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This doctoral dissertation consists of three studies that discuss several aspects of the international development of the private equity industry. We start this dissertation with an introductory chapter that introduces our research topic. Chapter 2, 3 and 4 present each of the three studies. The final chapter discusses the main findings and contributions of the studies.

Chapter 1: Introduction

Private equity (PE) emerged in the 1970s and 1980s in the United States and became an important financing source for unquoted companies. Although the gradual internationalization is a major development within the private equity industry, this topic has only recently been addressed in academic literature (Wright, Pruthi & Lockett, 2005). The goal of this dissertation is to increase our understanding of international PE transactions. We hereby focus on the one hand on the drivers of PE investors' cross-border activities and on the other hand on the exits of international transactions. In this introductory chapter, we will first describe the PE market in addition to the development of cross-border PE. A particular emphasis will be given to international PE transactions as an interesting research setting for academics and the state of the current literature in terms of its contributions and gaps. Thereafter, we will outline the main theoretical contributions of this dissertation. This is followed by a detailed explanation of the research setting. A summary of the dissertation studies concludes this introduction.

1.1 Setting the scene: Private equity investing

Private equity investors are financial intermediaries that acquire unquoted firms for a limited time period, generally for about five to seven years. They have broadly two different business models. The first investment strategy is to finance young, entrepreneurial ventures with a high risk and a high growth potential. These are often excluded from most external sources of capital such as bank loans or stock markets. This investment strategy is typically called venture capital or early stage investing. A PE investor takes an equity stake in these firms. A second investment strategy is to acquire and restructure established firms in close cooperation with its management. This is the buyout investment market. Buyouts are, in contrast to early stage investments, often highly leveraged during their PE ownership (Landström, 2007)¹. What characterizes both business models are the strict selection of these investments and a detailed assessment of information asymmetries² between the private equity investor and the managers of the

¹ The first category is often defined as the venture capital investment market and the second as the buyout, later stage or private equity market. Venture capital and private equity are however often substituted and can generally be considered as synonyms (Wright & Robbie, 1998).

² Information asymmetry entails that one party has more or superior information than another party. This happens often in private equity investments where managers have more information about a firm than the owners (i.e. the

company (Cressy, Munari & Malipiero, 2007; Metrick & Yasuda, 2011). PE investors are furthermore highly involved in the management of these companies through close monitoring and guidance. Finally, the returns of the investment are gained at the end of the investment when the company is sold, either on through an IPO, or - in most cases- through an acquisition (Wright & Robbie, 1998).

The development of the PE industry started in the 1970s in the United States. It is driven by an increase in investment opportunities, tax incentives and by the increasing commitment of pension funds and financial institutions (Landström, 2007). The UK has become the second most important PE region since the beginning of the 1980s. Over the past 20 years, PE investing spread out towards Continental Europe and it is currently developing in emerging regions such as Eastern Europe, Asia and Latin America (Wright et al., 2005).

To further highlight the importance of PE transactions, consider the following figures. In 2010, €203 billion was invested globally in the PE industry despite difficult economic conditions. In 2008, global investing even amounted for € 364 bn. The total investment volume of PE transactions (both early and later stage investments) worldwide between 2000 and 2010 is estimated at € 2,046 billion and more than 130,000 transactions. Later stage investments account for almost 70% of the total investment volume compared to 30% for early stage investments over those years. As investment amounts in the early stage market are generally much smaller than later stage ones, the venture capital market accounts with more than 94,000 investments for 71% of all investments, compared to 38,000 investments in the buyout market (29% of the total number). US has the largest investment volume of all countries and corresponds to more than half of the total number of private equity investments between 2000 and 2010. The development of the European market between 2000 and 2010 is also considerable with more than 38,000 PE investments (29% of the total number) and a total investment volume of € 1030 billion, which corresponds to 50% of the global investment value. Within Europe, UK is the largest PE market and accounts for 25% of all European investments (Thomson One, 2012).

1.2. International private equity transactions

The emphasis of PE investors on a reduction of information asymmetries explains the advantage of proximity (Mason, 2007). More specifically, in order select the most promising investment opportunities, obtaining high quality information is essential. This information is however mostly locally available through direct or indirect contacts with intermediaries, investors and consultants (Sörenson & Stuart, 2001). Local presence remains highly important during the investment as well. PE investors devote

private equity investors). Potentially, the lack of information could be harmful because one party can take advantage of the lack of information of the other party.

substantial time in monitoring and value adding activities which requires close guidance, board representativeness and frequent contacts with the firm and its management (Wright et al., 2005). Familiarity with the firm and with local practices and regulations are important in this respect, notwithstanding the need for a specialized knowledge of local stakeholders such as suppliers, managers and local regulations (Mäkelä & Maula, 2005; Mason, 2007). Finally, the sale of PE backed companies benefits from proximity, because acquirers face substantially lower acquisition costs when they are located closely to the PE investment or the selling PE investor (Hursti & Maula, 2007; Jääskeläinen & Maula, 2008).

Because of the benefits of local presence, non- domestic investments were only a small fraction of the total investment activity before the early 1990s (Manigart, De Prijcker & Bose, 2010). This has changed substantially since then. In order to highlight the importance of cross-border private equity transactions, a brief overview of the international development of the private equity industry between 2000 and 2010 is provided in Table 1. This table details the number of investments as well as the total investment value. Panel A of Table 1 shows the annual trend in international private equity. Panel B presents the international development of the venture capital and buyout investment market and Panel C shows the regional spread of international private equity investments. This overview is based on Thomson One database on worldwide venture capital and buyout investments (Thomson One, 2012).

Insert Table 1.1. around here

Panel A of Table 1 shows that both the number of international as well as domestic investments has increased substantially since 2000. As a result, there is a relatively stable trend in the proportion of international private equity investments of about 24%. However, the total international investment volume has risen substantially from about 70% in 2000 to more than 80% of the global private equity value. This stresses the highly international orientation of private equity market. It also indicates that cross-border investments are on average much larger than domestic investments.

Panel B of Table 1 shows that internationalization is highly important in both segments of the private equity industry: the relative number of international investments in the venture capital market is equal to the buyout market. However, in terms of the total investment value, the buyout market is more internationally oriented: 78% of the total investment volume in the buyout market is related to cross-border deals compared to 70% in the venture capital market. Interestingly, the distribution of cross-border investing varies substantially across different target country regions. This is presented in Panel C. While only 14% of the North American PE investments are made by cross-border investors, this is almost 35% in Europe. Asia and the Middle East are even more internationally oriented. The latter is mainly due to an

attractive Israeli VC market. Most international investments occur in Continental Europe (42%), followed by North America (34%) and Asia (16%). North America, Europe and Asia also account for the highest international investment value: 51% of the total cross-border investment volume occurs in Europe, 17% of all international investments occur in Asia and 14% of the cross-border deals are invested in North American firms. In these regions, cross-border PE finance accounts for more than $\frac{2}{3}$ of the total investment volume. In sum, our findings show that cross-border private equity has become a crucial part of the global private equity market.

Given the benefits of proximity, the importance of the cross-border private equity industry is paradoxical. This raises the interesting question how cross-border PE investors cope with the complexity of non-domestic investing (Mason, 2007). As a result, cross-border investing receives increasing attention from business scholars. While this research field was almost non-existing 10 years ago, there are currently a growing number of publications in the area of cross-border PE. These studies are not solely relevant for PE scholars but apply to a broader audience in the area of international business: both private equity and international business scholars focus on the effects of information asymmetries. The information asymmetries in PE investing and internationalization originate from different sources however. Whereas the PE literature focuses on the information asymmetries between the managers of a firm and the private equity owners, internationalization theory stresses information asymmetries between local and international actors as a result of distant and unfamiliar markets. More specifically, cross-border actors are not as privileged as domestic ones in their access towards local information. This derives from the geographical distance but also from a different culture, language and institutional context. For cross-border actors, this complicates the incorporation of local market conditions. Hence, the information disadvantages between the managers of a firm and the PE owners are particularly pronounced in a cross-border context. This makes international PE transactions a highly interesting research setting.

Academic studies in the area of cross-border PE focus generally on three types of phenomena. One research stream examines the motives of international PE transactions and the preferred investment regions. These studies show that PE investors gradually internationalize towards regions with an increasing geographical, cultural and regulatory distance (Alhorr, Moore & Payne, 2008; Manigart et al., 2010). Moreover, PE investors favor internationalization towards more institutionally developed countries as this creates a more investor-friendly climate with more transparency and less information asymmetries between PE owners and its management (Guler & Guillén, 2010). When cross-border PE investors enter distant or less institutionally developed regions, they alleviate information asymmetries through international experience, a focus in later stage investments and close cooperation with local PE investors. A close cooperation with local PE investors mainly occurs under the form of a combined equity

investment by local and international PE investors which is known under the term local syndication (Dai, Hoje & Kassicieh, 2011; Chemmanur, Hull & Krishnan, 2012; Meuleman & Wright, 2011; Tykvová & Schertler, 2006). A second research stream explains how cross-border PE investors need to adapt their investment strategy to compensate for the lack of knowledge of local market conditions such as the different levels of ownership protection. Both local syndication and staffing with local managers is important herein (Tykvová & Schertler, 2006; Pruthi, Wright & Meyer, 2009). Cross-border PE investors furthermore focus on different aspects of monitoring and value adding than domestic investors. They prefer strategic monitoring and advice which is easier to guarantee across distance than monitoring of the operational activities (Pruthi, Wright & Lockett, 2003). The third research stream focuses on the outcomes of international private equity. While cross-border PE investors may help their investments to implement an internationalization strategy, the remoteness of an international investor and his limited local experience could potentially be harmful (Hursti & Maula, 2007; Mäkelä & Maula, 2005, 2006). Recent findings therefore stress the benefits of a local syndication for the growth and success of the investment, particularly for early stage investments and for investments in emerging markets (Dai et al. 2011; Chemmanur et al., 2012; Devigne, Vanacker, Manigart & Paeleman, 2011).

In sum, there is notable research on institutional factors and local syndication in this research field. This contrasts to a lack of understanding on the effects of firm-specific heterogeneity for cross-border PE investing. More specifically, we know very little about the influence of PE investors' resource base on the international investment strategy or on the outcomes of internationalization. The three doctoral dissertation studies aim to address this research gap. In each of these, we examine whether the PE investor's resources alleviate the information asymmetries within different aspects of cross-border PE investing.

1.3. Integrating the international business literature with the resource-based view of the firm

The focus on PE investors' resources explains why this dissertation lies at the intersection between the international business literature and the resource-based view of the firm (RBV). The RBV argues that a sustained competitive advantage derives from resources that are valuable, rare, inimitable and not substitutable (Barney, 1991). Clearly, within the context of the resource-based view, an important research question is: under which conditions do the resources of the firm influence the performance of corporations in cross-border activities? In particular, the resource-based view is considered as the main theoretical ground to explain how corporations can reduce the complexity of internationalization (Peng, 2001).

Initially, the RBV was a context-free theory; the potential influence of environmental conditions on the value of resources was not taken into account. However, recent findings do show that the characteristics of

the business environment are an important moderator of the relationship between resources and performance (Holcomb, Holms & Connelly, 2009). Information asymmetries are a very important aspect herein. Resources (and strategies) that are valuable under low information asymmetries may become value destructive under high information asymmetries and vice versa (Brush & Artz, 1999). In order to address these issues, management scholars increasingly adopt a contingent resource-based view perspective. This theory combines insights from RBV and the contingency theory. The latter posits that a firm's competitive advantage originates from a proper alignment with the context in which it operates (Aragón-Correa & Sharma, 2003).

In this dissertation, we will apply the same approach and examine the effectiveness of resources for international PE investments, an activity characterized by severe information asymmetries. A central research question within this dissertation is whether resources that are developed within a particular, international context create a competitive advantage. This is an interesting question as there are currently contradicting expectations on the benefits of context-specific resources under high information asymmetries. On the one hand, large information asymmetries create severe issues for managers to make decisions and to assess the consequences of the decisions they make. Under these conditions, managers become more risk averse and rely primarily on resources that have proven to be valuable in a particular context (Aragón-Correa & Sharma, 2003). Moreover, as context-specific resources are ready to exploit and relatively easy to apply, they help firm to create a competitive advantage under large information asymmetries (Carpenter & Frederickson, 2001, Aragón-Correa & Sharma, 2003). On the other hand, context-specific resources are less generally applicable and they might create a rather narrow mindset. This bounds the firm from potentially relevant information. It may also limit the search towards novel, potentially more effective mechanisms how to deal effectively with the information disadvantages in international activities (Chetty, Eriksson & Lindberg, 2006; Miller & Shamsie, 1996).

Through a focus on internationalization of PE investors, the studies within this dissertation aim to get a better view on the effectiveness of context-specific resources in a context of high information asymmetries. More specifically, in the first study we focus on the relationship between PE investors' context-specific resources and the decision to opt for internationalization as a value creating strategy. In the second and third study, we examine whether context-specific resources influence the outcomes of a cross-border investment strategy, and the exit of their investments in particular. As such, we disentangle the effect of context-resources on performance into two steps. First, we focus on the relationship between context-specific resources and internationalization. Second, we study the influence of context-specific resources on the success of private equity investors' cross-border investment strategy. This provides us

with a richer understanding of the influence of PE investors' context-specific resources and the mechanisms through which these resources create or destruct value.

1.4. Overview of the research questions and objectives

Table 2 gives a schematic overview of the three dissertation studies. It indicates the aspects of cross-border investing, the levels of information asymmetries and the resources that are examined. The first study focuses on the international investment strategy. The second and third study look at acquisition exits after cross-border PE ownership. While the second study examines the effect of cross-border ownership on the type of acquisition exit, the third study focuses on the effect of cross-border ownership on the likelihood of a domestic versus an international acquisition exit. Hereunder, the contributions of the three dissertation studies to the international business literature and to the resource-based view are explained.

Insert Table 1.2. around here

1.4.1. Study 1: The influence of experiential, inherited and external knowledge on the internationalization of private equity investors

In this study, we examine whether PE investors invest across borders in addition to the extent of international investments. It aims to advance the contingent resource-based view through its focus on context-specific, foreign knowledge as a driver of internationalization. Building on insights from the resource-based view and international business literature; it examines which sources of foreign knowledge matter most for cross-border investing. Currently, there is no consensus herein. While international business scholars embedded in the process-based view of internationalization highlight the importance of internally developed knowledge for internationalization (Johanson & Vahlne, 1977), insights from the new venture internationalization studies suggest that relevant foreign market knowledge may originate from outside the firm as well (e.g. Oviatt & McDougall, 1994). We therefore focus on both internal as well as external sources of foreign knowledge: firm level experiential knowledge acquired through previous foreign investments, inherited knowledge through the prior working experience of its management and external knowledge through foreign network partners. The research question in this study is therefore: *What is the effect of experiential, inherited and external knowledge accumulation on the likelihood and extent of cross-border acquisitions of private equity investors?*

1.4.2. Study 2: Acquisition exits of cross-border buyouts: Differentiating between financial and strategic acquisitions

The second study differentiates between strategic and financial acquisition exits of cross-border buyouts. After the first part that examines the influence of cross-border buyout growth and efficiency on the

acquisition type, this study focuses on the role of PE investor reputation in the exit process. More specifically, it examines how the reputation of the selling international private equity investor can reduce the information asymmetries in the sale of cross-border buyouts. These information asymmetries originate from the uncertainty of strategic and financial acquirers in the reliability of the target's financial information. This uncertainty is due to the private and international ownership of the cross-border private equity investor prior to the acquisition exit (Beuselinck, Deloof & Manigart, 2009, Fang, 2005).

The contingencies on the reduction of information asymmetries through reputation are not are not fully understood however (Rhee & Valdez, 2009). Scholars increasingly highlight the segmentation of reputation towards different industries (e.g. Hsu, 2004), but it is unknown whether context-specific reputation can reduce the information problems of foreign owned businesses. For this reason, we examine the effectiveness of general as well as context-specific types reputation. With respect to context-specific reputation, both country-specific reputation (i.e. reputation within the investment country) and industry-specific reputation (i.e. reputation within the investment industry) are studied. The research question of the second dissertation study is therefore: *Can the overall, country-specific and industry-specific reputation of the private equity investor reduce the information asymmetries in acquisition exits of cross-border buyouts?*

1.4.3. Study 3: Cross-border financial intermediation and domestic acquisitions: The role of host country experience

The focus of the third study is the information cost of domestic acquirers in the acquisition process of internationally owned firms. While cross-border financial intermediaries, such as PE investors, may be particularly advantageous for cross-border acquirers, they are less able than local intermediaries to reduce the information problems of domestic acquirers. This is the result of a lower integration of cross-border financial intermediaries in local information networks. This creates a liability of foreignness (Hymer, 1976).

International business scholars have stressed the benefits of context-specific resources and in particular host country experience (i.e. experience in the country of the acquisition target) as a critical resource to overcome the liability of foreignness of financial service providers (Zaheer & Mosakowski, 1997). As such, we expect this to be important for financial intermediaries to reduce the information costs of domestic acquirers. However, within this literature stream, there is an increasing debate on the effectiveness of host country experience across different business contexts (Nachum, 2003). As a result, we study domestic acquirers' connectivity towards local information channels as a contingency effect on the influence of intermediaries' host country experience. In a first step, we examine the social aspect of

connectivity. We thereby focus on the access to local information through informal business networks (Davidsson & Honig, 2003). A second part focuses on the institutional aspect of connectivity. This investigates the impact of connectivity with alternative financial intermediaries across different levels of financial market development (Johnson, 2004). The research question in this study is therefore: *What is the effect of host country experience of cross-border financial intermediaries on the information costs of domestic acquirers? Is the effect of host country experience contingent on the connectivity of domestic acquirers towards local sources of information?*

1.5. Empirical setting: The European private equity market

This dissertation focuses on international PE transactions in Europe, particularly in Western Europe. While the first study examines the international investment strategy of European PE investors, the second and third study focus on deals located in Europe with a cross-border owner. Europe is second largest PE market after the United States (Lerner et al., 2009) but it tends to mirror the US with an increasing number of large and experienced investors and a mature fund raising market (Alhorr et al., 2008; Manigart et al., 2010).

The European PE market is a preferable research setting to study cross-border PE transactions due to better data availability in addition to its international orientation. The figures on cross-border investing illustrate the internationalization of the European PE industry. Over the period 2000-2010, 35% of all European private equity transactions were supported by foreign investors. In terms of deal value, the international orientation is even more notable as 77% of the total transaction volume originates from cross-border investments (see Table 1 supra).

Although data on European private equity investments and other private companies is much more available in Europe compared to the United States, one of the main constraints of PE researchers remains the access to relevant information. Moreover, information on the investment strategy and international orientation of these investors is difficult to obtain. Data are therefore drawn from multiple data sources. Each study combines a hand collected dataset with information from other, more widely available databases.

The first study uses survey information on PE investors originating from 5 European countries: Belgium, Germany, the Netherlands, Sweden and the UK. These countries were chosen because they cover a substantial and diverse part of the European PE market. Moreover, these countries are considered increasingly mature PE investor markets, covering a large proportion of the cross-border investors in this region (Manigart et al. 2010; Schertler & Tykvová, 2011). Our sample combines the early and later stage

investment market. Information is collected through surveys by a lack of publicly available information on many variables of interest such as investor fund size or the number and international experience of the investment managers. This is added with information from the Zephyr (Bureau van Dijk) database which contains detailed information on PE transactions as from 1997.

The second and third study focus on international transactions within the later stage, buyout investment market. They use the database from the Centre for Management Buy-out Research as the primary data source (CMBOR). This is a unique, hand-collected dataset on European buyout transactions. It covers the entire population of UK PE transactions as from the beginning of the 1980s in addition to the entire population on Continental European deals as from the beginning of the 1990s. From this database, we collected individual deal characteristics on cross-border buyout transactions during the period 1997-2004 within 6 different countries: Belgium, France, Italy, the Netherlands, Spain and Sweden that have exited through an acquisition. Unquoted companies located in these countries are interesting data sources as they provide detailed annual account information. The CMBOR data are then combined with other data sources. Annual account information is obtained from the Amadeus database (Bureau van Dijk), the Datastream database provides information on business cycle effects and the World Bank data covers data on the institutional development. By combining these different sources, we were able to construct a unique and rich dataset for the three dissertation studies.

1.6. A summary of the three dissertation studies

1.6.1. Study 1: The influence of experiential, inherited and external knowledge on the internationalization of private equity investors

Principal topic

The increasing globalization is one of the most important developments in the professional service industry. International activities are however associated with a steep increase of information asymmetries (Filatotchev & Wright, 2011). These are particularly pronounced in professional services, due to the inherent difficulties for outsiders to verify the quality of the service ex-ante and to monitor them ex-post (Sanchez-Peinado & Pla-Barber, 2006; von Nordenflycht, 2010). Despite these adverse circumstances, our knowledge of how professional service firms deal with information asymmetries in cross-border activities is still limited. PE investors' cross-border activities are an interesting example of professional service firms' recent global development. Their value creating activities reside to a large extent in their ability to address information asymmetries and agency issues. The latter are heavily influenced by local market conditions and practices (Filatotchev & Wright, 2011).

A central theme in international business research is the importance of foreign knowledge accumulation that helps firms to deal with internationalization uncertainties (Yli-Renko, et al., 2002). The goal of this study is to understand how foreign knowledge accumulation influences cross-border activities under conditions of large information asymmetries that characterize the internationalization of professional service firms and PE investors in particular. Early internationalization theorists recognized the importance of internal knowledge development (Johanson & Vahlne, 1977). Subsequent findings from new venture internationalization studies (e.g. Oviatt & McDougall, 1994) showed that relevant foreign market knowledge may originate from outside the focal firm as well (e.g. Autio, 2005; Johanson & Vahlne, 2009). We therefore focus on both internal and external sources of foreign knowledge accumulation in this study: firm-level experiential knowledge acquired through previous foreign investments, inherited knowledge through the prior foreign work experience of its management and external knowledge through its foreign network partners. We empirically test whether they increase the likelihood and the number of international investments of cross-border venture capital firms.

Method

The hypotheses are tested using a representative sample of PE investors in five European countries: Belgium, Germany, the Netherlands, Sweden and the United Kingdom. Our unique hand-collected dataset combines information from questionnaires and archival data sources. Information concerning inherited knowledge was, together with the control variables, collected through postal or e-mail surveys with senior managers or managing partners as key respondents. The sample was identified through national and European PE associations. Non-member firms that act as PE investors were added. Information on international investment partners and international investments required to compute the network variables and the dependent variables was obtained from the Zephyr-Bureau Van Dijk commercial database. This resulted in a final sample of 110 usable responses (=18.83% of the original sample): 17 Belgian, 28 German, 6 Dutch, 15 Swedish and 44 UK PE investors. We adopted a Heckman two-stage model to analyze the cross-border investment activities of PE investors, estimating first the probability of investing cross-border in a selection equation and, conditional on investing cross-border, estimating the number of cross-border investments (Estrin, Meyer, Wright & Foliano, 2008; Heckman, 1979).

Findings

Our findings stress the positive effect of foreign knowledge accumulation on PE investors' international investment behavior. Experiential knowledge has a large effect on international investment activity both in terms of the likelihood and the extent of international investments. Inherited knowledge through previous international activities of its managers is important as well, particularly for the likelihood of being

international. Our results on external knowledge accumulation point at the importance of the foreign network structure and particularly at the differences between the number of international partners (network range) and the intensity of the cooperation with these partners. While the range of the international network does not have a significant effect on the likelihood of being international, the intensity of cooperation negatively affects it. International PE investors with intense foreign network relationships are more likely to become domestic. Finally, external knowledge accumulation does not affect the extent of international activities. Together, these results highlight the importance of experiential and inherited knowledge to overcome the information asymmetries inherent in the international investment behavior of professional services and of PE investors in particular.

1.6.2. Study 2: Acquisition exits of cross-border buyouts: Differentiating between financial and strategic acquisitions

Principal topic

Continental Europe has become an attractive investment region for cross-border private equity investors, despite the lack of a flourishing stock market (Meuleman & Wright, 2009). In order to understand their preference for Continental Europe, it is crucial to increase our knowledge of acquisition exits of cross-border buyouts that provide an alternative to IPO exits. This paper aims to address this knowledge gap and differentiates between strategic acquisitions (also called trade sales) and financial acquisitions (also called secondary buyouts). In a first step, we examine whether the value creating mechanisms of the cross-border PE investor prior to divestment explain the differences between financial and strategic acquisitions. More specifically, we study the effect of growth and efficiency during the cross-border buyout as driver of the acquisition type. In a second step, we focus on the reduction of information problems inherent in the sale of cross-border buyouts. We examine whether the reputation of the cross-border PE investor can alleviate these information problems. We also differentiate between different types of reputation in this study. The effectiveness of overall as well as country-specific and industry-specific reputation is examined. As such, we test whether the effect of reputation in the reduction of information costs is segmented across countries and industries.

Method

We focus on acquisition exits of cross-border buyouts located in Continental Europe. As a result of its bank oriented financial system, acquisitions are the dominant exit mechanism for buyouts in this region. They correspond to more than 90% of all successful divestments by PE investors (Black & Gilson, 1998; CMBOR, 2008). The acquisitions in our sample are identified through the database of the Centre for

Management Buyout Research (CMBOR) which is regarded as a comprehensive source of information on acquisition exits in Europe. Our dataset covers cross-border buyout exits located in six countries: Belgium, France, Italy, the Netherlands, Spain and Sweden. The database covers the sale of investments that were made between 1997 and 2004. In order to be included in our sample, an acquisition needs to occur before the end of 2008. Our final samples consist of 180 acquisition exits: 83 strategic acquisition exits and 97 financial acquisition exits. A combination of logit analysis and seemingly unrelated estimations is used to obtain our results.

Findings

The results indicate substantial distinctions between strategic compared to financial acquisitions. First, we show that cross-border buyout growth increases the probability of a strategic compared to a financial acquisition. The opposite effect is found for efficiency, which decreases the probability of a strategic compared to a financial acquisition. Moreover, our findings stress the role of the selling PE investor's reputation in the reduction of information problems. As a result, both overall as well as country-specific and industry-specific reputation strengthen the relationship between efficiency and the type of acquisition exit of cross-border buyouts. Country-specific reputation also increases the effect of growth on the acquisition type. Finally, our findings indicate that country-specific reputation has the strongest impact of the three reputation measures in our study.

1.6.3. Study 3: Cross-border financial intermediation and domestic acquisitions: The role of host country experience

Principal topic

Financial intermediaries, such as financial investors, help to spread information thereby substantially reducing the information costs of acquirers (Chemmanur & Fulghieri, 1994). A substantial number of financial intermediaries originate from cross-border regions. Their large and geographically dispersed network increases the spread of information towards foreign acquirers (Jääskeläinen & Maula, 2008; Ragozzino & Reuer, 2011). This contrasts to domestic acquirers who favor domestic intermediaries which are more embedded in the host country information networks (Granovetter, 1985; Zaheer & Mosakowski, 1997). This creates an important liability of foreignness for cross-border financial intermediaries.

In this study, we focus on the transfer of information between cross-border financial intermediaries and domestic acquirers. We examine how cross-border financial intermediaries can alleviate their liability of foreignness towards domestic acquirers through higher levels of host country experience. The latter is

defined as the experience acquired by the financial intermediary through prior business deals in the country of the target company (Chetty, Eriksson & Lindbergh, 2006). First, we investigate whether host country experience increases the likelihood of a domestic over an international acquisition through a reduction of domestic acquirers' information costs. In a second step, we study domestic acquirers' connectivity towards local information channels as a contingency effect on the influence of intermediaries' host country experience. On the one hand, we examine the moderating effect of connectivity through informal business contacts between the domestic acquirer and the cross-border financial intermediary. We therefore investigate whether the influence of host country experience differs between financial acquirers - that operate within the same informal business network as financial intermediaries - and strategic buyers - with less established network connections to financial intermediaries. On the other hand, we study the moderating effect of the domestic acquirers' connectivity towards alternative financial intermediaries under higher levels of financial market development.

Method

Our hypotheses are tested on a unique and hand-collected sample of 296 acquisitions that were guided by cross-border financial intermediaries. More specifically, the acquisition targets were financed by a non-domestic private equity investor prior to the acquisition. Given the substantial equity stake by these investors, they are highly involved in the acquisition process of the firms they guide. Acquirers therefore attach a particularly high importance to the information spread by these intermediaries (Fitza & Dean, 2009). We furthermore concentrate on the Continental European market, as this market is increasingly internationally oriented with a high number of both domestic and international acquisitions, a large and diverse set of cross-border private equity investors in addition to a substantial variation of institutional characteristics (Meuleman & Wright, 2011).

Findings

Our findings support the positive effect of host country experience of cross-border financial intermediaries on the likelihood of a domestic acquisition. The reduced liability of foreignness originates from a higher embeddedness of financial intermediaries within the local market and an increased transfer of information towards domestic acquirers (Coval & Moskowitz, 1999; Zaheer & Mosakowski, 1997). In addition, we stress the moderating effect of domestic acquirers' connectivity towards local sources of information. We thereby show the effect of domestic acquirers' connectivity to the financial intermediary through information business networks as well as the connectivity towards alternative financial intermediaries through higher levels of host country financial market development.

1.7. References

- Alhorr, H. S., Moore, C. B., & Payne, G. T. 2008. The impact of economic integration on cross-border venture capital investments: Evidence from the European Union. *Entrepreneurship Theory and Practice*, 32, 897-917.
- Aragon-Correa, J. A. & Sharma, S. 2003. A contingent resource-based view of proactive corporate environmental strategy. *Academy of Management Review*, 28, 71-88.
- Autio, E. 2005. Creative tension: The significance of Ben Oviatt's and Patricia McDougall's article 'Toward a theory of international new ventures'. *Journal of International Business Studies*, 36, 9-19.
- Barney, J. 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99-120.
- Beuselinck, C., Deloof, M., & Manigart, S. 2009. Private equity involvement and earnings quality. *Journal of Business Finance & Accounting*, 36, 587-615.
- Bonini, S. 2010. *Secondary buy-outs*. Working paper Bocconi University, Milan, Italy.
- Brush, T. H. & Artz, K. W. 1999. Toward a contingent resource-based theory: The impact of information asymmetry on the value of capabilities in veterinary medicine. *Strategic Management Journal*, 20, 223-250.
- CMBOR 2008. *European management buyouts: European management buy-out review*. Nottingham, UK: Centre for Management Buyout Research.
- Chemmanur, T. J. & Fulghieri, P. 1994. Investment bank reputation, information production, and financial intermediation. *Journal of Finance*, 49, 57-79.
- Chemmanur, T.J., Hull, T. & Krishnan, K. 2012. Do local and international venture capitalists play well together? The geography of international venture capital investments. *AFA 2012 Chicago Meetings paper*.
- Chetty, S., Eriksson, K., & Lindbergh, J. 2006. The effect of specificity of experience on a firm's perceived importance of institutional knowledge in an ongoing business. *Journal of International Business Studies*, 37, 699-712.
- Cressy, R., Munari F., & Malipiero, A. 2007. Playing to their strengths? Evidence that specialization in the private equity industry confers competitive advantage. *Journal of Corporate Finance*, 13, 647-669.

- Dai, N., Hoje, J & Kassicieh, S. 2011. Cross-border venture capital investments in Asia: Selection and exit performance. *Journal of Business Venturing*, in press.
- Davidsson, P. & Honig, B. 2003. The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18, 301-331.
- Devigne, D., Vanacker, T., Manigart, S., & Paeleman, I. 2011. The role of domestic and cross border venture capital investor in the growth of portfolio companies. *Small Business Economics*, in press.
- Estrin, S., Meyer, K. E., Wright, M., & Foliano, F. 2008. Export propensity and intensity of subsidiaries in emerging economies. *International Business Review*, 17, 574-586.
- Filatotchev, I., & Wright, M. 2011. Agency perspectives on corporate governance of multinational enterprises. *Journal of Management Studies*, 48, 471-86.
- Fitza, M. and Dean, T. 2009. The relative importance of VC certification in the mitigation of information asymmetry at IPOs. *Academy of Management Best Paper Proceedings*.
- Granovetter, M. 1985. Economic action and social structure - The problem of embeddedness. *American Journal of Sociology*, 91, 481-510.
- Guler, I. & Guillen, M. F. 2010. Institutions and the internationalization of US venture capital firms. *Journal of International Business Studies*, 41, 185-205.
- Heckman, J. 1979. Sample selection bias as a specification error. *Econometrica*, 47, 153-161.
- Hursti, J. & Maula, M. W. 2007. Acquiring financial resources from foreign equity capital markets: An examination of factors influencing foreign initial public offerings. *Journal of Business Venturing*, 22, 833-851.
- Hymer, S. H. 1976. *The international operations of national firms: A study of direct investment*. Cambridge, MA: MIT Press.
- Jääskeläinen, M., & Maula, M. 2008. *Do networks of financial intermediaries help reduce local bias? Evidence from cross-border venture capital*. Working Paper Helsinki University of Technology, Helsinki, Finland.

Johanson, J., & Vahlne, J. E. 1977. Internationalization process of firm - Model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8, 23-32.

Johanson, J., & Vahlne, J. E. 2009. The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40, 1411-1431.

Johnson, S. 2004. 'Milking the elephant': Financial markets as real markets in Kenya. *Development and Change*, 35, 247-274.

Kang, J. K., & Kim, J. M. 2010. Do foreign investors exhibit a corporate governance disadvantage? An information asymmetry perspective. *Journal of International Business Studies*, 41, 1415-38.

Landstrom, H. 2007. Pioneers in venture capital research. In H. Landstrom (Ed.), *Handbook of research on venture capital*: 3-65. Cheltenham, UK: Edwards Elgar.

Lerner, J., Sorensen, M., & Stromberg, P. 2009. *What drives private equity activity and success globally?* World Economic Forum. Globalization of Alternative Investments Working Papers Volume 2. The Global Economic Impact of Private Equity Report 2009.

Mäkelä, M. M., & Maula, M. V. J. 2005. Cross-border venture capital and new venture internationalization: An isomorphism perspective. *Venture Capital*, 7, 227-257.

Mäkelä, M. M. & Maula, M. V. J. 2006. Interorganizational commitment in syndicated cross-border venture capital investments. *Entrepreneurship Theory and Practice*, 30, 273-298.

Manigart, S., De Prijcker, S., & Bose, S. 2010. International private equity flows. In D. Cumming (Ed.), *Private equity: Fund type; risks and returns, and regulation*: 395-417. Hoboken, NJ, US: John Wiley & Sons.

Mason, C. 2007. Venture capital: A geographical perspective. In H. Landstrom (Ed.), *Handbook of research on venture capital*: 86-112. Cheltenham, UK: Edward Elgar.

Metrick, A. & Yasuda, A. 2011. Venture capital and other private equity: a survey. *European Financial Management*, 17, 619-654.

- Meuleman, M., & Wright, M. 2011. Cross-border private equity syndication: Institutional context and learning. *Journal of Business Venturing*, 26, 35-48.
- Nachum, L. 2003. Liability of foreignness in global competition? Financial service affiliates in the City of London. *Strategic Management Journal*, 24, 1187-1208.
- Oviatt, B. M., & McDougall, P.P. 1994. Toward a theory of international new ventures. *Journal of International Business Studies*, 25, 45-64.
- Peng, M. W. 2001. The resource-based view and international business. *Journal of Management*, 27, 803-829.
- Pruthi, S., Wright, M., & Lockett, A. 2003. Do foreign and domestic venture capital firms differ in their monitoring of investees? *Asia Pacific Journal of Management*, 20, 175-204.
- Pruthi, S., Wright, M., & Meyer, K. 2009. Staffing venture capital firms' international operations. *International Journal of Human Resource Management*, 20, 186-205.
- Ragozzino, R. & Reuer, J. J. 2011. Geographic distance and corporate acquisitions: Signals from IPO firms. *Strategic Management Journal*, 32, 876-894.
- Rhee, M., & Valdez, M. E. 2009. Contextual factors surrounding reputation damage with potential implications for reputation repair. *Academy of Management Review*, 34, 146-168.
- Sanchez-Peinado, E., & Pla-Barber, J. 2006. A multidimensional concept of uncertainty and its influence on the entry mode choice: An empirical analysis in the service sector. *International Business Review*, 15, 215-232.
- Thomson One, www.thomsonone.com (assessed September 11, 2012).
- Tykvová, T. & Schertler, A. 2006. Rivals or partners? Evidence from Europe's international private equity deals. *ZEW Centre for Economic Research Discussion paper*.
- Schertler, A. & Tykvová, T. 2010. What lures cross-border venture capital inflows? *ZEW Centre for Economic Research Discussion paper*.
- Schertler, A. & Tykvová, T. 2011. Venture capital and internationalization. *International Business Review*, 20, 423-439.

Sorenson, O., & Stuart, T. E. 2001. Syndication networks and the spatial distribution of venture capital investments. *American Journal of Sociology*, 106, 1546-1588.

von Nordenflycht, A. 2010. What is a professional service firm? Toward a theory and taxonomy of knowledge-intensive firms. *Academy of Management Review*, 35, 155-174.

Wright, M., & Robbie, K. 1998. Venture capital and venture capital: A review and synthesis. *Journal of Business, Finance and Accounting*, 25, 521-571.

Wright, M., Pruthi, S., & Lockett, A. 2005. International venture capital research: From cross-country comparisons to crossing borders. *International Journal of Management Reviews*, 7, 135-165.

Wright, M., Amess, K., Weir, C., & Girma, S. 2009. Private equity and corporate governance: Retrospect and prospect. *Corporate Governance-An International Review*, 17, 353-375.

Yli-Renko, H., Autio, E., & Tontti, V. 2002. Social capital, knowledge, and the international growth of technology-based new firms. *International Business Review*, 11, 279-304.

Zaheer, S. & Mosakowski, E. 1997. The dynamics of the liability of foreignness: A global study of survival in financial services. *Strategic Management Journal*, 18, 439-463.

1.8. Tables

TABLE 1.1.: OVERVIEW OF THE INTERNATIONAL PRIVATE EQUITY MARKET

Panel A: Yearly trend in the number and value of international private equity investments between 2000 and 2010 (Source: Thomson One)

A1: Number of international investments

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
# International investments	6,032	1,165	690	950	1,033	3,381	3,848	4,369	4,137	2,530	3,155	31,290
# Domestic investments	17,546	4,873	2,954	4,121	4,458	11,601	11,910	12,601	12,168	8,574	10,552	101,358
Total investments	23,578	6,038	3,644	5,071	5,491	14,982	15,758	16,970	16,305	11,104	13,707	132,648
% International investments	25.58%	19.29%	18.94%	18.73%	18.81%	22.57%	24.42%	25.75%	25.37%	22.78%	23.02%	23.59%

A2: Value of international investments

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total
International investment value	89,248	58,410	43,875	59,774	64,794	129,793	199,544	284,801	291,837	161,864	164,111	1,548,051
Domestic investment value	38,554	24,413	24,650	34,936	41,147	48,255	47,382	71,385	72,928	54,487	39,387	497,524
Total investment value	127,802	82,823	68,525	94,710	105,941	178,048	246,926	356,186	364,765	216,351	203,498	2,045,575
% International investments	69.83%	70.52%	64.03%	63.11%	61.16%	72.90%	80.81%	79.96%	80.01%	74.82%	80.65%	75.68%

The amounts are expressed in million €.

Panel B: International private equity investments per investment type (Source: Thomson One)

B1: Number of international investments

	Venture capital investments	Buyout investments
# International investments	22,229	9,061
# Domestic investments	72,213	29,145
Total investmentss	94,442	38,206
% International investments	23.54%	23.72%

B2: Value of international investments

	Venture capital investments	Buyout investments
International investment value	437,717	1,110,334
Domestic investment value	191,642	305,882
Total investment value	629,359	1,416,216
% International investments	69.55%	78.40%

The amounts are expressed in million €.

Panel C: International private equity investments per target country region (Source: Thomson One)

C1: Number of international investments

	# Inter-national investments	# Domestic investments	Total investments	% International investments in target region	% of total international investments
Total North America	10,541	64,148	74,689	14.11%	33.69%
US	9,007	55,601	64,608	13.94%	28.79%
North America excl. US	1,534	8,547	10,081	15.22%	4.90%
Total Europe	13,180	24,871	38,051	34.64%	42.12%
UK	2,880	6,599	9,479	30.38%	9.20%
Western & Northern Europe (excl. UK)	8,092	14,934	23,026	35.14%	25.86%
Southern Europe	1,111	2,535	3,646	30.47%	3.55%
Eastern Europe & former USSR	1,097	803	1,900	57.74%	3.51%
Middle East	1,059	947	2,006	52.79%	3.38%
Total Asia	4,948	8,423	13,371	37.01%	15.81%
China	2,056	2,953	5,009	41.05%	6.57%
Asia (excl. China)	2,892	5,470	8,362	34.59%	9.24%
Oceania	526	2,074	2,600	20.23%	1.68%
Rest of the world	1,036	895	1,931	53.65%	3.31%
Total	31,290	101,358	132,648	23.59%	100.00%

C2: Value of international investments

	Value of international investments	Value of domestic investments	Total investment value	% International investment value in target region	% of total international investment value
Total North America	222,033	41,821	263,854	84.15%	14.34%
US	177,006	20,611	197,617	89.57%	11.43%
North America excl. US	45,027	21,210	66,237	67.98%	2.91%
Total Europe	791,358	238,865	1,030,223	76.81%	51.12%
UK	118,621	21,368	139,989	84.74%	7.66%
Western & Northern Europe (excl. UK)	457,326	148,363	605,689	75.51%	29.54%
Southern Europe	118,364	42,679	161,043	73.50%	7.65%
Eastern Europe & former USSR	97,047	26,455	123,502	78.58%	6.27%
Middle East	47,589	33,697	81,286	58.55%	3.07%
Total Asia	269,061	123,658	392,719	68.51%	17.38%
China	65,817	45,926	111,743	58.90%	4.25%
Asia (excl. China)	203,244	77,732	280,976	72.34%	13.13%
Oceania	74,131	27,541	101,672	72.91%	4.79%
Rest of the world	143,879	31,942	175,821	81.83%	9.29%
Total	1,548,051	497,524	2,045,575	75.68%	100.00%

The amounts are expressed in million €.

TABLE 1.2.: OVERVIEW OF THE THREE DISSERTATION STUDIES

Title study	The influence of experiential, inherited and external knowledge on the internationalization of private equity investors	Acquisition exits of cross-border buyouts: Differentiating between financial and strategic acquisitions	Cross-border financial intermediation and domestic acquisitions: The role of host country experience
Main concern	The information asymmetries of private equity investors in international compared to domestic investments	The information asymmetries in acquisition exits of cross-border investments: The uncertainty about governance quality and financial statement information of internationally owned portfolio companies	The information asymmetries in the acquisition exits of cross-border investments: The role of cross-border private equity investors on the reduction of information costs towards domestic acquirers
Unit of analysis	Acquirer: private equity investor	Portfolio firm: acquisition target	Portfolio firm: acquisition target
Role private equity investor	Acquirer	Seller/ financial intermediary	Seller/ financial intermediary
Resource: Main variable of the study	Foreign knowledge accumulation through experiential, inherited and external knowledge	Reputation: overall, country-specific and industry-specific reputation	Host country experience
Research question	<i>What is the effect of experiential, inherited and external knowledge accumulation on the likelihood and extent of cross-border private equity investments?</i>	<i>Can the overall, country-specific and industry-specific reputation of the private equity investor reduce the information asymmetries in acquisition exits of cross-border buyouts??</i>	<i>What is the effect of host country experience of cross-border financial intermediaries on the information costs of domestic acquirers? Is the effect of host country experience contingent on the connectivity of domestic acquirers towards local sources of information?</i>

Chapter 2: The influence of experiential, inherited and external knowledge on the internationalization of private equity investors

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2.1. Abstract

This paper examines the effect of different types of international knowledge accumulation on the internationalization of private equity investors, as a particular type of professional service firms. We distinguish between experiential knowledge acquired through previous activities, inherited knowledge through the management team and external knowledge through network partners. Hypotheses are developed for both the likelihood and the number of cross-border investments. The hand collected dataset comprises a combination of survey and archival data on a unique sample of 110 private equity investors from five different European countries. Analyses indicate a positive effect of experiential and inherited knowledge on internationalization, but external knowledge has limited impact. Intense international contacts even decrease international activities. Together, these results highlight the importance of experiential and inherited knowledge to overcome information asymmetries inherent in the internationalization of professional service firms, and of private equity investors in particular.

2.2. Introduction

Increasing globalization is one of the most important developments in the professional service industry. Over the last thirty years, professional service firms have benefited from the possibilities of foreign activities for growth and diversification (Contractor, Kundu & Hsu, 2003; Hitt, Uhlenbruck & Shimizu, 2006). International activities are however associated with a steep increase of information asymmetries (Filatotchev & Wright, 2011). These are particularly pronounced in professional services, due to the knowledge-intensity of these activities and the inherent difficulties for customers to verify the quality of the services ex-ante and to monitor them ex-post (Sanchez-Peinado & Pla-Barber, 2006; von Nordenflycht, 2010). Despite these adverse circumstances, our knowledge of how professional service firms deal with information asymmetries in cross-border activities is still limited. Private equity (PE) firms' cross-border investment activities are an interesting example of professional service firms' recent global development. PE investors' value creating activities reside to a large extent in their ability to address information asymmetries and agency issues. The latter are heavily influenced by local market conditions and practices (Filatotchev & Wright, 2011).

A central theme in international business research is the importance of foreign knowledge accumulation that helps firms to deal with internationalization uncertainties (Yli-Renko, Autio & Tontti, 2002). The goal of this paper is to understand how foreign knowledge accumulation influences cross-border activities under conditions of large information asymmetries that characterize the internationalization of professional service firms and PE investors in particular. Early internationalization theorists recognized the importance of internal knowledge development (Johanson & Vahlne, 1977). Subsequent findings

from new venture internationalization studies (e.g. Oviatt & McDougall, 1994) showed that relevant foreign market knowledge may originate from outside the focal firm as well (e.g. Autio, 2005; Johanson & Vahlne, 2009). We therefore focus on both internal and external sources of foreign knowledge accumulation in this study: firm-level experiential knowledge acquired through previous foreign investments, inherited knowledge through the prior foreign work experience of its management and external knowledge through its foreign network partners.

A unique hand-collected international dataset combining survey and archival data from 110 PE investors in five European countries is used as empirical setting. A broad definition of PE is used, including seed, start-up capital and later stage deals such as buy-outs (Wright & Robbie, 1998). Our results stress the positive effect of foreign knowledge accumulation on the international investment behavior of PE investors. Experiential knowledge has a large effect on international investment activity both in terms of the likelihood and the extent of international investments. Inherited knowledge through previous international activities of its managers is important as well, particularly for the likelihood of being international. Our results on external knowledge accumulation point to the importance of the foreign network structure and particularly to the differences between the number of international partners (network range) and the intensity of the cooperation with these partners. While the range of the international network does not have a significant effect on the likelihood of being international, the intensity of cooperation negatively affects it. International PE investors with intense foreign network relationships are more likely to become domestic. Finally, external knowledge accumulation does not affect the extent of international activities.

Our study makes several contributions. This paper advances our understanding of international professional services. As internationalization is associated with a steep increase of information asymmetries and agency problems, it is interesting to study the effects of foreign knowledge accumulation in a setting where these issues are particularly pronounced (Shertler & Tykvová, 2011). In addition, our results increase our knowledge on the international development of PE investors. While previous research has mainly focused on the effects of information asymmetries on the behaviour and outcome of PE investors outside their home country (e.g. Chemmanur, Hull & Krishnan, 2010; Devigne, Vanacker, Manigart & Paeleman, forthcoming), this paper focuses on the effects of information asymmetries and agency risks on the internationalization pattern of PE investors.

The paper is organized as follows. We first develop our theoretical framework including hypotheses, followed by a description of the research method and the presentation of our results. Thereafter, findings are discussed and the paper concludes with implications.

2.3. Theory development and hypotheses

Cross-border activities increase information asymmetries and agency risks (Filatotchev & Wright, 2011), making a firm's knowledge base especially important for overcoming these risks. Knowledge on operating in foreign markets may be accumulated through three different sources: (i) firm level experiential knowledge, developed through previous international activities, (ii) inherited knowledge, acquired by individual managers through their previous managerial experience in an international context and (iii) external international knowledge accessed through a firm's network of foreign co-investment partners.

Information asymmetries and agency risks are especially important for private equity investors, as they typically specialize in managing these risks through careful screening and due diligence before investing and through actively monitoring the venture after the investment (Manigart et al., 2006). PE investors pursue different strategies to mitigate higher levels of information asymmetries and agency risks in cross-border investments. For example, they may invest in more information-transparent firms (Dai, Hoje & Kassicieh, forthcoming), use more staged financing (Chemmanur et al., 2010) or seek cooperation with a domestic co-investment partner (Meuleman & Wright, 2011; Devigne et al., forthcoming). We expand below how the three different sources of knowledge may also help to overcome problems of information asymmetries and agency risks in cross-border PE investment activities.

2.3.1. Experiential knowledge

Experiential knowledge is acquired and developed within an organization through its previous experience. International experience has traditionally been proposed as one of the primary sources of knowledge accumulation for international development (Johanson & Vahlne, 1977): internationalization is regarded as a learning process where firms create procedural knowledge about how to handle higher agency risks and monitoring costs that accompany the higher uncertainties of international activities (Chetty, Eriksson & Lindbergh, 2006). Experiential knowledge can be beneficial in a PE context to assess opportunities and to mitigate information asymmetries. This gradually results in a smoother incorporation of general internationalization knowledge within the firm, positively affecting the perception about its ability to further engage in cross-border activities (Cohen & Levinthal, 1990). As a result of this learning process, firms that develop general internationalization knowledge through past international experiences are expected to further increase their commitment to pursue even more international activities (Johanson & Vahlne, 1977).

The importance of experiential knowledge for reducing information asymmetries in cross-border investments has been recognized in the PE industry. For example, PE investors are less likely to syndicate with domestic partners when they have more international experience (Meuleman & Wright, 2011). This suggests that international experience alleviates information asymmetries and monitoring costs. Moreover, investments in international knowledge development through previous international activities are not recoverable. This is expected to strengthen the positive relationship between past international experience and future international investment activities. Hence we propose:

H1: Experiential knowledge increases the cross-border investment activities of PE investors.

2.3.2. Inherited knowledge

In addition to internal knowledge development, we expect the international operations of professional service firms to be positively related with their inherited knowledge (Huber, 1991). Inherited knowledge refers to the previous international work experience of their managers (Sambharya, 1996) and contributes to a stronger understanding of foreign markets. This increases domain familiarity (Cohen & Levinthal, 1990) and enables the development of schemata for dealing with increasing information asymmetries in foreign markets (Takeuchi, Tesluk & Yun, 2005). As such, investors with more inherited knowledge are expected to be more capable of managing international operations and to have a better risk perception concerning foreign market activities (Bruneel, Yli-Renko & Clarysse, 2010). This is particularly important for professional service firms where the professionalization of a firm's workforce largely determines the quality of the services provided (von Nordenflycht, 2010). Its human capital base is therefore important for the implementation of local market conditions in different investment regions (Hitt et al., 2006). In addition, managers with international experience will have better risk perceptions and a more positive attitude towards cross-border activities (Herrmann & Datta, 2006). This will encourage firms to collect and integrate information about international opportunities (Erramilli, 1991) and make them more aggressive in committing relevant resources to international operations (Novicevic & Harvey, 2001).

Inherited knowledge has proven to reduce information asymmetries in the PE industry. For example, PE investors with more experienced managers, hence with more inherited knowledge, provide more value-adding activities thereby improving the success rate of their portfolio firms (Botazzi, Da Rin & Hellman, 2008). In the context of international investing, foreign market knowledge gained through the experience of PE investors' managers increases their attention towards agency issues and market risks which they perceive as more manageable and controllable (Patzelt, Knyphausen-Aufsess & Fischer, 2009). In

addition, PE investors with a stronger human capital base learn how to compete with more established investors in foreign regions (Meuleman & Wright, 2011), enhancing their willingness and ability to invest internationally. Therefore, we hypothesize:

H2: Inherited knowledge increases the cross-border investment activities of PE investors.

2.3.3. External knowledge

An increasing stream of international business literature stresses the importance of networks for foreign knowledge accumulation (Yli-Renko et al., 2002). According to Johanson & Vahlne (2009), knowledge accumulation through foreign partners does not solely provide an opportunity to use or copy the extant knowledge from others, it may result in the development of new knowledge as well. It can hence provide an incentive to internationalize, with or without the aid from the external network partner (Koza & Lewin, 1999).

For PE investors, relevant network relationships originate mainly from syndicated deals with investment partners. Syndication entails a combined equity investment which requires substantial commitments and frequent interactions of investors (Wright & Lockett, 2003). We expect that network partners are also important as a source of external knowledge about international markets. There are two mechanisms through which external network relations may expand a PE investor's knowledge base. First, PE investors depend on the knowledge base of their international co-investors during shared activities. Second, shared investments, whether they are local or international, may create ability to access and incorporate relevant knowledge about non-domestic environments from their international partners (Bruneel et al., 2010).

A foreign network structure is characterized by both the number of partners (or the network range) and the strength of the ties with the partners (or the network intensity) (Uzzi, 1997). We explain below how the range and the intensity of the foreign network may contribute to external knowledge accumulation (De Clercq & Dimov, 2008; Watson, 2007).

Foreign network range is defined as the number of different non-domestic co-investment partners (Zhao & Aram, 1995). We expect that it influences ex-ante information asymmetries and ex-post monitoring issues through several mechanisms. First, having a large international network increases the potential of deal reciprocity thereby reducing information asymmetries in deal sourcing across distance (Sorenson & Stuart, 2001). Second, it diminishes post-investment information asymmetries, particularly if the partner in the target country is willing to take the lead (Devigne et al., forthcoming; Meuleman & Wright, 2011).

Third, more foreign partners offer more opportunities to acquire knowledge on how to deal with different market conditions, skills and approaches in foreign investments (Lavie & Miller, 2008). This may incentivize PE investors to internationalize, either as a sole investor or with the aid of other partners.

The intensity of the relationship with international partners is also expected to impact knowledge accumulation (Uzzi, 1997) and ultimately international investment activity. Professional service firms often repeat interactions with the same partners to reduce transaction costs and behavioral uncertainty inherent in the intangible nature of the services rendered (Hitt et al., 2006; Meuleman, Lockett, Manigart and Wright, 2010; Wright & Lockett, 2003). Intense networks signal a higher trust and restrain opportunistic behavior (Wright & Lockett, 2003), further reducing information asymmetries and monitoring costs (De Clercq & Dimov, 2008; Meuleman et al., 2010). A more intense network of relationships hence leads to a higher willingness to invest across distance (Sorenson & Stuart, 2001). Moreover, repeated exchanges facilitate the flow of knowledge and in particular the acquisition of tacit information (Lane & Lubatkin, 1998; Uzzi, 1997). As a result, the firm may be dislodged from its competency traps, stimulating new solutions (Hitt et al., 2006; Lavie & Miller, 2008). Hence, we hypothesize:

H3: External knowledge through foreign network range and foreign network intensity increases the cross-border investment activities of PE investors.

2.4 Research method

2.4.1. Sample

The hypotheses are tested using a representative sample of PE investors in five European countries: Belgium, Germany, the Netherlands, Sweden and the United Kingdom. These countries are chosen because they are major PE markets that cover a substantial and diverse part of Europe (Manigart, De Waele, Wright, Robbie, Desbrières, Sapienza & Beeckman, 2002). More specifically, according to the EPEA statistics for 2000-2005, these countries managed between 59.5% and 71.6% of all funds that were invested by European private equity investors (EPEA, 2006). In addition, these five countries are considered as attractive or very attractive PE investment regions in Europe (Groh, von Liechtenstein, & Lieser, 2010). In particular, UK is listed as the most attractive European investment country, followed by Sweden on the fourth, the Netherlands on the seventh, Germany on the ninth and Belgium on the twelfth place (Groh et al., 2010). Finally, the countries in our sample reflect levels of R&D intensity that either equaled (Belgium, Netherlands, UK) or largely exceeded (Germany and Sweden) European averages

during the time frame of our research (Eurostat, 2008). This indicates the substantial innovation capacity of the countries in our sample.

Our unique hand-collected dataset combines information from questionnaires and archival data sources. Information concerning inherited knowledge was, together with the control variables, collected through postal or e-mail surveys (in the other countries) with senior managers or managing partners as key respondents. The sample was identified through national and European PE associations. Non-member firms that act as PE investors were added. This process resulted in 189 responses (response rate of 34.30%) which compares favorably with rates reported in other recent questionnaires (Cycyota & Harrison, 2006).

Information on international investment partners and international investments required to compute the network variables and the dependent variables was obtained from the Zephyr-Bureau Van Dijk commercial database. This database has a strong pan-European focus and is thus well suited to develop the variables of interest. We omitted 53 cases due to missing data in the Zephyr database, 20 cases due to incomplete survey data and six cases due to unreliable data¹. This resulted in a final sample of 110 usable responses (=18.83% of the original sample): 17 Belgian, 28 German, 6 Dutch, 15 Swedish and 44 UK PE investors.

The questionnaires were administered in 2002 in the UK and in 2003 in the other countries (Belgium, Germany, The Netherlands and Sweden). To avoid potential biases from cross-sectional research, the dependent variables are measured in a later time period than the independent variables. Hence, only cross-border investments between 2002-2004 (for the UK) and 2003-2005 (for the other countries) are taken into account.

Overall, our sample is broadly representative of the population with some explicable differences. The sample contains proportionally more British firms (40.00% versus 27.40%), while the proportion of Dutch PE companies in our sample is somewhat low (5.45% versus 11.43%). The overrepresentation of UK PE investors is not surprising as these firms are on average larger and more international than Continental European firms, which increases their tendency to respond to the survey and to have information recorded in Zephyr. Compared to the European PE population, the sample contains more (semi-)captive (33.64% versus 26.30%) and less independent firms (56.36% versus 66.90%) (EVCA, 2004). Table 2.1. describes all variables, both for the total sample and for the subsamples of domestic and international PE investors, and bivariate statistics comparing domestic and international firms.

2.4.2. Variables

2.4.2.1. Dependent variable: Cross-border investment activity

We acknowledge the multidimensional nature of cross-border investment activity. As the projects undertaken by professional service firms require client and context adapted solutions, they are more vulnerable to increasing complexity and excessive governance costs to manage the information asymmetries in having a larger number of projects (Contractor et al., 2003; O'Farrell, Wood & Zheng, 1998). For this reason, we measure the effect of our variables on two different outcomes of internationalization. First, we model the likelihood of investing internationally. A dummy variable *international PE investor* takes the value of 1 if the PE investor made at least one investment outside the country where its headquarters are located and 0 if all investments were domestic. The sample comprises 66 (60%) domestic and 44 (40%) international PE investments (see Table 2.1.). Second, we model the degree of international activity, conditional on having made at least one cross-border investment. Therefore, the *number (No) of international investments* made by PE investments with at least one international investment is recorded. International PE investors made on average 6.93 cross-border investments. As this variable is skewed, a log transformation is used in further analyses. Analyzing both the likelihood of investing cross-border and, conditional on investing cross-border, the extent of the international investment activity allows for a more fine-grained understanding of the impact of different sources of knowledge on international activities.

2.4.2.2. Independent variables

In line with the dependent variable, we incorporate the effect of experiential knowledge through previous international activities using two variables: a *dummy variable of experiential knowledge* indicating whether the PE investor was international in the previous period and a variable that measures *experiential knowledge in terms of the number (No) of previous international deals*. Both are obtained from the Zephyr database. An average PE investor made 2.17 cross-border investments in the period 2001-2002 (or 2000-2001 for UK PE investors). This variable is skewed and therefore log transformed.

Inherited knowledge is a self-reported variable. Respondents indicated the percentage of executives with international work experience prior to their current position. This variable quantifies the cultural and regulatory knowledge obtained together with the ability to build relevant expertise, organizational learning and a global mindset (Sambharya, 1996).² On average, 45% (median 37%) of the executives have international work experience.

External knowledge is measured through foreign network range and foreign network intensity. These variables are derived using information from the Zephyr database, based upon investments during 2001-2002 (for UK PE investors: 2000-2001). *Foreign network range* is defined as the number of foreign syndication partners with at least one co-investment with the focal PE investor, and is on average 7.99. As it is skewed, the log of this variable is used in the analyses. To avoid missing values for firms without international syndication partners, a constant (0.1) is added.

Foreign network intensity quantifies PE investors' tendency to work multiple times with the same foreign investor. We first counted the number of investments the focal PE investor made together with the same foreign investor. If the firm made at most one co-investment together with all foreign syndication partners, its network intensity is set to 0. If the firm had more than one co-investment with at least one foreign partner, the average number of co-investments per foreign partner was calculated. Foreign network intensity is equal to that average minus one. As such, we calculate the average number of subsequent investments with the same foreign partner. For example, if a PE investor with four foreign syndication partners made two investments with foreign syndication partners A and C and one investment with syndication partner B and D, it has an average network intensity of $0.50 = [(2+1+2+1)/4 - 1]$. The average foreign network intensity in our sample is 0.07.

2.4.2.3. Control variables

In line with previous research, we control for *investment stage focus*, distinguishing between early stage and later stage investors (Hall & Tu, 2003). Fifty seven firms invest in later stage deals, with 46 investing in both early and later stage deals. We further include *fund size* and the *number of investment executives* in our analyses to capture the influence of size (Hall & Tu, 2003) and general human resources (Hitt et al., 2006). The average PE investor has a fund size of €50 million and has 9.59 investment executives. The log of these two measures is included. We also take into account if the PE investor is government related or not (dummy variable: *Public PE investor*), because government related firms may have a more local investment strategy. Finally, we controlled for the origin of the PE investor by including a dummy variable (*UK PE investor*) taking the value of 1 if the PE investor is British, as the UK PE market developed earlier than in Continental Europe. As a consequence, British PE investors are on average larger and invest more internationally. This variable contributes towards capturing the UK PE market as the most mature and the Continental European countries being at similar stages of development.

2.4.2.4. Heterogeneity across different countries

We tested for regional differences in the independent and dependent variables. While neither the likelihood nor the number of international investments significantly differ across regions, there are some regional differences in terms of experiential and inherited knowledge. More specifically, while the likelihood of having international experience does not differ between regions, Dutch and UK PE investors have marginally significantly higher levels of experiential knowledge in terms of the number of previous international activities (average of 4.17, median of 2.00 and average of 2.55, median of 0.00 respectively). Interestingly, Dutch and British PE investors have significantly lower levels of inherited knowledge (average and median of respectively 0.27 and 0.25 for the Netherlands and an average and median of respectively 0.37 and 0.25 for the UK). Swedish PE investors have the highest level of inherited knowledge in our sample with an average value of 0.75 and a median value of 0.80. Belgian and Dutch PE investors also have levels of inherited knowledge exceeding the sample average. Differences in terms of external knowledge were not significant across the countries in our sample.

2.4.3. Comparison of international versus domestic PE investors

Table 2.1. presents bivariate statistics distinguishing between domestic and international PE investors. All independent variables differ significantly between the subsample of domestic versus international firms. 75% of the international PE investors have developed experiential knowledge through international experience in the previous time period, compared to only 15% for domestic PE investors. International investors made on average more international investments in the previous period (4.80 compared to 0.42). In addition, 56% of the executives of international PE investors have international work experience, compared to 39% for domestic PE investors. International PE investors have a higher foreign network range (16.89 compared to 2.06) and cooperate more with the same foreign network partner (0.08 versus 0.06) than domestic PE investors. This implies that international PE investors make on average a second investment with 1 out of 12 foreign network partners compared to 1 out of 15 for domestic firms. In addition, international PE investors have a significantly larger fund size (€984 million compared to €32 million) and employ significantly more investment managers (14.18 versus 6.53). They do not differ significantly in terms of investment stage, the proportion of public PE investors and the proportion of UK investors.

2.4.4. Method of analysis

We eschewed employing a zero inflated negative binomial regression model as this method may cause substantial discrepancies in small to medium sized samples (Gujarati, 2003) and because test results showed that the log transformation of the dependent variable is not skewed. Instead, we adopted a Heckman two-stage model to analyze the cross-border investment activities of PE investors, estimating first the probability of investing cross-border in a selection equation and, conditional on investing cross-border, estimating the number of cross-border investments (Estrin, Meyer, Wright & Foliano, 2008; Heckman, 1979). The latter is estimated through an OLS regression which includes the ‘inverse Mills ratio’, an estimate based on the selection regression that measures the existence of international investments (Li & Prabhala, 2007). To avoid multicollinearity issues, there should be at least one instrument that affects the probability of foreign investments, but not the number of foreign investments. We therefore include whether the PE investor is government-related or not in the selection equation, as most public PE investors have a purely domestic focus. Being a government related PE investor should therefore only impact the selection equation. Further, experiential knowledge is measured through a dummy variable in the first step and through a continuous variable (log number of cross-border investments in the previous time period) in the second step of the analyses.

Table 2.2. provides an overview of the correlations between the variables. With respect to the control variables in our study, there is a high correlation between the number of investment executives and fund size. For this reason, two separate models are estimated: the first model includes fund size only, while the second model includes the number of investment executives only. Concerning the correlations between our independent variables, there is no correlation problem between the two measures of experiential knowledge as they are used in different regression steps. Table 2.2. furthermore shows that experiential knowledge is highly correlated with external knowledge in terms of the foreign network range. This is not surprising as firms that invest abroad are more likely to co-invest with a larger range of non-domestic partners. There is also a positive and significant correlation between experiential knowledge and the intensity of foreign network relationships but this is relatively low. Variance inflation factors were calculated and range between 1.16 and 4.07. The latter corroborate the limited threat of multicollinearity.

Insert Table 2.2. around here

2.5. Results

The results of the multivariate analyses are presented in Table 2.3. Model I includes fund size and Model II includes the number of investment executives as indicators of the size of the PE investor. The left hand columns in each model show the regressions that focus on the control variables only. In line with previous findings, PE investors with larger investment funds and more investment managers are more likely to invest across borders (e.g. Hall & Tu, 2003). We furthermore find that PE investors who invest solely in later stage deals are less inclined to operate internationally compared to PE investors with a pure early stage or a more generalist approach. These effects are however only significant in the control models. Moreover, the Mills ratio is not significant in most models. Consequently, we conclude that the results would not change substantially if the second step of the regression was estimated through an OLS regression, but that inclusion of the Mills ratio is necessary due to the potential of a bias (Estrin et al., 2008).

Insert Table 2.3. around here

The right hand columns in each Model present the regressions including the independent variables. The multivariate analyses provide strong support for hypothesis 1, which predicts that PE investors with more experiential knowledge will be more international. Both the likelihood of investing internationally and the number of international investments are significantly ($p < 0.01$) and positively associated with experiential knowledge developed in the previous period. The odds of investing internationally are around 7.5 times higher (7.45 in Model I and 7.83 in Model II)³ for PE investors with cross-border investing experience in the previous period. In addition, a percentage increase in international investment experience is related to an increase in international investments of 0.42 percent (0.47 in Model II), conditional on being international. This implies that for an average international PE investor with two international investments in the previous period, having an additional international investment will increase the number of international investments in the subsequent period with 21%. The latter shows the high impact of experiential knowledge on the cross-border activities of PE investors, both in terms of the number and the likelihood of international investing.

Hypothesis 2 suggests that PE investors with more inherited knowledge will be more international. Table 2.3. shows a significantly ($p < 0.05$) positive effect in the first step of the Heckman regression. More specifically, for an average firm with 10 investment managers of which 45% have international experience, adding one investment manager with international experience increases the odds of being international by on average 18.7 % (Model I) or 22.2 % (Model II). The influence of this variable on the

number of international investments is also supported ($p < 0.10$). Adding one investment manager with international experience to an average international PE investor increases its number of international investments by 3.6% (Model I) or 3.9% (Model II). Although inherited knowledge matters for both aspects of cross-border investing in our study, it more strongly affects the likelihood of cross-border investing than the number of cross-border investments. Overall, our findings provide strong support for hypothesis 2.

Hypothesis 3 suggests a positive relationship between external knowledge and the PE investor's cross-border investment behavior. The results however indicate that external knowledge measured as foreign network range does not have a significant impact on the likelihood of international investing if PE investor fund size is taken into account (Model I). When the number of executives is included in the regression model, the variable is positive and significant at a 10% level. Foreign network range is not significantly related to the number of international investments. Overall, these results do not confirm the expected positive association between external knowledge in terms of the foreign network range and PE investors' cross-border investment activities. In addition, in contrast to hypothesis 3, PE investors with a more intense foreign network have a significantly ($p < 0.05$) lower probability of investing internationally. The economic effect of this relationship is substantial. The average PE investor in our sample has a foreign network intensity of 0.07 which equals an average number of subsequent investment with one out of fourteen non-domestic network partners. If doubles its foreign network intensity, it would decrease the odds of being international by 30.30%. Further, foreign network intensity is not associated with the number of international investments, conditional on investing internationally. Hypothesis 3 is hence not supported.

As the findings relating to foreign network intensity go against expectations, additional analyses were performed to further investigate its negative relationship with the likelihood of investing internationally. The foreign network intensity variable is therefore split in two: a first variable measures foreign network intensity for firms that were international in the previous period, while a second variable measures foreign network intensity for firms that were domestic. Table 2.4. provides the results. Firms with previous international experience significantly decrease their propensity to remain international if they have a larger foreign network intensity. The negative effect of foreign network intensity is far less important for firms with no international experience in the past years, however.

Insert Table 2.4. around here

2.6. Discussion and implications

The high information asymmetries of professional service firms' activities pose major challenges for their internationalization. Through a focus on the PE industry, we highlight the effect of three different sources of knowledge accumulation that originate internally or externally to the firm. We thereby consider internationalization in terms of both the likelihood and the number of cross-border investments. These findings are of interest for several reasons.

2.6.1. Theoretical implications

First, this study responds to a call for more research on the international development of professional service firms (Hitt et al., 2006). Despite the issues related to cross-border activities, many law, accountancy or private equity investors have become international and even global players. Our findings have shown how different types of foreign knowledge accumulation differentially compensate for the problems arising from investing internationally.

Second, our findings contribute to the international business literature. We highlight the complementarities between early internationalization theorists that largely focus on internal knowledge development (e.g. Johanson & Vahlne, 1977) and the findings from "new venture internationalization" studies that stress the impact of inherited knowledge (e.g. Oviatt & McDougall, 1994). Our findings show that, under conditions of severe information asymmetries, both sources of knowledge accumulation are important. More specifically, the large and positive effects of experiential knowledge indicate that dealing with the potential issues of different local institutional contexts is a learning process. Knowledge inherited through a PE investor's investment managers also has an important and positive influence on its international activities. This relationship is strongest in terms of the likelihood of international investing. Professional service firms with international aspirations but with limited international experience can hence build upon inherited knowledge through hiring managers with international experience to reduce the information asymmetries of cross-border activities.

Third, our findings advance network theory. Our results stress the multidimensionality of network relationships through the different effects of foreign network range and foreign network intensity. On the one hand, we fail to find a consistent effect of foreign network range on internationalization activities. Hence, while having a broad range of international partners may be beneficial for servicing local companies with international operations (Devigne et al., forthcoming), it does not necessarily induce the service firm to internationalize. On the other hand, our results suggest that foreign network intensity is negatively related to the likelihood of investing internationally, but not to the number of international investments. This adds to reservations concerning an overly positive view about the influence of intense

network relationships for international development (Ojala, 2009). While intense networks reduce the transaction costs of activities characterized by high levels of information asymmetry, they could insulate firms from other sources of external knowledge (Yli-Renko et al., 2002). As professional service firms with strong ties can easily turn to familiar partners, this could create a preference to search inside their established information channels which negatively affects knowledge-intensive firms' international growth (Chetty & Agndal, 2007). In general, our results indicate that professional service firms should balance the costs and benefits of working with trusted partners with the benefits of developing a central position in a larger network (Meuleman et al., 2010). Firms that want to continue to invest internationally may be particularly hampered. This does not necessarily imply that international network partners decrease the propensity to be international. However, PE investors are less likely to be international if they have especially intense relationships with their existing international partners.

Fourth, this paper contributes to the PE literature. In addition to earlier findings that indicated how internal and external sources of knowledge may influence the success rate of PE investor involvement (De Clercq & Dimov, 2008), we explain the effect of these resources on the investment strategy itself through a focus on international investment activities. We also add to the knowledge on international PE transactions. While previous research has mainly studied the outcomes of international investment behavior in terms of their involvement in value adding activities or the exit pattern of these investments (e.g. Chemmanur et al., 2010; Dai et al., forthcoming), this paper focuses on the determinants of the international investment strategy.

2.6.2. Managerial implications

Our results have important managerial implications for professional service firms in general, and for PE investors in particular. Our findings indicate that professional service firms with international aspirations should focus on several sources of foreign knowledge accumulation as each of these sources may influence international development.

In addition, although academic research has stressed the need for a well-developed human resource function in multinational organizations (Reiche, 2008), only a small number of firms do focus on global talent sourcing and management (Collings, Scullion & Dowling, 2009). Given the importance of executives with cross-border working experience, professional service firms should pro-actively develop a human resource management that specializes in the search and retention of international management talent.

Furthermore, PE investors with international aspirations have to reflect on their cooperation with non-domestic syndication partners. While they may provide a first contact with international markets, overly intensive contacts may constrain the continuity of their international development. Hence, this may prove a suboptimal strategy. Knowledge-intensive firms should, in contrast, actively build a broad social network fostering international development (Yli-Renko et al., 2002).

2.6.3. Limitations and future research directions

This research is not without limitations, which provides avenues for future research. We measured international exposure in terms of the existence and the number of international investments. While beyond the scope of our current study, future studies could consider additional outcomes such as the number of countries in which the firm has international investments or its mode of entry in international markets. In addition, despite the care taken to achieve rigor, the operationalization of the independent variables entails some limitations. Due to lack of data, we were only able to measure experiential and external knowledge over a limited time period as the Zephyr database only started in 1997 and its coverage is rather low in the first years. Our approach hence implies that the effects of experiential and external knowledge fade away over time. It would be interesting to understand the longevity of the effect of experiential and external knowledge, however. Finally, external knowledge might be gained through other network partners, for example domestic syndication partners that have relevant international investment experience, international shareholders or service providers such as lawyers or consultants. Future research could test to what extent these partners are substitutes for foreign syndication partners, or whether they complement them in different ways.

2.7. Conclusion

Through the focus on private equity investors, this paper studied the effects of foreign knowledge accumulation on the international development of professional service firms. Using a unique international dataset, we have shown that dealing with the increased complexities of international investing is a learning process where professional services build upon their experiential knowledge. In addition to internal sources of knowledge accumulation, inherited knowledge and external knowledge had also an influence on cross-border investments. In sum, this paper has advanced our understanding of how different types of knowledge enable or constrain dealing with severe information asymmetries and agency issues inherent in the international activities of intangible service providers.

2.8. Notes

1. For each of the cases, we checked whether they had a very low number of national, international or total investments. If one of these figures was very low according to the database, we checked other sources (firms' websites, newspaper articles, ...) to ensure that the data provided by the database were reliable. For six PE investors, this was not the case. Hence, these cases were omitted.
2. An alternative approach is to collect information on the foreign work experience of its executives from the website of the PE investor. This information is however often unavailable or incomplete (Patzelt et al., 2009), especially in the context of our study. We therefore rely on survey information.
3. The calculation of the economic significance of the variables of the selection model is based on the corresponding logit model instead of a probit model. In a probit model, the evaluation of the economic effect depends on the chosen start value. In addition, the interpretation of an odds ratio is far less tedious than the interpretation of the coefficients of a probit model (Gujarati, 2003).

2.9. References

- Autio, E. 2005. Creative tension: The significance of Ben Oviatt's and Patricia McDougall's article 'Toward a theory of international new ventures'. *Journal of International Business Studies*, 36, 9-19.
- Bottazzi, L., Da Rin, M., & Hellman, T. 2008. Who are the active investors? Evidence from venture capital. *Journal of Financial Economics*, 89, 488-512.
- Bruneel, J., Yli-Renko, H., & Clarysse, B. 2010. Learning from others: How congenital and interorganizational learning substitute for experiential learning in young firm internationalization. *Strategic Entrepreneurship Journal*, 4, 164-182.
- Chemmanur, T. J., Hull, T. J., & Krishnan, K. 2010. *Do local and international venture capitalists play well together? A study of international venture capital investments*. Unpublished manuscript.
- Chetty, S., Eriksson, K., & Lindbergh, J. 2006. The effect of specificity of experience on a firm's perceived importance of institutional knowledge in an ongoing business. *Journal of International Business Studies*, 37, 699-712.
- Chetty, S., & Agndal, H. 2007. Social capital and its influence on changes in internationalization mode among small and medium-sized enterprises. *Journal of International Marketing*, 15, 1-29.
- Cohen, W. M., & Levinthal, D. A. 1990. Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35, 128-152.
- Collings, D. G., Scullion, H., & Dowling, P. J. 2009. Global staffing: A review and thematic research agenda. *International Journal of Human Resource Management*, 20, 1253-1272.
- Contractor, F. J., Kundu, S. K., & Hsu, C. C. 2003. A three-stage theory of international expansion: The link between multinationality and performance in the service sector. *Journal of International Business Studies*, 34, 5-18.
- Cycyota, C. S., & Harrison, D. A. 2006. What (not) to expect when surveying executives: A meta-analysis of top manager response rates and techniques over time. *Organizational Research Methods*, 9, 133-160.
- Dai, N., Hoje, J., & Kassicieh, S. Forthcoming. Cross-border venture capital investments in Asia: Selection and performance. *Journal of Business Venturing*, in press.

- De Clercq, D., & Dimov, D. 2008. Internal knowledge development and external knowledge access in venture capital investment performance. *Journal of Management Studies*, 45, 585-612.
- Devigne, D., Vanacker, T., Manigart, S., & Paeleman, I. Forthcoming. The role of domestic and cross border venture capital investor in the growth of portfolio companies. *Small Business Economics*, in press.
- Erramilli, M. K. 1991. The experience factor in foreign market entry behaviour of service firms. *Journal of International Business Studies*, 22, 479-501.
- Estrin, S., Meyer, K. E., Wright, M., & Foliano, F. 2008. Export propensity and intensity of subsidiaries in emerging economies. *International Business Review*, 17, 574-586.
- European Venture Capital Association. 2004. *EVCA yearbook 2004: Annual survey of pan-European venture capital and venture capital activity*. Zaventem: EVCA.
- European Venture Capital Association. 2006. *EVCA yearbook 2006: Annual survey of pan-European venture capital and venture capital activity*. Zaventem: EVCA.
- Eurostat. 2008. *Science, technology and innovation in Europe (Edition 2008)*. Luxembourg: Office for official publications of the European communities.
- Filatotchev, I., & Wright, M. 2011. Agency perspectives on corporate governance of multinational enterprises. *Journal of Management Studies*, 48, 471-86.
- Groh, A. P., von Liechtenstein, H., & Lieser, K. 2010. The European Venture Capital and Private Equity country attractiveness indices. *Journal of Corporate Finance*, 16, 205-224.
- Gujarati, D. N. 2003. *Basic econometrics*. New York: McGraw-Hill.
- Hall, G., & Tu, C. 2003. Venture capitalists and the decision to invest overseas. *Venture Capital*, 5, 181-190.
- Heckman, J. 1979. Sample selection bias as a specification error. *Econometrica*, 47, 153-161.
- Herrmann, P., & Datta, D. K. 2006. CEO experiences: Effects on the choice of FDI entry mode. *Journal of Management Studies*, 43, 755-778.
- Hitt, M. A., Uhlenbruck, K., & Shimizu, K. 2006. The importance of resources in the internationalization of professional service firms: The good, the bad, and the ugly. *Academy of Management Journal*, 49, 1137-1157.

- Huber, G.P. 1991. Organizational learning: The contributing processes and the literatures. *Organization Science*, 2, 88-115.
- Johanson, J., & Vahlne, J.E. 1977. Internationalization process of firm - Model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, 8, 23-32.
- Johanson, J., & Vahlne, J. E. 2009. The Uppsala internationalization process model revisited: From liability of foreignness to liability of outsidership. *Journal of International Business Studies*, 40, 1411-1431.
- Koza, M. P., & Lewin, A.Y. 1999. The coevolution of network alliances: A longitudinal analysis of an international professional service network. *Organization Science*, 10, 638-53.
- Lane, P. J., & Lubatkin, M. 1998. Relative absorptive capacity and interorganizational learning. *Strategic Management Journal*, 19, 461-77.
- Lavie, D., & Miller, S. R. 2008. Alliance portfolio internationalization and firm performance. *Organization Science*, 19, 623-646.
- Li, K., & Prabhala, N. R. 2007. Self-selection models in corporate finance. In E.B. Eckbo Ed., *Handbook of corporate finance: Empirical corporate finance* (pp. 37-86). North-Holland: Elsevier.
- Manigart, S., De Waele, K., Wright, M., Robbie, K., Desbrières, P., Sapienza, H., & Beeckman, A. 2002. Determinants of required return in venture capital investments: A five-country study. *Journal of Business Venturing*, 17, 291-312.
- Manigart, S., Lockett, A., Meuleman, M., Wright, M., Landstrom, H., Bruining, H., Desbrieres, P., & Hommel, U. 2006. Venture capitalists' decision to syndicate. *Entrepreneurship Theory and Practice*, 30, 131-153.
- Meuleman, M., Lockett, A., Manigart, S., & Wright, M. 2010. Partner selection decisions in interfirm collaborations: The paradox of relational embeddedness. *Journal of Management Studies*, 47, 995- 1019.
- Meuleman, M., & Wright, M. 2011. Cross-border venture capital syndication: Institutional context and learning. *Journal of Business Venturing*, 26, 35-48.

- Novicevic, M. M., & Harvey, M. 2001. The changing role of the corporate HR function in global organizations of the twenty-first century. *International Journal of Human Resource Management*, 12, 1251-1268.
- O'Farrell, P. N., Wood, P. A., & Zheng, J. 1998. Regional influences on foreign market development by business service companies: Elements of a strategic context explanation. *Regional Studies*, 32, 31-48.
- Ojala, A. 2009. Internationalization of knowledge-intensive SMEs: The role of network relationships in the entry to a psychically distant market. *International Business Review*, 18, 50-59.
- Oviatt, B. M., & McDougall, P.P. 1994. Toward a theory of international new ventures. *Journal of International Business Studies*, 25, 45-64.
- Patzelt, H., Knyphausen-Aufsess, D. Z., & Fischer, H.T. 2009. Upper echelons and portfolio strategies of venture capital firms. *Journal of Business Venturing*, 24, 558-72.
- Reiche, B. S. 2008. The configuration of employee retention practices in multinational corporations' foreign subsidiaries. *International Business Review*, 17, 676-687.
- Sambharya, R. B. 1996. Foreign experience of top management teams and international diversification strategies of US multinational corporations. *Strategic Management Journal*, 17, 739-746.
- Sanchez-Peinado, E., & Pla-Barber, J. 2006. A multidimensional concept of uncertainty and its influence on the entry mode choice: An empirical analysis in the service sector. *International Business Review*, 15, 215-232.
- Schertler, A. & Tykvová, T. 2011. Venture capital and internationalization. *International Business Review*, 20, 423-439.
- Sorenson, O., & Stuart, T. E. 2001. Syndication networks and the spatial distribution of venture capital investments. *American Journal of Sociology*, 106, 1546-1588.
- Takeuchi, R., Tesluk, P. E., & Yun, S. H. 2005. An integrative view of international experience. *Academy of Management Journal*, 48, 85-100.
- Uzzi, B. 1997. Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*, 42, 35-67.
- von Nordenflycht, A. 2010. What is a professional service firm? Toward a theory and taxonomy of knowledge-intensive firms. *Academy of Management Review*, 35, 155-174.

Watson, J. 2007. Modeling the relationship between networking and firm performance. *Journal of Business Venturing*, 22, 852-874.

Wright, M., & Lockett, A. 2003. The structure and management of alliances: Syndication in the venture capital industry. *Journal of Management Studies*, 40, 2073-2102.

Wright, M., & Robbie, K. 1998. Venture capital and venture capital: A review and synthesis. *Journal of Business, Finance and Accounting*, 25, 521-571.

Yli-Renko, H., Autio, E., & Tontti, V. 2002. Social capital, knowledge, and the international growth of technology-based new firms. *International Business Review*, 11, 279-304.

Zhao, L. M., & Aram, J. D. 1995. Networking and growth of young technology-intensive ventures in China. *Journal of Business Venturing*, 10, 349-370.

2.10. Tables

TABLE 2.1.:INTERNATIONAL VERSUS DOMESTIC PE INVESTOR CHARACTERISTICS

	<i>Total sample</i>						<i>International PE investors</i>						<i>Domestic PE investors</i>						
	<i>N</i>	<i>Mean</i>	<i>Med.</i>	<i>S.D.</i>	<i>Min.</i>	<i>Max.</i>	<i>N</i>	<i>Mean</i>	<i>Med.</i>	<i>S.D.</i>	<i>Min.</i>	<i>Max.</i>	<i>N</i>	<i>Mean</i>	<i>Med.</i>	<i>S.D.</i>	<i>Min.</i>	<i>Max.</i>	
International (Dummy)	110	.40	0	.49	0	1													
No of international investments ¹	44	6.93	4.50	7.94	1	38													
Experiential knowledge through previous international	110	.39	0	.49	0	1	44	.75	1	.44	0	1	66	.15	0	.36	0	1	**
Experiential knowledge through the number of previous	110	2.17	0	5.35	0	31	44	4.80	1.50	7.50	0	31	66	.42	0	1.72	0	13	**
Inherited knowledge	110	.45	.37	.35	0	1	44	.56	.60	.37	0	1	66	.39	.33	.31	0	1	*
External knowledge through foreign network range ¹	110	7.99	1	19.48	0	121	44	16.89	5.00	28.06	0	121	66	2.06	0	5.11	0	28	**
External knowledge through foreign network intensity	110	.07	0	.17	0	1	44	.08	0	.13	0	.50	66	.06	0	.19	0	1	**
Later stage deals included (Dummy)	110	.52	1	.50	0	1	44	.50	.50	.51	0	1	66	.53	1	.50	0	1	
Both stages included (Dummy)	110	.42	0	.50	0	1	44	.41	0	.50	0	1	66	.42	0	.50	0	1	
No of investment executives ¹	110	9.59	6	10.82	1	70	44	14.18	9	15.06	2	70	66	6.53	5	4.73	1	26	**
Fund size ¹	104	550	139	1223	2	9200	44	984	355	1696	22	9200	60	232	69	520	2	3750	**
Public PE investor (Dummy)	110	.05	0	.23	0	1	44	.02	0	.15	0	1	66	.08	0	.27	0	1	
UK PE investor (Dummy)	110	.40	0	.49	0	1	44	.48	0	.50	0	1	66	.35	0	.48	0	1	

¹ The logarithm of this measure is included in the multivariate analyses.

Significance levels indicate test results from differences between international and domestic PE investors (Chi-square tests or Mann-Whitney tests).

Significant at (**) 1%, (*) 5% or (†)10% on a two-tailed test.

TABLE 2.2.: CORRELATION MATRIX OF THE VARIABLES INCLUDED IN THE REGRESSIONS

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Experiential knowledge through previous	1.00									
2. Experiential knowledge through the number	.85	1.00								
3. Inherited knowledge	.12	.10	1.00							
4. External knowledge through foreign network	.72	.76	.15	1.00						
5. External knowledge through foreign network	.21	.30	-.03	.46	1.00					
6.Later stage deals included (Dummy)	.02	.06	-.35	-.09	-.11	1.00				
7.Both stages included (Dummy)	.07	.10	-.25	-.02	-.05	.82	1.00			
8.No of investment executives	.40	.49	-.11	.44	.10	.32	.22	1.00		
9.Fund size	.47	.54	-.11	.49	.19	.36	.22	.84	1.00	
10.Public PE investor (Dummy)	-.19	-.16	-.12	-.07	-.02	-.09	-.04	.03	-.06	1.00
11.UK PE investor (Dummy)	.14	.15	-.19	.06	.09	.42	.40	.34	.38	-.20

All correlations with absolute values above 0.18 are significant ($p < 0.05$).

TABLE 2.3.: RESULTS OF THE MULTIVARIATE REGRESSION ANALYSES (HECKMAN TWO-STEP ANALYSES)

<i>Step 1: Internationalization (Dummy)</i>	<i>Model I</i>		<i>Model II</i>	
Experiential knowledge (Dummy)		1.16 (.44)**		1.20 (.41)**
Inherited knowledge		1.04 (.52)*		1.20 (.51)*
External knowledge: Foreign network range		.41 (.28)		.49 (.26) †
External knowledge: Foreign network intensity		-3.22 (1.38)*		-2.91 (1.31)*
Later stage deals included (Dummy)	-1.26 (.52)*	-.64 (.65)	-.82 (.48) †	-.20 (.61)
Both stages included (Dummy)	.56 (.50)	-.01 (.59)	.28 (.48)	-.21 (.58)
No of investment executives			1.82 (.46)**	1.04 (.62) †
Fund size	1.16 (.24)**	.74 (.31)*		
Public PE investor (Dummy)	-1.06 (.68)	-.08 (.76)	-.89 (.63)	.16 (.72)
UK PE investor (Dummy)	-.14 (.33)	.43 (.39)	.12 (.31)	.61 (.38)
Intercept	-2.21 (.49)	-2.47 (.75)**	-1.48 (.37)	-2.13 (.67)**
<i>Step 2: Number of international investments</i>	<i>Model I</i>		<i>Model II</i>	
Experiential knowledge (No international deals)		.42 (.12)**		.47 (.13)**
Inherited knowledge		.36 (.19) †		.39 (.21) †
External knowledge: Foreign network range		-.01 (.12)		.06 (.13)
External knowledge: Foreign network intensity		-.06 (.65)		-.06 (.68)
Later stage deals included (Dummy)	-.65 (.40) †	-.15 (.22)	-.33 (.37) †	.11 (.22)
Both stages included (Dummy)	.25 (.27)	-.06 (.20)	.05 (.27)	-.22 (.21)
No of investment executives			1.24 (.61)	.43 (.22)*
Fund size	.87 (.32)**	.41 (.13)**		
UK PE investor (Dummy)	-.25 (.16)	-.07 (.14)	-.07 (.18)**	.05 (.15)
Intercept	-1.61 (1.00)	-.75 (.43) †	-.86 (.95)	-.36 (.40)
Mills ratio	.50 (.44)	.37 (.24)	.52 (.52)	.41 (.25) †
Wald test	33.97 **	50.57 **	22.91 **	41.82 **
N	104	104	110	110

Regression coefficients are displayed in the table, standard errors in parentheses.
Significant at (**) 1%, (*) 5% or (†)10% on a two-tailed test.

TABLE 2.4.: SENSITIVITY ANALYSIS: DETAILED ANALYSES OF FOREIGN NETWORK INTENSITY (PROBIT ANALYSES)

<i>Step 1: Internationalization (Dummy)</i>	<i>Model I</i>		<i>Model II</i>	
Experiential knowledge (Dummy)		1.24 (.48)*		1.25 (.46)**
Inherited knowledge		1.08 (.53)*		1.22 (.52)*
External knowledge: Foreign network range		.38 (.29)		.47 (.27)†
External knowledge: Foreign network intensity for PE investors that were international in the previous period		-3.39 (1.44)*		-3.01 (1.37)*
External knowledge: Foreign network intensity for PE investors that were domestic in the previous period		-2.22 (2.61)		-2.39 (2.43)
Later stage deals included (Dummy)	-1.26 (.52)*	-.62 (.65)	-.82 (.48) †	-.18 (.62)
Both stages included (Dummy)	.56 (.50)	-.01 (.59)	.28 (.48)	-.21 (.58)
No of investment executives			1.82 (.46)**	1.03 (.62)†
Fund size	1.16 (.24)**	.74 (.32)*		
Public PE investor (Dummy)	-1.06 (.68)	-.12 (.77)	-.89 (.63)	.14 (.73)
UK PE investor (Dummy)	-.14 (.33)	.42 (.39)	.12 (.31)	.61 (.38)
Intercept	-2.21 (.49)	-2.54 (.78)**	-1.48 (.37)	-2.15 (.68)**
LR Chi ²	32.74	60.17 **	22.10	59.82 **
Log likelihood	-54.48	-40.77	-62.98	-44.12
N	104	104	110	110

Regression coefficients are displayed in the table, standard errors in parentheses.

Significant at (**) 1%, (*) 5% or (†)10% on a two-tailed test.

Chapter 3: Acquisition exits of cross-border buyouts: Differentiating between financial and strategic acquisitions

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3.1. Abstract

This paper studies the exits of cross-border buyouts. We focus on the differences between financial and strategic acquisition exits in addition to the information problems of these acquirers. Using a unique dataset of Continental European buyouts divested by cross-border private equity investors, buyout growth increases the likelihood of a strategic compared to a financial acquisition. Efficiency increases the likelihood of a financial compared to a strategic acquisition. In addition, the reputation of the selling cross-border PE investor decreases the information problems of potential acquirers substantially. Both overall as well as specific measures of reputation, such as country-specific and industry-specific reputation are important herein. Country-specific reputation has the largest impact of all reputation measures. In sum, this paper advances our understanding how private equity investors divest their cross-border buyouts through acquisition.

3.2. Introduction

Continental Europe has become an attractive investment region for cross-border private equity (PE) investors, despite the lack of a flourishing stock market that enables these cross-border investors to opt for an IPO exit (Meuleman & Wright, 2009). In order to understand their preference for Continental Europe, it is crucial to increase our knowledge on acquisition exits of cross-border buyouts. Cross-border buyout exits are however confronted with substantial information problems. As these firms are internationally owned and privately held prior to exit, potential acquirers are confronted with substantial uncertainties. The governance quality of the selling PE investor is expected to be lower for cross-border compared to domestic buyouts and the reliability of information on the acquisition target is more difficult to guarantee. Moreover, up till now, there is a limited understanding on the functioning of acquisitions as a successful exit mechanism, both for cross-border buyout exits as well as for buyout exits in general.

This paper aims to address these two knowledge gaps. It differentiates between strategic acquisitions (also called trade sales) and financial acquisitions (also called secondary buyouts). In a first step, we explain the relationship between the value creating mechanisms of the buyout and the type of acquisition exit. More specifically, we study the effect of growth and efficiency during the buyout as value creating mechanisms. We thereby examine whether the distinctive corporate governance mechanisms of strategic versus financial acquirers play a role herein. In a second step, we focus on the reduction of information problems inherent in the sale of cross-border buyouts. We examine whether the reputation of the cross-border PE investor can alleviate these information problems. We also differentiate between different types of reputation in this study. The effectiveness of overall as well as country-specific and industry-specific

reputation is examined. As such, we test whether the effect of reputation in the reduction of information costs is segmented across countries and industries.

Our sample consists of 180 exits of cross-border buyouts in six Continental European countries: Belgium, France, the Netherlands, Italy, Spain and Sweden. The results indicate substantial distinctions between strategic compared to financial acquisitions. First, cross-border buyout growth increases the probability of a strategic compared to a financial acquisition. The opposite effect is found for efficiency, which decreases the probability of a strategic compared to a financial acquisition. Moreover, our findings stress the role of the selling PE investor's reputation in the reduction of information problems. As a result, both overall as well as country-specific and industry-specific reputation strengthen the relationship between efficiency and the type of acquisition exit of cross-border buyouts. Country-specific reputation also increases the effect of growth on the acquisition type. Finally, our findings indicate that country-specific reputation has the strongest impact of the three reputation measures in our study.

This study contributes to several strands of literature. First, our research advances the entrepreneurial finance literature. It addresses the knowledge gap on acquisition exits of cross-border buyouts. This study also responds to a call for more research on acquisition exits in general (Nikoskelainen & Wright, 2007). Our focus on the distinctions between strategic and financial acquisitions contributes to a better understanding on acquisition exits and to a better knowledge of the increasing importance of financial acquisition exits. Second, we extend existing insights in the role of reputation in the reduction of information problems. While the effect of reputation is mainly examined in IPOs (e.g. Lee & Wahal, 2004), we study how the reputation of the selling firm is important for acquisitions. Third, this study advances international business theory. This literature stream mainly focuses on international expansion while there is little interest in the exit of international activities. However, within an evolutionary perspective of internationalization, exits of cross-border equity stakes are an essential part of the international business strategy (Birkinshaw & Hood, 1998). Fourth, this paper contributes to the divestment literature. Divestments are often associated with poor performance although a substantial part is done for strategic reasons rather than failure (Shimizu & Hitt, 2005; Brauer, 2006). As divesting is essential in the strategy of cross-border PE investors, this setting will increase our understanding of this phenomenon. More specifically, our study will detail the potential acquisition channels.

The paper proceeds as follows. The next section develops hypotheses on the relationship between the value creating strategy of the divesting firm and the type of acquisition in addition to the effect of the divesting firm's reputation to reduce information problems acquisitions. Thereafter, we describe our

research method followed by the empirical results of our analyses. We end with our discussion and conclusion.

3.3. Hypotheses development

3.3.1. Differentiating between financial and strategic acquisitions: A corporate governance perspective

Financial acquisition exits differ substantially from strategic acquisition exits. This does not solely apply to cross-border buyout exits, it generally accounts for all buyout exits. Particularly the governance structure post-acquisition varies substantially between both acquisition types. On the one hand, a financial acquisition is a subsequent, secondary buyout transaction by a novel private equity investor (Sudarsanam & Nwagodoh, 2005). The acquired firm will continue to operate as a stand-alone entity and the novel private equity investor can build upon the corporate governance mechanisms that were installed by the previous PE investor (Bonini, 2010, Sousa, 2010). This implies a strong alignment of incentives between owners and managers through substantial managerial equity stakes, active monitoring and a reduction of agency costs through a high leverage (Achleitner & Figge, 2011; Jensen, 1986). As a result of these governance mechanisms, private equity investors are expert in the reduction of value destructing over-investment issues (Jensen, 1986). In addition, the novel PE investor provides access to a wide network of business partnerships and managers that stimulate value creation in a secondary buyout (Wright, Hoskisson, Busenitz & Dial, 2000). As high debt levels are an essential part of the private equity investor's governance mechanisms, the access to financial resources post-acquisition will however be rather limited (Bonini, 2010).

On the other hand, strategic acquirers intend to integrate the target into the acquiring company which initiates a radical change in the post-buyout governance structure. Through the integration into a larger group, the target can build upon the resources and capabilities that have been developed within the acquirer (Camerlynck, Ooghe & De Langhe, 2005). Financial resources are also more widely available through the access towards the internal capital market of the strategic acquirer (Deloof, 1998).

In this section, we will argue that differences between the governance structures of financial compared to strategic acquirers determine the type of acquisition. We thereby examine the strategic fit between the value creating mechanisms of the buyout prior to acquisition and the post-acquisition governance structure.

We focus on the pre-acquisition levels of growth and efficiency which are the two main value creating mechanisms during a buyout (Mäkela & Maula, 2005; Wright et al., 2000). First, prior to acquisition exit,

the private equity investor has provided the buyout access to a wide range of network contacts and human capital (Mäkelä & Maula, 2005). This may have stimulated growth opportunities (Wright et al., 2000; Devigne, Vanacker, Manigart & Paeleman, 2011). Second, the use of a high leverage combined with managerial equity stakes by the private equity investor creates a managerial focus on efficiency (Jensen, 1986). Although growth and efficiency are not mutually exclusive and go often hand in hand, there exists some heterogeneity between buyouts prior to acquisition (Meuleman, Amess, Wright & Scholes, 2009). We will explain how this heterogeneity explains the type of acquisition in the following paragraphs. We will first argue that growth achieved in the buyout will increase the probability of a strategic compared to a financial acquisition. Second, we explain the effect of efficiency on the acquisition type. The arguments that will be explained hereunder with respect to the main effect of growth and efficiency on the type of acquisition exit are not solely relevant for acquisition exits of cross-border buyouts. In contrast, they are more generally applicable to all buyout exits.

3.3.1.1. Growth and the acquisition type

For strategic acquirers, acquisitions are often considered as a tool to solve the mismatch between the availability of value creating growth projects and the financial resources that finance these projects. Hence, firms with a lot of financial resources and limited internal growth projects will look for external growth through acquisition (Camerlynck, Ooghe & De Langhe, 2005). Cash rich strategic acquirers are therefore interested in firms with a high growth potential. They are expected to target firms with a high current growth as a driver of future growth (Heyman, Deloof & Ooghe, 2008).

The acquisition of buyouts with a high growth will help strategic acquirers to achieve their growth objectives. Particularly the combination of past resource access by the preceding PE owner and future resource access by the strategic acquirers may ensure further growth (Lavie & Miller, 2008). Moreover, while growth opportunities in the preceding buyout had to be achieved with restricted financial resources, the access to the acquirer's internal capital market may stimulate growth mechanisms that were previously unavailable by lack of funds.

Financial acquirers of buyouts also provide novel resource access, which stimulates value creating growth (Wright et al., 2000). However, in contrast to strategic acquirers, financial acquirers build upon the same tools and governance mechanisms to stimulate growth (Sousa, 2010). As a result, the PE investor may have already extracted the most value creating growth opportunities that can be achieved under a buyout structure (Bonini, 2010). It is hence questionable whether the buyout firm can sustain value creating growth under restricted availability of financial resources (Achleitner & Figge, 2011).

Due to the difficulties to sustain growth levels after a financial acquisition of a buyout, we expect that financial acquirers will have a lower focus on growth as an acquisition motive than strategic acquirers of cross-border buyouts. This leads to the following hypothesis:

H1a: Cross-border buyout growth will increase the likelihood of a strategic compared to a financial acquisition.

3.3.1.2. Efficiency and the acquisition type

Prior to acquisition, the introduction of corporate governance mechanisms that stimulate efficiency in a buyout is a lengthy process. The focus on efficiency is likely to sustain post-acquisition if the acquirer uses the same governance mechanisms. As a result, it is beneficial for financial acquirers to build upon the efforts of the selling private equity investor. For this reason, financial acquirers are expected to focus on buyouts that have proven to work efficiently under the preceding buyout structure. In that way, the financial acquirer can benefit from the lower risk profile of the acquisition target which enables them to introduce even higher debt levels as a corporate governance mechanism (Achleitner & Figge, 2011). This will continue the focus on efficiencies within the firm and lead to substantial tax shield benefits (Sousa, 2010; Bonini, 2010).

Although the acquisition of efficient companies is also beneficial for strategic acquirers, we expect their interest to be somewhat lower. In order to maintain a managerial focus on efficiencies, it is important to establish strong corporate governance that discourages managers from value destructing growth projects post-acquisition (Muscarella & Vetsuypens, 1990). Strategic acquires are however less expert in the use of corporate governance mechanisms that prevent over-investments compared to financial acquirers whose business model is centered around a strong corporate governance (Jensen, 1986; Wright, Amess, Weir & Girma, 2009). We therefore expect that the pre-acquisition level of efficiency is less important for strategic compared to financial acquirers of buyouts. This leads to the following hypothesis:

H1b: Cross-border buyout efficiency will decrease the likelihood of a strategic compared to a financial acquisition.

3.3.2. *The reputation of the selling private equity investor and the type of acquisition*

Acquisitions of cross-border buyouts suffer however from severe information problems. As these buyouts are internationally owned prior to acquisition, there is a high uncertainty whether the selling firm had been able to ensure the quality monitoring and the quality of financial information across borders (Kang & Kim, 2010; Morsfield & Tan, 2006). This creates important information problems between targets and

potential acquirers, even after a thorough due diligence of the target. Moreover, as buyouts are privately owned pre-acquisition, they face even more information problems because the reliability of their financial information is lower for private than for listed companies (Burgstahler, Hail & Leuz, 2006).

Information problems can create substantial inefficiency issues in the acquisition process of cross-border buyouts. They reduce the interest of potential acquirers substantially thereby creating a rather limited pool of financial and strategic acquirers. Substantial interest in the acquisition target by both financial and strategic acquirers is however a necessary condition for the efficient flow of cross-border buyouts towards novel owners (Fidrmuc, Roosenboom, Paap & Teunissen, 2012).

Hereunder, we will describe how the reputation of the selling cross-border private equity investor can alleviate these information problems. We will argue that reputation certifies the financial information of cross-border buyouts, thereby reducing the uncertainty of potential acquirers. This will increase the interest of potential acquirers substantially and guarantees an efficient functioning of acquisition markets. As such, reputation ensures that growth will increase the probability of a strategic acquisition and that efficiency increases the probability of a financial acquisition. In contrast, under high information problems, the limited availability of potential acquirers creates market inefficiencies which forces cross-border investors to sell the firm to whoever that is available.

We focus on the effect of overall reputation as well as on the fragmentation of reputation towards countries and industries. As a result, our hypotheses discuss the effect of overall reputation, country- and industry-specific reputation.

3.3.2.1. Overall reputation of the selling private equity investor

The overall reputation of the selling PE investor can decrease the information problems in an acquisition. Reputable cross-border PE investors guarantee a high quality of governance during the buyout. They are also expected to use reliable financial information as a monitoring tool (Beuselinck, Deloof & Manigart, 2009; Demiroglu & James, 2010). This will certify the information on the value creating mechanisms of cross-border buyouts (Fang, 2005; Felix, Tan & Morsfield, 2005).

As overall reputation reduces the information problems of potential acquirers, it is an important tool to attract a larger pool of potential acquirers which advances market efficiency. This implies that overall reputation increases the positive (negative) effect of growth (efficiency) on the likelihood of a strategic compared to a financial acquisition of cross-border buyouts. This leads to the following hypothesis:

H2a: The positive effect of growth on the likelihood of a strategic compared to a financial acquisition is higher for acquisition exits of cross-border PE investors with a high overall reputation.

H2b: The negative effect of efficiency on the likelihood of a strategic compared to a financial acquisition is higher for acquisition exits of cross-border PE investors with a high overall reputation.

3.3.2.2. Country-specific reputation of the selling private equity investor

Although the overall reputation of the cross-border private equity investor ensures an overall ability to reduce information problems, it does not signal whether the seller has been able to alleviate the issues in cross-border ownership prior to acquisition. Cross-border private equity investors have to incorporate national idiosyncrasies with respect to taxation, regulations, financial market development and the local business style (Bruton, Fried & Manigart, 2005). They are also less familiar with the local market (Kang & Kim, 2010). Even with all communication advances, cross-border investing is expected to complicate a PE investor's governance and monitoring during the buyout (Dai, Jo & Kassicieh, 2011; Sorenson & Stuart, 2001). As a result, the effect of reputation on the decrease of information problems is expected to be reduced in foreign regions (Kang & Stulz, 1997; Lee, Pollock & Jin, 2011).

We argue that cross-border buyouts will benefit from the association with a selling PE investor that has a high country-specific reputation (i.e. a high reputation in the country of the acquisition target). These PE investors are expected to bear the increasing costs of monitoring and specialized guidance across borders (Fang, 2005; Kang & Kim, 2010; Makelä & Maula, 2006; Pruthi, Wright & Lockett, 2003). This will alleviate the credibility issues in the quality of financial information towards potential acquirers (Mäkelä & Maula, 2006). The reduced information problems of firms sold by cross-border PE investors with a high country-specific reputation will strengthen the positive (negative) association between growth (efficiency) and the likelihood of a strategic (financial) acquisition. We hence propose:

H3a: The positive effect of growth on the likelihood of a strategic compared to a financial acquisition is higher for acquisition exits of cross-border PE investors with a high country-specific reputation.

H3b: The negative effect of efficiency on the likelihood of a strategic compared to a financial acquisition is higher for acquisition exits of cross-border PE investors with a high country-specific reputation.

3.3.2.3. Industry-specific reputation of the selling private equity investor

We also expect industry-specific reputation (i.e. the reputation in the industry of the acquisition target) of the selling cross-border PE investor to be important for the reduction of information problems. This effect is grounded in the specialized knowledge of products, markets and competition in that industry (Hsu, 2004) which decreases the issues of cross-border private equity investing (Mäkelä & Maula, 2006; Sorenson & Stuart, 2001). As a result, cross-border buyouts are associated with skilled monitoring of their cross-border private equity investors and more reliable financial information (Beuselinck et al., 2009; Cotter & Peck, 2001; Cressy, Munari & Malipiero, 2007). This will decrease the information problems of potential acquirers. We therefore expect that buyouts sold by cross-border PE investors with a high industry-specific reputation will be more able to attract acquirer types that are in line with their own characteristics. We hence propose:

H4a: The positive effect of growth on the likelihood of a strategic compared to a financial acquisition is higher for acquisition exits of cross-border PE investors with a high industry-specific reputation.

H4b: The negative effect of efficiency on the likelihood of a strategic compared to a financial acquisition is higher for acquisition exits of cross-border PE investors with a high industry-specific reputation.

Figure 3.1. presents a graphical summary of our hypotheses

Insert Figure 3.1. around here

3.4. Research method

3.4.1. Data and sample

We focus on acquisition exits of cross-border buyouts located in Continental Europe. As a result of its bank oriented financial system, acquisitions are the dominant exit mechanism for buyouts in this region. They correspond to more than 90% of all successful exits by PE investors (Black & Gilson, 1998; CMBOR, 2008).

The acquisitions in our sample are identified through the database of the Centre for Management Buyout Research (CMBOR). This is a hand-collected database that retrieves its information through a combination of semi-annual surveys to private equity investors in addition to business press info. These surveys obtain a maximum response rate as respondents receive a free copy of a quarterly review of aggregate market trends. It is therefore regarded as a comprehensive source of information on acquisition exits in Europe. Our dataset covers exits located in six countries: Belgium, France, Italy, the Netherlands, Spain and Sweden. Acquisition targets in these countries provide detailed annual account information, necessary for our research.

As we focus on acquisitions of cross-border buyouts, we only include buyouts sold by cross-border PE investors. Therefore, we incorporate exits of cross-border PE investors that act either as the single PE investor or as the lead PE investor. Information on the lead investor is also retrieved through the CMBOR database. For the limited number of deals where more than one lead investor is involved, we assume that the most reputable investor acts as the actual lead in the deal. The database covers the sale of investments that were made between 1997 and 2004. In order to be included in our sample, an acquisition needs to occur before the end of 2008. The latter makes sure that we were able to collect sufficient information on the cross-border buyout at time of acquisition exit. Our sample initially consists of 396 acquisitions: 208 financial and 188 strategic acquisitions. Information on the characteristics of these firms was found for 180 of these acquisition exits. This hence reduces the sample size to 45% of its initial size with 97 financial and 83 strategic acquisitions.

In order to assess potential sample selection bias, we compared the characteristics of the initial sample of 396 acquisitions with the final sample of 180 acquisitions for which accounting information could be obtained. The proportion of financial compared to strategic acquisitions (46% versus 54%) is highly in line with the initial sample (47% versus 53%). Average and median company values (measured at time of investment) are furthermore highly similar (average and median of respectively €142 mio and €50 mio for the initial sample versus average and median of €128 mio and €50 mio for the final sample). Finally, no significant differences were found in terms of the proportional distribution of the different countries or the average value of the private equity reputation measures in our sample. This suggests that the final sample is not prone to selection biases.

3.4.2. Variables

3.4.2.1. Dependent variable

The dependent variable in our analyses is binary and indicates whether the cross-border buyout is sold to a strategic or a financial acquirer. A value of 1 is attributed if the buyout is sold to a strategic acquirer and 0 if the buyout is sold to a financial acquirer.

3.4.2.2. Independent variables

We have two different sets of independent variables which are on the one hand the growth and efficiency of the divested buyout and the reputation of the selling PE investor on the other hand.

On the one hand, we focus on *growth* and *efficiency*. Our data are obtained through the Amadeus database (Bureau Van Dijk) and are based on the financial statements of the target in the pre-acquisition year. Our measures are controlled for inflation, with 1994 as the baseline price level. We winsorized the inflation corrected measures at 5 and 95% percentiles. *Growth* is operationalized as the growth in sales. Sales growth is the preferred growth measure in entrepreneurially oriented companies such as buyouts (Delmar, Davidsson & Gartner; 2003). Moreover, sales growth is also more relevant than asset or employee growth in inter-industry studies. As the pattern of employee and total asset growth depends on a firm's labor- and capital intensity, firms from different industries may be very heterogeneous in terms of their total asset and employee growth (Weinzimmer, Nystrom & Freeman, 1998). We measure growth as the relative annual growth in sales over the three years preceding the acquisition. When data on sales growth over the final three years were missing, we calculated the growth figures over the final two years. *Efficiency* is measured as EBITDA (Opler & Titman, 1993) and normalized by the book value of total assets (Lang, Stulz & Walking, 1991). Our efficiency measure hence incorporates the amounts of assets needed to generate operating cash flow. This measure is consistent with previously-used variables in buyout studies (e.g. Cressy et al., 2007; Sudarsanam & Nwagodoh, 2005).

Reputation measures of the selling PE investor are based on the complete CMBOR database of buyout investments, not solely those that were examined within this particular sample. In line with recent studies on reputational effects in the buyout market (Demiroglu & James, 2010), *overall reputation* is operationalized as the market share (in percentage) of the selling private equity investor over the past three years prior to the year of exit, calculated as the number of investments of the private equity investor as a proportion of all buyout investments. A three-year window is preferred as a shorter window is

vulnerable for business cycle effects and a longer window measures experience instead of reputation. To test the effect of *country-specific reputation*, we measured the market share (in percentage) of the selling private equity investor as a proportion of all buyout investments in the country of the acquisition target. We finally measure *industry-specific reputation*. We therefore focus on the investments in the industry of the acquisition target. We categorize the investments of PE investors within 14 different industries. This categorization derives from the European Venture Capital & Private Equity Association (EVCA, 2009).

3.4.2.3. Control variables

Several control variables are included in the multivariate analyses. We control for syndication as non-lead PE investors could influence the acquisition exit (Jääskeläinen & Maula, 2008). We include whether the selling private equity investor syndicated with other cross-border investors or with at least one domestic PE investor. We incorporate the size of the cross-border buyout, measured by the log of total assets at the 1994 price level. This measure is winsorized at the 5 and 95% percentile. The source of the buyout is incorporated as well with three categories: divestments, private & family firms and the reference group contains secondary buyouts, public-to-private transactions and privatizations. We also take into account whether the cross-border buyout operates in a high tech industry. Both the source of the buyout and the industry determine the susceptibility towards growth and efficiency which may influence the type of acquisition exit (Jensen, 1986; Meuleman et al., 2009). We furthermore control for business cycle effects as financial and strategic acquisitions are highly dependent on macro-economic conditions. Therefore, the loan spread and the total deal value of acquisitions in the host country (as a % of the GDP) are taken into account. The loan spread is operationalized through the average loan spread between 3 and 6 months prior to exit, calculated as the difference between the interest rates on government bonds and BBB rated large non-financial corporations in the European Monetary Union for loans with a 5-7 years duration (Sousa, 2010). The total value of acquisitions is obtained through the Zephyr database (Bureau Van Dijk) and divided by the GDP (obtained from the World Bank). Moreover, we insert a quadratic time variable for testing the effect of the holding period as the acquisitions in our sample suggest a quadratic hazard rate. We also control for the location of the acquisition target with France as the reference category, a control variable that incorporates exits located in Spain and Italy, and a second control variable with exits located in Belgium, the Netherlands and Sweden. These three groups represent differences in the maturity and attractiveness of the local private equity markets. More specifically, according to the venture capital and private equity attractiveness index, Belgium, the Netherlands and Sweden are considered as the three most attractive private equity markets, followed by France and finally Italy and Spain are considered as countries with a relatively low attractiveness within Continental Europe (Groh, von Liechtenstein &

Lieser, 2010). We finally incorporate the direct effect of the three different reputation measures of the selling private equity investor in our regressions.

3.4.3. Sample description

Table 3.1. provides a description of our sample. We present descriptive statistics for the total sample of acquisitions and for the subsamples of financial and strategic acquisitions. We also present bivariate statistics on the differences between the two subgroups. This shows that 24 percent of our acquisitions concern the exits of cross-border PE investments that were syndicated with a domestic private equity investor. Furthermore, 13 percent of the acquisition exits are sold by cross-border PE investors who were syndicated with other cross-border PE investors.

In addition, strategic acquisitions have a median total asset value of €37 mio which is lower than financial acquisitions (€80 mio). This difference is significant on a 1% level. Most acquisition exits originate from a divestment (40 percent), 34 percent were private companies (including family firms) prior to the cross-border buyout. The cross-border buyouts that originate from secondary buyouts, delistings or privatisations account for 24 percent of our sample. Cross-border buyouts of family firms are significantly more likely to be sold to strategic acquirers ($p < 0.10$). The opposite is found for the cross-border buyouts that originate from a secondary buyout, delisting or privatization; they are more sold to financial acquirers ($p < 0.05$). 19 percent of our acquisition targets are active in a high-tech industry. This is, in line with the EVCA definitions, defined as ICT and biotech firms. High tech firms exit more through strategic acquisitions ($p < 0.05$). We also provide information on the loan spread in Continental Europe at time of acquisition. The average value of the spread was 0.87 percent and this was relatively equal between financial and strategic acquisitions. The total deal value of acquisitions in the host country is on average 5% of the GDP. Moreover, the holding period indicates that a cross-border buyout in our sample takes about 4 years to divest. The holding period is 4.03 years for financial acquisitions which is comparable to strategic acquisitions with 4.16 years. 51 percent of the acquisition exits originate from France. Italy and Spain account each for 13 percent, the Netherlands for 8 percent, and Sweden and Belgium for 7 percent. Cross-border buyouts located in Spain are more often sold to strategic acquisitions ($p < 0.10$).

Insert Table 3.1. around here

Table 3.1. also indicates the descriptive statistics of our main variables. The average growth equals 17 % (median 3%) and the level of efficiency is on average 11% (median 11%). While the difference in efficiency between financial and strategic acquisitions is significant on a 1% level in bivariate statistics, growth does not significantly differ between those categories. With respect to the reputation measures in

our study, a selling private equity investor has an average overall market share of 1.82 percent (median 0.95%). The country-specific reputation is on average 2.52 % (median 1.43%) while the average industry-specific reputation equals 2.14% (median 1.01%). Cross-border PE investors selling to strategic acquirers have a significantly higher country-specific reputation ($p < 0.05$). Other reputation measures are not statistically different between financial and strategic acquisitions.

3.4.4. Hypothesis testing procedure

Logistic regressions are used to model the probability of a strategic versus a financial acquisition, clustering on the selling PE investor (Froot, 1989). First, we test the main effect of growth and efficiency on the type of acquisition. Second, we analyze the moderating effect of overall, country-specific and industry-specific reputation through the seemingly unrelated estimation procedure (Weesie, 1999). In order to do so, we first perform a median split of the sample, separating cross-border buyouts sold by reputable PE investors from those sold by less reputable ones. As we have three different measures of reputation, a median split procedure is repeated for each reputation measure, resulting in three paired subsamples. This estimation procedure jointly estimates the effect in both subsamples. It combines the estimation results of the logit regressions of the subsamples into a single covariance matrix controlling for clustered standard errors per cross-border PE investor. Thereafter, using a Wald test, equality of coefficients is statistically tested between the subsamples (Weesie, 1999).

This estimation method is preferred to the inclusion of interaction terms in logit analyses. Unlike OLS, estimating interaction terms in a logit regression does not result in a constant coefficient across all observations. In contrast, the magnitude and the sign of an interaction term are a function of not only the coefficient for the interaction, also the coefficients for each interacted variable and the values of all the variables play a role (Hoetker, 2007).

A correlation matrix for the dependent, independent and continuous control measures is presented in Table 3.2. This matrix indicates the low correlations between the variables included in our analyses with the exception of our reputation measures. In our regression models that combine all reputation measures, we therefore insert orthogonalized variables using the Gram-Schmidt procedure (Saville & Wood, 1991). This technique “partials out” the common variance, creating transformed variables that are uncorrelated with one another.

Insert Table 3.2. around here

3.5. Empirical results

3.5.1. Main analyses

Table 3.3. presents the results of our multivariate statistics on the probability of being sold to a strategic compared to a financial acquirer. Our first model presents the results from the main effects of growth and efficiency. Models 2 to 7 show the results of the seemingly unrelated estimations. Model 2 and 3 estimate the likelihood of a strategic compared to a financial acquisition in the subsample of exits sold by cross-border private equity investors with respectively a high and a low overall reputation. Model 4 and 5 present the results of the logit analyses, based on a median split of country-specific reputation and finally model 6 and 7 are based on a median split of the industry-specific reputation of the selling private equity investor. For models 2 to 7, Table 3.3. also indicates the results of the Wald test for equality of coefficients within different subsamples. This Wald test enables us to compare the effect of growth and efficiency between exits of PE investors with a high versus a low reputation. As such, we test hypotheses 2, 3 and 4. One-tailed tests are reported for hypothesized effects.

Insert Table 3.3. around here

With respect to the control variables, the results highlight that small cross-border buyouts, buyouts that originate from a corporate divestment and buyouts that operate in a high tech industry are more likely to be sold to a strategic rather than to a financial acquirer. Cross-border buyouts that are sold during M&A waves are also more likely to end up as a strategic acquisition. In addition, there is a quadratic effect of holding time on the type of acquisition. Other variables, including the main effect of the PE investor reputation (overall, country-specific as well as industry-specific reputation) are not significantly related to the type of acquisition.

The performance measures indicate a positive effect of growth ($p < 0.10$) and a negative effect of efficiency ($p < 0.05$) on the likelihood of a strategic acquisition, providing marginal support for hypothesis 1a and strong support or hypothesis 1b. Models 2 and 3 compare the likelihood of a strategic acquisition in the subsamples of buyouts supported by private equity investors with a high compared to a low overall reputation. Model 2 indicates that efficiency ($p < 0.01$) is again highly related to the likelihood of a strategic acquisition. Growth is no longer significant in this smaller sample. For firms sold by cross-border PE investors with a low overall reputation, there is only a marginally significant relationship between the growth of the firm ($p < 0.10$) and the type of acquisition. If we compare the values of the coefficients for our target firm characteristics, the Wald test indicates that efficiency is indeed more strongly related to the type of acquisition ($p < 0.01$). Growth does not differ between the two subsamples.

This provides strong support for hypothesis 2b, hypothesis 2a is not supported. Models 4 and 5 present the relationship between target firm characteristics and the type of acquisition, based on a median split of country-specific reputation. The results of these models indicate that both growth ($p < 0.01$) as well as efficiency ($p < 0.01$) are strongly significant in the high country-specific reputation subsample, while this is not the case if the buyouts was sold by a cross-border private equity investor with a low country-specific reputation. Based on the Wald test, there are strong differences between both subsamples with respect to the effect of efficiency ($p < 0.01$) and growth ($p < 0.05$) on the type of acquisition Hence, this provides strong support for hypothesis 3a and 3b. Finally, model 6 and 7 present the findings of the median split of industry-specific reputation. In the subsample of buyouts sold by cross-border private equity investors with a high industry-specific reputation, efficiency ($p < 0.01$) strongly decreases the probability of a strategic compared to a financial acquisition. Growth was not found to matter. In contrast, in the low industry-specific reputation subsample neither growth nor efficiency influence the type of acquisition. The Wald test indicates that efficiency is significantly more related to the type of acquisition in the subsample of buyouts supported by investors with a high industry-specific reputation ($p < 0.01$), providing strong support for hypothesis 4b. The moderating effect of industry-specific reputation on the relationship between growth and the type of acquisition (hypothesis 4a) was not supported.

3.5.2. Post-hoc analysis

As a post-hoc analysis, we compare the relative importance of three different reputation measures as a moderating variable in Table 3.4. We therefore analyze whether the moderating effect of overall reputation, country-specific reputation and industry-specific reputation are equally strong or not. We test this through seemingly unrelated regressions, comparing different subsamples of acquisitions sold by cross-border PE investors with respectively a high overall, a high country-specific and a high industry-specific reputation. More specifically, model 1 and 2 estimate the likelihood of a strategic compared to a financial acquisition in the subsamples of acquisitions sold by respectively PE investors with a high overall reputation and a high country-specific reputation. Model 3 and 4 estimate the likelihood of a strategic acquisition in the subsamples of acquisitions sold by PE investors with a high overall compared to a high industry-specific reputation. Finally, model 5 and 6 estimate the likelihood of a strategic acquisition in the subsamples of acquisitions sold by cross-border PE investors with a high industry-specific versus a high country-specific reputation. We also report the Wald test that compares the coefficients of growth and efficiency between the subsamples. Based on model 1 and 2, we find that the effect of growth on the type of acquisition is more important in the subsample of acquisitions sold by a cross-border PE investor with a high country-specific compared to a high overall reputation. The value of

the Wald test is significant on a 1% level. The effect of efficiency on the type of acquisition did not differ between the two subsamples. With respect to the difference between overall and industry-specific reputation of the selling PE investor (Model 3 and 4), our findings do not indicate significant differences between the effect of growth or efficiency between the two subsamples. Both subsamples suggest a negative effect of efficiency on the type of acquisition while growth is not significant. Moreover, the Wald test does not indicate any significant difference between both subsamples. Finally, model 5 and 6 report the effect of growth and efficiency in the subsamples of acquisitions sold by cross-border PE investor with a high industry-specific versus a high country-specific reputation. While growth is important in the subsample of acquisitions sold by a cross-border PE investor with a high country-specific reputation, growth is not significant in the subsample of acquisitions sold by PE investors with a high industry-specific reputation. The Wald test furthermore indicates that the effect of growth is significantly different between both subsamples ($p < 0.10$). The negative effect of efficiency on the type of acquisition was supported in both subsamples. Based on the Wald test, no differences between the subsamples were found.

Based on the different models in Table 3.4., country-specific reputation has a stronger impact on the relationship between growth and the type of acquisition than the two other types of reputation. The moderating effect of efficiency is not significantly different between the three different types of reputation. This suggests that country-specific reputation is more important as a moderating variable than overall and industry-specific reputation.

Insert Table 3.4. around here

In sum, our findings indicate a marginally significant positive effect of growth and a significantly negative effect of efficiency on the likelihood of a strategic compared to a financial acquisition. Moreover, the negative effect of efficiency on the type of acquisition is stronger for buyouts sold by a reputable cross-border investor. Both overall as well as country-specific and industry-specific reputation strengthen the effect of efficiency. In addition, the positive influence of growth is also stronger if the selling cross-border PE investor has a high country-specific reputation. The moderating effect of overall and industry-specific reputation is not significant. This indicates that country-specific reputation has a more extensive moderating influence on the relationship between the value creating mechanisms and the type of acquisition exit of cross-border buyouts. The latter is confirmed in our post-hoc analysis, indicating that country-specific reputation is more important than overall and industry-specific reputation as a moderating variable on the effect of growth on the type of acquisition.

Figure 3.2. serves to clarify the interaction effects of our three reputation measures on the influence of growth and efficiency on the acquisition type. As shown in panel A, the probability of a financial acquisition increases more by higher levels of efficiency of the selling cross-border PE investor has a high overall reputation. Panel B and C furthermore indicate the larger impact of respectively growth and efficiency for high levels of country-specific reputation. Finally, the higher influence of efficiency across high levels of industry-specific reputation is shown in Panel D.

Insert Figure 3.2. around here

The economic significance of our effects is substantial. This interpretation is based on a difference in odds ratios between the values of the 75th compared to the 25th percentile of growth and efficiency. First of all, the coefficient of model 1 indicates that cross-border buyouts with a large growth increase their odds of a strategic acquisition with 12%; the odds of firms with a high efficiency decrease with 89%. The latter indicates that efficiency is both statistically as well as economically more important than growth. Second, the moderating effect of overall, country-specific and industry-specific reputation on the relationship between efficiency and the type of acquisition exits is considerable. While more efficient buyouts decrease their odds of a strategic compared to a financial acquisition with 250% if they are supported by a private equity investor with a high overall reputation, those supported by less reputable private equity investors show even an increase with 3%. Likewise, the odds ratio for efficient buyouts sold by PE investors with a high country-specific reputation decrease 258% in the high country-specific reputation subsample in contrast to efficient buyouts that increase their odds of a financial acquisition with 22% in the low country-specific reputation subsample. In a similar vein, the odds of a strategic acquisition for efficient firms drop with 208% in the high industry-specific reputation subsample whereas they only drop with 17% in the low industry-specific reputation subsample. Third, our results indicate that the likelihood of a strategic acquisition rises with 82% for cross-border buyouts with a higher growth in the subsample of acquisitions supported by investors with a high country-specific reputation. This contrasts to an increase with only 1% within the low country-specific reputation subsample.

3.5.3. Robustness checks

We have performed several robustness checks to control for the sensitivity of our analyses. First, we controlled for a selection effect in our models. More specifically, we analyzed the effect of potential differences between buyouts sold by reputable versus less reputable private equity investors. Our major concern here was that this selection effect could influence the hypothesized relationships between growth and efficiency on the type of acquisition (Heckman, 1979). Our robustness checks indicated that buyouts

exited by more reputable investors do not differ in terms of growth and efficiency from buyouts sold by less reputable investors. In addition, we controlled for the selection effect as an additional variable in our models. This selection effect did not alter our findings, suggesting that our results are not driven by selection.

Moreover, we analyzed whether our findings are driven by the country of exit. First, we tested potential differences in terms of target firm characteristics between domestic and cross-border acquirers. This suggests that domestic acquisition targets have a higher efficiency. Growth does not differ between domestic and cross-border acquisition exits. Second, we analyzed the moderating effect of the country of exit on the relationship between target firm characteristics and the type of acquisition exit. This suggests that the behavior of domestic acquirers is not significantly different from cross-border acquirers: the effect of growth and efficiency does not differ. Third, the inclusion of the country of exit as a control variable in our models did also not alter our findings. This indicates that the country of exit does not drive our results.

In addition, an alternative explanation for the positive moderating effect of reputation is that less reputable investors face higher fund pressures (Lee & Wahal, 2004). They face more issues to attract additional funds and may therefore suffer to a larger extent from the need to improve their track record through acquisition exits on short term (Gompers, 1996). This might create the preference of less reputable investors to opt for an earlier and less value maximizing type of exit. In contrast, reputable investors can wait till there is substantial interest from different parties to exit the cross-border buyouts in their portfolio. In order to test for this alternative explanation, we checked for potential effects of reputation on the time-to-exit. Both bivariate and multivariate analyses indicate however that reputable investors exit their buyouts earlier. These findings do not provide evidence for the effect of fund pressures on acquisition exits.

Finally, as financial acquisitions of buyouts have become increasingly popular over the years, we tested its potential effect on our findings. 71% of the acquisitions in our sample occur within the period 2005-2008. The others occur in the period 1999-2004. Through bivariate and multivariate analyses, we checked for the potential effect of timing on our results. This did not indicate a significant main effect of timing on the likelihood of a financial compared to a strategic acquisition. Moreover, the year of acquisition does not moderate the relationship between target firm characteristics and the type of acquisition exit.

There are two alternative estimation procedures to test our findings that are, for several reasons, not applied in this research setting. First, an alternative to test the moderating effect of reputation is to use a correction procedure in logit analyses with moderating variables. This computes the marginal effect of a

change in two interacted variables through the “*inteff*” postestimation command in STATA (Norton, Wang & Ai, 2004). This method makes it possible to test moderating effects of continuous variables without the loss of information on intragroup variation as in the split sample procedure. Unfortunately, the *inteff* command does not work in a model with multiple interactions terms that include the same independent variable (Seymour, 2011). In this research setting, this is hence not a suitable estimation procedure. A second alternative method of analysis would be to use competing risk models to test our hypotheses. These analyze the combined effects of our variables on the type and timing of the exit. They do not allow us to separate the effects on exit type and the exit timing. In contrast, the goal of this study lies solely on the type of acquisition exit, not on the timing. The timing of the exit is therefore only used as a control variable in our study. Hence, we report the results based on logistic regressions.

3.6. Discussion and conclusion

This paper studies the differences between strategic and financial acquisition exits of cross-border buyouts. Our findings support the argumentation that the differences between strategic and financial acquisitions result from varying value creating mechanisms during the cross-border buyout. More specifically, cross-border buyout growth increases the likelihood of strategic compared to a financial acquisition while efficiency has the opposite effect. The latter increases the probability of a financial acquisition. The effect of efficiency on the type of acquisition exit is higher if the divesting cross-border PE investor has a high reputation. Both the overall, the industry-specific and particularly the country-specific reputation play a role herein. Moreover, country-specific reputation also strengthens the relationship between efficiency and the type of acquisition. In sum, this paper advances our understanding how private equity investors divest their cross-border buyouts through acquisition. These findings are interesting for a number of reasons.

First, we contribute to the entrepreneurship literature. Although PE investors dominantly opt for acquisitions to exit their cross-border buyout investments, there is a limited understanding in the differences between strategic and financial acquisitions of cross-border buyouts and of buyouts in general (Sudarsanam & Nwagodoh, 2005). Based on insights from the acquisition and the international entrepreneurship literature, we indicate that the value creating mechanisms during the buyout explain these differences. Strategic acquirers opt for buyouts with a higher growth while financial acquirers are more interested in efficiencies. In addition, the reputation of the selling PE investor is an important tool to reduce information costs in acquisition exits of cross-border buyouts. Particularly country-specific

reputation was found to matter. Moreover, our findings contribute to a better knowledge on the increasing attractiveness of financial acquisition exits of buyout firms, i.e. the secondary buyouts (Bonini, 2010, Achleitner & Figge, 2011). These are not the exits of last resort, although this is often mentioned in the popular media (Sousa, 2010). Instead, they offer buyouts that operate efficiently under the governance mechanisms of a private equity investor the opportunity to continue within a buyout governance structure while they provide the selling private equity investor a mechanism to end his current engagement.

Second, our findings contribute to the literature on information costs in acquisitions. As previous studies have mainly focused on acquisition contracts or methods of payment as mechanisms to alleviate information problems in acquisitions, the effect of reputation on information problems in acquisitions is an underdeveloped research topic (Ragozzino & Reuer, 2011). In contrast, the effect of reputation on information problems is mainly examined in alternative financial transactions such as IPOs. Through a focus on acquisitions of internally owned firms, which are associated with high information costs, our study details how the reputation of the selling firm decreases the information problems in acquisitions. First, the reputation of the selling cross-border investor reduces information costs through a higher credibility of financial information. Second, our international setting enables us to increase our understanding on the fragmentation of reputation. Recent findings indicate that reputation is segmented towards different areas of expertise (e.g. Jensen & Roy, 2008; Rhee & Valdez, 2009). As a result, the effect of reputation is often considered to be industry-specific (Hsu, 2004). Reputation is also segmented across countries. More specifically, country-specific reputation signals the ability of expertise, credibility and specialized guidance of the foreign owner within a particular region. As such, acquisitions sold by cross-border investors with a high country-specific reputation are associated with a decrease in information costs.

Third, we contribute to international business theory by exploring the exit of cross-border operations. This is an essential part of the internationalization strategy (Birkinshaw & Hood, 1998; Santangelo & Meyer, 2011). Our findings stress the role of the selling firm within this process as his value creating strategy prior to exit determines the type of acquisition. Moreover, we extend existing knowledge on the benefits of local specialization. While the process based theory of internationalization highlights that local specialization leads to an increased commitment towards a particular country (Johanson & Vahlne, 1977), our findings suggest that it is also important for the divestment of cross-border activities. More specifically, a higher level of country-specific reputation as a result of local specialization reduces the information problems in the sale of cross-border operations.

3.7. References

- Achleitner, A. K., & Figge, C., 2011. Private equity lemons? Evidence on value creation in secondary buyouts. Working paper Centre for Entrepreneurial and Financial Studies (CEFS), Technische Universität München, TUM Business School.
- Beuselinck, C., Deloof, M., & Manigart, S. 2009. Private equity involvement and earnings quality. *Journal of Business Finance & Accounting*, 36, 587-615.
- Birkinshaw, J. & Hood, N. 1998. Multinational subsidiary evolution: Capability and charter change in foreign-owned subsidiary companies. *Academy of Management Review*, 23, 773-795.
- Black, B. S., & Gilson, R. J. 1998. Venture capital and the structure of capital markets: Banks versus stock markets. *Journal of Financial Economics*, 47, 243-277.
- Bonini, S. 2010. *Secondary buy-outs*. Working paper Bocconi University, Milan, Italy.
- Brauer, M. 2006. What have we acquired and what should we acquire in divestiture research? A review and research agenda. *Journal of Management*, 32, 751-785.
- Bruton, G. D., Fried, V. H., & Manigart, S. 2005. Institutional influences on the worldwide expansion of venture capital. *Entrepreneurship Theory and Practice*, 29, 737-760.
- Burgstahler, D. C., Hail, L., & Leuz, C. 2006. The importance of reporting incentives: Earnings management in European private and public firms. *Accounting Review*, 81, 83-1016.
- Camerlynck, J., Ooghe, H., & De Langhe, T. 2005. Pre-acquisition profile of privately held companies involved in take-overs. *Small Business Economics*, 24, 169-186.
- CMBOR 2008. *European management buyouts: European management buy-out review*. Nottingham, UK: Centre for Management Buyout Research.
- Cotter, J. F., & Peck, S. W. 2001. The structure of debt and active equity investors: The case of the buyout specialist. *Journal of Financial Economics*, 59, 101-147.
- Cressy, R., Munari F., & Malipiero, A. 2007. Playing to their strengths? Evidence that specialization in the private equity industry confers competitive advantage. *Journal of Corporate Finance*, 13, 647-669.

- Dai, N., Jo, H., & Kassicieh, S. 2011. Cross-border venture capital investments in Asia: Selection and performance. *Journal of Business Venturing*, in press.
- Delmar, F., Davidsson, P., & Gartner, W. B. 2003. Arriving at the high-growth firm. *Journal of Business Venturing*, 18, 189-216.
- Deloof, M. 1998. Internal capital markets, bank borrowing and financing constraints: Evidence from Belgian firms. *Journal of Business Finance & Accounting*, 25, 945-968.
- Demiroglu, C., & James, C. M. 2010. The role of private equity group reputation in LBO financing. *Journal of Financial Economics*, 96, 306-330.
- Devigne, D., Vanacker, T., Manigart, S., & Paeleman, I. 2011. The role of domestic and cross-border venture capital investors in the growth of portfolio companies. *Small Business Economics*, in press.
- European Venture Capital Association. 2009. *EVCA yearbook: Pan-European private equity & venture capital activity report*. Brussels, Belgium: EVCA.
- Fang, L. H. 2005. Investment bank reputation and the price and quality of underwriting services. *Journal of Finance*, 60, 2729-2761.
- Felix, W., Tan, C. E. L., & Morsfield, S. G. 2005. *The demand for auditing in the presence of venture capitalists*. Working paper, The University of Arizona, Tucson, AZ, and Baruch College–City University of New York, New York, NY.
- Fidrmuc, J. P., Paap, R., Roosenboom, P., & Teunissen, T. 2012. One size does not fit all: Selling firms to private versus strategic acquirers. *Journal of Corporate Finance*, 18, 828-848.
- Froot, K. A. 1989. Consistent Covariance-Matrix Estimation with Cross-Sectional Dependence and Heteroskedasticity in Financial Data. *Journal of Financial and Quantitative Analysis*, 24, 333-355.
- Gompers, P. A. 1996. Grandstanding in the venture capital industry. *Journal of Financial Economics*, 42, 133-156.
- Groh, A. P., von Liechtenstein, H., & Lieser, K. 2010. The European venture capital and private equity country attractiveness indices. *Journal of Corporate Finance*, 16, 205-24.
- Heckman, J. J. 1979. Sample Selection Bias As A Specification Error. *Econometrica*, 47, 153-161.

- Heyman, D., Deloof, M., & Ooghe, H. 2008. The financial structure of private held Belgian firms. *Small Business Economics*, 30, 301-313.
- Hoetker G. 2007. The use of logit and probit models in strategic management research: Critical issues. *Strategic Management Journal*, 28, 331-343.
- Hsu, D. H. 2004. What do entrepreneurs pay for venture capital affiliation? *Journal of Finance*, 59, 1805-1844.
- Jääskeläinen, M., & Maula, M. 2008. *Do networks of financial intermediaries help reduce local bias? Evidence from cross-border venture capital*. Working Paper Helsinki University of Technology, Helsinki, Finland.
- Jensen, M. C. 1986. Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review*, 76, 323-329.
- Jensen, M., & Roy, A. 2008. Staging exchange partner choices: When do status and reputation matter? *Academy of Management Journal*, 51, 495-516.
- Johanson, J. & Vahlne, J. E. 1977. Internationalization Process of Firm - Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies*, 8, 23-32.
- Kang, J. K., & Stulz, R. M. 1997. Why is there a home bias? An analysis of foreign portfolio equity ownership in Japan. *Journal of Financial Economics*, 46, 3-28.
- Kang, J. K., & Kim, J. M. 2010. Do foreign investors exhibit a corporate governance disadvantage? An information asymmetry perspective. *Journal of International Business Studies*, 4, 1415-38.
- Lang, L. H. P., Stulz, R. M., & Walkling, R. A. 1991. A Test of the Free Cash Flow Hypothesis - the Case of Bidder Returns. *Journal of Financial Economics*, 29, 315-335.
- Lavie, D. & Miller, S. R. 2008. Alliance portfolio internationalization and firm performance. *Organization Science*, 19, 623-646.
- Lee, P. M., Pollock, T. G., & Jin, K. 2011. The contingent value of venture capitalist reputation. *Strategic Organization*, 9, 33-69.

- Lee, P. M., & Wahal, S. 2004. Grandstanding, certification and the underpricing of venture capital backed IPOs. *Journal of Financial Economics*, 73, 375-407.
- Mäkelä, M. M. & Maula, M. V. J. 2005. Cross-border venture capital and new venture internationalization: an isomorphism perspective. *Venture Capital*, 7, 227-257.
- Mäkelä, M. M., & Maula, M. V. J. 2006. Interorganizational commitment in syndicated cross-border venture capital investments. *Entrepreneurship Theory and Practice*, 30, 273-298.
- Meuleman, M., & Wright, M. 2011. Cross-border private equity syndication: Institutional context and learning. *Journal of Business Venturing*, 26, 35-48.
- Meuleman, M., Amess, K., Wright, M., & Scholes, L. 2009. Agency, strategic entrepreneurship, and the performance of private equity-backed buyouts. *Entrepreneurship Theory and Practice*, 33, 213-239.
- Morsfield, S. G., & Tan, C. E. L. 2006. Do venture capitalists influence the decision to manage earnings in initial public offerings? *Accounting Review*, 81, 1119-1150.
- Nikoskelainen, E., & Wright, M. 2007. The impact of corporate governance mechanisms on value increase in leveraged buyouts. *Journal of Corporate Finance*, 13, 511-537.
- Norton, E. C., Wang, H., & Ai, C. 2004. Computing interaction effects and standard errors in logit and probit models. *Stata Journal*, 4, 154-167
- Opler, T. & Titman, S. 1993. The Determinants of Leveraged Buyout Activity - Free Cash Flow Vs Financial Distress Costs. *Journal of Finance*, 48, 1985-1999.
- Pruthi, S., Wright M., & Lockett, A. 2003. Do foreign and domestic venture capital firms differ in their monitoring of investees? *Asia Pacific Journal of Management*, 20, 175-204.
- Ragozzino, R. & Reuer, J. J. 2011. Geographic Distance and Corporate Acquisitions: Signals from Ipo Firms. *Strategic Management Journal*, 32, 876-894.
- Rhee, M., & Valdez, M. E. 2009. Contextual factors surrounding reputation damage with potential implications for reputation repair. *Academy of Management Review*, 34, 146-168.

- Santangelo, G. D. & Meyer, K. E. 2011. Extending the internationalization process model: Increases and decreases of MNE commitment in emerging economies. *Journal of International Business Studies*, 42, 894-909.
- Saville, D. J. & Wood, G. R. 1991. *Statistical methods: The geometric approach*. New York: Springer.
- Seymour, R. 2011. *The computation of interaction effects in probit models with multiple interaction terms that include the same variable*. Centre for Labour Market Research Discussion Paper Series 2011/03, Curtin Business School, Australia.
- Shimizu, K. & Hitt, M. A. 2005. What constrains or facilitates divestitures of formerly acquired firms? The effects of organizational inertia. *Journal of Management*, 31, 50-72.
- Sörenson, O., & Stuart, T. E. 2001. Syndication networks and the spatial distribution of venture capital investments. *American Journal of Sociology*, 106, 1546-1588.
- Sousa, M. 2010. *Why do private equity firms sell to each others?* Working paper, Said Business School, Oxford University, UK.
- Sudarsanam, S., & Nwaghodoh, U. 2005. *Exit strategy of UK leveraged buyouts: Empirical evidence on determinants*. Working paper Cranfield University, United Kingdom.
- Weesie, J. 1999. Seemingly unrelated regression and the cluster-adjusted sandwich estimator. *STATA Technical Bulletin*, 52, 34-46.
- Weinzimmer, L. G., Nystrom, P. C., & Freeman, S. J. 1998. Measuring organizational growth: Issues, consequences and guidelines. *Journal of Management*, 24, 235-262.
- Wright, M., Amess, K., Weir, C., & Girma, S. 2009. Private Equity and Corporate Governance: Retrospect and Prospect. *Corporate Governance-An International Review*, 17, 353-375.
- Wright, M., Hoskisson, R. E., Busenitz, L. W., & Dial, J. 2000. Entrepreneurial growth through privatization: The upside of management buyouts. *Academy of Management Review*, 25, 591-601.

3.8. Tables and figures

TABLE 3.1.: DESCRIPTIVE STATISTICS FOR THE SAMPLE AND FOR THE TWO SUBGROUPS OF STRATEGIC AND FINANCIAL ACQUISITIONS

Variable	Sample		Strategic acquisition		Financial acquisition		
	Av.	Med.	Av.	Med.	Av.	Med.	
<u>Sample description</u>							
Syndication with domestic investor ^a	0.24		0.20		0.27		
Syndication with other international investors ^a	0.13		0.11		0.15		
Size (in € 000)	129709	52527	95502	37269	158979	80189	**
Source: divestment ^a	0.40		0.42		0.38		
Source: family or private firm ^a	0.34		0.41		0.28		†
Source: secondary buyout, privatization or listed firm ^a	0.24		0.16		0.32		*
High tech industry ^a	0.19		0.27		0.13		*
Loan spread	0.87	0.77	0.90	0.79	0.84	0.75	
M&A activity	0.05	0.04	0.05	0.04	0.05	0.05	
Holding time in years	4.09	3.63	4.16	3.50	4.03	3.67	
Location: Belgium ^a	0.07		0.06		0.08		
Location: France ^a	0.51		0.47		0.55		
Location: Italy ^a	0.13		0.16		0.10		
Location: Netherlands ^a	0.08		0.07		0.09		
Location: Spain ^a	0.13		0.18		0.09		†
Location: Sweden ^a	0.07		0.06		0.08		
<u>Dependent variables</u>							
Growth	0.17	0.03	0.23	0.06	0.12	0.02	
Efficiency (in %)	11.27	11.47	9.12	6.49	13.11	12.53	**
<u>Reputation of the divesting PE owner</u>							
Overall reputation	1.82	0.95	1.90	0.95	1.75	0.95	
Country-specific reputation	2.51	1.43	2.87	2.22	2.20	1.33	*
Industry-specific reputation	2.14	1.01	2.37	1.01	1.94	1.00	
N	180		83		97		

This table provides a description of our sample of buyouts in addition to the subgroups of buyouts that exit through a financial or a strategic acquisition. For each variable, we present average (Av.) and median (Med.) values except for the dummy variables. For these variables, we report the relative proportion. We also present the results of the bivariate test statistics between these two subgroups.

** indicates $p < 0.01$, * indicates $p < 0.05$, † indicates $p < 0.1$ (One-tailed tests for hypothesized effects)

^aThis is a dummy variable.

TABLE 3.2.: CORRELATIONS FOR THE DEPENDENT, INDEPENDENT AND CONTINUOUS CONTROL VARIABLES

	1	2	3	4	5	6	7	8	9	10
1 Secondary buyout	1.00									
2 Size (in € 000)	0.20	1.00								
3 Loan spread	-0.07	-0.05	1.00							
4 M&A activity	-0.00	0.16	-0.15	1.00						
5 Holding time in years	-0.04	-0.16	0.04	0.15	1.00					
6 Growth	-0.09	0.04	0.01	-0.17	-0.16	1.00				
7 Efficiency	0.20	-0.15	-0.04	-0.16	0.08	-0.02	1.00			
8 Overall reputation	-0.03	-0.32	0.15	-0.24	-0.04	0.04	0.07	1.00		
9 Country-specific reputation	-0.09	-0.33	0.22	-0.22	-0.11	0.04	0.04	0.77	1.00	
10 Industry-specific reputation	-0.07	-0.28	0.11	-0.24	-0.09	0.12	-0.01	0.88	0.67	1.00

All correlations with absolute values above 0.14 are significant ($p < 0.05$)

TABLE 3.3.: LOGIT REGRESSIONS FOR THE DIFFERENCES BETWEEN STRATEGIC AND FINANCIAL ACQUISITIONS

Dependent variable: Strategic versus financial acquisition	(1)		(2)		(3)		(4)		(5)		(6)		(7)	
	Full sample		High overall reputation		Low overall reputation		High country-specific reputation		Low country-specific reputation		High industry-specific reputation		Low industry-specific reputation	
	Coef.	S.D.	Coef.	S.D.	Coef.	S.D.	Coef.	S.D.	Coef.	S.D.	Coef.	S.D.	Coef.	S.D.
<i>Independent variables</i>														
Growth	0.392	† (0.259)	-0.164	(0.526)	0.641	† (0.487)	1.467	** (0.627)	0.026	(0.373)	0.265	(0.530)	0.415	(0.388)
Efficiency	-0.058	* (0.032)	-0.173	** (0.029)	0.002	(0.027)	-0.160	** (0.033)	0.015	(0.030)	-0.142	** (0.038)	-0.011	(0.026)
<i>Control variables</i>														
Syndication with domestic investor	-0.373	(0.385)	0.780	† (0.424)	-0.982	(0.811)	0.520	(0.689)	-1.082	† (0.648)	0.450	(0.664)	-0.890	(0.593)
Syndication with other international investors	-0.350	(0.575)	1.595	(1.141)	-0.027	(0.702)	-3.367	** (0.97)	0.173	(0.639)	0.042	(0.731)	-0.164	(0.680)
Size	-0.337	* (0.137)	-0.870	* (0.389)	-0.373	(0.244)	-0.323	(0.231)	-0.396	† (0.221)	-0.519	† (0.301)	-0.309	(0.205)
Source: Divestment	0.741	† (0.414)	-0.232	(0.798)	1.347	* (0.654)	0.457	(0.788)	0.829	(0.633)	0.612	(0.627)	0.845	(0.598)
Source: Family or private firm	0.667	(0.500)	0.955	(0.783)	0.094	(0.945)	0.695	(0.621)	0.117	(0.983)	1.448	* (0.573)	0.139	(0.773)
High tech industry	0.939	* (0.396)	2.311	** (0.460)	0.412	(0.541)	2.320	** (0.686)	0.793	(0.727)	2.475	** (0.917)	0.510	(0.458)
Loan spread	0.488	(0.421)	1.141	(0.761)	0.237	(0.717)	0.089	(0.498)	1.284	† (0.760)	0.191	(0.748)	0.612	(0.553)
M&A activity	12.140	† (7.226)	25.640	† (14.560)	12.540	(11.47)	18.710	(13.510)	14.230	(13.35)	21.840	(13.78)	10.430	(8.860)
Holding time in years	0.029	(0.086)	-0.122	(0.144)	0.033	(0.125)	0.056	(0.179)	0.001	(0.108)	0.105	(0.098)	0.018	(0.121)
Holding time in years squared	0.103	** (0.040)	0.183	† (0.094)	0.115	† (0.065)	0.103	(0.064)	0.132	* (0.055)	0.153	† (0.078)	0.131	* (0.066)
Location: Belgium, Netherlands,	-0.634	(0.463)	-0.868	(0.598)	-1.718	* (0.828)	-0.915	(0.702)	-0.796	(0.696)	-1.039	(1.050)	-0.654	(0.670)
Location: Spain, Italy	0.389	(0.466)	0.834	(0.635)	0.037	(0.681)	0.211	(0.458)	0.116	(0.726)	0.797	(0.720)	0.178	(0.724)
Overall reputation ^a	-0.015	(0.124)					0.384	* (0.190)	-0.635	(1.067)	0.281	† (0.158)	-0.387	(0.922)
Country-specific reputation ^a	0.111	(0.139)	-0.013	(0.105)	1.846	** (0.656)					0.164	(0.202)	0.255	(0.685)
Industry-specific reputation ^a	-0.033	(0.127)	0.417	† (0.227)	-1.038	† (0.542)	0.447	* (0.215)	-0.499	(0.345)				
Constant	2.161	(1.575)	6.977	* (3.240)	2.564	(3.232)	3.160	(2.696)	0.951	(3.257)	3.612	(3.157)	1.454	(2.577)
Observations	180		91		89		88		92		88		92	
chi-square test	43.44	**	48.06	**	30.19	*	44.42	**	25.37	†	39.11	**	18.10	
<i>Wald tests for equality of coefficients</i>														
Growth				1.27				3.95		*		0.06		
Efficiency				19.03		**		13.40		**		12.13		**

Estimated coefficients for the logit regressions which compare the characteristics of buyout exits through strategic versus financial acquisitions. (Dependent variable equals 1 in the case of a strategic acquisition). We model the final year before exit. Standard errors are clustered per private equity investor.

^a This variable is orthogonalized

** p<0.01, * p<0.05, † p<0.1 (One-tailed tests for hypothesized effects)

TABLE 3.4.: LOGIT REGRESSIONS FOR THE DIFFERENCES BETWEEN STRATEGIC AND FINANCIAL ACQUISITIONS: COMPARISON BETWEEN DIFFERENT TYPES OF REPUTATION

Dependent variable: Strategic versus financial acquisition	(1) High overall reputation		(2) High country-specific reputation		(3) High overall reputation		(4) High industry-specific reputation		(5) High industry-specific reputation		(6) High country-specific reputation	
	Coef.	S.D.	Coef.	S.D.	Coef.	S.D.	Coef.	S.D.	Coef.	S.D.	Coef.	S.D.
<i>Independent variables</i>												
Growth	-0.164	(0.532)	1.467 *	(0.636)	-0.164	(0.533)	0.265	(0.538)	0.265	(0.534)	1.467 **	(0.633)
Efficiency	-0.173 **	(0.029)	-0.160 **	(0.034)	-0.173 **	(0.029)	-0.142 **	(0.039)	-0.142 **	(0.038)	-0.160 **	(0.034)
<i>Control variables</i>												
Syndication with domestic investor	0.780 †	(0.430)	0.520	(0.698)	0.780 †	(0.431)	0.450	(0.674)	0.450	(0.670)	0.520	(0.695)
Syndication with other international investors	1.595	(1.156)	-3.367 **	(0.983)	1.595	(1.158)	0.042	(0.742)	0.042	(0.738)	-3.367 **	(0.978)
Size	-0.870 *	(0.394)	-0.323	(0.234)	-0.870 *	(0.395)	-0.519 †	(0.306)	-0.519 †	(0.304)	-0.323	(0.233)
Source: Divestment	-0.232	(0.809)	0.457	(0.798)	-0.232	(0.810)	0.612	(0.637)	0.612	(0.633)	0.457	(0.795)
Source: Family or private firm	0.955	(0.793)	0.695	(0.629)	0.955	(0.794)	1.448 *	(0.581)	1.448 *	(0.578)	0.695	(0.626)
High tech industry	2.311 **	(0.466)	2.320 **	(0.695)	2.311 **	(0.467)	2.475 **	(0.930)	2.475 **	(0.924)	2.320 **	(0.692)
Loan spread	1.141	(0.771)	0.089	(0.504)	1.141	(0.772)	0.191	(0.759)	0.191	(0.754)	0.089	(0.502)
M&A activity	25.640 †	(14.750)	18.710	(13.680)	25.640 †	(14.770)	21.840	(13.980)	21.840	(13.890)	18.710	(13.620)
Holding time in years	-0.122	(0.146)	0.056	(0.181)	-0.122	(0.146)	0.105	(0.100)	0.105	(0.099)	0.056	(0.180)
Holding time in years squared	0.183 †	(0.095)	0.103	(0.064)	0.183 †	(0.095)	0.153 †	(0.079)	0.153 †	(0.079)	0.103	(0.064)
Location: Belgium, Netherlands, Sweden	-0.868	(0.606)	-0.915	(0.711)	-0.868	(0.607)	-1.039	(1.066)	-1.039	(1.059)	-0.915	(0.708)
Location: Spain, Italy	0.834	(0.643)	0.211	(0.464)	0.834	(0.645)	0.797	(0.731)	0.797	(0.726)	0.211	(0.462)
Overall reputation ^a	-0.013	(0.106)			-0.013	(0.107)	0.164	(0.205)	0.164	(0.204)		
Country-specific reputation ^a	0.417 †	(0.230)	0.447 **	(0.218)	0.417 †	(0.231)					0.447 *	(0.217)
Industry-specific reputation ^a			0.384 **	(0.193)			0.281 †	(0.161)	0.281 †	(0.160)	0.384 *	(0.192)
Constant	6.977 *	(3.282)	3.160	(2.731)	6.977 *	(3.288)	3.612	(3.203)	3.612	(3.183)	3.160	(2.718)
Observations	91		88		91		88		88		88	
<i>Wald tests for equality of coefficients</i>												
Growth		5.70		**		0.47				2.40		†
Efficiency		0.15				1.19				0.38		

Estimated coefficients for the logit regressions which compare the characteristics of buyout exits through strategic versus financial acquisitions. (Dependent variable equals 1 in the case of a strategic acquisition). We model the final year before exit. Standard errors are clustered per private equity investor

^a This variable is orthogonalized

** p<0.01, * p<0.05, † p<0.1 (One-tailed tests for hypothesized effects)

FIGURE 3.1.: THEORETICAL MODEL

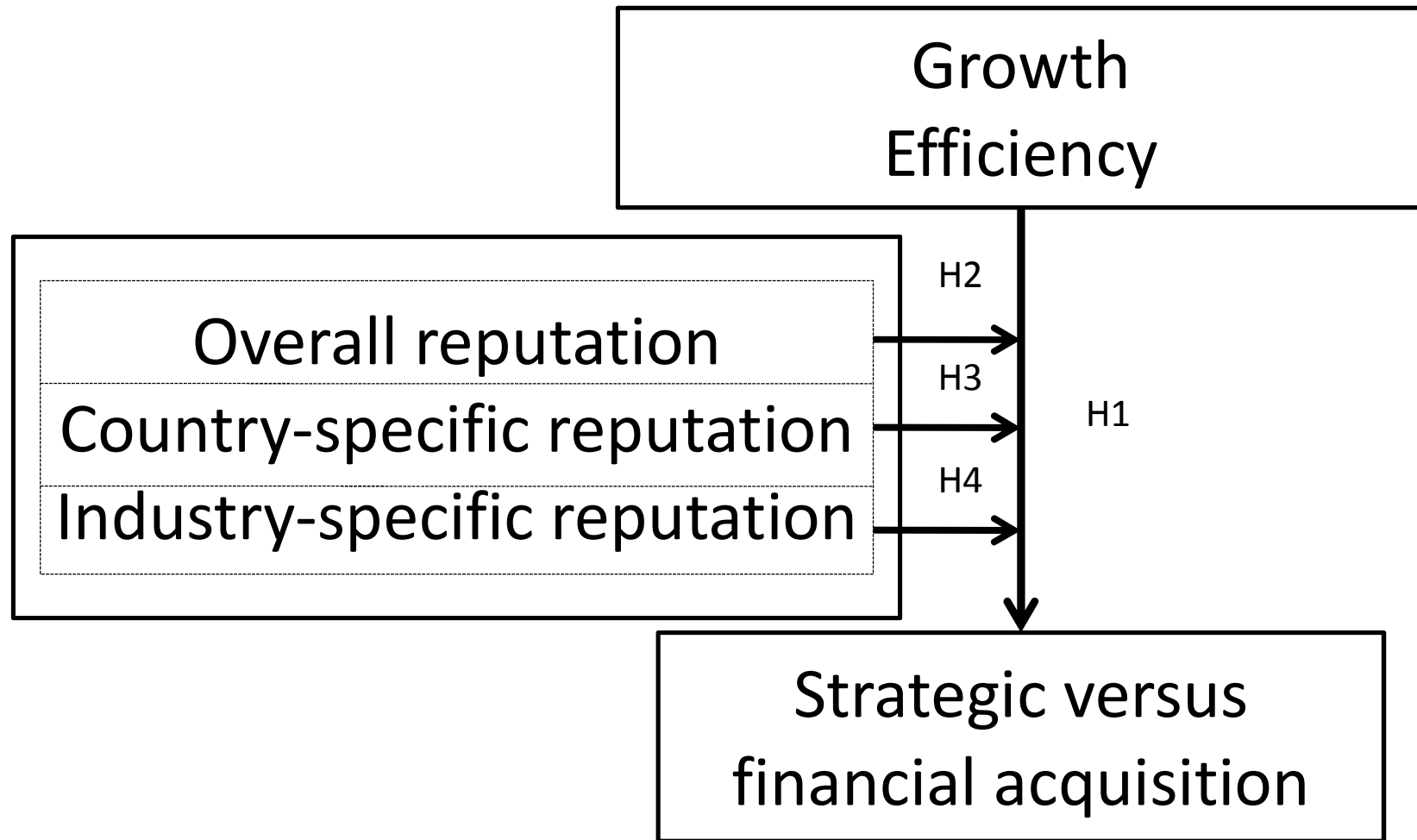
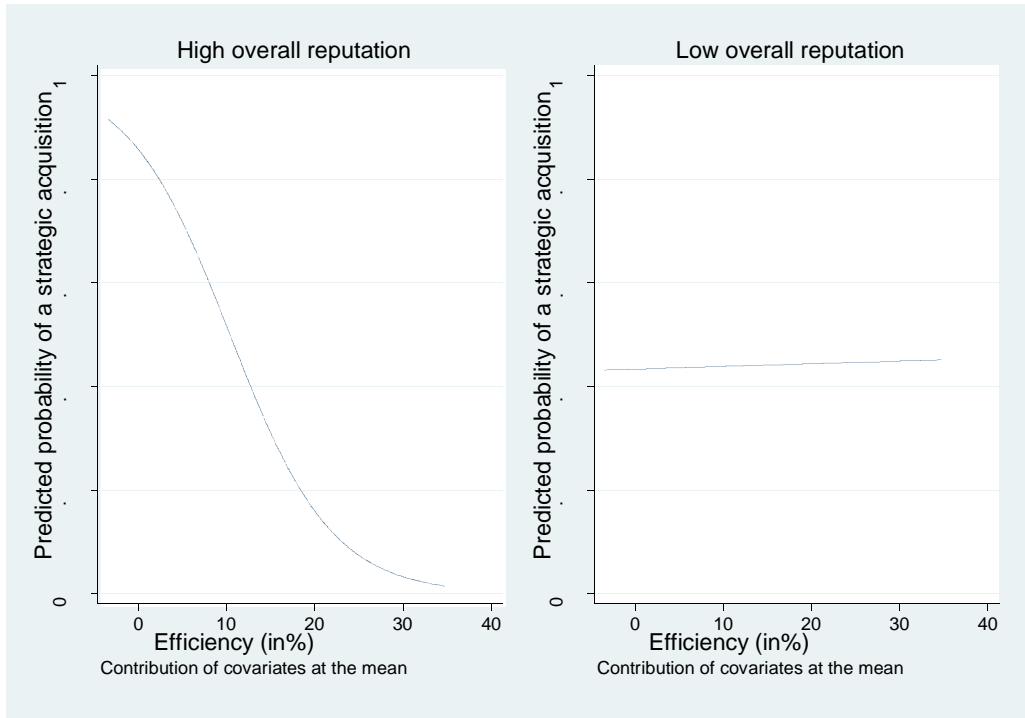
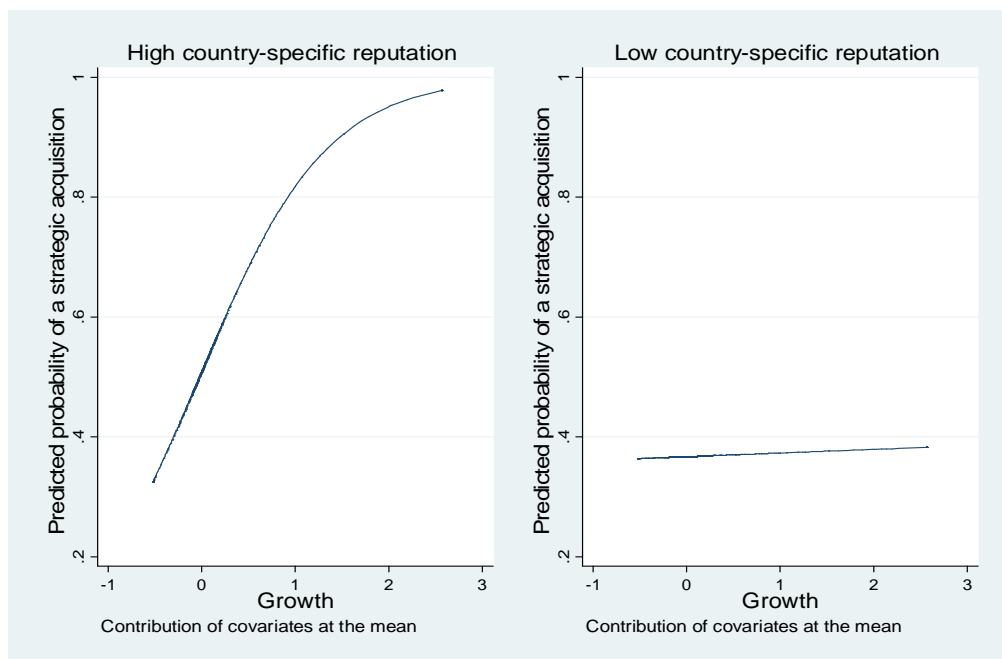


FIGURE 3.2: THE PROBABILITY OF A STRATEGIC ACQUISITION AS A FUNCTION OF GROWTH AND EFFICIENCY ACROSS DIFFERENT LEVELS OF REPUTATION

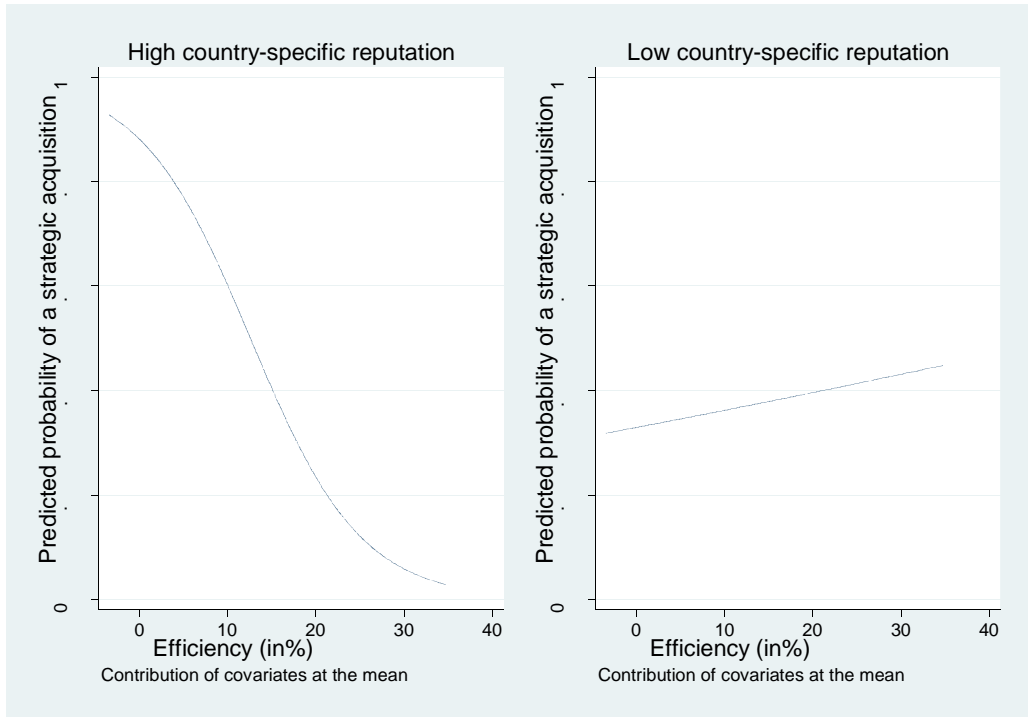
Panel A: The probability of a strategic acquisition as a function of efficiency across different levels of overall reputation



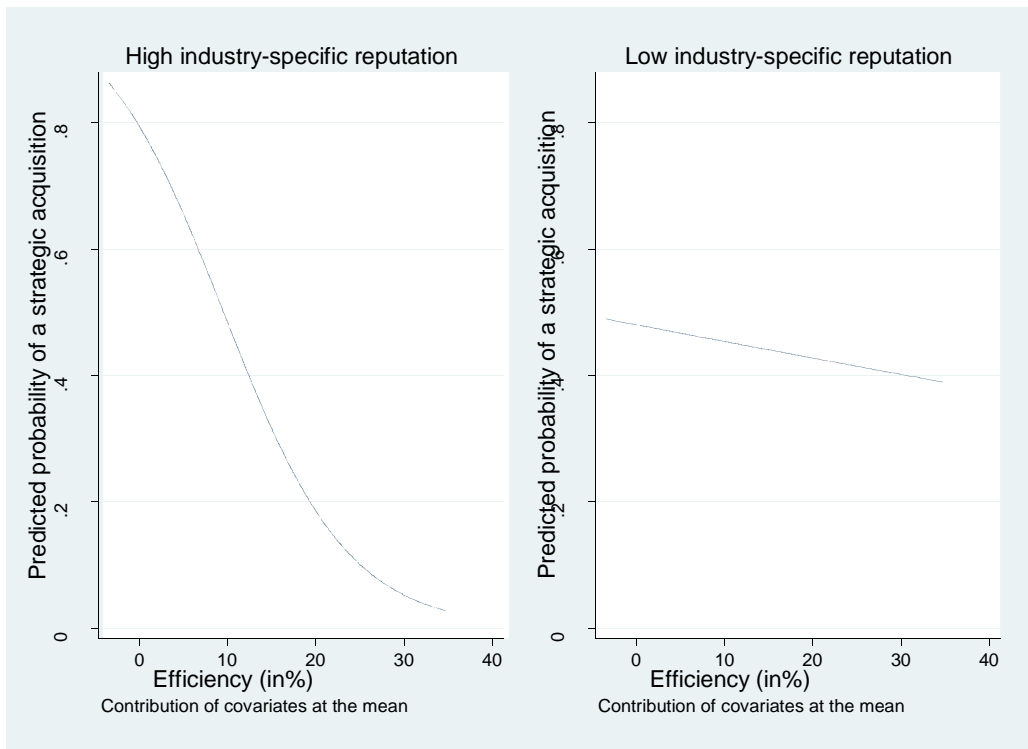
Panel B: The probability of a strategic acquisition as a function of growth across different levels of country-specific reputation



Panel C: The probability of a strategic acquisition as a function of efficiency across different levels of country-specific reputation



Panel D: The probability of a strategic acquisition as a function of efficiency across different levels of industry-specific reputation



Chapter 4: Cross-border financial intermediation and domestic acquisitions: The role of host country experience

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4.1. Abstract

This paper studies the effect of host country experience of cross-border financial intermediaries on the probability of a domestic versus an international acquisition. Using a unique dataset of 296 Continental European acquisitions guided by cross-border private equity investors, this paper shows how host country experience enhances local information transfer through local embeddedness. This reduces the information costs of domestic acquirers which increases the probability of a domestic acquisition. The positive effect of cross-border private equity investors' host country experience on the probability of a domestic acquisition is higher for financial than for strategic acquisitions. This is the result of increasing network connections between private equity investors and financial acquirers compared to strategic acquirers. Finally, host country experience is less positively associated with a domestic acquisition under higher levels of host country financial market development. The increased accessibility of local information within more developed financial markets substitutes for benefits of local information transfer by cross-border intermediaries with higher levels of host country experience.

4.2. Introduction

Financial intermediaries, such as private equity investors, help to spread information thereby substantially reducing the information costs of acquirers (Chemmanur & Fulghieri, 1994). In the currently globalized economy, a substantial number of financial intermediaries originate from cross-border regions. Their geographically dispersed network increases the spread of information towards foreign acquirers thereby facilitating cross-border acquisitions (Jääskeläinen & Maula, 2008; Ragozzino & Reuer, 2009). In contrast, domestic acquirers favor domestic intermediaries which are more embedded in the host country information networks (Granovetter, 1985; Zaheer & Mosakowski, 1997). This creates an important liability of foreignness for cross-border financial intermediaries whose access to domestic networks and domestic acquirers is more limited. In order to understand the effectiveness of cross-border financial intermediaries for domestic acquirers, it is crucial to analyze how cross-border financial intermediaries overcome their liability of foreignness.

In this study, we focus on the transfer of information between cross-border financial intermediaries and domestic acquirers. We examine how cross-border financial intermediaries can alleviate their liability of foreignness towards domestic acquirers through higher levels of host country experience. This is defined as the experience acquired by the financial intermediary through prior business deals in the country of the target company (Chetty, Eriksson & Lindbergh, 2006). First, we investigate whether host country experience increases the likelihood of a domestic over an international acquisition through a reduction of

domestic acquirers' information costs. Second, we concentrate on domestic acquirers' connections towards different sources of local information. We examine whether this moderates the positive influence of local information transfer by cross-border financial intermediaries with more host country experience. On the one hand, we examine the moderating effect of business connections between the domestic acquirer and the cross-border financial intermediary. We therefore investigate whether the influence of host country experience differs between financial acquirers - that operate within the same business network as financial intermediaries - and strategic buyers - with less established network connections to financial intermediaries. On the other hand, we concentrate on financial market development which increases the connections of domestic acquirers with alternative, domestic financial intermediaries. We examine whether the increased access of information on local acquisition targets under higher levels of financial market development substitutes for the effectiveness of host country experience on the reduction of domestic acquirers' information costs.

The hypotheses are tested on a unique and hand-collected sample of 296 acquisitions that are supported by cross-border financial intermediaries. More specifically, we examine acquisition exits of cross-border buyouts sold by cross-border private equity investors. Given the substantial equity stake of these private equity investors, they are highly involved in the acquisition process. Acquirers therefore attach a particularly high importance to the information spread by these intermediaries (Fitza & Dean, 2009). We concentrate on the Continental Europe, as this region is increasingly internationally oriented with a high number of both domestic and international acquisitions, a large and diverse set of cross-border private equity investors in addition to a substantial variation of financial market development (Meuleman & Wright, 2011).

Our findings highlight the positive effect of host country experience of cross-border financial intermediaries on the likelihood of a domestic acquisition. It reduces the financial intermediaries' liability of foreignness through increased local information transfer towards domestic acquirers (Coval & Moskowitz, 1999; Zaheer & Mosakowski, 1997). Moreover, the positive effect of financial intermediaries' host country experience is larger for financial than for strategic acquisitions. Finally, the positive effect of host country experience on the probability of a domestic acquisition is lower under higher levels of financial market development.

This study has important contributions for the liability of foreignness literature. The high levels of internationalization within the financial service industry have challenged existing insights on the liability of foreignness. More specifically, recent findings have shown that in many industries, such as the financial intermediation industry, foreign entrants are numerous and perform often better than purely domestic firms. This calls for additional research whether there are indeed benefits of increased host country

experience in highly internationally oriented industries (Nachum, 2010). Our study addresses the need for a better insight in this phenomenon. Second, our study enlarges the liability of foreignness literature through the introduction of a contingency perspective. As embeddedness within local information channels explains the benefits of host country experience (Zaheer & Mosakowski, 1997), this raises the question whether domestic acquirers' connectivity towards these local information channels affects the benefits of host country experience. Third, we contribute to network theory. The focus of this paper is to examine whether the benefits of a network for information transfer depend on the relative importance of different information networks. This contrasts to most studies that only examine the effect of information transfer within a sole information network (Burt, 1992). Finally, our study extends the home bias literature in acquisitions. While most studies highlight the relationship between cross-border financial intermediation and the information costs of international acquirers (e.g. Jääskeläinen & Maula, 2008), the impact of cross-border financial intermediation on the information costs of cross-border acquirers is yet not fully understood.

The remainder of this paper proceeds as follows. We first develop our theoretical framework including hypotheses. Thereafter, we describe our research method and present our results. The paper ends with a discussion and conclusion.

4.3. Theory development and hypotheses

The role of financial intermediaries in acquisitions is to spread information on the acquisition targets. However, as information is bounded across geographical locations, domestic intermediaries are better able than cross-border intermediaries to spread information towards domestic acquirers (Granovetter, 1985; Zaheer & Mosakowski, 1997). We study how a cross-border financial intermediary can alleviate its liability of foreignness.

We argue that cross-border financial intermediaries can ease local information transfer to domestic acquirers through increasing levels of host country experience. This will increase the likelihood of a domestic compared to a cross-border acquisition. Moreover, we expect that the effect of host country experience on local information transfer depends on the connectivity of domestic acquirers towards local sources of information. In other words, we study whether local information transfer by cross-border intermediaries is more valuable for domestic acquirers that are well-connected to the financial intermediary and that are less connected to alternative information channels (Burt, 1992). We thereby focus on social as well as institutional aspects of connectivity. First, we examine the impact of local network connections between the cross-border financial intermediary and the domestic acquirer. Second, we concentrate on the institutional aspect of connectivity. More specifically, we study whether higher

levels of financial market development create a better access of information towards local acquirers through alternative information channels. We examine whether this alternative information transfer substitutes for local information transfer of cross-border financial intermediaries with increasing levels of host-country experience. We will expand hereafter on the expected relationships.

4.3.1. Host country experience of the financial intermediary

Cross-border financial intermediaries with increased investment experience in the host country gradually develop a wide range of connections with domestic actors such as legal or strategic advisors, investment banks, operating companies and domestic private equity investors (Cumming, Fleming & Schwienbacher, 2009; Nachum, 2003). In addition, host country experience enhances familiarity with the local culture and business style (Zaheer, 1995). The combination of local connections and familiarity within the region increase the local embeddedness of the cross-border financial intermediary (Slangen & Hennart, 2008). This is highly important for the transfer of information on the acquisition target towards domestic acquirers. Through local embeddedness, financial intermediaries can effectively contact domestic acquirers through direct or indirect information channels and reduce their information costs. We therefore expect that the likelihood of an acquisition by a local acquirer increases with higher levels of financial intermediaries' host country experience.

H1: Host country experience of cross-border financial intermediaries increases the likelihood of a domestic acquisition.

4.3.2. The impact of connectivity towards local information channels

In this section, we examine whether the benefits of increased information transfer by financial intermediaries through host country experience depend on the connections of domestic acquirers towards local information channels. We incorporate two aspects of connectivity. First, we stress the social aspect of connectivity. We thereby focus on the networks that connect domestic acquirers with the cross-border financial intermediary (Davidsson & Honig, 2003). Second, we examine the institutional aspect of connectivity and more specifically the impact of financial market development. We thereby stress the increased access to alternative information sources on local acquisition targets under higher levels of host country financial market development (Johnson, 2004). Both the moderating influence of business networks as well as financial market development is explained hereafter.

4.3.2.1. Host country experience and business networks

Financial intermediaries with higher levels of host country experience are more strongly integrated in local business networks. These network meetings offer close contacts that are an important mechanism for local information transfer towards potential acquirers (Uzzi, 1999; Zaheer & Mosakowski, 1997).

Different types of acquirers operate however in different business networks (Chuang & Lee, 2011). We therefore expect the effect of financial intermediaries' host country experience to vary between financial acquirers (i.e. private equity investors) and strategic acquirers (i.e. corporate firms). There is ample evidence of strong connections between financial acquirers and financial intermediaries operating in the same country or region (Guler & Guillén, 2010; Sorenson & Stuart, 2001). Financial intermediaries with higher levels of host country experience are therefore expected to effectively reduce the information costs of domestic financial acquirers (Sorenson & Stuart, 2001).

Financial intermediaries have less direct connections with strategic acquirers. In the absence of close connections between strategic acquirers and financial intermediaries, the value of host country experience of financial intermediaries for local information transfer is expected to be lower (Uzzi, 1997). Further, the targets of strategic acquirers often operate within their own business network, as these targets are often customers or suppliers (in vertical acquisitions) or competitors (in horizontal acquisitions). Hence, domestic strategic acquirers have more network meetings and hence relevant firsthand information with their acquisition targets (Bruneel, Yli-Renko & Clarysse, 2010). This is less the case for financial acquirers. Strategic acquirers therefore rely less on info from financial intermediaries to localize and evaluate acquisition targets. As a result, the benefits of host country experience of the financial intermediary on the likelihood of a domestic acquisition are expected to be higher for financial than for strategic acquisitions. This leads to the following hypothesis:

H2: The positive effect of host country experience of the financial intermediary on the likelihood of a domestic acquisition is higher for financial than for strategic acquisitions.

4.3.2.2. Host country experience and financial market development

Financial market development creates a more information-friendly environment (Hazarika, Nahata & Tandon, 2009). This environment is the result of a higher number and a better expertise of domestic financial intermediaries, such as local investment bankers and consultants, operating in developed financial markets (Hyun & Kim, 2010). These local intermediaries are primarily embedded within domestic information networks. Through these information networks, domestic financial intermediaries

generate substantial information about local acquisition targets. These information networks also enable domestic financial intermediaries to transfer relevant information towards potential, domestic acquirers. As a result, these domestic intermediaries create an alternative source of information for domestic acquirers (Johnson, 2004; Meuleman & Wright, 2011).

We argue that this alternative information channel decreases the information costs of domestic acquirers substantially. This channel substitutes for the information transfer by cross-border intermediaries with increasing levels of host country experience. Hence, we expect the effect of host country experience on the probability of a domestic acquisition to be lower at increasing levels of financial market development (Filatotchev & Wright, 2012; Johnson, 2004).

In contrast, under lower levels of financial market development, domestic acquirers are more dependent upon information transfer from cross-border financial intermediaries. Under these conditions, increasing levels of host country experience are more highly valued. We therefore expect that host country experience has a larger effect on the likelihood of a domestic acquisition within host countries with a lower level of financial market development. We therefore hypothesize:

H3: The positive effect of host country experience of the financial intermediary on the likelihood of a domestic acquisition decreases at higher levels of financial market development.

Figure 4.1. summarizes the hypothesized relationships.

Insert Figure 4.1. around here

4.4. Research method

4.4.1. Empirical setting and sample

Our hypotheses are empirically tested within a sample of acquisitions supported by cross-border private equity investors as non-domestic financial intermediaries. Cross-border private equity investors are an important information source for acquirers given their substantial equity stake and their strong involvement in the management of the acquisition target. We study acquisitions within Continental Europe as it has highly internationally oriented takeover and private equity markets (Meuleman & Wright, 2011; Wright, Pruthi & Lockett, 2005).

The acquisitions in our sample are identified through the database of the Centre for Management Buyout Research (CMBOR). This hand-collected database retrieves its information through semi-annual surveys in addition to business press info. These surveys obtain a high response rate as private equity investors receive a free copy of a quarterly review of aggregate market trends. This database is therefore regarded as a comprehensive source of information on European private equity transactions in general and on acquisitions supported by cross-border private equity investors in particular.

A private equity investor is considered cross-border if its head offices are located in a different country from the head offices of his investment. In addition, we only included acquisitions where the cross-border private equity investor was the leading private equity investor, not the syndicate partner. This exclusion is the result of the lower involvement of non-domestic syndication partners in the management and sale of the acquisition target compared to leading foreign private equity investors. If there is more than one lead private equity investor involved, we assume that most reputable investor acts as the lead investor.

Our dataset covers acquisitions of target firms located in six countries: Belgium, France, Italy, the Netherlands, Spain and Sweden. These six countries are selected to have a large and diverse spread on domestic and cross-border acquisitions and on cross-border private equity involvement (EVCA, 2010; Groh, von Liechtenstein & Lieser, 2010). The database furthermore covers acquisitions where the cross-border private equity investor initiated its involvement during the period 1997 - 2004.

Our sample initially consists of 401 acquisitions backed by cross-border financial intermediaries. Detailed information on the origin of the acquirers was found for 379 acquisitions (95%). 42% of these are domestic acquisitions. This proportion is somewhat larger for financial (46%) compared to strategic acquisitions (38%). Information on the complete set of variables was found for 296 of these acquisitions, reducing our sample with 22%. The proportion of domestic compared to cross-border acquisitions remains unchanged in the final sample (42%) as well as the proportion of domestically syndicated deals, or the proportion of Anglo-Saxon PE investors. Moreover, the average levels of host country experience, deal value and duration also do not significantly differ between the initial and the final sample. There are some significant differences between the characteristics of the initial and the final sample, although these variations remain small. More specifically, the acquisitions that were not included in the final sample differ slightly with the acquisitions in the final sample in terms of the age of the financial intermediary (an average of 11 compared to 12 years), the proportion of domestic ownership prior to financial intermediary involvement (93% compared to 79%) and the proportion of strategic acquisitions (36% compared to 54%). This indicates the limited risk of sample selection bias.

4.4.2. Variables

An overview of the variable definitions is provided in Table 4.1. These variables are explained in detail hereunder. Table 4.2. presents the descriptive statistics of the variables used in the multivariate analyses, including comparisons between domestic and cross-border acquisitions.

Insert Table 4.1. around here

Insert Table 4.2. around here

4.4.2.1. Dependent variable: Domestic acquisition

The dependent variable is binary and indicates whether the firm is bought by a domestic or a foreign acquirer. An acquirer is considered domestic if its headquarter is located in the same country as the headquarter of the acquisition target. A value of 1 is attributed for a domestic acquisition and 0 for a cross-border acquisition. 42% of our acquisitions are domestic.

4.4.2.2. Independent variables

Host country experience is operationalized as the total number of private equity transactions in the country of the acquisition target, either as a lead or as a non-lead investor, until the pre-acquisition year. On average, a private equity investor has invested in 20 firms in the host country until the year prior to the acquisition. The logarithm of this variable is taken as the marginal effect of host country experience is expected to decrease (De Clercq & Dimov, 2008).

Financial versus strategic acquisition is a dummy variable indicating whether the acquirer is a strategic (i.e. a corporate firm) or a financial acquirer (i.e. another private equity investor). A value of 1 is attributed if it is a financial acquirer and 0 if it is a strategic acquirer. 54% of the firms are sold to a financial acquirer; 46% to a strategic acquirer.

Financial market development is measured as the market capitalization of listed firms (in % of GDP). This is an important indicator of the development of the financial markets within in a country (Black & Gilson, 1998). Within our sample, the mean market capitalization of listed companies equals 83% of the GDP.

4.4.2.3. Control variables

Several control variables that reflect the differences between domestic versus cross-border acquisitions are included in the multivariate statistics. One set of variables accounts for the heterogeneity among the acquisitions in our sample. These variables are: deal value, the duration of private equity involvement, the source of the deal, domestic ownership prior to private equity involvement and syndication with other private equity investors. First, we include the natural log of target firm value as larger deals are less likely acquired domestically (Balsvic & Haller, 2010). This is measured at the start of the cross-border private equity investor's involvement. The measure is adjusted for inflation rates with the 1994 price levels as base level. The deal value is on average €145 mio for the acquisitions in our sample. Second, we take the natural log of the duration of private equity involvement prior to acquisition into account (measured in number of months), which is on average 47 months. This variable incorporates potential differences in the time to contract domestic versus international acquirers (Boeh, 2011). Third, the source of the deal that initiates private equity involvement is incorporated, distinguishing between family or private deals (30% of the firms in our sample) and other sources such as divestments, secondary buyouts, delistings and privatizations. Family or private deals may have different strategic orientations and governance issues than other deals which influences the attractiveness towards domestic or international acquirers (Devigne, Vanacker, Manigart & Paeleman, 2011; Scholes, Wright, Westhead & Bruining, 2010). Fourth, we take into account whether the acquisition target was domestically (79%) or internationally (21%) owned prior to cross-border private equity involvement. Fifth, we incorporate whether the foreign private equity investor syndicated with local private equity investors in the focal deal. 22% of the acquisitions were supported by a combination both domestic and cross-border investors.

Next to the private equity investor's host country experience, the analyses control for its overall experience (measured during the year prior to the domestic or foreign acquisition of the target firm) since experienced private equity investors are expected to be more internationally oriented (Hall & Tu, 2003). Hence, they may search more actively for cross-border acquirers. This is operationalized as the log of the age of the private equity investor. The age is on average 12 years. In order to control for the stronger development of US and UK private equity markets, two dummies are created, taking the value of 1 when the private equity investor originates from the UK (67%) and the US (14%) respectively. These variables indicate the dominance of Anglo-Saxon intermediaries in the Continental European cross-border private equity market.

Finally, we control for the potential effect of the business environment. We incorporate business cycle effects, the importance of local acquisitions, the development of the local private equity market and the market openness. Business cycle effects are measured through the return of the Europe's Morgan Stanley

Capital International index (MSCI index) 3 to 6 months prior to acquisition (Cumming, 2008; Groh et al., 2010). The mean value of this variable is 1%. With respect to the importance of local acquisitions, we include the number of domestic acquisitions as a proportion of the total number of acquisitions within the host country in the year prior to acquisition. The average of this value is 70%. On the other hand, we control for the development of the local private equity market through the cumulative number of private equity investments within the host country until the year prior to acquisition (Gompers, Kovner, Lerner & Scharfstein, 2008). This measure incorporates the development of the local private equity market in addition to the mechanic increase in host country experience of a cross-border private equity investor over time. This is on average 1179 investments. Finally, market openness is operationalized as the amount of foreign direct investments in the host country as a proportion of GDP. This averages 4.11% of the GDP.

Table 4.2. shows the results of the bivariate statistics comparing domestic and cross-border acquisition targets. The host country experience of the foreign private equity investor is significantly larger in the case of a domestic acquisition. Moreover, host country financial market development is also positively associated with the likelihood of a domestic acquisition. This effect is marginally significant. Interestingly, domestic acquisitions are more often domestically owned prior to the private equity investment and are more often syndicated by a combination of domestic and cross-border private equity investors. The proportion of domestic acquisitions, the cumulative number of private equity investments in the host country and the openness of the economy are also positively related to the likelihood of a domestic acquisition.

4.4.3. Method of analyses

Logistic regressions are used to model the probability of a domestic versus an international acquisition, clustering on private equity investors (Froot, 1989). The final sample consists of 296 acquisitions supported by 79 private equity investors. First, we test the main effect of host country experience on the likelihood of a domestic acquisition. Second, we analyze the moderating effect of the type of acquirer (hypothesis 2) and the host country financial market development (hypothesis 3) through the seemingly unrelated estimation procedure (Weesie, 1999). More specifically, we divide the sample into two subsamples of on the one hand financial versus strategic acquisitions (hypothesis 2) and on the other hand a median split of the sample based on the levels of financial market development (hypothesis 3). As a result, we separate between levels of host country financial market development above and below 82% of the GDP (i.e. the median value). Thereafter, this estimation procedure jointly analyzes the effect of host country experience on the likelihood of a domestic acquisition within both subsamples. It combines the estimation results of the subsamples into a single covariance matrix controlling for clustered standard

errors per financial intermediary. The difference of coefficients between both subsamples is statistically tested through a Wald test.

The seemingly unrelated estimation procedure is preferred to the inclusion of interaction terms in logit analyses. Unlike OLS, estimating interaction terms in a logit regression does not result in a constant coefficient across all observations. In contrast, the magnitude and the sign of an interaction term are a function of not only the coefficient for the interaction, but also of the coefficients for each interacted variable and the values of all the variables (Hoetker, 2007).

A correlation matrix for the dependent, independent and continuous control measures is presented in Table 4.3. It indicates that correlations between the variables included in the analyses are low and do not exceed 0.50 except from the correlation between the levels of overall and host country experience. All models were rerun, excluding the effect of overall experience. This does not alter the results that will be presented hereafter. The variance inflating factor score for the full model indicates that multicollinearity is not an issue. The mean VIF score for this model equals 1.35 and the maximum individual VIF score is 1.73.

Insert Table 4.3. around here

4.5. Results

Table 4.4. presents the results of the multivariate statistics. Model 1 is the baseline model that estimates the influence of the control variables on the probability of a domestic acquisition. Model 2 adds the main effect of host country experience. Model 3 till 6 estimate the likelihood of a domestic acquisition within a particular subsample, based on the seemingly unrelated estimation procedure. Model 3 estimates the likelihood of a domestic acquisition in the subsample of financial acquisitions whereas model 4 shows the results of the subsample of strategic acquisitions. Model 5 and 6 analyze the probability of a domestic acquisition within the subsamples of a low versus a high financial market development. A split sample procedure is used to divide the sample in two parts. Table 4.4. also indicates the results of the Wald test to examine the equality of coefficients of host country experience between financial and strategic acquisitions on the one hand and between low versus high financial market development on the other hand. One-tailed tests are used to analyze hypothesized effects.

With respect to our control variables, the multivariate analyses indicate that acquisition targets, supported by highly experienced private equity investors are more likely to be acquired by cross-border firms. This is in line with earlier research that associates experienced cross-border financial intermediaries with an increased probability of a cross-border acquisition (Jääskeläinen & Maula, 2008). Our findings suggest that it is particularly their high overall experience which plays a role in the spread of information towards

cross-border acquirers. UK private equity investors are also more likely to sell across borders. Moreover, the cumulative number of investments in a particular region over time and the openness of the market also influence the acquirer country. Finally, deal source and domestic ownership prior to private equity involvement are significantly positively associated to the likelihood of a domestic acquisition under low levels of host country financial market development.

The main effect of host country experience is analyzed in model 2. The model indicates that host country experience significantly increases the probability of a domestic acquisition ($p < 0.01$). This provides strong support for hypothesis 1. Models 3 and 4 compare the likelihood of a domestic acquisition in the subsamples of respectively financial and strategic acquisitions. While host country experience significantly increases the probability of a domestic acquisition in the subsample of financial acquisitions ($p < 0.01$), it is not significant in the subsample of strategic acquisitions. The Wald test indicates that the coefficients of host country experience are significantly different ($p < 0.05$) between both subsamples, thereby supporting hypothesis 2. Finally, model 5 and 6 analyze the likelihood of a domestic acquisition in the subsamples of high versus low financial market development. In accordance with hypothesis 3, host country experience is more positively associated with the likelihood of a domestic acquisition under lower levels of institutional development ($p < 0.01$ versus $p < 0.10$). This is also confirmed by the results of the Wald test for equality of coefficients ($p < 0.01$). Hypothesis 3 is hence supported.

Insert Table 4.4. around here

Figure 4.2. serves to clarify the interaction effects of the acquisition type and the level of financial market development. As shown in panel A, host country experience has a larger influence on the probability of a domestic acquisition in the subsample of financial compared to strategic acquisitions. Panel B furthermore indicates the larger impact of host country experience under lower levels of financial market development.

Insert Figure 4.2. around here

The economic significance of our effects is substantial. This interpretation is based on a comparison of the odds of a domestic acquisition between 75th and the 25th percentile of host country experience. This corresponds to a comparison of acquisition targets supported by cross-border financial intermediaries with 21 versus two prior investments within the host country. More specifically, the coefficient of host country experience in model 2 corresponds to an odds ratio of 1.67. This implies that the odds of a domestic acquisition for targets supported by a financial intermediary with 21 prior host country investments are 154% higher than the odds of targets supported by cross-border financial intermediaries with only two prior host country investments. Moreover, within the subsample of financial acquisitions, the odds of a

domestic acquisition at higher levels of host country experience increase with 236%, while this is only 76% in the subsample of strategic acquisitions. Similarly, the odds of a domestic acquisition are 418% higher for targets supported by cross-border financial intermediaries with 21 prior host country investments compared to those supported by cross-border financial intermediaries with only two prior investments within the host country. This contrasts to an odds increase with 95% in the subsample of a high financial market development.

In order to test the robustness of our findings, we perform several sensitivity tests. First, we control for sample selection effects. Therefore, we incorporate a selection step to test whether potential inherent differences between the firms supported by private equity investors with a high compared to a low host country experience could alter our findings. Our selection model combines the effect of target firm characteristics (deal value, the duration of private equity involvement, the source of the deal, domestic ownership prior to financial intermediary involvement, syndication with other private equity investors) in addition to the origin and overall experience of the private equity investor and the type of acquisition. Moreover, the selection step incorporates business cycle effects, the characteristics of the local acquisition and private equity market, the market openness and financial market development indirectly through a combination of country and year dummies. If we add the selection step in our main analyses, our results are similar. Hence, selection does not drive our findings.

Second, there is an alternative mechanism to test the moderating effect of acquisition type on the one hand and the level of financial market development on the other hand. This mechanism uses a logit analysis with interaction terms in addition to a correction procedure that computes the interaction effect through the “*inteff*” postestimation command in STATA (Norton, Wang & Ai, 2004). This correction procedure calculates a corrected interaction effect for each observation, which depends on the estimated coefficients of the main effects and the estimated probability for this observation. In appendix 4.1., we report the average interaction effects in addition to their level of significance and the percentage of observations for which this interaction effect is significant (Belderbos & Zou, 2009). These findings are generally in line with our main analyses presented in Table 4.4. First, the findings indicate a significantly higher effect of host country experience in the case of a financial acquisition ($p < 0.05$) and under lower levels of financial market development ($p < 0.05$). Moreover, the moderating effect of acquisition type is significant in 69% of our observations. The moderating effect of financial market development is significant in 74% of the observations. These findings provide again support for hypotheses 2 and 3.

4.6. Discussion and conclusion

This paper studies the impact of cross-border financial intermediaries on the information costs of domestic acquirers. We build on the liability of foreignness literature and examine the effect of host country experience on the likelihood of a domestic acquisition through increased local information transfer. We also investigate whether the impact of host country experience is contingent on the connectivity of domestic acquirers towards local information channels. We study the influence of connectivity through network relationships as well as the impact of connectivity across different levels of financial market development.

Multivariate logistic regressions on the acquisition exits of internationally financed buyouts support our central argument that cross-border financial intermediaries with more experience in the host country increase the probability of a domestic acquisition. These intermediaries become more locally embedded and are better connected towards local information channels. Moreover, the effect of financial intermediaries' host country experience is larger for financial than for strategic acquisitions. This derives from the increased transfer of information between domestic financial acquirers and cross-border financial intermediaries with higher levels of host country experience. This transfer occurs through business network connections. In contrast, network connectivity and information transfer between cross-border financial intermediaries and strategic acquirers is lower. Finally, in more developed financial markets, domestic acquirers are highly connected towards alternative sources of information on the local acquisition target. These sources substitute for the role of cross-border financial intermediaries in the reduction of information costs. Therefore, domestic acquirers depend less upon the cross-border financial intermediary as a source of information. The positive effect of host country experience on the probability of a domestic acquisition is therefore lower under higher levels of financial market development.

Our findings contribute to a better understanding of the liability of foreignness. The increasing international orientation of firms has challenged our existing knowledge on the liability of foreignness. In many industries, foreign entrants perform even better than purely domestic firms (Nachum, 2003, 2010). Our findings suggest that even in highly internationally oriented industries such as the financial services industry, liability of foreignness is still important. More specifically, certain activities, such as domestic information transfer depend highly upon local embeddedness. This explains the benefits of host country experience. In addition, we introduce a contingency perspective within the liability of foreignness literature. We indicate that the benefits of increased local information transfer through higher levels of host country experience depend upon the environment in which the cross-border firm operates. The business networks and the institutional context within the host country are important in this respect.

Moreover, our findings contribute to network theory. Earlier studies stress the ability to spread information as a result of the network position (Burt, 1992, 2007). More specifically, actors are better positioned if they are able to spread information towards many actors within a particular network and if they possess information that is less available by other actors within the network. However, as economic actors operate in many networks, the benefits of local information transfer do not solely depend on the position within a particular information network, these benefits also depend on the relative importance of the information network itself compared to alternative information networks. This is often ignored in the literature. In addition, in order to examine the relative importance of an information network, we have to incorporate also institutional factors. In institutional contexts that hamper the access to local sources of information, local information transfer through network relationships becomes more important (Johnson, 2004).

There are a number of limitations in our study that suggest avenues for further research. First, our findings are obtained from a sample of private equity investors as financial intermediaries. There are many reasons to believe that the mechanisms through which financial intermediaries spread information towards domestic acquirers are more generally applicable. Additional research could however further explore the generalizability of our findings. Second, foreign investors may reduce their liability of foreignness by syndicating with domestic partners. Although we expect domestic syndication partners to reduce the information costs of domestic acquirers, this effect is mostly not significant in our multivariate analyses. Several reasons could explain why we do not find an effect of domestic syndication on the country of exit. On the one hand, this points at the dominance of the lead investor over its syndication partners in the search for an acquisition exit. On the other hand, the effect of domestic syndication could also vary upon the motives for syndication. More specifically, syndication could be a tool for domestic private equity investors to get foreign market access in subsequent syndicated deals. As such, these domestic investors might have a lower focus on the domestic market while other syndication partners play a more effective role in the reduction of information costs. Further research could examine this in more detail. Third, there are limitations as a result of data availability. For example, we measure the size of the acquired firm in terms of the original deal value at the initiation of the financial intermediary's involvement. This corresponds largely to the acquisition price which is only limitedly available. Moreover, our measure of overall experience of the financial intermediary is based upon the initial investment made in Europe (both Continental and Anglo-Saxon European countries). We however did not obtain information on deals outside Europe. Especially for private equity investors that originate from countries outside Europe, we may underestimate their overall experience.

For practitioners, our findings highlight the importance of local market specialization for cross-border financial intermediaries. In contrast to earlier studies who mainly consider cross-border financial intermediaries as a tool to reduce the information costs of foreign acquirers, cross-border intermediaries can also reduce the information costs of domestic acquirers. As domestic firms account for a substantial proportion of the acquirer companies, it is crucial not to limit their attention towards international acquirers when aiming for a successful acquisition. In addition, our results stress the long term effects of cross-border private equity involvement. While cross-border private equity investors are often approached in order to enhance growth and strategic development (Mäkelä & Maula, 2005; Devigne et al., 2011), our findings demonstrate the long term effects of cross-border private equity ownership. More specifically, private equity investors have an important role to play in the sale of their investments and they influence which firms will remain internationally owned or become domestic.

4.7. References

- Balsvik, R. & Haller, S. A. 2010. Picking "Lemons" or Picking "Cherries"? Domestic and Foreign Acquisitions in Norwegian Manufacturing. *Scandinavian Journal of Economics*, 112, 361-387.
- Belderbos, R. & Zou, J. L. 2009. Real options and foreign affiliate divestments: A portfolio perspective. *Journal of International Business Studies*, 40, 600-620.
- Black, B. S. & Gilson, R. J. 1998. Venture capital and the structure of capital markets: Banks versus stock markets. *Journal of Financial Economics*, 47, 243-277.
- Boeh, K. B. 2011. Contracting Costs and information asymmetry reduction in cross-border M&A. *Journal of Management Studies*, 48, 568-590.
- Bruneel, J., Yli-Renko, H., & Clarysse, B. 2010. Learning from experience and learning from others: How congenital and interorganizational learning substitute for experiential learning in young firm internationalization. *Strategic Entrepreneurship Journal*, 4, 164-182.
- Burt, R. S. 1992. *Structural holes: The social structure of competition*. Cambridge, MA: Harvard University Press.
- Burt, R. S. 2007. Secondhand brokerage: Evidence on the importance of local structure for managers, bankers, and analysts. *Academy of Management Journal*, 50, 119-148.
- Chemmanur, T. J. & Fulghieri, P. 1994. Investment bank reputation, information production, and financial intermediation. *Journal of Finance*, 49, 57-79.
- Chetty, S., Eriksson, K., & Lindbergh, J. 2006. The effect of specificity of experience on a firm's perceived importance of institutional knowledge in an ongoing business. *Journal of International Business Studies*, 37, 699-712.
- Chuang, W. I. & Lee, B. S. 2011. The informational role of institutional investors and financial analysts in the market. *Journal of Financial Markets*, 14, 465-493.
- Coval, J. D. & Moskowitz, T. J. 1999. Home bias at home: Local equity preference in domestic portfolios. *Journal of Finance*, 54, 2045-2073.

- Cumming, D. 2008. Contracts and exits in venture capital finance. *Review of Financial Studies*, 21, 1947-1982.
- Cumming, D., Fleming, G., & Schwienbacher, A. 2009. Corporate relocation in venture capital finance. *Entrepreneurship Theory and Practice*, 33, 1121-1155.
- Davidsson, P. & Honig, B. 2003. The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18, 301-331.
- De Clercq, D. & Dimov, D. 2008. Internal knowledge development and external knowledge access in venture capital investment performance. *Journal of Management Studies*, 45, 585-612.
- Devigne, D., Vanacker, T., Manigart, S., & Paeleman, I. 2011. The role of domestic and cross-border venture capital investors in the development of portfolio companies. *Small Business Economics*, in press.
- EVCA. 2010 EVCA buyout report: an EVCA research paper. Ref Type: Report.
- Filatotchev, I. & Wright, M. 2012. *FDI Location Choices of Chinese Firms: The Interrelationship between Internationalization Experience, Home Country Government Support and Host Country Institutions*. Ref Type: Unpublished Work.
- Fitza, M. & Dean, T. 2009. The relative importance of VC certification in the mitigation of information asymmetry at IPOs. *Best Paper Proceedings of the 2009 Academy of Management Meeting*.
- Froot, K. A. 1989. Consistent covariance-matrix estimation with cross-sectional dependence and heteroskedasticity in financial data. *Journal of Financial and Quantitative Analysis*, 24, 333-355.
- Gompers, P., Kovner, A., Lerner, J., & Scharfstein, D. 2008. Venture capital investment cycles: The impact of public markets. *Journal of Financial Economics*, 87, 1-23.
- Granovetter, M. 1985. Economic-action and social-structure - The problem of embeddedness. *American Journal of Sociology*, 91, 481-510.
- Groh, A. P., von Liechtenstein, H., & Lieser, K. 2010. The european venture capital and private equity country attractiveness indices. *Journal of Corporate Finance*, 16, 205-224.
- Guler, I. & Guillén, M. F. 2010. Institutions and the internationalization of US venture capital firms. *Journal of International Business Studies*, 41, 185-205.

- Hall, G. & Tu, C. 2003. Venture capitalists and the decision to invest overseas. *Venture Capital*, 5, 181-190.
- Hazarika, S., Nahata, R., & Tandon, K. 2009. Success in global venture capital investing: Do institutional and cultural differences matter? *Working Paper Baruch College/City University New York*.
- Hoetker, G. 2007. The use of logit and probit models in strategic management research: Critical issues. *Strategic Management Journal*, 28, 331-343.
- Hyun, H. J. & Kim, H. H. 2010. The determinants of cross-border M&As: The role of institutions and financial development in the gravity model. *World Economy*, 33, 292-310.
- Jääskeläinen, M. & Maula, M. 2008. Do networks of financial intermediaries help reduce local bias? Evidence from cross-border venture capital. *Working Paper Helsinki University of Technology*.
- Johnson, S. 2004. 'Milking the elephant': Financial markets as real markets in Kenya. *Development and Change*, 35, 247-274.
- Mäkelä, M. M. & Maula, M. V. J. 2005. Cross-border venture capital and new venture internationalization: an isomorphism perspective. *Venture Capital*, 7, 227-257.
- Meuleman, M. & Wright, M. 2011. Cross-border private equity syndication: Institutional context and learning. *Journal of Business Venturing*, 26, 35-48.
- Nachum, L. 2003. Liability of foreignness in global competition? Financial service affiliates in the City of London. *Strategic Management Journal*, 24, 1187-1208.
- Nachum, L. 2010. When is foreignness an asset or a liability? Explaining the performance differential between foreign and local firms. *Journal of Management*, 36, 714-739.
- Norton, E. C., Wang, H., & Ai, C. 2004. Computing interaction effects and standard errors in logit and probit models. *Stata Journal*, 4, 154-167
- Ragozzino, R. & Reuer, J. J. 2011. Geographic distance and corporate acquisitions: Signals from IPO firms. *Strategic Management Journal*, 32, 876-894.
- Scholes, L., Wright, M., Westhead, P., & Bruining, H. 2010. Strategic changes in family firms post management buyout: Ownership and governance issues. *International Small Business Journal*, 28, 505-521.

Slangen, A. H. L. & Hennart, J. F. 2008. Do multinationals really prefer to enter culturally distant countries through greenfields rather than through acquisitions? The role of parent experience and subsidiary autonomy. *Journal of International Business Studies*, 39, 472-490.

Sorenson, O. & Stuart, T. E. 2001. Syndication networks and the spatial distribution of venture capital investments. *American Journal of Sociology*, 106, 1546-1588.

Uzzi, B. 1997. Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative Science Quarterly*, 42, 35-67.

Uzzi, B. 1999. Embeddedness in the making of financial capital: How social relations and networks benefit firms seeking financing. *American Sociological Review*, 64, 481-505.

Weesie, J. 1999. Seemingly unrelated regression and the cluster-adjusted sandwich estimator. *STATA Technical Bulletin*, 52, 34-46.

Wright, M., Pruthi, S., & Lockett, A. 2005. International venture capital research: From cross-country comparisons to crossing borders. *International Journal of Management Reviews*, 7, 135-165.

Zaheer, S. 1995. Overcoming the liability of foreignness. *Academy of Management Journal*, 38, 341-363.

Zaheer, S. & Mosakowski, E. 1997. The dynamics of the liability of foreignness: A global study of survival in financial services. *Strategic Management Journal*, 18, 439-463.

4.8. Tables and figures

TABLE 4.1.: VARIABLE DEFINITION

Variable	Definition
<i>Host country experience financial intermediary</i>	Logarithm of the cumulative number of deals a financial intermediary was involved in the country of the portfolio firm- Source: CMBOR
<i>Financial acquisition</i>	Dummy variable indicating if the buyout was sold to a financial (i.e. private equity) investor versus a strategic buyer - Source: CMBOR
<i>Financial market development</i>	Market capitalization of listed firms in the year prior to acquisition (in % of GDP)- Source: World Bank
<i>Control measures</i>	
Deal value	Logarithm of the firm value, measured at the start of the involvement of the financial intermediary in € (1994 price level) - Source: CMBOR
Duration (months)	Logarithm of the time range (in months) between start and end of the cross-border financial intermediary's involvement - Source: CMBOR
Source: family or private deal	A distinction is made between buyouts that originate from a private or family firm and other buyout sources (divestments, secondary buyouts, public-to-private deals, receiverships, privatizations) - Source: CMBOR
Domestic ownership prior to buyout	Dummy variable indicating whether the portfolio firm was owned by domestic versus international shareholders prior to the cross-border buyout - Source: CMBOR
Syndication with domestic investor	Dummy variable that highlights if the cross-border private equity investor syndicated with at least one domestic investor in the deal - Source: CMBOR
Overall experience financial intermediary	Logarithm age of the financial intermediary - Source: CMBOR
UK	Dummy variable indicating if the financial intermediary originates from the UK - Source: CMBOR
US	Dummy variable indicating if the financial intermediary originates from the US - Source: CMBOR
MSCI return index (Europe)	The return of the Europe Morgan Stanley Capital International index 3 till 6 months prior to acquisition- Source: Datastream
Proportion domestic acquisitions	Relative proportion of the number of domestic compared to the number of total acquisitions within the host country during the year prior to acquisition – Source: Zephyr (Bureau van Dijk)
Cumulative number of investments in local PE industry	Logarithm cumulative number of investments in the private equity industry of the host country prior to the year of acquisition - Source: CMBOR
Market openness	Foreign direct investments, net inflows in the year prior to acquisition (in % of GDP)- Source: World Bank

TABLE 4.2.: SAMPLE DESCRIPTION

	<i>Total sample</i>				<i>Domestic acquisitions</i>				<i>Cross-border acquisitions</i>			
	<i>N</i>	<i>Mean</i>	<i>Med.</i>	<i>S.D.</i>	<i>N</i>	<i>Mean</i>	<i>Med.</i>	<i>S.D.</i>	<i>N</i>	<i>Mean</i>	<i>Med.</i>	<i>S.D.</i>
Domestic acquisition	296	0.42	0	0.49								
Host country experience financial intermediary ¹	296	19.56	7	27.74	124	26.87	13.50	33.15	172	14.28	5	21.67 **
Financial acquisition	296	0.54	0	0.50	124	0.59	1	0.49	172	0.51	1	0.50
Legal development	296	1.31	1.39	0.38	124	1.28	1.40	0.37	172	1.33	1.36	0.38
Financial market development	296	82.87	82.32	22.66	124	79.87	75.84	22.71	172	85.03	82.32	22.45 †
Deal value (in € mio) [‡]	296	144.55	54.27	234.20	124	130.88	47.00	238.79	172	154.40	70.73	231.04
Duration (months) ¹	296	46.81	42	22.84	124	47.55	45.50	21.87	172	46.28	41.5	23.56
Source: family or private deal	296	0.30	0	0.46	124	0.35	0	0.48	172	0.27	0	0.44
Domestic ownership prior to buyout	296	0.79	1	0.41	124	0.84	1	0.37	172	0.76	1	0.43 †
Syndication with domestic investor	296	0.22	0	0.41	124	0.27	0	0.45	172	0.17	0	0.38 *
Overall experience financial intermediary ¹	296	12.45	14	4.84	124	12.47	14	5.11	172	12.43	13	4.65
UK	296	0.67	1	0.47	124	0.62	1	0.49	172	0.70	1	0.46
US	296	0.14	0	0.34	124	0.14	0	0.35	172	0.13	0	0.34
MSCI return index (Europe)	296	0.01	0.04	0.09	124	0.02	0.04	0.08	172	0.01	0.04	0.10
Proportion domestic acquisitions	296	0.70	0.70	0.07	124	0.71	0.71	0.06	172	0.69	0.70	0.07 †
Cumulative number of investments in local PE industry ¹	296	1179.21	765.00	842.27	124	1386.35	1623	860.73	172	1029	653	798.38 **
Market openness	296	4.11	3.17	6.03	124	2.74	2.40	1.99	172	5.10	3.20	7.58 **

¹ The log of this measure is included in the multivariate analyses.

Significance levels indicate test results from differences between domestic and international acquisitions (Chi-square tests or Mann-Whitney tests).

Significant at (**) 1%, (*) 5% or (†) 10% (one-tailed tests for hypothesized effects)

TABLE 4.3.: PAIRWISE CORRELATION COEFFICIENTS OF THE DEPENDENT, INDEPENDENT AND CONTINUOUS CONTROL VARIABLES

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Domestic acquisition	1.00									
2. Host country experience	0.21	1.00								
3. Financial acquisition	0.08	0.02	1.00							
4. Financial market development	-0.11	0.01	0.03	1.00						
5. Deal value	-0.09	-0.26	0.17	0.06	1.00					
6. Duration (months)	0.04	0.19	0.17	0.08	0.03	1.00				
7. Overall experience financial intermediary	-0.03	0.55	0.13	0.06	0.08	0.29	1.00			
8. MSCI return index Europe	0.08	-0.03	0.05	0.00	0.06	0.04	0.00	1.00		
9. Proportion domestic acquisitions	0.12	0.15	0.11	0.01	0.14	0.39	0.21	0.09	1.00	
10. Cumulative number of investments in local PE industry	0.22	0.39	0.17	0.09	0.03	0.20	0.17	0.06	0.37	1.00
11. Market openness	-0.19	-0.21	-0.03	0.13	-0.01	-0.09	-0.01	-0.18	-0.41	-0.43

All correlations with absolute values above 0.11 are significant ($p < 0.05$)

TABLE 4.4.: MULTIVARIATE LOGISTIC REGRESSIONS THAT MODEL THE LIKELIHOOD OF A DOMESTIC EXIT

	(1) Full sample		(2) Full sample		(3) Financial acquisition		(4) Strategic acquisition		(5) Low financial market development		(6) High financial market development	
	Coef.	S.D.	Coef.	S.D.	Coef.	S.D.	Coef.	S.D.	Coef.	S.D.	Coef.	S.D.
Host country experience			0.512 ** (0.142)		0.705 ** (0.217)		0.284 (0.179)		1.034 ** (0.267)		0.344 † (0.202)	
Financial acquisition	0.324 (0.320)		0.404 (0.333)						0.096 (0.426)		0.664 (0.529)	
Financial market development	-0.005 (0.007)		-0.005 (0.008)		0.007 (0.009)		-0.010 (0.014)					
Deal value	-0.112 (0.113)		0.025 (0.092)		-0.053 (0.142)		0.167 (0.138)		0.095 (0.141)		0.110 (0.157)	
Duration (months)	0.007 (0.214)		-0.036 (0.212)		-0.409 (0.378)		0.147 (0.308)		-0.126 (0.350)		0.085 (0.292)	
Source: Family or private deal	0.313 (0.325)		0.291 (0.324)		0.319 (0.418)		0.799 (0.625)		1.040 ** (0.368)		-0.253 (0.445)	
Domestic ownership prior to buyout	0.384 (0.285)		0.411 (0.300)		0.528 (0.386)		-0.430 (0.649)		0.967 * (0.389)		-0.012 (0.521)	
Syndication with domestic investor	0.342 (0.232)		0.344 (0.224)		0.629 (0.405)		-0.396 (0.413)		0.607 (0.375)		0.227 (0.384)	
Overall experience of the financial intermediary	-0.156 (0.296)		-0.748 * (0.306)		-0.539 (0.642)		-0.745 * (0.369)		-1.177 ** (0.410)		-0.649 (0.528)	
UK	-0.675 † (0.371)		-1.132 ** (0.390)		-0.924 † (0.480)		-1.475 * (0.619)		-1.511 * (0.677)		-1.067 † (0.545)	
US	-0.504 (0.501)		-0.555 (0.494)		0.143 (0.740)		-1.447 * (0.658)		-0.545 (0.817)		-0.889 (0.746)	
MSCI return index (Europe)	0.795 (1.293)		1.195 (1.380)		1.252 (1.877)		2.834 (2.198)		2.338 (1.828)		1.479 (1.880)	
Proportion domestic acquisitions	0.460 (2.009)		1.016 (2.296)		1.469 (4.519)		0.796 (2.672)		0.420 (3.614)		4.545 (4.446)	
Cumulative number of investments	0.464 * (0.185)		0.260 (0.176)		0.259 (0.217)		0.384 (0.302)		0.139 (0.293)		0.365 † (0.208)	
Market openness	-0.122 † (0.068)		-0.112 (0.075)		-0.027 (0.057)		-0.266 * (0.126)		-0.268 † (0.145)		-0.028 (0.098)	
Constant	-2.323 (1.467)		-1.175 (1.795)		-1.862 (3.888)		-0.796 (2.377)		-0.261 (2.223)		-5.585 (3.916)	
Observations	296		296		160		136		138		158	
chi-square test	28.36 *		53.26 **		37.16 **		34.56 **		55.75 **		21.04	
Wald test for equality of coefficients of host country experience between seemingly unrelated regressions							4.10				6.15	
p-value Wald test (one tailed)							0.021				0.007	

Estimated coefficients for the logit regressions which compare the characteristics of domestic versus cross-border acquisitions. (Dependent variable equals 1 in the case of a domestic acquisition.) Standard errors are clustered per financial intermediary

** p<0.01, * p<0.05, † p<0.1 (one-tailed tests for hypothesized effects)

FIGURE 4.1.: CONCEPTUAL MODEL

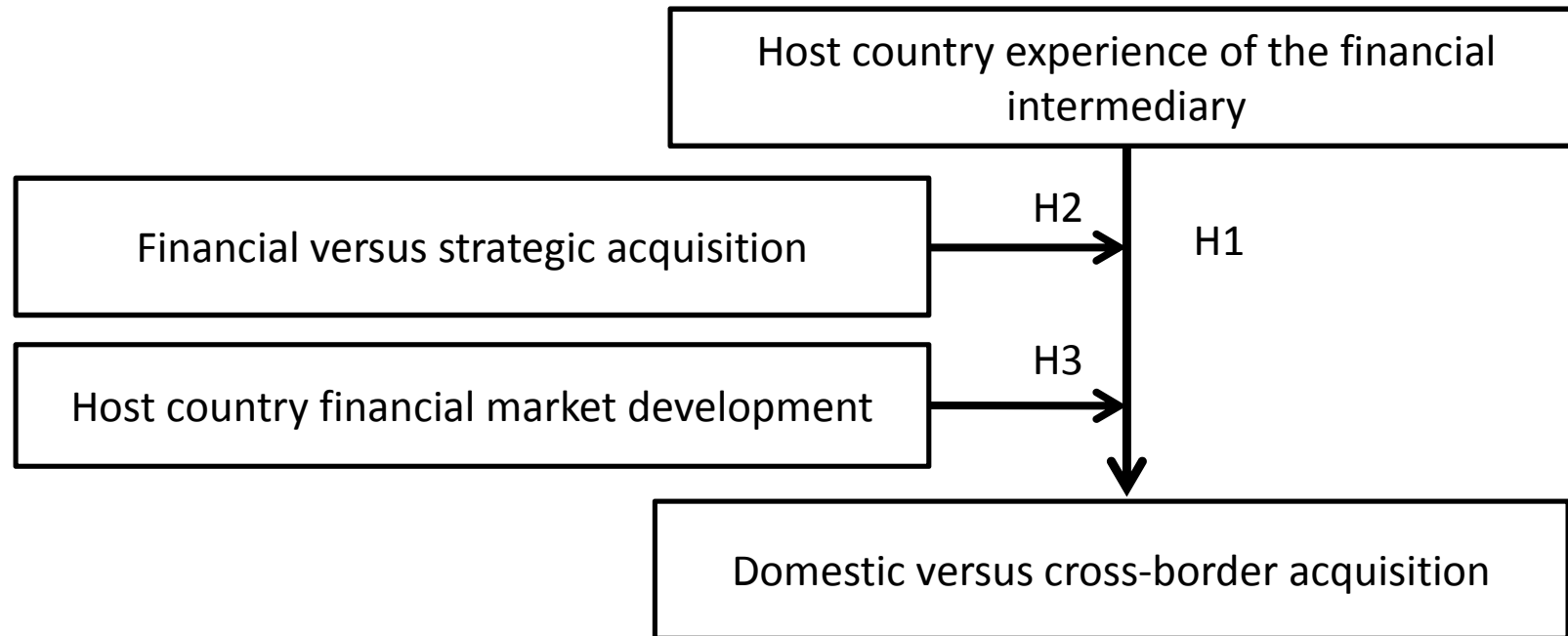
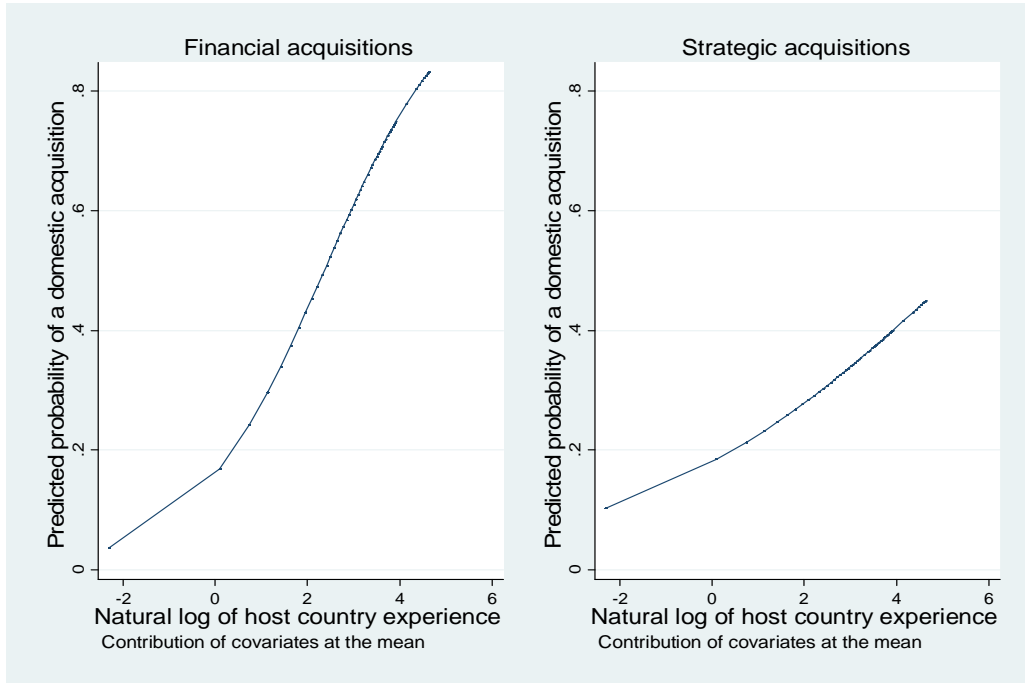
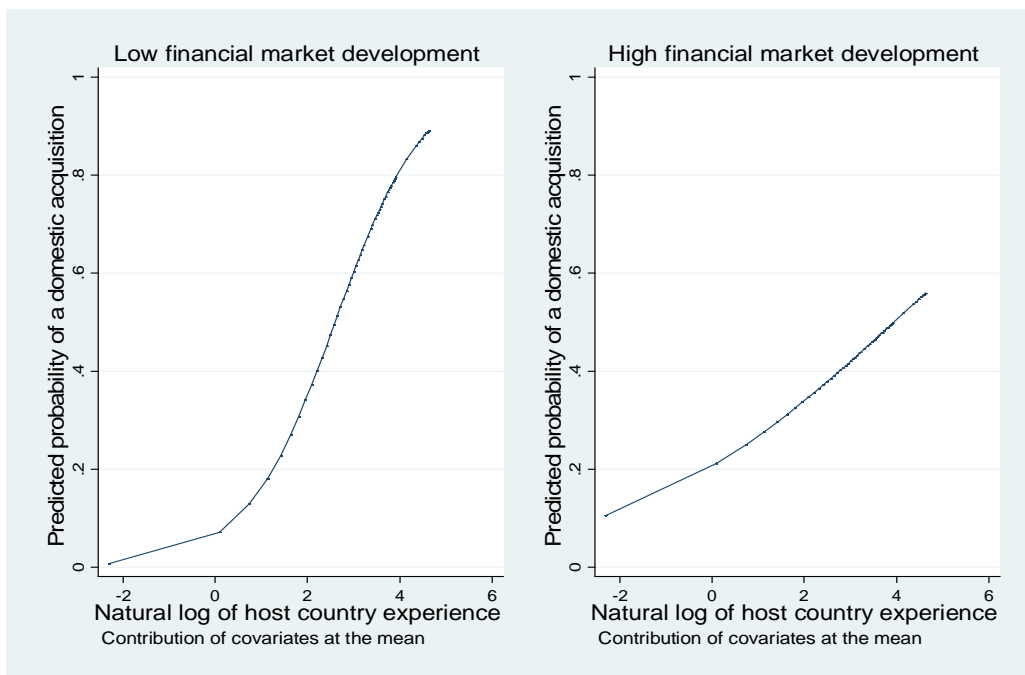


FIGURE 4.2.: THE PROBABILITY OF A DOMESTIC ACQUISITION AS A FUNCTION OF HOST COUNTRY EXPERIENCE

Panel A: The probability of a domestic acquisition for financial versus strategic acquisitions



Panel B: The probability of a domestic acquisition for low versus high levels of financial market development



4.9. Appendix 1

OVERVIEW INTERACTION EFFECTS USING THE “INTEFF” CORRECTION PROCEDURE

(Norton et al., 2004)

	Mean interaction effect	% of observations with a significant interaction term ¹
Host country experience* Financial acquisition	0.072*	69%
Host country experience * Financial market development	-0.002*	74%

¹Significance based on a 5% level (one-tailed test)

Chapter 5: Conclusion

The goal of this dissertation is to provide an insight in international private equity (PE) transactions. Due to the difficulties to guarantee the quality of investment selection and managerial involvement across borders, cross-border investments were traditionally only a small fraction of the total private equity investment activity. This has changed dramatically over the last 20 years. As a result, non-domestic investments account for more than 70% of the total transaction volume between 2000 and 2010 (Thomson One, 2012).

The importance of cross-border investing raises the question whether resources enable the private equity investor to manage the difficulties of cross-border investing. In each study, the focus lies primarily on the effect of context-specific resources. These are resources that are adapted to the specific, international context. This final chapter summarizes the main findings and the academic contributions of these dissertation studies. Furthermore, the limitations and avenues for further research will be discussed. This conclusion ends with managerial implications.

5.1. Main findings

The goal of this dissertation is to examine whether context-specific resources influence the international activities of private equity investors. The first study concentrates on the international investment strategy of the private equity investor. The second and third study explore the performance of international activities, with a focus on acquisition exits of cross-border buyouts. We concentrate on different types of context-specific resources across these studies. The first study is centered on context-specific knowledge, the second study examines the impact of context-specific reputation and finally, the third study focuses on context-specific experience. A summary of the main findings is presented in Table 1 and discussed hereunder.

Insert Table 5.1. around here

The first study concentrates on the role of context-specific knowledge in the international investment strategy. More specifically, we examine the role of knowledge that is adjusted to the foreign, international context (i.e. foreign knowledge accumulation). We contribute to the debate on the effectiveness of this resource. Currently, there is no consensus within the international business literature whether effective sources of foreign knowledge accumulation reside internally or externally to the firm. Our hypotheses are tested on a sample of 110 European PE investors. Heckman two-staged regressions are used to examine the influence of different sources of context-specific, foreign knowledge accumulation on the likelihood

and on the number of international investments. Our results show that both internal as well as external sources of foreign knowledge are important for cross-border activities: internal knowledge, also called experiential knowledge as well as external, inherited knowledge stimulate both the likelihood as well as the number of cross-border investments. Internally developed, experiential knowledge has however a larger positive impact on internationalization than inherited knowledge. In addition, contrary to our hypothesis, external foreign knowledge access through the network partners of the private equity investor does not have the expected positive influence on cross-border investments. The range of foreign network is not related to international activities while the intensity of the relationship negatively affects the likelihood of cross-border investing. Especially international private equity investors that want to continue their cross-border activities are hampered by the intensity of their foreign network. As a result, private equity investors should balance the benefits of working with familiar non-domestic partners with the importance of building a central position in a larger network (Meuleman, Manigart, Lockett & Wright, 2010).

In the second and third study, we explore the outcomes of international activities, with a focus on acquisition exits of cross-border investments. The central question was how context-specific resources alleviate the information problems of acquirers that buy internationally owned portfolio firms. In the second study, we compare the role of overall with context-specific resources as a tool to reduce the information asymmetries inherent in the sale of cross-border buyouts. With respect to context-specific reputation, we examine the effectiveness of reputation build through active presence in the investment country (i.e. country-specific reputation) as well as the effectiveness of reputation that is built within the particular industry of investment (i.e. industry-specific reputation). In order to do so, we integrate the literature on information problems with insights from the resource-based view and international business theory. Our findings are based on 180 acquisition exits of internationally financed buyouts located in Continental Europe. They stress the benefits of both overall as well as context-specific sources of reputation for the reduction of information asymmetries in the sale of cross-border buyouts. Whereas overall reputation certifies the general expertise of private equity investors, county-specific and industry-specific reputation signal the ability to adequately monitor investments in a particular country and industry. As such, both overall as well as specific types of reputation matter. Country-specific reputation has even a larger impact than alternative types of reputation. Hence, our second study shows the value of reputation that is adjusted to the particular, foreign context on the reduction of information asymmetries.

The third study explores the experience a cross-border private equity investor in the country of investment, also defined as host country experience. We build on the liability of foreignness literature and argue that host country experience enables firms to spread more information about the acquisition target

towards local, domestic acquirers. As such, host country (i.e. investment country) experience is expected to increase the probability of a domestic compared to an international acquisition. In addition, following a contingency theory logic, we explore whether the impact of host country experience is depends on the connectivity of domestic acquirers towards local information channels. We study the influence of connectivity through network relationships as well as the impact of connectivity across different levels of financial market development. Logit analyses based on a sample of 296 acquisition exits of cross-border buyouts results in the following findings. First, this study shows the positive effect of host country experience: it can overcome the liability of foreignness of the selling private equity investor. This stimulates the transfer of local information towards domestic acquirers and results in a higher probability of a domestic acquisition exits. Second, we show that the effect of financial intermediaries' host country experience is contingent upon the connectivity of domestic acquirers towards local information channels. Both network connections between domestic financial acquirers and cross-border private equity investors as well as connections between alternative financial intermediaries and domestic acquirers under different levels of financial market development play a role herein.

5.2. Academic contributions

This dissertation contributes to academic literature in various ways. In the following paragraphs, we indicate the main implications for the resource-based view, international business theory, the financial intermediation literature and the entrepreneurial finance literature.

5.2.1. Implications for the resource-based view

Above all, the three studies contribute to the resource-based view, and more specifically to the contingent resource-based view, an upcoming research stream in management literature. The resource-based view argues that a competitive advantage derives from resources that are valuable, rare and non-substitutable and it is traditionally a context-free theory (Barney, 1991). However, the context-specific resource-based view emphasizes the need for a more integrated approach. It states that business scholars have to incorporate the characteristics of the general business environment as a driver of the relationship between the firm's resources and its performance. An environmental condition that requires particular attention is information asymmetry. This makes it more difficult for companies to anticipate success or to estimate the effectiveness of their resource base (Brush & Artz, 1999). Given the substantial information asymmetries in internationalization and in private equity investing, our research setting is highly relevant to examine the effectiveness of resources under substantial information asymmetries.

The central research question in this dissertation is whether context-specific resources enable firms to operate under large information asymmetries. There are currently contradicting argumentations on the benefits of context-specific resources under high information asymmetries. On the one hand, managers depend primarily on context-specific resources as they have proven their value under severe information asymmetries. As they are relatively easy to apply and easy to exploit, these resources help the firm to increase and sustain their competitive advantage (Carpenter & Frederickson, 2001, Aragón-Correa & Sharma, 2003). On the other hand, context-specific resources may create a pitfall for firms once they neglect the potential benefit of resources obtained within other contexts (Chetty, Eriksson & Lindberg, 2006; Miller & Shamsie, 1996).

Based on a setting of international private equity investing, the studies in this dissertation generally support the argumentation that context-specific resources are valuable under severe information asymmetries. These context-specific resources create the perception of expertise in international operations, both by the firm itself as well as by its third parties. More specifically, in the first study of this dissertation, we show that firms rely heavily on context-specific knowledge once they are confronted with severe information asymmetries (Carpenter & Frederickson, 2001, Aragón-Correa & Sharma, 2003). It stimulates firms to internationalize as they consider themselves better able to succeed. This knowledge is gained through previous international experience by the firm or by the managers of the firm. In addition, the results of the second and third study suggest that context-specific resources improve the outcomes of international activities. While our second indicates that context-specific reputation is found to be more important than overall reputation to certify the expertise in international operations towards third parties, the third study shows that context-specific experience enhances the access towards local sources of information. Hence, these resources contribute substantially to the success of international operations under severe information asymmetries. In sum, our findings show that context-specific resources provide the firm certain benefits that are difficult to obtain through general resources.

Furthermore, we show that a contingency perspective needs to be incorporated within different levels. This was particularly stressed in the third study of our dissertation: while context-specific experience may help the firm to deal with certain aspects of the business environment, the importance of its effect depends on other environmental conditions. As a result, context-specific, host country experience becomes more important for local information transfer if the institutional business context itself limits the access to relevant information.

Another aspect that has been addressed in this dissertation is the influence of internally versus externally developed context-specific resources. Based on our findings which are obtained within a cross-border context, we stress the importance of internal development to overcome substantial information

asymmetries. First, the internally developed, context-specific resources that were examined in the three studies of this dissertation- which are context-specific knowledge, reputation and experience- were all found to be important for cross-border private equity investing. Second, the findings of our first study highlight that internally developed resources are more important than externally developed ones when it comes to the decision to internationalize. Our findings therefore imply that, under severe information asymmetries, managers depend primarily under resources that have been integrated within the firm and that are easier to apply. External resources are less important.

However, our findings do not suggest that firms with more context-specific resources are unconditionally better in their international activities. As highlighted by earlier theorists embedded in the contingent resource-based view, the value of resources depends on environmental conditions as well as on firms' value creating strategies (Brush & Artz, 1999). In this respect, we indicate in our third study that *firms with different levels of context-specific resources have different value creating strategies*. More specifically, while firms with a larger level of context-specific experience create value from their international activities through the use of their local information network, firms with lower levels of context-specific experience rely more on international business contacts. Hence, we can conclude that context-specific resources can be an important source of competitive advantage under large information asymmetries. However, the effect of context-specific resources under severe information asymmetries depends on the business context as well as the value creating strategies of the firm.

5.2.2. *Implications for the international business literature*

This dissertation also advances the international business literature by providing a richer understanding on the liability of foreignness. This posits that firms face additional difficulties when operating in a foreign market. These difficulties originate from two different reasons: a lack of knowledge how to conduct business in foreign regions and the lack of information by third parties (such as customers or suppliers) in the expertise of a firm across borders. These issues decrease by higher levels of context-specific experience (Nachum, 2003).

We increase our understanding on the role of context-specific experience to influence both the lack of knowledge and the lack of information by third parties about the expertise in cross-border operations. *First, the findings of our first study nuance the dominant role of experience for developing knowledge on foreign market operations*. Managerial knowledge that was developed outside the firm (also called inherited knowledge) is also beneficial as it increases familiarity with the market and helps to develop schemata for dealing with the issues of cross-border investing (Takeuchi, Tesluk & Yun, 2005).

Second, this dissertation has disentangled the mechanisms how increase the information towards third parties about the expertise in foreign operations. This depends from the integration within local information channels as well as from the ability to signal quality in a particular region. Both mechanisms are studied independently in this dissertation. With respect to the integration within local information channels, the third study of this dissertation suggests that the benefits of local market embeddedness through context-specific experience are moderated by environmental conditions such as the institutional context or network characteristics. This extends earlier findings that focus on the main effect of institutions or network relationships on the liability of foreignness. The moderating impact was, to our knowledge, not yet examined. With respect to the certification of quality in a particular region, the second study stresses the impact of context-specific reputation rather than the impact of context-specific experience. Whereas the certification effect of reputation is generally acknowledged in management and finance literature, this has not yet been explored as a mechanism to reduce the liability of foreignness.

5.2.3. Implications for the financial intermediation literature

In addition, we advance the literature on the global development of financial intermediation. Earlier research has demonstrated the crucial role of stock market liquidity for financial intermediary development in general and for private equity investing in particular (Black & Gilson, 1998). Private equity has however become an important financing tool for entrepreneurial firms in regions that lack a flourishing stock market such as in Continental Europe. Our findings shed light on this phenomenon. We show how *acquisition exits are an important alternative exit mechanism for later stage investments that enable a successful outcome of private equity investing in bank oriented financial systems.* Interestingly, these regions even attract increasing interest from non-domestic financial intermediaries. Our sample shows that particularly private equity investors that origin from liquid stock market regions such as UK and US are highly interested in these regions.

Our findings furthermore focus on the behavior of non-domestic financial intermediaries. First, we show that foreign private equity investors adapt to local institutional conditions: the exit mechanisms that are used by these investors correspond largely to local market conditions. IPO exits were highly uncommon, in contrast to the exits within the country of origin of these cross-border financial intermediaries. Second, local integration through host country experience is important for the success of acquisition exits that differ substantially from IPOs (Jääskeläinen & Maula, 2008). As the success of acquisition exits depends on close contacts between acquirers and financial intermediaries, host country experience is important to decrease information costs, particularly for financial acquisitions.

Finally, *our findings enhance our understanding on cross-border financial intermediation as an initiator of sustained international ownership or not*. While we do show that a substantial proportion of the cross-border buyouts in our sample remain internationally owned, this is not necessarily the case for all buyout investments. Given the differences between domestic and international owners for the strategic development of the acquisition targets, future research should take this heterogeneity into account.

5.2.4. Implications for the entrepreneurial finance literature

Furthermore, *this dissertation contributes to the entrepreneurial finance literature in two ways*. First, we expand existing knowledge on the paradox of the increasing internationalization in the private equity market: the importance of cross-border investing contrasts to the benefits of proximity for the quality of selection and for managerial involvement (Mason, 2007). *Our findings show that dealing with the challenges of international investing calls for a context-specific resource base, even in highly internationally oriented financial markets such as Continental Europe* (Alhorr, Moore & Payne, 2008). We indicate that both the international investment strategy as well as the outcomes of international investing therefore benefit substantially from resources adjusted to the international environment.

Second, *we address the knowledge gap on acquisition exits of buyouts*. We highlight the distinctions between financial and strategic acquisitions in terms of growth and efficiency. Financial acquirers have a higher interest than strategic acquirers in efficiency while they are less interested in growth. This also contributes to a better knowledge on the increasing attractiveness of financial acquisition exits of buyout firms, i.e. secondary buyouts. Given the higher efficiency of financial acquisition exits compared to strategic acquisitions, we contrast the supposition that financial acquisitions are ‘the exit of last resort’.

This dissertation also challenges existing suppositions about the temporariness of buyouts and the buyout cycle (e.g. Bruton, Keels & Scifres, 2002). For an increasing number of firms, a buyout is the preferred organizational structure. Especially firms that are vulnerable to free cash flow issues benefit from long term private equity ownership. They are hence not likely to give up the benefits of private equity ownership and exit preferably through a financial instead of a strategic acquisition.

5.3. Limitations and avenues for further research

This section sets out to discuss some theoretical and methodological issues that suggest some avenues for further research. I will thereby reflect on both theoretical as well as methodological limitations.

5.3.1. Theoretical limitations in the resource-based view and international business literature

5.3.1.1. Towards a contingent resource-based view? An agenda for the future.

For a while the resource-based view (RBV) is one of the dominant theoretical frameworks in management literature (Hoskisson, Hitt, Wan & Yiu, 1999): it has been used as an umbrella for examining the relationship between resources, strategies and performance. While this offered a wide range of insights, it has led to some critics on the value of this theory as well. One of these critics is that the RBV studies resulted in a large variety of findings but that it fails to integrate this variety into a more integrated framework on the effectiveness of resources across various contexts. It is therefore sometimes perceived as an ad hoc paradigm (Lado, Boyd, Wright & Kroll, 2006). In order to address this criticism, managerial scholars should pay more attention to contingency factors. Both the existence of environmental conditions as well as different value creating strategies may influence the relationship between resources and performance (Aragon-Correa & Sharma, 2003, Brush & Artz, 1999). This criticism is addressed within the contingent resource-based view which hence creates a more overall picture of the effectiveness of resources. As an advanced theoretical paradigm of the resource-based view, the contingency resource-based view would benefit however from additional research on a broad range of environmental conditions and value creating strategies other than the existence of large information asymmetries that have been the focus within our studies.

An additional note relates to the degree of context-specificity needed for the adjustment to a particular context. In this dissertation, we have studied both the effects of resources developed through international activities as well as resources developed through activities within a particular country. They may have different effects however. International resources on the one hand create more general capabilities how to deal with diverse contexts and with the actors operating in foreign regions. Country-specific resources on the other hand create idiosyncratic capabilities how to cope with country-specific issues (Li & Mayer, 2009). There is however limited knowledge on the differences between the effectiveness of both resource types (Chetty et al., 2006). Institutional factors are expected to influence the needs for higher levels of specificity, but future research could provide a more fine-grained view on e.g. the different roles of home

and host country institutions (Filatotchev & Wright, 2012). Other contextual factors are also yet to be examined.

A better integration of the contingency factors would also increase our knowledge of the balance between the value creating versus value destroying effects of resources. In this dissertation, we found for example that intense cooperation with foreign network relations creates an important cost for private equity investors. It potentially leads to insulation and the lack of access towards other external network partners. However, the balance between the value creating and value destroying effects of resources differs across environmental conditions (Van Houtte, 2012). Investigating this balance under a wide range of contingencies substantially enlarge our understanding of the relationship between resources and performance.

5.3.1.2. Novel perspectives on the effects of international ownership

In this dissertation, we did not examine the relationship between target firm characteristics and the benefits of international compared to domestic ownership. The different governance styles of domestic compared to international owners may appeal to different types of firms however. Compared to domestic owners, international acquirers are on the one hand less equipped to monitor the firm closely: they are less committed to the region and place a lower emphasis on operational involvement (Boddeyn, 1983; Pruthi, Wright & Lockett, 2003). On the other hand, they operate within a broader network of potential business partners and managers, which increases flexibility and responsiveness to rapidly changing market trends (Devigne, Vanacker, Manigart & Paeleman, 2011). This topic leads to various avenues for further research. First, firms operating in volatile business environments for example might benefit more from international ownership in order to enhance the scope of their knowledge base and to accelerate innovation (Lavie & Miller, 2008). Second, there is a limited understanding on potential life cycle effects on the benefits of domestic versus international ownership. Earlier research highlighted that start-up businesses benefit more from the close monitoring whereas international investors are more beneficial at further stages of development (Devigne et al., 2011). There is limited knowledge however on the benefits of international compared to domestic ownership when firms evolve from a more developing towards a more mature state: a higher cash flow generation requires different strategic involvement and an adjusted governance style of the owners (Jensen, 1986). In a similar vein, buyouts operate under different stages of development. More specifically, there are substantial differences in terms of the appropriateness of different governance and financial structures between growth oriented, entrepreneurial buyouts compared to stable, efficiency driven buyouts (Wright, Robbie, Thomson & Starkey, 1994; Wright, Hoskisson, Busenitz & Dial, 2000). Further research could examine this more in-depth to create a better insight in the

benefits of cross-border compared to domestic ownership for different types of buyouts. Third, a final avenue relates to the conditions that make firms more susceptible for subsequent international compared to domestic ownership after the initial foreign owner has exited his involvement. Further research could for example compare the value creating mechanisms of initial versus subsequent international owners in addition to the returns that are gained from their value creating strategies.

5.3.2. *Methodological limitations: Sample, variables and method of analysis*

5.3.2.1. Sample: discussion of the internal validity, external validity and the time frame used in the studies

A first potential limitation of the dissertation relates to the *internal validity* of our studies. This potentially suffers from the inclusion of multiple geographical locations and investment stages. One might argue that they both influence the information asymmetries in cross-border activities, a central theme in our research (Hall & Tu, 2003; Wright, Pruthi & Lockett, 2005). Hereunder, we examine its potential limitations for the internal validity of in each of our studies, starting with the effect of multiple geographical locations.

In the first study, the internal validity may suffer from the various levels of development and competition in the private equity investor home region. This potentially affects their tendency to internationalize (Wright et al., 2005). These regions might also differ in terms of their foreign knowledge accumulation. In order to address this issue, we incorporated whether the private equity investor was British or not, as Anglo-Saxon investors origin from a more internationally oriented private equity market. We also compared the international orientation and levels of foreign knowledge accumulation within different countries. This did not result in substantial differences between the countries in our sample. This is hence not expected to alter our findings. With respect to the second study, the interest of financial compared to strategic acquirers may be higher in flourishing private equity markets. The development of local private equity markets varies however in our research setting. Bivariate statistics indicate that Spanish deals are indeed somewhat less likely to end up in a secondary buyout ($p < 0.10$). Other countries are not significantly different. In order to guarantee the internal validity of our findings, we therefore incorporated the location of the buyout as a control variable. In the third study, the inclusion of different investee countries may affect the probability of a domestic compared to an international acquisition. This is however mainly related to the institutional development, such as the financial market development of a particular country. This is addressed within the theoretical and empirical framework of our study. As such, we believe that the internal validity of our third study is guaranteed.

A second threat to the internal validity of our sample is related to the incorporation of multiple investment stages which is the case in the first study. For early stage investments, the levels of information asymmetries are much higher which may increase the information asymmetries inherent in distant investing (Hall & Tu, 2003). We therefore incorporated its potential effect as a control variable in our study. Bivariate statistics show that in our sample, the likelihood of internationalization and the levels of foreign knowledge accumulation are not significantly different for investors with an exclusive focus on the early stage market. In addition, in multivariate statistics, the investment stage does not influence our findings.

A second potential limitation is related to *external validity*. More specifically, the geographical and investment stage coverage of our studies may reduce the generalization of our findings. First, the effect of geographical coverage is explained, followed by the influence of investment stage coverage on external validity.

There are several reasons to assume that the findings of our first study are generalizable towards investors outside Europe. Earlier studies show that the internationalization of the private equity investors follows a highly standard pattern. Both US, UK or Continental European firms internationalize first towards regions with a low geographical and institutional distance (Manigart et al., 2009). Moreover, within our sample, we show that UK investors act in accordance to the Continental European countries in our sample, despite their institutional differences. Concerning the second study, I acknowledge the potential limitations in the generalizability of the findings. This is due to the particularities of the Continental European market where IPOs are scarce. In Anglo-Saxon markets, IPOs are a third and very important exit mechanism that provide on average the highest returns (Nikoskelainen & Wright, 2007; Sudarsanam & Nwagodoh, 2005). As a result, there are some indications that in stock oriented financial markets, IPOs are a preferable exit for portfolio companies with a large size, a high growth or a high leverage (Sudarsanam & Nwagodoh, 2005; Sousa, 2010). In the Continental European market, these firms have to search for other exit opportunities. However, the limited studies available that compare IPOs with other exit options in Anglo-Saxon markets show that the differences in terms of efficiency and growth between financial and strategic acquisitions are consistent with our findings (Sudarsanam & Nwagodoh, 2005). Finally, a potential threat in the external validity of the third study originates from the limitations in the heterogeneity in the institutional context of our sample. Our findings with respect to the influence of financial market development on the country of exit are solely based on acquisitions in civil law countries that have a lower financial market development than common law countries. Despite this, our measures of financial market development do vary substantially in our sample as a result of the heterogeneity within Continental Europe. This warrants the external validity.

A second threat to the external validity relates to the investment stages covered in our studies. The second and third study focus on the later stage investment market. The later stage market is however highly specific in terms of the importance of financial acquisitions as an exit mechanisms. In the early stage investment market, a sellout of the existing private equity investor is more exceptional, particularly if that private equity investor has not yet invested in the portfolio company. However, the beneficial effects of reputation and experience to decrease information asymmetries and information costs in the exits of early stage firms have been acknowledged in earlier studies (e.g. Megginson & Weiss, 1991; Jääskeläinen & Maula, 2008). I therefore believe that the insights, on which our findings are based, are also applicable for early stage investments.

Finally, I acknowledge the limitations inherent in the *time frame* of the first and second study. The first study only accounts for the influence of knowledge accumulation within a time period of three years. It also incorporates the effect of experiential and internal knowledge over a restricted time period due to lack of data. This approach hence implies that the effects of foreign knowledge accumulation fade away over time. Future research could verify the longevity of the effects of foreign knowledge development. A potential limitation to the time frame adopted in the second study relates to the increasing popularity of secondary buyouts. Through bivariate and multivariate analyses, we checked for the potential effect of timing on our results. Fortunately, this did not indicate an effect of effect of timing on the likelihood of a financial compare to a strategic acquisition exit.

5.3.2.2. Variables

There are some limitations related to the *measurement of the variables* used in our studies. First of all, we do not control for the impact of an office presence abroad. There is however an increasing awareness that this can alleviate the information asymmetries of private equity investors across borders (Meuleman & Wright, 2011). Future research could incorporate whether it increases the number of cross-border investments of international private equity investors in addition to the type and country of acquisition of private equity backed companies. Moreover, the first study only incorporates the effect of foreign knowledge accumulation through non-domestic network partners. Professional service firms could however also develop relevant knowledge through domestic network partners with foreign experience. It would be interesting to analyze whether these sources of external knowledge complement or substitute for the external knowledge accumulated through foreign network partners. Moreover, the second and third study of this dissertation measure respectively reputation and experience of the private equity investor through the CMBOR database that incorporates European investments, including UK, Continental Europe and Central European countries. For financial intermediaries that originate from countries outside Europe,

we may underestimate their overall and industry-specific reputation in addition to their overall experience. The private equity investors however only account for a limited proportion of all acquisition exits in our sample, respectively for 15% of all acquisitions in the second study and for 14% of all acquisitions in the third study. Most of these investors are US private equity investors. Excluding investments that involve non-European investors does not alter our main findings, indicating that the potential effect of this limitation is expected to be low.

5.3.2.3. Method of analysis

Since the dependent variables of our second and third study are binary, we employ logit analyses. In order to test the moderating effects in these studies, we relied on seemingly unrelated estimations rather than including interaction terms. As highlighted in these studies, estimating interaction terms in a logit regression does not result in a constant coefficient across all observations. In contrast, the magnitude and the sign of the moderating effect are a function of not only the coefficient for the interaction, but also the coefficients for each interacted variable and the values of all the variables. As a result, the inclusion of interaction terms in logit regressions may hence potentially lead towards erroneous results (Hoetker, 2007).

The seemingly unrelated estimation procedure is employed after a split sample procedure. Concerning the moderating effects of continuous variables, our sample is hence divided between groups with a high compared to a low reputation –for the second study- or between groups with a high or a low level of institutional development –for the third study. Within group variation in the different subsamples is hence not fully incorporated in our studies. A second mechanism to test moderating effect of a variable in logit analyses is to use a correction procedure that computes the marginal effect of a change in two interacted variables through the “inteff” postestimation command in STATA (Norton, Wang & Ai, 2004). This method makes it possible to analyze moderating effects of continuous variables without the loss of information on intragroup variation as in the split sample procedure. Unfortunately, the inteff command does not work in a model with multiple interactions terms that include the same independent variable. This issue is yet to be further addressed in statistical research (Seymour, 2011).

5.4. Practical implications

The findings presented in the three studies have several practical *implications for private equity investors*. First, *our findings are of interest for private equity investors that consider cross-border investing*. While we highlight that international investing is a learning process; private equity investors with international

aspirations should also proactively focus on global talent management. The integration of managers with foreign experiences helps to deal with the increasing complexity of selecting and monitoring cross-border investments. We also stress the benefits of local specialization. Gaining experience and a building reputation through active presence within the country of investment is highly valued. It increases the ability to monitor an investment and certifies your local expertise towards potential acquirers. It also connects the cross-border private equity investor towards domestic acquirers. Second, *we highlight the benefits of reputation and experience* for private equity investors that exit their buyouts. While earlier findings mainly stress their effects on IPO exits (Megginson & Weiss, 1991), we suggest that both experience and reputation are highly important for acquisition exits as well. Third, *this dissertation explains the increasing popularity of secondary buyouts*. Despite the presumption of the popular media that they are exits of last resort, this is an increasingly attractive mechanism to keep firms that operate efficiently under the governance of private equity investors and it offers the existing private equity investor an ability to exit his investment.

Our findings have furthermore *implications for entrepreneurs. They have to reckon the long term consequences of their private equity investor selection*. More specifically, the private equity investor has an important role in the exit of a buyout as it affects the type and origin of the acquirer substantially. Given the impact of acquirer type and origin on the strategy, employment, productivity and wages of the acquired firm (Hege, Lovo, Slovin & Sushka, 2011, Balsvik & Haller, 2010), investor selection will indirectly influence the long term perspectives of the company's management and employees. Moreover, *entrepreneurial companies should not solely focus on the overall reputation and experience when selecting a particular private equity investor* but also look at the specialization of these investors and their achievements within a particular region.

For policy makers, these studies provide additional insights on the effect of the institutional context for private equity investing. We show that acquisition exits can develop as alternative exit mechanism for later stage investments in regions with illiquid stock markets. As such, we highlight the importance of a well-functioning acquisition climate in order to attract international private equity investors. Furthermore, our findings stress the need for financial market development to promote international private equity investing. Under higher levels of financial market development, it is much easier for cross-border private equity investors to operate in a novel country.

5.5. References

Alhorr, H. S., Moore, C. B., & Payne, G. T. 2008. The impact of economic integration on cross-border venture capital investments: Evidence from the European Union. *Entrepreneurship Theory and Practice*, 32, 897-917.

Aragon-Correa, J. A. & Sharma, S. 2003. A contingent resource-based view of proactive corporate environmental strategy. *Academy of Management Review*, 28, 71-88.

Balsvik, R., & Haller, S. A. 2010. Picking "lemons" or picking "cherries"? Domestic and foreign acquisitions in Norwegian manufacturing. *Scandinavian Journal of Economics*, 112, 361-387.

Barney, J. 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17, 99-120.

Black, B. S., & Gilson, R. J. 1998. Venture capital and the structure of capital markets: Banks versus stock markets. *Journal of Financial Economics*, 47, 243-277.

Boddewyn, J. J. 1983. Foreign and domestic divestment and investment decisions: Like or unlike? *Journal of International Business Studies*, 14, 23-35.

Brush, T. H. & Artz, K. W. 1999. Toward a contingent resource-based theory: The impact of information asymmetry on the value of capabilities in veterinary medicine. *Strategic Management Journal*, 20, 223-250.

Bruton, G. D., Keels, J. K., & Scifres, E. L. 2002. Corporate restructuring and performance: An agency perspective on the complete buyout cycle. *Journal of Business Research*, 55, 709-724.

Chetty, S., Eriksson, K., & Lindbergh, J. 2006. The effect of specificity of experience on a firm's perceived importance of institutional knowledge in an ongoing business. *Journal of International Business Studies*, 37, 699-712.

Devigne, D., Vanacker, T., Manigart, S., & Paeleman, I. 2011. The role of domestic and cross border venture capital investor in the growth of portfolio companies. *Small Business Economics*, in press.

Filatotchev, I. and Wright, M. 2012. *FDI location choices of Chinese firms: The interrelationship between internationalization experience, home country Government support and host country institutions*. Ref Type: Unpublished Work.

- Hall, G., & Tu, C. 2003. Venture capitalists and the decision to invest overseas. *Venture Capital*, 5, 181-190.
- Hege, U., Lovo, S., Slovin, M. B., & Sushka, M. E. 2011. *Does private equity bid in corporate asset sales?* Working Paper. Department of Finance HEC Paris.
- Hoetker G. 2007. The use of logit and probit models in strategic management research: Critical issues. *Strategic Management Journal*, 28, 331-343.
- Hoskisson, R. E. , Hitt, M. A., Wan, W. P., & Yiu D. 1999. Theory and research in strategic management: swings of a pendulum. *Journal of Management*, 25, 417- 456.
- Jääskeläinen, M., & Maula, M. 2008. *Do networks of financial intermediaries help reduce local bias? Evidence from cross-border venture capital.* Working Paper Helsinki University of Technology, Helsinki, Finland.
- Jensen, M. C. 1986. Agency costs of free cash flow, corporate finance, and takeovers. *American Economic Review*, 76, 323-329.
- Lado, A. A., Boyd, N. G., Wright, P. & Kroll, M. 2006. Paradox and theorizing within the resource-based view. *Academy of Management Review*, 31, 115-131.
- Lavie, D., & Miller, S. R. 2008. Alliance portfolio internationalization and firm performance. *Organization Science*, 19, 623-646.
- Li, P., & Meyer, K. E. 2009. Contextualizing experience effects in international business: a study of ownership strategies. *Journal of World Business*, 44, 370-382.
- Mason, C. 2007. Venture capital: A geographical perspective. In H. Landstrom (Ed.), *Handbook of research on venture capital*: 86-112. Cheltenham, UK: Edward Elgar.
- Meggison, W. L., & Weiss, K. A. 1991. Venture capitalist certification in initial public offerings. *Journal of Finance*, 46, 879-903.
- Meuleman, M., Lockett, A., Manigart, S., & Wright, M. 2010. Partner selection decisions in interfirm collaborations: The paradox of relational embeddedness. *Journal of Management Studies*, 47, 995- 1019.
- Meuleman, M., & Wright, M. 2011. Cross-border venture capital syndication: Institutional context and learning. *Journal of Business Venturing*, 26, 35-48.

- Meyer, K. E. 2007. Contextualizing organizational learning: Lyles and Salk in the context of their research. *Journal of International Business Studies*, 38, 27-37.
- Nachum, L. 2003. Liability of foreignness in global competition? Financial service affiliates in the City of London. *Strategic Management Journal*, 24, 1187-1208.
- Nikoskelainen, E., & Wright, M. 2007. The impact of corporate governance mechanisms on value increase in leveraged buyouts. *Journal of Corporate Finance*, 13, 511-537.
- Norton, E. C., Wang, H., & Ai, C. 2004. Computing interaction effects and standard errors in logit and probit models. *Stata Journal*, 4, 154-167
- Pruthi, S., Wright M., & Lockett, A. 2003. Do foreign and domestic venture capital firms differ in their monitoring of investees? *Asia Pacific Journal of Management*, 20, 175-204.
- Seymour, R. 2011. *The computation of interaction effects in probit models with multiple interaction terms that include the same variable*. Centre for Labour Market Research Discussion Paper Series 2011/03, Curtin Business School, Australia.
- Sousa, M. 2010. *Why do private equity firms sell to each others?* Working paper, Said Business School, Oxford University, UK.
- Sudarsanam, S., & Nwagbodoh, U. 2005. *Exit strategy of UK leveraged buyouts: Empirical evidence on determinants*. Working paper Cranfield University, United Kingdom.
- Takeuchi, R., Tesluk, P. E., & Yun, S. H. 2005. An integrative view of international experience. *Academy of Management Journal*, 48, 85-100.
- Thomson One, www.thomsonone.com (assessed September 11, 2012).
- Vanhoutte, C. 2012. *Exploring the relationship between initial resources and performance outcomes in start-ups*. Doctoral dissertation, KU Leuven, Leuven, Belgium.
- Wright, M. Hoskisson, R. E., Busenitz, L. W. & Dial, J. 2000. Entrepreneurial growth through privatization: The upside of management buyouts. *Academy of Management Review*, 25, 591- 01.
- Wright, M., Pruthi, S., & Lockett, A. 2005. International venture capital research: From cross-country comparisons to crossing borders. *International Journal of Management Reviews*, 7, 135-165.

Wright, M., Robbie, K., Thompson, S. & Starkey, K. 1994. Longevity and the life-cycle of management buy-outs. *Strategic Management Journal*, 15, 215-227.

5.6. Tables

TABLE 5.1.: OVERVIEW FINDINGS OF THE THREE DISSERTATION STUDIES

Title study	The influence of experiential, inherited and external knowledge on the internationalization of private equity investors	Acquisition exits of cross-border buyouts: Differentiating between financial and strategic acquisitions	Cross-border financial intermediation and domestic acquisitions: The role of host country experience
Dependent variable	The internationalization of private equity investors (the likelihood and the extent of international activities)	The difference between financial and strategic acquisition exits of internationally owned buyouts	The difference between domestic and international acquisitions of internationally owned buyouts
Independent variables	Foreign knowledge accumulation through experiential, inherited and external knowledge	Reputation: overall, country-specific and industry-specific reputation	Host country experience
Unit of analysis	Acquirer: private equity investor	Portfolio firm: acquisition target	Portfolio firm: acquisition target
Overview findings	<p>H1 supported: Experiential foreign knowledge increases the internationalization of private equity investors</p> <p>H2 supported: Inherited foreign knowledge increases the internationalization of private equity investors</p> <p>H3 not supported: External foreign knowledge does not increase the internationalization of private equity investors</p>	<p>H1 supported: Overall reputation of the cross-border PE investor reduces the information asymmetries in the acquisition exits of cross-border buyouts</p> <p>H2 supported: Country-specific reputation of the cross-border PE investor reduces the information asymmetries in the acquisition exits of cross-border buyouts</p> <p>H3 supported: Industry-specific reputation of the cross-border PE investor reduces the information asymmetries in the acquisition exits of cross-border buyouts</p>	<p>H1 supported: Host country experience of the cross-border PE investor increases the likelihood of a domestic acquisition exit</p> <p>H2 supported: The positive effect of host country experience on the likelihood of a domestic acquisition is contingent on the connectivity of domestic acquirers towards local sources of information.</p>

Nederlandstalige samenvatting (Summary in Dutch)

Private equity investeerders of durfkapitalisten zijn investeringsmaatschappijen die zich specialiseren in de financiering of overname van niet-beursgenoteerde ondernemingen met het doel deze op middellange termijn door te verkopen, meestal na een periode van 5 tot 7 jaar. Hun investeringsaanpak wordt gekenmerkt door een strikte selectie en actieve begeleiding van hun participatie. Om een sterke betrokkenheid binnen de participatie optimaal te garanderen, richten private equity ondernemingen zich traditioneel voornamelijk op lokale investeringsopportuniteiten.

Ondanks de voordelen van een lokale investering, is er de laatste twee decennia een sterke toename van het aantal buitenlandse participaties binnen de private equity sector. Bijgevolg waren meer dan één op vijf transacties in de periode 2000-2010 internationale investeringen. Bovendien zijn internationale investeringen gemiddeld véél grotere transacties, waardoor de internationale private equity markt tijdens dezelfde periode meer dan 70% van de globale transactiewaarde vertegenwoordigde. De drang tot diversificatie en de toenemende concurrentie op de lokale markt zijn hiervan enkele onderliggende oorzaken. Een internationale durfkapitalist dient echter om te gaan met de potentiële moeilijkheden van het investeren over lange afstand. Daarom bestudeert dit doctoraal proefschrift in welke mate de aanpassing van de durfkapitalist aan de internationale context het internationaal investeringsgedrag bepaalt. We focussen ons hierbij zowel op de oorzaken als op de gevolgen van internationalisering.

Een eerste studie onderzoekt de relatie tussen het internationaal investeringsgedrag en de kennis over internationalisering. We onderzoeken zowel de kennis die men haalt uit eigen internationale ervaringen alsook uit de samenwerking met buitenlandse partners en de eerdere internationale werkervaring van het investeringsmanagement. Onze resultaten bevestigen het belang aan van een behoorlijke kennis over internationalisering. De kennis uit eigen internationale ervaring speelt de grootste rol, maar ook de ervaringen van het investeringsmanagement hebben een belangrijke invloed. Een opmerkelijke bevinding van het onderzoek is het effect van een internationaal netwerk op het investeringsgedrag: een zeer intense samenwerking met steeds dezelfde internationale partners reduceert de internationalisering van een durfkapitalist. Dit leidt namelijk tot een isolering waardoor men interessante investeringsopportuniteiten aan zich voorbij laat gaan.

In de tweede en derde studie wordt de aandacht verschoven naar de gevolgen van het internationaal investeringsgedrag. We richten ons meer bepaald op de verkoop van een internationale participatie in een management buyout. In een management buyout wordt een onderneming beheerd door een combinatie

van managers en durfkapitalisten die tot doel hebben deze participatie op middellange termijn zelf door te verkopen. In de tweede en derde studie richten we ons dan ook specifiek op het verkoopproces van de management buyout door de internationale private equity investeerder. In een tweede studie ligt de klemtoon op de verschillende types van verkoop. We onderzoeken de verschillen tussen de verkoop van aan een nieuwe durfkapitalist (een secondary buyout) enerzijds en aan een niet-financiële, onderneming anderzijds. We tonen aan dat een secondary buyout vooral is weggelegd voor participaties in ondernemingen met een hoge efficiëntie in tegenstelling tot de verkoop aan een strategische speler. Hierbij speelt de groei van de buyout een grote rol. We stellen bovendien vast dat buitenlandse investeerders met een hoge reputatie er beter in slagen om een koper te vinden die aansluit bij het profiel van de investering. Naast de invloed van algemene reputatie blijkt ook de reputatie binnen de sector en voornamelijk de reputatie binnen het land van investering een positief effect te hebben op de verkoop van een internationale participatie. Dit laatste wijst op het belang van lokale verankering voor internationale durfkapitalisten.

Een derde studie tenslotte onderzoekt de nationaliteit van de kopers van deze internationale participaties. In dit onderzoek focussen we specifiek op de rol van lokale ervaring voor een internationale durfkapitalist. Uit onze resultaten blijkt dat lokale ervaring de informatiekosten van een binnenlandse koper reduceert waardoor de kans op een verkoop aan een lokale speler toeneemt. Hierbij mogen we niet uit het oog verliezen dat het effect van lokale ervaring niet in alle omstandigheden even sterk is. De voordelen van lokale ervaring spelen voornamelijk een rol in de verkoop aan andere durfkapitalisten. De verkoop aan niet-financiële spelers is minder gedreven door de lokale ervaring van de verkoper aangezien niet-financiële spelers in mindere mate beroep doen op durfkapitalisten als een bron van informatie. Daarnaast blijkt de invloed van lokale ervaring toe te nemen in een minder gunstige institutionele context. Aangezien een moeilijke institutionele context de nood aan informatie van lokale kopers verhoogt, hechten deze kopers een groter belang aan de informatie die door de internationale durfkapitalisten verspreid wordt.

Deze drie studies geven een beter inzicht in de manier waarop een durfkapitalist zich kan aanpassen aan een internationale omgeving. Deze studies bevestigen onze hypothese dat de aanpassing van de investeerder aan de specifieke, internationale context een grote rol heeft op de oorzaken en gevolgen van het internationaal investeringsgedrag.