

Kay Müller

## **Investing in Private Equity Partnerships**

# GABLER EDITION WISSENSCHAFT

## Entrepreneurial and Financial Studies

Herausgegeben von

Professor Dr. Dr. Ann-Kristin Achleitner

und Professor Dr. Christoph Kaserer



Die Schriftenreihe präsentiert aktuelle Forschungsergebnisse aus dem Gebiet der Entrepreneurial und Corporate Finance. Sie greift an der Schnittstelle von Wissenschaft und Praxis innovative Fragestellungen der Unternehmensfinanzierung auf.

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Kay Müller

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The Role of Monitoring and Reporting

With a foreword by Prof. Dr. Dr. Ann-Kristin Achleitner

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## **Foreword**

The private equity industry has experienced rapid growth on a global scale in recent years. Institutional investors nowadays see private equity as a core element of their portfolios and have increased their allocation to this asset class accordingly.

With the private equity industry becoming more mature and institutional investors becoming more experienced with the asset class, the debate on the industry's transparency has intensified. In order to manage their exposure to private equity effectively, institutional investors demand increased levels of transparency and disclosure from private equity fund managers. Are these calls justified? What information do private equity fund investors actually need? Are private equity fund managers providing sufficient reporting?

Kay Müller's distinguished dissertation sheds light on these questions. For the first time, he provides empirical analysis combining the perspective of private equity fund investors and managers. On the basis of a comprehensive set of interviews with leading European private equity fund investors, he presents an in-depth insight into the monitoring activities of institutional investors and explores their information requirements. These results are then contrasted with the actual reporting by fund managers based on a disclosure study of a unique sample of private equity fund reports. The analysis reveals several important information gaps and provides guidance on areas for improvements.

The focus of this book is the relationship between investors and fund managers, which is at the heart of the private equity industry. It comes at the right time as the industry is facing major challenges as a result of the global credit crunch. Declining returns turn the investors' focus to transparency and governance issues. Effective and open communication between the market participants becomes even more important in order to support long-lasting and trusted partnerships.

I strongly believe that this book offers valuable contributions for the private equity industry and helps to further professionalize the asset class. I am very confident that researchers and practitioners alike will find the results thought-provoking and insightful.

Munich, May 2008

Prof. Dr. Dr. Ann-Kristin Achleitner

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I am also indebted to several members of the TUM Business School. In particular, I very much thank Professor Christoph Kaserer who was not only acting as referee for my dissertation but was always supportive in various projects that I carried out at the CEFS. I also thank Professor Horst Wildemann for chairing my doctoral examination committee.

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The emotional support of my family and friends allowed me to complete this dissertation. My deepest and sincere thanks go to Julia Leuffen for her love, encouragement and patience especially in the final phase of writing this book. She has always been there when I needed her most. Furthermore, she is also a great editor and gave insightful comments and reviewed my work diligently.

Above all, none of this would have been possible without my family. I will always be grateful to my parents, Gerhard and Ilsebeth Müller, and my brother Jan-Gerd, for their love and emotional support over all the years. I am just very sorry that my father did not live to see this work finally come to fruition. I dedicate this book to him.

Munich, May 2008

Dr. Kay Müller

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**Table of Abbreviations**

AcSEC	Accounting Standard Executive Committee
AFIC	Association Française des Investisseurs en Capital
AFS	Assets available for sale
AICPA	American Institute of Certified Public Accountants
BVCA	British Venture Capital & Private Equity Association
CalPERS	California Public Employees' Retirement Systems
CEO	Chief Executive Officer
CF	Cash flow
DCF	Discounted cash flow
DPI	Distribution to paid-in
EBIT	Earnings before interests and taxes
EBITDA	Earnings before interests, taxes, depreciation and amortization
EV	Enterprise value
EVCA	European Private Equity & Venture Capital Association
FASB	Financial Accounting Standards Board
FOIA	Freedom of Information Act
FV	Fair value
FVTPL	Assets at fair value through profit and loss
GAAP	General Accepted Accounting Standards
GIPS	Global Investment Performance Standards
GP	General partner
IAS	International Accounting Standard
IASB	International Accounting Standards Board

IFRS	International Financial Reporting Standards
IPO	Initial public offering
IRR	Internal rate of return
LP	Limited partner
LPA	Limited partnership agreement
M	Mean
NASDAQ	National Association of Securities Dealers Automated Quotation System
NAV	Net asset value
NPV	Net present value
NVCA	U.S. National Venture Capital Association
PC	Portfolio company
PE	Private equity
PEIGG	Private Equity Industry Guidelines Group
PME	Public market equivalent
PPM	Public placement memorandum
RVPI	Residual value to paid-in
SD	Standard deviation
SECA	Swiss Private Equity & Corporate Finance Association
SFAS	Statement of Financial Accounting Standard
S&P	Standard & Poor's
TVPI	Total value to paid-in
U.S.	United States of America

## Table of Symbols

### Chapter 3

$t$	Time period
$T$	Lifetime of the fund
$CF$	Cash flow
$IRR$	Internal rate of return
$NAV$	Net asset value
$n$	Number of remaining time periods
$\lambda$	Distribution scaling factor
$S_+$	Total number of index shares bought over time
$S_-$	Total number of index shares sold over time
$S_N$	Final number of index shares
$R_{It}$	Net return of a public market index in period $t$
$cf_t$	Normalized positive cash flow of private equity fund in period $t$

### Chapter 4

$I_0$	Initial investment
$V_0$	Post-money valuation including the initial investment
$TD$	Total disclosure score
$d_i$	Disclosure item
$M$	Maximum amount of information items

## 1 Introduction

### 1.1 Relevance of Topic

The global growth of the private equity industry has been spectacular over the last years. According to PRIVATE EQUITY INTELLIGENCE, private equity funds worldwide raised USD 432 billion in 2006 which is an increase of 38% on the already strong 2005 figure of USD 313bn.<sup>1</sup> In 1985, global fundraising has been only USD 5bn indicating an annual growth rate of around of 24% of the asset class over the last more than 20 years.<sup>2</sup> The private equity universe, i.e. the total private equity assets under management, accounted for around USD 1,400 billion in 2006.<sup>3</sup> The growth of the asset class also reflects in the trend for larger fund sizes.<sup>4</sup> The ten largest funds in 2006 together raised USD 100bn. Six of them were among the largest private equity funds of all times.<sup>5</sup> As these funds use typically high leverage ratios when investing in portfolio companies, their actual economic impact is even greater as these figures suggest.<sup>6</sup> As a result, the industry has developed significantly in the past years to the extent that it is not longer regarded as the niche sector it once was. Today, private equity has “moved from the fringe to the centre of the capitalist action”<sup>7</sup> and private equity investors are shaping entire industries with their investment strategies.

Many new investors have started to make allocations to private equity and existing investors are increasing their allocations to this asset class. With these investments, they intend to generate high returns and at the same time to improve the diversification of their entire portfolios.<sup>8</sup> Several other growth drivers of the asset class can be identified: The volatility of public stock markets, especially in the years after the tech bubble had burst, has made the allocation to public equity as source of consistent returns less at-

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<sup>1</sup> See Private Equity Intelligence (2007a), p. 3.

<sup>2</sup> See Phalippou (2007), p. 1.

<sup>3</sup> See Private Equity Intelligence (2007b), p. 13.

<sup>4</sup> In 2006 for example, Blackstone raised a USD 15.6bn fund, Texas Pacific Group a USD 15.0bn fund, or Permira a USD 14.7bn fund. Moreover, in 2007, Goldman Sachs Capital Partners is for example expected to close a USD 19bn vehicle. See Smith (2007).

<sup>5</sup> See Private Equity Intelligence (2007a), p. 3.

<sup>6</sup> See Phalippou (2007), p. 1.

<sup>7</sup> Bishop (2004), p. 2.

<sup>8</sup> See Bance (2004), p. 5.

tractive. Many investors have become more risk aware and increasingly search for absolute return investment opportunities. Coupled with record long-term low real yields on government bonds, these factors have made many institutional investors consider a higher allocation to private equity.<sup>9</sup>

The majority of the private equity investments are invested via specialized intermediaries that are typically organized as independent limited partnerships.<sup>10</sup> Professional fund managers as general partners are responsible for investing and managing the fund's money. Their fund investors are limited partners and provide the financial capital but are not involved in the active management of the fund.

Fund investors face several challenges when investing in private equity funds. First of all, their investments are blind pool investments. At the launch of the fund, there is no ability to preview the portfolio assets because they have not yet been identified. Furthermore, after the fund has made portfolio company investments, it is typically very difficult for the limited partners to value these investments and to assess their performance. They rely on information provided by the fund managers.

After the burst of the tech bubble and disappointing absolute and relative returns for many funds, many fund investors felt, however, that they were misled by the information provided to them. With the increasing professionalism of the asset class, fund investors in private equity partnerships therefore have focused their attention on investor rights and have asked for more accountability of the fund managers. More accountability requires better information on the development and performance of the private equity funds. Furthermore, sophisticated private equity fund investors nowadays try to capture, categorize and interpret historical performance data more accurately. They use the results in order to construct meaningful benchmarks. In addition, they try to map cash flows on a forward-looking basis more reliably and potentially employ risk-return optimization models.<sup>11</sup> Fund investors typically also have a fiduciary responsibility to understand their investments. New investors that run new private equity programs may have to reassure their sponsors and trustees that all is going according to plan.<sup>12</sup> All

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<sup>9</sup> See Achleitner/Fingerle (2006), p. 729.

<sup>10</sup> See Phalippou (2007), p. 1.

<sup>11</sup> See Borel (2004), p. 45.

<sup>12</sup> See Private Equity Intelligence (2005), p. 2.

these developments have led to greater demands from fund investors to get more rigorous and in-depth reporting.<sup>13</sup>

It seems, however, that fund managers are reluctant to provide the required level of detail in their reporting to fund investors. Some fund managers for example note that more disclosure would bring in short-term targets to an asset class where patience and long-term orientation is a critical success factor.<sup>14</sup> They also argue that regular revaluation of portfolio companies using a fair value model rather than holding the investment at costs means that a fund's performance gets artificially volatile. Or they simply may try to avoid allocating resources to regularly capture, collate and distribute the required information.<sup>15</sup>

This struggle for more transparency between both parties in private equity funds is surprising, because, in general, hiding information should not be optimal. Fund managers have to pay for secrecy by offering superior performance in equilibrium.<sup>16</sup> It is therefore interesting to know more about how fund investors actually monitor their fund investments after having invested in a fund and what their specific information needs are. Furthermore, a realistic assessment is required about whether these information needs are actually fulfilled by the fund managers' reporting or not. This dissertation is intended to shed more light on these issues.

Against the background of the growth and relevance of private equity as an asset class, it is astonishing that academic research does not yet provide a sufficient answer to the conflict between fund managers and their investors concerning the necessary information flow. Over the last years, private equity has become a focus area for many scholars. Due to the existence of fund vehicles as intermediaries in the private equity market, the private equity investment process is typically described in two sets of relationships – the ones between the private equity fund managers and the portfolio companies in which they invest and the others between the private equity fund managers and their fund providers.<sup>17</sup> Previous academic research has concentrated mainly on the first type

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<sup>13</sup> See Meek (2005b), p. 36.

<sup>14</sup> See Meyer/Mathonet (2005), p. 277.

<sup>15</sup> See Anonymous author (2004), p. 42.

<sup>16</sup> See Phalippou (2007), p. 11.

<sup>17</sup> See Achleitner (2002a), 145; Robbie/Wright/Chiplin (1997), p. 9.

of relationship between fund managers and the private equity-backed portfolio companies and has neglected the relationship between fund managers and their investors.<sup>18</sup>

Existing studies on the relationship between fund managers and their investors focus on three fields of interest. First, many studies analyze the performance of private equity fund investments.<sup>19</sup> This strand of research covers topics such as the optimal performance measures for the asset class, the actual return and risk of fund investments, the outperformance of private equity fund investments over public market indexes, or the implications of risk-return characteristics for portfolio allocation decisions of investors. The second field of interest has been the organizational structure between fund managers and their investors. In a seminal paper, SAHLMAN describes and analyzes the fund structure and its compensation system from a principal-agent theory perspective.<sup>20</sup> Based on his findings, many other researchers have focused on the contractual covenants in limited partnerships, on the non-tradability of the fund stakes, or on the compensation structure.<sup>21</sup> The fund selection process from the perspective of the fund investors and the corresponding fundraising process from the perspective of the fund managers have been the third field of interest for researchers.<sup>22</sup> Relevant studies examine the process and criteria used by fund investors in the selection of private equity funds or the determinants of successful fundraising by fund managers.

While these three fields of interests have been explored in some detail, there is a lack of academic research examining the *post*-investment relationship between fund managers and their investors and the information flow in terms of the fund managers' re-

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<sup>18</sup> See Phalippou (2007), p. 2; Robbie/Wright/Chiplin (1997), p. 9.

<sup>19</sup> Four important research papers focus on the on risk-return relationship from the fund investors' perspective: Kaplan/Schoar (2005); Phalippou/Zollo (2005); Kaserer/Diller (2004c); Ljungqvist/Richardson (2003).

<sup>20</sup> See Sahlman (1990).

<sup>21</sup> Feinendegen/Schmidt/Wahrenburg (2003) and Gompers/Lerner (1996) for example pursue an empirical study on private equity limited partnership covenants. Lerner/Schoar (2004) examine reasons for the restrictions on fund investors' ability to transfer funds and provide evidence. Gompers/Lerner (1999) propose a learning model to explain variations in compensation of fund managers by fund investors and provide empirical evidence.

<sup>22</sup> For the fund investors' selection process see Tausend (2006); Barnes/Menzies (2005). Studies on the fundraising include for example Balboa/Marti (2006); Burton/Schierschmidt (2004); Gompers/Lerner (1998).

ports.<sup>23</sup> Again, this is astonishing given the practical importance of this issue. Fund investors regard the lack of performance transparency as one of the top risks of investing in private equity.<sup>24</sup> This dissertation, however, intends to fill the identified research gap. Its strength and its distinguishable feature from previous research is that it explicitly focuses on the fund manager-fund investor dyad and thereby takes each partner's side and position explicitly into account.

## 1.2 Aims of Analysis and Research Approaches

This dissertation intends to contribute to the understanding of the post-investment relationship between private equity fund managers and their fund investors. It concentrates on the role of the information flow between both parties. Specifically, it examines the fund investors' monitoring of the fund investments on the one hand, and the fund managers' reporting to their investors on the other hand. Three explicit research aims are followed:

*The first aim is to elaborate on the role of the information flow between private equity fund managers and their fund investors after the latter have invested in the fund.* In the common view, fund investors are - due to their status as limited partners - usually perceived as being entirely passive after having invested in a private equity partnership. Therefore, they are seen as though they only need limited information about their fund investments. By analyzing the characteristics of a private equity partnership, as well as highlighting the governance of such a partnership and the fund investors' investment process, it will be demonstrated that and how this view can be rejected. Moreover, several theoretical explanations for the role of information are provided. In order to achieve the first aim of this analysis, the available current literature on private equity partnerships is thoroughly examined.

Based on these general and theoretical explanations of the information flow between fund managers and their investors, the specific information needs of fund investors are

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<sup>23</sup> Only a few studies examine this issue. See for example Kemmerer/Weidig (2005); Böhler (2004b).

<sup>24</sup> This has been found in a survey of large UK investors. Investors gave equal weighting of 3.7 (highest scores) to lack of liquidity and lack of performance transparency when asked to rank perceived risks on a scale of one (low risk) to five (high risk). See CMBOR/Adveq (2005) cited in Skypala (2005).

identified. Therefore, an understanding of their monitoring approaches and their respective use of the information is necessary. Consequently, *the second aim is to elaborate the current best practices of private equity fund investors with respect to monitoring their fund investments and to identify their specific information requirements*. In order to get detailed insight into their monitoring processes, the author carried out semi-structured interviews with 28 European private equity fund investors. His intention was to explore the current best practices. Therefore, the sample includes both leading institutions investing in private equity and designated experts in that field. Conclusions are drawn from the fund investors monitoring approaches resulting in the development of several implications for the specific information content.

After exploring and outlining the information requirements of fund investors, the analysis will focus on the perspective of the fund managers. *The third aim of this analysis is to investigate whether fund managers actually fulfill the fund investors' information needs with their fund reporting or not*. Fund reports are perceived to be an integral part of the communication and seen as most important information sources for fund investors.

Heading for the third aim, however, three derived subordinated aims need to be achieved. Parts of the fund reports are statutory financial statements which are based on accounting regulation. As the International Financial Reporting Standards (IFRS) are becoming more important for private equity funds, the *first subordinated aim is to describe and discuss the requirements of the IFRS especially in regard to the accounting for portfolio company investments*.

The valuations of the fund's portfolio company investments are an essential input not only to the statutory financial statements, but also to the fund managers' reports. Fund managers are required to carry out periodic valuations of their investments. In the past, it has been common practice among industry participants to report these typically illiquid and non-listed investments at costs. Today, the fair value measurement of these investments is required not only by accounting standards, but also by valuation guidelines which were developed by private equity industry associations. *The second subordinated aim is therefore a detailed elaboration and discussion of the fair value measurement requirements of portfolio company investments*.

In order to achieve these two subordinated aims, the respective accounting standards and industry valuation guidelines, the accompanying commentary and the relevant

academic literature need to be thoroughly examined. Data gathered from four in-depth interviews with leading international private equity fund accounting and portfolio company valuation experts assures that practical insight and experience is integrated in the analysis and discussion.<sup>25</sup>

As statutory financial statements alone do not provide a comprehensive picture of the performance and current state of private equity investments, fund managers disclose additional information to the fund investors. *The third subordinated aim is to develop a comprehensive framework for the additional investors reporting, to measure the level of disclosure in the fund reports based on this framework and to identify relationships between the level of disclosure and selected fund characteristics.* In order to measure the level of additional disclosure, a so-called disclosure index will be developed. This technique has been proven to be a valid and frequently used research methodology in empirical accounting research. For the first time, it will be employed to analyze the additional disclosure to investors in private equity fund reports. The necessary data to empirically test the actual extent of disclosure was gathered from two leading European fund-of-funds investors who provided full access to all fund reports from their investments. The findings on the content of private equity fund reports will be finally compared with fund investors' information requirements in order to identify and discuss any potential information gaps.

This in-depth analysis of the post-investment relationship and the information flow between fund managers and investors will be useful for practitioners who have to understand the requirements of various players involved in the private equity market. In addition, it may also form the basis for further future theoretical research on the issue.

### 1.3 Structure of Analysis

The dissertation proceeds as follows: After the introduction in *chapter 1*, *chapter 2* provides an overview of investing in private equity partnerships with the intention to examine the role of information between the partners. Chapter 2.1 features the fundamentals of private equity by providing a general definition of private equity invest-

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<sup>25</sup> In addition, results of a study conducted on behalf of the European Private Equity & Venture Capital Association on the differences between private equity entities and non-investment companies are integrated in the analysis and discussion. For this study 21 semi-structured interviews with leading private equity experts were carried out. See Achleitner/Müller (2004).

ments and an introduction to private equity funds as intermediaries. As the vast majority of private equity funds are organized as a limited partnership, the characteristics of this organizational form are discussed in chapter 2.2. Its generic structure, its typical life cycle and the roles of both partners in such a partnership - private equity firms as general partners and fund investors as limited partners – will be disclosed. Based on these findings, the characteristics of private equity partnership investments from the fund investors' perspective are briefly analyzed in chapter 2.3. Based on the findings in the three precedent chapters, the challenges of governing the relationship between limited and general partners are subject to chapter 2.4. It is demonstrated which potential conflicts of interest could arise between both partners, and how these conflicts are addressed by direct means of control and by performance incentives. Before being able to elaborate the role of information in the private equity partnership, it is necessary to turn again to the perspective of the fund investors. Chapter 2.5 describes the private equity fund investors' investment process with respect to their allocation decision, their portfolio construction processes and their portfolio monitoring and portfolio management. Any institutional differences with respect to this process and the impact on the fund investors' investment success are discussed in chapter 2.6. All these preceding elaborations finally form the basis for the theoretical reflections on the role of information in the relationship between fund managers and their investors in chapter 2.7. A decision-supporting role, a governance-enabling role and a relationship-building role of the information between both parties will be discussed.

*Chapter 3* concentrates on how fund investors monitor their fund investments and thoroughly analyzes resulting information requirements. After introductory remarks in chapter 3.1, chapter 3.2 presents the research methodology and the data for the exploratory study. Chapter 3.3 explains the relevance and specific objectives of fund investors' monitoring. As discussed in chapter 3.4, a fundamental basis for all other monitoring purposes is provided by a thorough investigation of performance not only of the single fund investments, but also of the fund investor's entire portfolio. The common return measures for private equity investments are introduced, the relevance of interim return measurement and resulting challenges of interim fund valuations are revealed, and the possibilities to benchmark these returns are presented. However, fund investors are interested in risk-adjusted returns. Therefore, the risks of fund investments are discussed and, finally, also the costs of fund investments are presented. In chapter 3.5 the monitoring and fund governance of individual fund investments is addressed, i.e. the advisory board representation of fund investors, their potential value

adding to funds as well as the management of any arising crisis. In chapter 3.6, the author discloses how the monitoring can support the re-investment decision in a subsequent fund of the same fund managers. Chapter 3.7 highlights the monitoring for portfolio management purposes which includes steering the portfolio diversification and liquidity as well as using secondary market transactions to be able to do so. Finally, chapter 3.8 summarizes the resulting information requirements of fund investors to fulfill the monitoring purposes and formulates implications for the content of the fund managers' reporting.

*Chapter 4* turns to the perspective of the fund managers and elaborates the fund managers' reporting to investors. Following the introduction in chapter 4.1, this chapter comprises three parts. First of all, in chapter 4.2, the statutory financial statements are analyzed and their relevance for fund investors is discussed. The descriptions emphasize the accounting for portfolio companies as main part of the financial statements. Secondly, the fair value measurement of the portfolio company investments of the funds is subject to an in-depth analysis in chapter 4.3, as the valuations are an integral input of the reports to fund investors. Especially the appropriateness of the fair value measurement in comparison to the more conservative cost-based approach is discussed. Finally, chapter 4.4 comprises a detailed empirical analysis of the actual content of the additional voluntary disclosure, i.e. the investors reporting. Based on the content implications of the fund reports developed in chapter 3, which were drawn from a review of the employed literature as well as on the recommendations of reporting guidelines from industry association, a comprehensive private equity investor reporting framework is developed. Within this framework, a sample of fund reports serves to measure the actual level of disclosure. It is tested whether various fund characteristics have an influence on the level of disclosure. Finally, the results are presented and interpreted.

*Chapter 5* concludes, discusses and reveals further implications for private equity practitioners as well as the research community. Figure 1 summarizes the structure of the analysis.

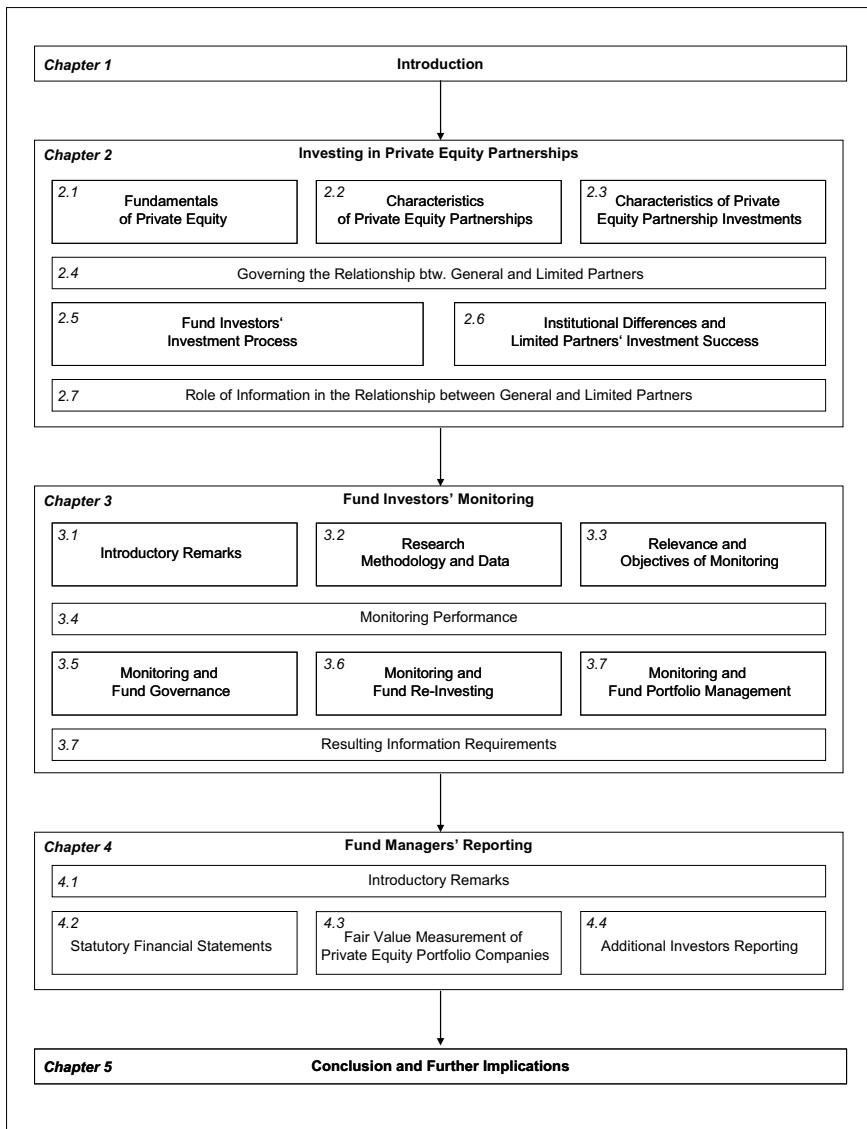


Figure 1: Structure of analysis

## 2 Investing in Private Equity Partnerships

### 2.1 Fundamentals of Private Equity

#### 2.1.1 Definition of Private Equity Investments

Private equity investments comprise all equity investments<sup>26</sup> in non-public<sup>27</sup>, closely held companies that face a transformational situation in their corporate development.<sup>28</sup> Apart from providing financial resources, private equity investors offer additional management support mainly by advising the management teams of the portfolio companies.<sup>29</sup> The objective of the investors is to generate an optimal risk-adjusted rate of return of their investments. The primary reward of the investors is typically a capital gain which is only rarely supplemented by dividend yields. In order to realize that capital gain, the investors typically plan for an exit of the company investment already at the time of the initial investment. The holding period of the investments lasts usually five to seven years.<sup>30</sup>

According to the stage of the companies that receive the financing, private equity investments are typically split into different sub-segments.<sup>31</sup> Broadly defined, these sub-segments are venture capital, i.e. early stage investments, on the one hand, and buy-

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<sup>26</sup> Equity investments are any form of securities that have an equity feature, e.g. common stock, convertible preferred stock, or subordinated debt that include conversion privileges or warrants. See Fenn/Liang/Prowse (1995), p. 2. If an investment has both equity and debt characteristics it is also called mezzanine capital.

<sup>27</sup> The majority of private equity investments are in unquoted companies. However, private equity investors have historically also pursued private investment in public equity, so-called *PIPE investments*. These transactions are typically structured as minority investments in a publicly listed company. See Kuzneski/Landen (2006). EVCA therefore defines the term private equity more broadly as “*investing in securities through a negotiated way*.” Bance (2004), p. 2.

<sup>28</sup> See Hagenmüller (2004), p. 12; Wright/Robbie (1998), p. 526; Bader (1996), p. 11. In addition to equity capital, investors may provide debt to the companies.

<sup>29</sup> See Wright/Robbie (1998), p. 525. Private equity investors may for example take an active role as member of the advisory boards.

<sup>30</sup> See Achleitner/Müller (2004), p. 15; Levin (2002), p. 102.

<sup>31</sup> Most categorizations of private equity investments build upon the stage of corporate development in which the portfolio companies is. See for an overview of different conceptualizations of the stages in the literature Fingerle (2005), p. 24.

outs, i.e. late stage investments, on the other.<sup>32</sup> *Venture capital* encompasses all equity investments in start-up companies intended to finance the launch, early development or expansion of a business.<sup>33</sup> The financing may be required for developing business plans, product development, initial marketing activities, or the commercialization of products and their production. The portfolio companies typically belong to high growth industries, e.g. technology or biotech. Due to their inherent risks, these firms have very limited financing alternatives other than equity financing provided by venture capitalists.<sup>34</sup> The source of the return to the equity provider typically comes from revenue and profit stream growth.

*Buyouts or late stage investments* comprise investments in established companies. These companies are considered to have stable business or to face matured growth.<sup>35</sup> As these companies normally have positive and predictable cash flows, the financing structure of the transactions allows for additional leverage of the investments through debt. The potentially high returns to equity providers are mainly sourced from financial structuring, cost reductions and improving efficiencies.<sup>36</sup>

The *purposes* for financing companies with private equity can be distinguished as follows. On the one hand, private equity is used to finance growth, e.g. by providing capital to develop new products, to expand operations, or to make acquisitions. This is typical for venture capital investments, but could be also relevant for later stage companies. Private equity can further resolve ownership and management issues. A succession in family-owned companies or the buyout or the buyin of a company by ex-

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<sup>32</sup> For further details on the sub-segmentation see for example Schefczyk (2000), p. 37 or Sahlman (1990), p. 479. The boundaries of the different development stages are blurred.

<sup>33</sup> See Grabenwarter/Weidig (2005a), p. 19. Venture capital investments are often distinguished in seed, start-up and expansion capital. *Seed capital* finances the research, assess and development of a product. *Start-up capital* serves to finance the set-up of a company and the further development and initial marketing of the product. When the business reaches break-even or is profitable, *expansion capital* might be provided to finance further growth, e.g. the increase of production capacity, market development or providing working capital. See Bance (2004), p. 3; Sahlman (1990), p. 479.

<sup>34</sup> See Fingerle (2005), p. 28.

<sup>35</sup> Their growth is usually lower than that of venture capital-backed companies.

<sup>36</sup> See Tuck (2003a), p. 6. The investors usually acquire a controlling stake of the company.