002, Mäkelä & Maula 2008, Schertler & Tykvová 2010, Wuebker et al. 2015). According to Wright and Lockett (2003), informal relationships are seen useful in venture capital firms because they may build trust and help in decision making situations where asymmetric information and dubiety exist. Sorenson and Stuart (2001) and Shane and Cable (2001) argue that social and professional relationships are greatly important for a venture capitalist to find potential venture investments, as well as to evaluate the quality of those investments. The tightness of local networks in the investment location country and the cross-border social web can also influence investment decision making of venture capitalists (Schertler & Tykvová 2010, Wuebker et al. 2015).

The venture capitalists' social networks consist for example of other venture capitalists, entrepreneurs and managers in their venture portfolio, investors of the venture fund, personal relations, banks and investment bankers (Tyebjee & Bruno 1984, Fried & Hisrich 1994, Sorenson & Stuart 2001). According to Wright and Lockett (2003), the venture capital industry knits into a tightly bonded network, where managers from different venture capital firms as well as other actors around them often know each other, thus frequently leading to strong local ties in the industry.

According to Shane and Cable (2002) and Wuebker et al. (2015), social networks influence venture capital investment decision making through both indirect and direct mechanisms. The indirect mechanism includes another venture capitalist's reputation as the driver for a syndicated investment (Wuebker et al. 2015). For example, experience in a certain industry generally expands the personal network of the venture capitalist in that specific industry, which later may facilitate to identification of new investment possibilities (Sorenson & Stuart 2001). The direct mechanism includes the venture capitalist's personal network, through which the venture capitalist finds and selects its' investments (Sorenson & Stuart 2001, Shane & Cable 2002, Wuebker et al. 2015). Sorenson and Stuart (2001) find in their study, that a venture capitalist's investment decisions are dependent of the position where the venture capital firm is located in the information network of the industry. This is also argued by Wuebker et al. (2015), who present that venture capital investment decision making is an outcome of information transfer, which a venture capitalist derives from its' personal information network by gathering private information.

Sorenson and Stuart (2001) argue for two reasons how information transfer in social networks influences venture capital investment decision making: Firstly, because information about early stage companies is often not available, personal and professional relationships provide information for a venture capitalist about potential ventures to invest in. Secondly, both personal and professional relationships are used by the venture capitalist to gain information and build trust towards a potential, but risky new venture (Sorenson & Stuart 2001, Shane & Cable 2002, Wuebker et al. 2015). According to Sorenson and Stuart (2001), venture capitalists with experience and thereby broad networks in a specific industry can use these networks to better evaluate the quality of a venture in terms of risks and returns. Venture capital firms

can also use these networks to mitigate information asymmetries between them and the potential venture's entrepreneur (Sorenson & Stuart 2001).

The social network around the venture capitalist also includes so called referrers, who refer new potential ventures to the venture capital firm (Tyebjee & Bruno 1984, Fried & Hisrich 1994, Wuebker et al. 2015). According to Fried and Hisrich (1994) the referral network is important for venture capital investment decision making for two reasons: firstly, referred deals are evaluated more carefully if the venture capitalist trusts the referrer and secondly, the referrer might more likely understand the type of investments the venture capitalist is looking for. The referral network lowers the venture capitalist firm's risk to foul investment decisions, because the referrer most likely wants to maintain his or her relationship with the venture capitalist, thereby leading to a better decision making of the venture capitalist (Fried & Hisrich 1994, Sorenson & Stuart 2001). According to Tyebjee and Bruno (1984) and Fried and Hisrich (1994), most deals proposed without an introduction by a referrer end up with the venture capitalist not investing in them. Age and experience affect the venture capitalists' network of referrers: when the venture capital firms gain age and experience, they also gain more referrers to their network (Sorenson & Stuart 2001).

According to Sorenson and Stuart (2001) and Wuebker et al. (2015) social networks and information transfer have impact in venture capital decision making especially in early stage investments or in new cross-border investments, where information asymmetries are often more present and the risks of the investment tend to be more volatile, compared to later stage investments or local investments (Wright & Lockett 2003, Schertler & Tykvová 2010). According to Wuebker et al. (2015), in the context of market uncertainty, for example in an emerging industry where traditional risk and return parameters are more difficult to define in an investment evaluation, whether the investment possibility comes from a trusted referral in the investor's personal network or not has more impact than traditional evaluation criteria of a venture capital investment (Fried & Hisrich 1994, Wuebker et al. 2015). Wuebker et al. (2015) also find in their study, that the influence of personal ties in investment decision making is more relevant in the US, than it is in the European venture capital community.

Foreign venture capital firms may also prefer to operate with local investors who are locally strongly tied (i.e. with strong local networks), because the strong ties may serve as an indicator for the trustworthiness of the local investor (Schertler & Tykvová 2010). Wuebker et al. (2015) argue, that venture capitalists prefer to operate with those who they have previously operated with, meaning that venture capitalists tend to prefer strong ties in information gathering and partner selection when making investment decisions. Therefore venture capitalists often prefer to make cross-border investments to locations where local networks between local venture capital firms and their partners are strong (Wright & Lockett 2003, Schertler & Tykvová 2010). According to Schertler and Tykvová (2010), local venture capital investors from countries with strong local ties might also invite foreign venture capital investors to jointly participate with them in local investment deals (i.e. syndicate deals).

3.2.2 Cross-border syndication

Mäkelä and Maula (2008) present that the key for a venture capitalist to invest in to a foreign location is the presence of a local investor, with whom to form an investment syndicate with, being nearly essential in cross-border venture capital investment decision making (Mäkelä & Maula 2008, Schertler & Tykvová 2010). According to Fried and Hisrich (1994), venture capital firms often invest through syndicates, in which at least two ventures join forces in an investment, to share risk, increase the maximum amount of capital invested in to a venture and mitigate information asymmetries between the initial investors and later round investors (Sorenson & Stuart 2001, Wright & Lockett 2003). A venture capital syndicate generally consists of a lead venture capital investor and non-lead venture capital investor(s) (Wright & Lockett 2003).

Tyebjee and Bruno (1984) and Wright and Lockett (2003) present, that syndication is coming more common and cross-referrals occur between venture capitalists to locate co-investors with whom to syndicate investment deals with. Lerner (1994) also argues that venture capital firms' deal syndication is common, especially among more experienced venture capitalists, who tend to syndicate especially first-round investment deals with venture capital firms with similar levels of experience. Syndicate deals are structured to be ad hoc by character, with the financing structure

of the syndicate constructed particularly to the specific investment (Wright & Lockett 2003). Syndicates are also dynamic, because several financing rounds are often needed in a specific venture investment (Wright & Lockett 2003, Schertler & Tykvová 2010).

In a cross-border investment decision, both the local and the foreign venture capital firm can learn from each other in an investment syndicate (Schertler & Tykvová 2010). According to Fried and Hisrich (1994), venture capitalists tend to talk to each other to learn potentially important information when they are considering new venture investments. Before starting a firm evaluation of a potential venture investment, venture capitalists tend to invite other venture capital investors to review the potential investment as well to check whether other venture capital firms agree or disagree of the investment (Lerner 1994), because in syndicated cross-border venture investments another venture capitalist's readiness to invest in to a new venture is a major factor in the decision making process for the venture capitalist (Lerner 1994, Mäkelä & Maula 2008). According to Lerner (1994) and Mäkelä and Maula (2008) it implies whether other venture capitalists also find the potential investment prospective. The decision to invest in a syndicated deal is based on active discussion and trust between the venture capital firms (Wright & Lockett 2003).

According to Tyebjee and Bruno (1984), Fried and Hisrich (1994), Lerner (1994) and Schertler and Tykvová (2012), by venture capitalists jointly investing in cross-border syndicates, they spread their limited funds over a larger amount of deals, while potentially generating additional value through combining several venture capitalists' skill sets, experience and networks. This is also argued by Sorenson and Stuart (2001), Wright and Lockett (2003) and Schertler and Tykvová (2010), who suggest that cross-border syndication adds value to both local and foreign investor firms when both of these firms can bundle their complementary skills. In other words, while the local investor, located near the company invested in, has extreme knowledge on the local market, practices, rules, technology and patterns of behavior, the foreign investor can help the invested company to implement an internationalization strategy into foreign products and capital markets (Mäkelä & Maula 2008, Cummings et al. 2010, Schertler & Tykvová 2010). Foreign investors also benefit from cross-border syndicates by lower monitoring costs (Sorenson & Stuart 2001) as well as by lower information costs (Shane & Cable 2002).

Schertler and Tykvová (2010) find in their study, that syndicated cross-border deals, syndicated with a foreign and a local investor, tend to go hand in hand with higher success rates, meaning that by creating cross-border relationships and by networking and investing to ventures together with local investors, the results of the venture capital investments are better. Lerner (1994) agrees, arguing that syndication in first-round venture investments might carry to better investment decisions. Cross-border syndication may also contribute to portfolio diversification, giving both the local, and the foreign investor an advantage in their overall portfolio (Tyebjee & Bruno 1984, Schertler & Tykvová 2010). Lerner (1994), Sorenson and Stuart (2001) and Wright and Lockett (2003) agree, arguing that syndication spreads the risks and brings together more expertise and support for the venture invested in.

Information sharing and social network benefits may also motivate local investors to syndicate investment deals with foreign investors and thus build up concentrated venture capital networks (Schertler & Tykvová 2010). Wright and Lockett (2003) also argue that venture capital firms tend to pursue syndicate investments repeatedly with a network of venture capital investors. According to Sorenson and Stuart (2001), syndicate networks benefit venture capital investors who build focal positions in their syndicate network, because they can broaden their access to information about more distant potential investments and thereby expand the extent of their investment activities. In this way venture capital firms may gain access to more foreign deals, which further helps to increase deal flow and contribute to a better geographical portfolio diversification (Wright & Lockett 2003, Schertler & Tykvová 2010).

According to Lerner (1994), because investment syndication directly impacts the risk and profitability ratio of venture capitalists' fund, it may also have an impact on their ability to raise funds for new venture funds. The risk of an underperforming fund can be lowered by syndicating deals across borders with other venture capitalists, increasing the profitability of the fund, as well as lowering the overall risk of the fund (Lerner 1994, Sorenson & Stuart 2001, Schertler & Tykvová 2012).

Although Wright and Lockett (2003) argue for the benefits venture capital syndication yields, they also present that co-operation with syndicate partners may give rise to complications and procrastination in the investment decision making. According to

Wright and Lockett (2003) and Cumming et al. (2010), this uncertainty may lead to an increase in the associated management costs. Syndicated investments may also lead to difficulties and delays in negotiating the investment agreement, thereby delaying the overall investment decision making (Wright & Lockett 2003). Local investors can also build strategic alliances with other local investors to protect their local markets to draw off competition from foreign investors (Hochberg et al. 2010). According to Hochberg et al. (2010), a densely networked local venture capital industry may create barriers for foreign venture capitalists to entry to the industry, thus diminishing some of the benefits that syndicated venture capital investments generate.

3.3 Institutions

According to Guler and Guillén (2010) and Lerner and Tåg (2013), venture capital firms invest to countries which emphasize institutional factors such as technological, legal, financial and political institutions that create opportunities for innovation, protect investors' rights, provide flexibility to hiring labor, alleviate exit opportunities from a venture, and ensure regulatory stability. This is also argued by Aizenman and Kendall (2011), who confirm that cross-border venture capital tends to flow to countries with high-end human capital and better institutional environment, and by Cumming et al. (2010), who present that venture capital markets and therefore venture capital flows across countries are influenced by international differences in law systems and institutions which determine venture capital governance structures. Li and Zahra (2012) present that formal institutions, especially political, economic and contractual rules, influence how venture capital activity varies across countries by affecting transaction costs related to venture capital investments and by either providing or denying incentives that foster them.

Guler and Guillén (2010), Aizenman and Kendall (2011) and Lerner and Tåg (2013) present, that venture capital firms' investment decision making to a certain foreign market is highly influenced by institutions that encourage innovation and entrepreneurial opportunity, as well as the ability to commercialize these opportunities and to appropriate the profits earned from the investments made to these ventures. To understand why institutions of a country invested in influence cross-border venture capital investment decision making, they must be reviewed more specifically (Guler

& Guillén 2010, Aizenman & Kendall 2011, Li & Zahra 2012, Lerner & Tåg 2013). In this study institutions are divided to institutions that support innovation and technology and to legal, financial and political institutions, following the study conducted by Guler and Guillén (2010).

According to Gompers and Lerner (1998a), Guler and Guillén (2010) and Aizenman and Kendall (2011), institutions supporting innovation and technology, such as educational systems, are important to venture capitalist's investment decision making because firms in such environments tend to focus their attention on high-tech industries, which are often also the industries that venture capitalists prefer to invest in (Black & Gilson 1998, Fenn & Liang 1998, Jeng & Wells 2000). Stuart and Sorenson (2003) and Guler and Guillén (2010) present, that entrepreneurs are likely to set up offices in locations where institutional support is high for innovation, such as locations near universities (Guler & Guillén 2010). Because foreign venture capital firms are looking for attractive investment possibilities, meaning innovative ideas to invest in, they tend to follow the entrepreneurs who have set up their firms in places with most institutional support for innovation (Jeng & Wells 2000, Guler & Guillén 2010). Aizenman and Kendall (2011) and Lerner and Tåg (2013) argue that especially public spending on research & development (R&D) activities, both to educational research and military research, have an effect on cross-border venture capital investments to a country.

Differences in a country's level of innovation, deriving from the institutions that support technological innovation such as universities, influence the level of entrepreneurial activity in that country, thus leading to differences in the attractiveness of that country for foreign venture capitalists to invest in (Guler & Guillén 2010, Aizenman & Kendall 2011, Lerner & Tåg 2013). Lerner and Tåg (2013) argue, that when innovation is created through public spending, such as university research, it still needs strong intellectual property rights (IPR) and strong technology transfer to be easily commercialized. Thus institutions providing IPR protection and the level of support for technology transfer (i.e. educational systems that educate about new technologies) are relevant for venture capital investment decision making, because entrepreneurs with the idea and the innovation can rely on the venture capitalist not

stealing their idea, and on the other hand gain ideas from university researchers (Aizenman & Kendall 2011, Lerner & Tåg 2013).

Bottazzi et al. (2008) and Cumming et al. (2010) present, that the legal environment of a country has a substantial influence on the governance of venture capital investments, thus influencing cross-border venture capital investment decision making (Guler & Guillén 2010, Aizenman & Kendall 2011). According to Cumming et al. (2010) better a legal environment leads to a better overall environment for venture capital investments in terms of deal screening, investment agreement, syndication and the venture capital investors' participation in the post-investment activities. Cumming et al. (2010) and Guler and Guillén (2010) via Trevino (1996) argue, that legal institutions have two major functions that influence cross-border venture capital investment decision making by creating grounds for economic activity and financial transactions: they define persons that surpass individuals, create instruments for negotiation and create a ground for how negotiations and transactions can take place (Bottazzi et al. 2008), as well as define and protect the legitimate interests of different parties such as investors, managers and the government (Guler & Guillén 2010, Li & Zahra 2012).

According to Cumming et al. (2010) and Guler and Guillén (2010), venture capital firms prefer to carry out investment decisions to countries with a legal system that protects the investors rights as an owner, because in the opposite case of poor investor protection against an agency risk, investors may need to protect themselves by increasing their ownership concentration and monitoring of the ventures activities (Sorenson & Stuart 2001). The monitoring and the need to increase equity stakes in ventures located in poor investor protected countries increase costs for the venture capital firm, as well as undermine the venture capital firm's ability to distribute capital among a larger amount of ventures and to diversify portfolio risk (Wright & Lockett 2003, Bottazzi et al. 2008, Lerner & Tåg 2013).

Thus, the most important legal institution for a venture capital firm considering a cross-border investment is corporate law, which determines the rights and the obligations of investors and managers (Guler & Guillén 2010, Li & Zahra 2012). Bottazzi et al. (2008) and Lerner and Tåg (2013) agree, presenting that in terms of cross-border

venture capital investments legal institutions should determine which sort of contracts can be made between the venture capitalist and the entrepreneur. Contracts between the entrepreneur and the venture capitalist reference how the entrepreneur and on the other hand the venture capitalist are compensated from the investment, how the ownership divides between them and how the ventures are monitored (Bottazzi et al. 2008, Li & Zahra 2012, Lerner & Tåg 2013). According to Cumming et al. (2010) and Li and Zahra (2012), institutions providing support for contractual rules, which determine the elements of the investment structure, can help to mitigate asymmetric information and transaction costs that may arise to the venture capitalist from both asymmetric information and opportunistic behavior by the entrepreneur, thereby creating attractive cross-border investment opportunities for the venture capitalist (Shane & Cable 2002, Wright & Lockett 2003, Schertler & Tykvová 2012).

According to Bottazzi et al. (2008), Cumming et al. (2010) and Lerner and Tåg (2013), the legal environment also has an influence on the securities venture capitalists use in cross-border investments: in countries with a weak legal environment where contracts are hard to supervise, venture capital firms tend to have confidence in direct equity ownership, while on the other hand in more suitable legal environment where contracts can be enforced better, the venture capitalists tend to use more complex securities such as convertible preferred stock.

Lerner and Tåg (2013) present, that venture capital investments to firms operating in poor legal environments for a venture capitalist also tend to have poorer returns and overall success rates, which implies that in traditional risk return parameters venture capital firms are more likely to invest to countries that support investors' rights and more complex contracts. Because a better legal environment facilitates faster investment agreements and better contractual protection (Cumming et al. 2010, Li & Zahra 2012), it also leads to a faster overall investment cycle. In a weak legal environment the investment cycle is slowed down because writing binding and enforceable contracts is harder (Bottazzi et al. 2008, Lerner & Tåg 2013), therefore leading to a slower investment decision making process and weaker deal flow between venture capital firms (Cumming et al. 2010, Schertler & Tykvová 2012).

Another legal institution found to influence cross-border venture capital investment decision making is labor market regulation (Black & Gilson 1998, Guler & Guillén 2010, Lerner & Tåg 2013). Black and Gilson (1998) argue that venture capital investment decisions tend to be higher to locations where labor markets are more flexible, such as to the US and the UK, and on the other hand lower to countries where labor market is more highly regulated with restrictions to layoffs, such as is the situation in Germany and Scandinavian countries. This is also argued by Jeng and Wells (2000), who claim that inflexible labor markets are one of the major reasons why venture capital investments are made more to the US and less to Europe or Asia. According to Jeng and Wells (2000) and Lerner and Tåg (2013), labor market inflexibility affects early stage ventures negatively through higher hiring costs, as well as through difficulties in hiring people because letting them go if their services are not needed is harder in inflexible labor markets. This limits the ventures' growth potential and thus influences cross-border venture capital investment decision making. (Black & Gilson 1998, Jeng & Wells 2000, Lerner & Tåg 2013).

Black and Gilson (1998) however consent that labor market regulation may only partially explain venture capital investment decisions to different countries, due to examples of countries where both labor market regulation and venture capital investments are high, such as is the situation in Ireland and Israel. According to Lerner and Tåg (2013), the type of labor regulation matters more than the level of regulation, which might explain the conflict discussed by Black and Gilson (1998). Countries that rely more on labor market spending to provide workers insurance have stronger venture capital investment levels than countries which emphasize employment protection regulations against layoffs (Lerner & Tåg 2013).

The main risk for a venture capital firm and its' investors investing in a foreign venture is not getting their money back from the investment (Black & Gilson 1998, Jeng & Wells 2000). Therefore financial institutions, in particular efficient stock markets, are significant for cross-border venture capital investment decision making, because venture capitalists often exit from the venture through an initial public offering (IPO) or other exit modes facilitated by financial institutions, realizing the capital gains made from the venture (Fried & Hisrich 1994, Jeng & Wells 2000, Guler & Guillén 2010, Aizenman & Kendall 2011, Li & Zahra 2012, Schertler & Tykvová 2012, Lerner &

Tåg 2013). These capital gains are then further distributed to the venture fund's investors (Gompers & Lerner 1998a, Gompers & Lerner 1998b, Jeng & Wells 2000, Guler & Guillén 2010). Thus, according to Black and Gilson (1998), Aizenman and Kendall (2011) and Lerner and Tåg (2013), a well-developed stock market (i.e. financial institution) that permits venture capital firms to exit and realize profits through an IPO is a key driver for cross-border venture capital investment decisions. Also Jeng and Wells (2000) find in their study that IPOs are the most important factor for a venture capitalist making cross-border investments. Therefore the available exit opportunities should be evaluated already in the cross-border venture capital decision making process (Black & Gilson 1998, Guler & Guillén 2010, Aizenman & Kendall 2011).

A successful exit and therefore the presence of viable exit opportunity is important for the venture capitalist not only to ensure the profitability of the business, but also because it influences the venture capitalists reputation (i.e. how successful the venture capitalist is) (Lerner 1994, Black & Gilson 1998, Gompers 1996, Lerner & Tåg 2013). A successful reputation increases the venture capital firm's ability to raise funds from investors at more favorable conditions in the future because investors believe that high performing venture capitalists are more likely to fund companies that ultimately go public (Gompers 1996, Lerner & Tåg 2013). This is also agreed by Lerner (1994) and Black and Gilson (1998), who argue that a venture capital firm's fund performance is measured based on completed investments, which also acts as the principal tool for attracting more capital from investors to new limited partnerships. Thus especially in cross-border venture capital investment decisions the presence of exit opportunities such as IPOs are important, because the success of the investment also influences the venture capitalists possibility to make future cross-border investments (Black & Gilson 1998, Jeng & Wells 2000, Lerner & Tåg 2013).

In addition to being an exit strategy for a venture capitalist, IPOs may according to Stuart and Sorenson (2003) and Li and Zahra (2012) also aid new individuals, who have previously worked in a firm going through an IPO, to set up new ventures with earnings they may have gained by selling their shares in the IPO firm. Therefore viable exit opportunities are important for cross-border venture capital investment decisions also from an opportunity creation perspective: successful exits from an invested

venture may in addition generate new cross-border investment opportunities for the venture capitalist (Black & Gilson 1998, Stuart & Sorenson 2003, Guler & Guillén 2010). According to Black and Gilson (1998), this “recycling” of the venture capital investor’s capital through exit and reinvestment is important for both, the venture capitalist and the invested venture because the financial and nonfinancial services that a venture capital firm offers to its’ ventures lose their efficiency when the venture matures.

Another important financial institution influencing cross-border venture capital investment decision making are financial reporting standards, because they determine how much financial information is available for the investor (Jeng & Wells 2000, Cumming et al. 2010). According to Jeng and Wells (2000) and Cumming et al. (2010), good financial reporting standards of a country may reduce costs of asymmetric information, leading to a potentially lower risk premium that venture capitalists require from a venture in return for their investment. This is because markets do not often provide proper information about privately held early stage companies, leaving investors with generally low information of the venture they are supposed to invest in (Jeng & Wells 2000). Thus, proper accounting regulation ensures that venture capitalists get more information about their potential investments, leading to an overall lower risk premium and lower cost of asymmetric information, when venture capitalists need to spend less time gathering information to monitor their investments (Jeng & Wells 2000, Cumming et al. 2010). This further leads to making the cross-border venture capital investment decision making process more efficient for the venture capitalist (Jeng & Wells 2000, Cumming et al. 2010, Schertler & Tykvová 2012).

Another important determinant for cross-border venture capital decision making is the political environment of the nation potentially invested in (Guler & Guillén 2010). According to Guler and Guillén (2010) and Li and Zahra (2012), an investment location with low risk for political hazards and favorable public policy is a more stable location for a venture capital firm to invest in. The other institutions discussed to influence cross-border venture capital investment decision making do not ensure that the policy makers of a country won’t change laws, rules and regulations that concern the venture capitalists benefits (Guler & Guillén 2010, Lerner & Tåg 2013). Thus,

venture capital firms prefer to make investments to countries in which rules and regulations concerning the venture capitalist's benefits are not liable for change (Guler & Guillén 2010, Li & Zahra 2012, Lerner & Tåg 2013).

Guler and Guillén (2010) argue, that the policy makers might even be tempted to change the policies only in order to appropriate the investors' return. This is agreed by Li and Zahra (2012), who present that corruption may distort venture capital investments, reduce the effectiveness of a government and carry instability to the political decision making, thereby affecting the attractiveness of the country for venture capital firms to invest in.

3.4 Economic factors

On top of cross-border networks, investment syndication and institutions, also economic factors, such as the level of technological innovation, economic growth rate and tax environment, influence cross-border investment decisions (Gompers & Lerner 1998b, Jeng & Wells 2000, Hirukawa et al. 2011, Schertler & Tykvová 2012). This is agreed by Gompers and Lerner (1998a) and Cumming and Macintosh (2006), who argue that macroeconomic factors such as economic growth rate, capital gains tax and interest rates directly have effect in both the demand and the supply of cross-border venture capital. Strömberg (2009) shows in a cross-country data study, that private equity investments and economic growth have a clear positive relationship with each other.

To understand which economic factors influence cross-border venture capital investment decisions and how the factors actually do influence them, one can review economic factors that shape the venture capital investments' supply and demand in a country (Schertler & Tykvová 2012). The supply and demand of cross-border venture capital provide an implication to how economic factors also influence cross-border venture capital investment decision making, because they provide a clear proposal for how invested cross-border venture capital gross and net flows occur in and out from that country (Hirukawa et al. 2011, Schertler & Tykvová 2012). The supply of venture capital refers to the investors' desire to place money into venture capital funds (Gompers & Lerner 1998a, Gompers & Lerner 1998b) and the demand to the desire of

the entrepreneurs to attract venture capital investments to their firm (Gompers & Lerner 1998a, Gompers & Lerner 1998b). Both demand and on supply are important for cross-border venture capital investment decision making: the demand implies how many investment opportunities are available for the venture capitalists in a country and the supply how much venture capital is available for the venture capitalists to invest to those opportunities (Gompers & Lerner 1998a, Gompers & Lerner 1998b, Schertler & Tykvová 2012). According to Schertler and Tykvová (2012), high levels of capital available force venture capitalists to invest across borders because potential investments might not be available in their home location.

First economic factor to be discussed is the level of technological innovation. According to Schertler and Tykvová (2012), a high level of technological innovation in a country enforces more people to become entrepreneurs and demand venture capital finance from investors to start up their company. Cumming and Macintosh (2006) and Hirukawa et al. (2011) also argue, that technological innovations, such as significantly lowered costs in computer technology, may create business opportunities and trigger startups that create demand for venture capital financing. This demand of venture capital financing influences cross-border venture capital decision making by providing more potential opportunities for venture capitalists to invest in (Cumming & Macintosh 2006, Hirukawa et al. 2011, Schertler & Tykvová 2012). In contrast, a low level of technological innovation may discourage venture capitalists to make cross-border investments to certain locations, because there is less demand for venture capital (Cumming & Macintosh 2006, Schertler & Tykvová 2012).

Economic growth rate is the most influential factor to influence cross-border venture capital investment decision making, because it also influences other economic factors (Schertler & Tykvová 2012). Cumming and Macintosh (2006) and Strömberg (2009) find in their studies, that economic growth rate generates significant positive or negative changes in both the supply and demand of cross-border venture capital financing, depending on whether the economic growth is positive or negative. According to Gompers and Lerner (1998a) and Li and Zahra (2012), economic growth influences the demand of venture capital by entrepreneurs attracted to start new firms. This also influences the venture capitalists' cross-border investment decision making by providing more opportunities to invest in (Gompers & Lerner 1998a, Li & Zahra

2012, Schertler & Tykvová 2012). According to Gompers and Lerner 1998a, greater investment opportunity in a growing economy may be linked also with greater commitments to the venture capital industry by the supply, or in other words, the investor side of venture capital. Li and Zahra (2012) agree, arguing that a growing economy may encourage investors to place their funds in more risky investments (e.g. venture capital funds), increasing the supply of venture capital. For venture capitalists a favorable economic environment in terms of expected growth thus influences the decision of when and where to make cross-border venture capital investments (Cumming & Macintosh 2006, Li & Zahra 2012, Schertler & Tykvová 2012)

Interest rates can also be considered as an economic factor to influence cross-border venture capital investment decisions. According to Cumming and Macintosh (2006), interest rates are significantly and negatively related to venture capital investment flows in the supply of venture capital. Gompers and Lerner (1998a) also argue that interest rates may correlate with venture capital investment flows: when the interest rates are high, bonds, which compete as an alternative investment to venture capital, might seem as a more attractive investment for investors of venture capital funds. Cross-border investments decisions may therefore be relatively lower in times of higher interest rates and in contrast higher in times of lower rates (Gompers & Lerner 1998a, Cumming & Macintosh 2006, Schertler & Tykvová 2012).

Capital gains tax in both the investment location and in the venture capital firm's home country is an important economic factor which influences cross-border investment flows and thus the venture capitalist's decision to make cross-border investments (Schertler & Tykvová 2012). According to Jeng and Wells (2000) and Schertler and Tykvová (2012) this is, because capital gains tax directly impacts the capital gains that can be made from an investment. This is also argued by Gompers and Lerner (1998a), Jeng and Wells (2000) and Lerner and Tåg (2013), who present that capital gains tax affects both the demand and supply of cross-border venture capital financing through the investors desire to invest in venture capital funds and on the other hand through the entrepreneurs' desire to attract venture capital investments to their company. Poterba (1989) also argues that capital gains tax either encourages or discourages entrepreneurs to build startups, which naturally affects the demand of venture capital investments. Gompers and Lerner (1998a) and Lerner and Tåg (2013) make similar

findings, arguing that capital gains tax rates have a serious effect to the venture capital industry, and that decreases in the capital gains tax rates are associated with greater venture capital investments. Tyebjee and Bruno (1984) on the other hand claim, that tax benefits are not relevant in investment decision making, because venture capitalists' aim is to enforce capital gains rather than provide tax sanctuaries to investors. However, capital gains tax influences overall capital gains (Poterba 1989, Gompers & Lerner 1998b, Jeng & Wells 2000, Schertler & Tykvová 2012), and can thereby be seen to influence also the decision making of cross-border venture capital investments.

4 CONCLUSIONS

This chapter concludes. First, main findings of this study are presented to gather the factors that have in this study been found to influence cross-border venture capital investment decision making. Second, the contributions of this study to managerial use are proposed. Third, the chapter presents limitations that have affected this study and suggestions for future research.

4.1 Main findings of the study

The objective of this study was to determine and gather the factors that influence cross-border venture capital investment decision making by reviewing and analyzing existing literature relevant to the topic. This objective has been fulfilled by answering the research questions presented in the introduction chapter of this study.

The main research question for this study was:

→ *What factors influence cross-border venture capital investment decisions?*

In order to more thoroughly understand the factors behind cross-border venture capital investment decisions, a subquestion was also presented:

→ *How do the factors that influence cross-border venture capital investment decisions actually influence these decisions?*

The literature review conducted in this study emerged three main concepts that have in previous literature been defined to influence cross-border venture capital investment decision making. These concepts were cross-border networks and investment syndication in these networks, governmental institutions and economic factors. These concepts include multiple factors below them: Cross-border networks have been identified in terms of social networks (i.e. personal and professional relationships) between venture capitalists and other stake holders both locally and across countries and investment syndication between venture capitalists across national borders

(Schertler & Tykvová 2010, Wuebker et al. 2015). Governmentally set institutions include institutions that aim to increase technological development, as well as political, legal and financial institutions (Guler & Guillén 2010). Three main factors were identified inside the concept of economic factors: economic growth, level of technological innovation and taxation (Schertler & Tykvová 2012).

Cross-border networks were found to influence the investment decision making in venture capital firms through social networks between venture capitalists and other stake holders across countries, as well as through investment syndicates and the networks behind them. Social networks are according to the literature used to obtain information about the potential investment, as well as to receive knowledge of new potential investment targets through referrals (Fried & Hisrich 1994, Wuebker et al. 2015).

According to the literature, investment syndicates are formed to share risk, to increase the maximum amount of capital invested and to mitigate information asymmetries (Fried & Hisrich 1994, Schertler & Tykvová 2010). Syndicate networks were also found to provide other benefits, such as portfolio diversification and bundling complementary skills between the local and the foreign syndicate partners. Syndicate networks were found to be the most conventional way to enter into a cross-border investment, by local venture capitalist inviting foreign venture capitalists to join the investment syndicate.

In light of the literature review, institutions were found to influence cross-border venture capital investment decision in terms of institutions that support technological development, as well as political, financial and legal institutions (Guler & Guillén 2010). Institutions that support technological development, such as universities and public spending on R&D activities both to public (university) research and military research, were found to be influential because venture capitalists tend to invest into new technologies and innovative ideas, often containing the use of new technologies or aiming to completely new markets or industries. According to the literature, also IPR protection and technology transfer through education were found influential to cross-border venture capital investment decisions (Lerner & Tåg 2013). Political institutions were found to have an influence to cross-border venture capital investment

decisions in terms of political stability and the risk for political hazards, as well as changes in regulation concerning venture capitalists.

Financial institutions were found to be most relevant from the institutions discussed to influence cross-border venture capital investment decisions (Jeng & Wells 2000). Financial institutions, such as a developed stock market were found to give the venture capitalist a viable exit from the venture. In other words financial institutions were found to provide a way for the venture capitalist to make capital gains. Financial institutions were also found to be beneficial for information gathering through financial reporting standards.

Legal institutions, based on the discussed literature, were found to influence the decision making of venture capitalists in three ways: First, they provide the venture capitalist protection of the owners' rights, which means that the venture capitalists can influence the invested ventures daily activities as board members and through evaluating managerial performance (Guler & Guillén 2010). Second, they provide contractual flexibility and define how enforceable contracts can be made, which further implies the level of monitoring venture capitalists must conduct (Bottazzi et al. 2008). Third, they directly influence the labor markets through labor regulation, which implies how efficiently can an invested venture grow and on the other hand let people go if they are not needed any more (Black & Gilson 1998).

The economic factors influencing cross-border venture capital investment decision making that emerged from the literature were economic growth, the level of technological innovation, taxation and interest rates. Economic factors and their effects to venture capital were discussed through the supply and demand of venture capital, because they provide implications to how these economic factors influence cross-border venture capital investment decision making (Schertler & Tykvová 2012). Both the demand and supply were found to be important to cross-border venture capital investment decision making: according to the literature the demand implies how many investment opportunities are available for the venture capitalists in a country and the supply how much venture capital is available for the venture capitalists to invest to those opportunities (Schertler & Tykvová 2012).

The level of technology was found to affect the demand of venture capital through for example lowered costs of technology, which further creates business opportunities and triggers new ventures for the venture capitalists to invest in (Hirukawa et al. 2011), thus influencing cross-border venture capital investment decision making. Interest rates were found to highly and negatively correlate with the supply of venture capital. Discussed literature presented that when the interest rates are high, bonds are seen as a more valuable investment by investors of venture capital funds therefore decreasing the supply of venture capital (Gompers & Lerner 1998a).

Economic growth was seen to influence both demand and supply of venture capital (Cumming & Macintosh 2006). It seems to influence the demand of venture capital through the entrepreneurs' eagerness to start their own businesses and the supply through investors' desire to invest to risky ventures and the availability of potential ventures to invest in. A favorable economic environment in terms of economic growth was thus found to influence the venture capitalist's decision of when and where to make cross-border venture capital investments (Schertler & Tykvová 2012). Economic growth was also found to influence the other economic factors, implying that it may strengthen the effects of the other economic factors on supply and demand of venture capital, and thus on cross-border venture capital investment decision making (Schertler & Tykvová 2012).

Taxation was seen to influence both the supply and demand of venture capital in terms of capital gains tax and therefore influence cross-border venture capital investment decision making. Capital gains tax was discussed to influence the supply of venture capital through the investors' desire to invest to venture capital funds and on the other hand to demand through the entrepreneurs' desire to attract venture capital investments to their ventures (Jeng & Wells 2000). According to the literature a lower capital gains tax associates with higher venture capital investments (Poterba 1989).

4.2 Managerial contributions

On top of the theoretical contributions to the existing literature, this study also gives managerial implications to venture capital firms' managers as well as to entrepreneurs

aiming to score venture investments and also to governmental decision makers aiming to enhance venture capital investments in their country.

Venture capital firms' managers can based on the literature reviewed in this study more accordingly define the factors that they need to acknowledge and evaluate when making cross-border investment decisions. With the information provided in this study venture capital fund managers can also more accordingly evaluate the cross-border activities that are the most (expectedly) profitable and determine and evaluate the cross-border investment factors that influence the fund raising from investors.

This study also makes contributions to entrepreneurs seeking to obtain venture financing. Entrepreneurs seeking to obtain (cross-border) venture financing can with this study determine the factors that are most relevant to the venture capitalists in terms of investing to cross-border ventures. Acknowledging this information, entrepreneurs can try to improve their abilities that directly or indirectly are relevant also to the venture capital investment decision making, such as the entrepreneur's networks to people who might act as referrers to venture capitalists.

For governments seeking to improve their venture capital markets this study gives implications on what governmentally actable factors are important for venture capitalists when they are seeking to invest in to a specific country. This study also implies how these factors should be organized to ensure the best possible outcome for a venture capital investment.

4.3 Limitations and future research

This study is exposed to some limitations related both to time and width limits of this study, as well as to the deficiency of empirical evidence supporting the findings presented in this study. Restricted amount of time to finish this study made it impossible to review all the articles that would have had relevance to the study. Time limitations also restricted the possibility to gather empirical evidence, leading to the study completely leaning on previous research related to the topic.

Limitations to the width of this study forced to limit the research to explore only a limited amount of factors that influence cross-border venture capital investment decision making, leaving possibly relevant factors that may influence cross-border venture capital investment decision making unexplored (See e.g. Wells 1974, Tyebjee & Bruno 1984, Fried & Hisrich 1994). This study also completely ignores whether or not the invested venture size is important in cross-border venture capital investment decision making.

This study leaves multiple questions for future research. Empirical research should be carried out to test how relevant the factors found in this study to influence cross-border venture capital investment decision making actually are in the decision making process. Research on how these factors are evaluated in venture capital decision making would also help to more thoroughly understand the topic. Also factors, such as firm-specific evaluation, that were not explored in this study should be examined more comprehensively.

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