



Alternative
Insight

**PRIVATE EQUITY
INTERNATIONAL**

PRIVATE EQUITY MATHEMATICS

SECOND EDITION

Applied analytics and quantitative methods
for private equity investing

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About the lead editor

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Oliver's current research focuses on the strategic logic and the performance determinants of private equity investments. His work has been published in leading academic journals and in various publications for practitioners, and has been featured over 100 times in the business media (press, radio, television and online) in the past two years. His book, *Private Equity Mathematics*, is one of the bestselling books with PEI Media.

He regularly presents his research at academic conferences and private equity symposia, and serves as an adviser to leading investors in the private equity industry. He repeatedly served as an adviser to policymakers at the national and European levels in the context of the ongoing debate about a possible need for regulation of the private equity industry.

Oliver's company PERACS is the leading provider of standardised independent private equity track record analytics and validation services, currently advising approximately 20 percent of the market of private equity fund managers fundraising worldwide. □

Introduction

By Oliver Gottschalg, HEC Paris and PERACS Private Equity Track Record Analytics

Institutional private equity is playing an increasingly central role in business, as an important and well-established component of alternative investments, as a governance structure that enables the financing of thousands of corporate transformation or expansion strategies, and as a key driver of M&A and IPO activity. It is still, however, a relatively young investment class by most standards. It was less than four decades ago that the industry's pioneers, such as Henry Kravis, Martin Düblier and Joseph Rice, created this investment model and form of governance. The asset class has since gained prominence to the point that it has attained the lofty moniker of 'Capitalism's new king'. Private equity has grown, matured, expanded its global reach and attracted outstanding talent. At the same time, institutional private equity has become an 'industry' in its own right with an increasing level of professionalisation.

It was only a few years ago that many investors still held the belief that investing in private equity was still much of an 'art', rather than a science, when compared to other asset classes. While some artisanal element remains, the private equity industry has over the past decade developed an increasingly sophisticated range of specific and dedicated tools, benchmarks and methods that help both the general partner (GP) and the limited partner (LP) to make the right investment decisions. Being a great artist requires the mastery of tools and methods; the professionalisation of the private equity industry continues to raise the bar for investors with respect to this requirement.

Still, it is striking that the accessibility of knowledge about this asset class remains low when compared to its economic relevance. At its previous peak during the first half of 2007, private equity was responsible for close to 50 percent of global M&A activity, yet a search in the electronic databases of business journals reveals that there are almost ten times more articles written on 'mergers and acquisitions' than on 'private equity'.

For years, many people believed that almost any form of private equity investment was a sure path to outstanding performance. While research shows that this belief has never been warranted, recent economic difficulties made it clear to everyone once again that only skilled investors can expect to reap attractive returns. Private equity remains a relatively opaque asset class with great information asymmetries. This implies that substantial opportunities are available for investors with superior skills and capabilities – often at the expense of the less skilled.

Historically, the spread between the best and the worst investment opportunities has been much greater in private equity than in many other asset classes. Being average has never been an attractive position and only the upper half of the performance spectrum

yielded returns that clearly compensated investors for the risk and the illiquidity characteristic of this type of investment. At the same time, the very best private equity investments have generated an almost unparalleled performance. The recent crisis of 2008-09 not only put pressure on the overall returns of this asset class, but also made the difference between the best and worst private equity investments and investors clearly visible.

This emphasises the need for investors both GPs and LPs alike to equip themselves with the latest and most sophisticated methods and techniques to assess investment opportunities, to value businesses, to benchmark portfolio performance, and to design incentives for executives and fund managers.

This guide, *Private Equity Mathematics, Second Edition*, aims to provide a comprehensive and timely account of the state-of-the-art, available mathematical tools and methods that inform and guide relevant decisions in all aspects of private equity investing. It presents the theoretical background and lays out formulae whenever necessary. At the same time, it has been written in a pragmatic spirit and intends to focus on the question 'How to ...?' rather than to expound on the latest abstract theoretical debate around a given concept. As such, most chapters include practical example calculations that can be easily adjusted to the reader's real-world applications. More complex calculations are illustrated and facilitated based on detailed spreadsheet models, which are available to readers on request.

In this edition, the content has been updated and expanded to reflect the latest advancements and thinking in a given area. Several chapters have been added to integrate recent advancements in the analytical approaches to the private equity asset class. Of particular relevance are the updated chapters on performance measurement and benchmarking, along with a new chapter on performance persistence. Further, three chapters are dedicated to the important topic of risk, reflecting the progress made towards its integration into private equity investment considerations.

I would like to extend my thanks to the contributors for sharing insights on their respective areas of expertise. Their investment of time and their willingness to make best practices available is greatly appreciated, as without it, this project would never have been possible. It is my hope that private equity professionals will be able to improve their investment decisions based on the mathematical methods and tools contained within this publication and that this guide further contributes to the advancement of knowledge about this important and expanding asset class.

Chapter overview

The topics in this guide are broadly divided into three sections. The first section, **Fundamentals**, looks at the most relevant distinguishing features of this asset class: performance, cash flow patterns and risk. The second section, **Investing**, focuses on a variety of issues relevant to GPs and LPs alike, from the evaluation of a possible investment opportunity to different aspects of performance benchmarking, the identification of performance drivers and their persistence across time. The third section, **Fund and**

portfolio management, covers the economic and legal aspects of operating a private equity investment house or a private equity investment programme.

Chapter 1, *Private equity as part of your portfolio*, by Satyan Malhotra of Caspian Private Equity, lays the foundations for the first section by providing an overview of relevant risk and return considerations for the construction of a private equity portfolio. The chapter *Measuring private equity performance* by Ludovic Phalippou of the University of Oxford illustrates the dangers of an imprudent application of widely used but not always appropriate performance measures. Ivan Herger of Capital Dynamics extends this discussion to the complexities of modelling net cash flows from private equity investments based on J-curve projections for both primary and secondary fund investments. The following three chapters address questions of risk in private equity, starting with the chapter by Fernando Vazquez of PERACS which provides insights into the ability to measure and benchmark private equity risk profiles for GPs and LPs. Bernd Kreuter of Palladio Partners and Oliver Gottschalg of HEC Paris and PERACS demonstrate a Monte Carlo approach for risk management in private equity portfolios. Elias Korosis of Hermes GPE and Roy Kuo of Church Commissioners round off the risk discussion with their treatment of methods to integrate risk measures into a risk budgeting approach.

The second section on investing starts with a chapter on the quantification of individual drivers of returns of private equity investments by Oliver Gottschalg. Brian Gallagher of Twin Bridge Capital Partners tackles the question of investment valuation from the perspective of a buyout investor. The following three chapters look at complementary methods to benchmark the performance of private equity investments. Robert Ryan of PERACS addresses the challenges of constructing a meaningful benchmark to benchmark one private equity fund to comparable private equity investments. Alexander Peter Groh of EMLYON presents the latest techniques in assessing the risk-adjusted performance of private equity investments based on public market benchmarks, which are complemented by Oliver Gottschalg's pragmatic approach method to estimating the relative performance of private equity investments in the following chapter. This section concludes with Oliver Gottschalg's chapter on the latest findings on performance persistence in private equity, that is, the likelihood of past outperformers to again outperform in the future.

The last section focuses on the management of private equity funds and portfolios. John Barber of Bridgepoint outlines the relevant formulae and nuances of the economics and incentives of running a private equity firm. The following two chapters deal with economic and legal aspects of the management compensation in MBOs. Michael J. Album, Trevor J. Chaplick, and Joshua M. Miller of Proskauer Rose treat the US context, while Jenny Wheeler and Pierfrancesco Carbone of Duane Morris look at the same issue for different European jurisdictions. Leon Hadass of Pantheon and Arantxa Prado examine the optimal construction and assessment of a fund of funds portfolio. Michael J. Ryan of Hamilton Lane investigates methods to assess the performance of private equity service providers, and Griffith Norville of Hamilton Lane concludes this section and the book with a discussion of approaches to measuring volatility in private equity. □

1

Private equity as part of your portfolio

By Satyan Malhotra, Caspian Private Equity

Introduction

It is generally agreed on that investment portfolios undergo the classic life cycle of construct, nurture and harvest.¹ Most of the extant research on investing expound on the general principles articulated by Harry Markowitz in his 1952 paper that serves as the foundation of modern portfolio theory (MPT). Markowitz's research assumes that a portfolio is comprised of assets that are, among other things, fungible, transparent, readily quoted and easily transferable. These elements contribute towards understanding the risk-reward trade-offs among investment choices, thereby allowing the portfolio manager to build an appropriate portfolio given his/her individual utility function.

Private equity as an investment option raises unique challenges, including:

- **Construct phase** - lack of unitised/clean data; non-uniform access with generally large minimums, cash flow uncertainty and multi-year commitments; qualitative aspects (for example, talent, relationships) and other such elements.
- **Nurture phase** - lack of ability to actively manage or assert influence could vary from being completely passive for limited partners (LP) to being active for general partners (GP). However, post-portfolio construction (or when making an acquisition), even the most active GPs can do little other than continue to be active in the individual portfolio companies themselves.
- **Harvest phase** - lack of multiple or defined exit options imply realisations could be suboptimal or span many years. The continuing development of the secondary markets, structured products and listed private equity funds notwithstanding, exit options are quite limited which make the asset class illiquid.

Further, the private equity industry as a whole is not known to maintain robust data sets, due to issues such as lack of depth, lag in information, lack of true price discovery, as well as selection and self-reporting biases. Reported returns are not normally distributed and they are also capital weighted, which makes uniform, unitised allocation analysis very difficult. It can also be generally agreed on that possibly the most important aspect of private equity portfolio management is upfront selection, whether an LP making an investment in a GP or an investment a GP makes in a portfolio company.

Therefore, given the uniqueness of private equity, its data issues and the overlay of multiple non-quantifiable elements, private equity portfolio management is as much an art as a science. Even if it is not possible to clearly articulate the exact methods of portfolio management, it may be possible to identify some general parameters, principles and metrics

¹ Depending on trading or maturity strategies, the portfolios may be with or without composition churn during the holding period.

(herein collectively called 'private equity tools'). The potential application of private equity tools in managing private equity portfolios is unique to the type of participant:

- GP focus on industry sub-sectors² (for example, IT, industrial)
- Fund of funds focus on various types of GPs (for example, buyout, secondary)
- LP focus on types of investments (for example, private equity, public equity, fixed income)

This chapter aims to demonstrate methods of estimating private equity metrics as well as highlight illustrations and presentation styles specific to each private equity participant (that is, GPs, funds of funds and investors). We begin by presenting select private equity metrics and then performing sample analyses from the perspective of each private equity participant. At the onset, it is also equally important to remind the readers of the numerous concerns highlighted above; therefore, the results should be used with extreme caution and more so as relative anchor points are used with some degree of freedom.

Private equity metrics

As with all market practitioners, private equity participants have their own preferences about the metrics they use for portfolio management. Although the metrics, exact formulae and their utility may vary across practitioners, the analysis itself can be grouped into three general categories: (1) return-related, (2) risk-related, and (3) at the portfolio level. This section presents select private equity metrics and their estimation formulae for each of the three general categories.

Return-related

Expected return is a mathematical expectation of return from a single holding or portfolio of holdings. It is generally based on the expected probability of each return. In quantifying the expected return, it is important to establish the parameters around the expected return or whether it is: (a) relative or absolute, and (b) cash-on-cash or in percentages (that is, a 2x multiple return is 41 percent IRR if cash is returned in year 2 versus 10 percent IRR if cash is returned in year 7).

Mean return is the arithmetic average of the return. *Weighted average mean return* would include an additional set of information along with the return for the holding (for example, assets, number of holdings, capital invested).

Quartile is the measure of the relative ranking of the holding (for example, return). The K^{th} quartile of population X can be defined as the value 'x' such that:

$$P(X \leq x) \leq p \text{ and } P(X \geq x) \geq 1 - p$$

where:

$$p = \frac{k}{4}, \text{ for } k = 1, \dots, 4$$

² For the purposes of this chapter, the focus is on the industry sub-sector as a whole, rather than unique opportunities within the sub-sector.

Insights in assessing the performance of private equity service providers

By Michael J. Ryan, Hamilton Lane

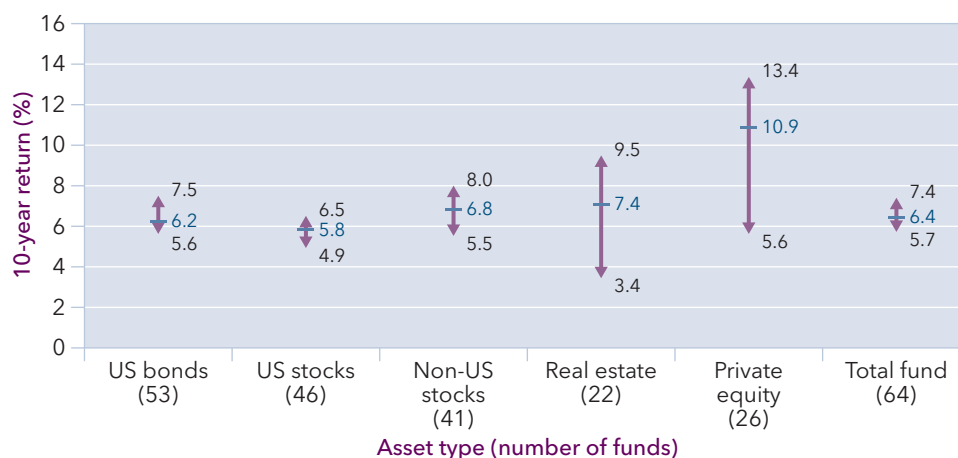
In search of a roadmap

Since the mid-1990s, private equity investing has matured dramatically, evolving from its beginnings as a cottage industry into the institutionalised asset class that exists today. Throughout this period, a number of studies have been conducted on how to evaluate private equity fund managers – the general partners (GPs) – including track record analysis, value creation drivers and deal flow sources. In reality, however, a large number of investors, or limited partners (LPs), are accessing private equity via a service provider, which may be a fund of funds manager, separate account manager or consultant. Evaluating service providers is vastly different from assessing GPs directly. How should their performance be analysed? What is the appropriate benchmark? What are their sources of value add? This chapter attempts to answer those questions.

Performance matters

A number of factors can drive the reported performance of a private equity portfolio. An LP should carefully evaluate the underlying drivers and determine which are spurious and which are likely to persist. As Figure 17.1 shows, private equity has been, on average, the best performing asset class for US state pension plans over the last ten years; it has been a much needed source of alpha for these plans. At the same time, the experience of individual plans has varied widely, as there has been a spread of 780

Figure 17.1: Tenth to 90th percentile of state fund returns (2003-2012)



Note: Year ending 30 June.

Source: Cliffwater 2013 Report on State Pension Performance and Trends.

**A head-to-head
comparison**

basis points between top and bottom decile performance. Given this wide a range of performance, the service provider's skills in superior investment selection and portfolio construction have a material impact on the plan portfolio's ultimate returns. For example, for a large pension plan with \$500 million net asset value in private equity, outperformance of even 100 basis points produces an additional \$50 million in value over ten years. That is the kind of impact that matters for the plan. It matters for the beneficiaries.

In traditional liquid asset classes, the Global Investment Performance Standards (GIPS®) have long served as voluntary, but widely used, performance presentation guidelines for asset managers seeking institutional capital. In 2010, the CFA Institute released the GIPS for private equity. However, private equity GIPS have been slow to catch on, and few managers have undertaken the cumbersome process of adopting them.¹ In the absence of a widely followed standard, private equity service providers, like GPs, will attempt to present their returns in a format that is most favourable to them. The resulting lack of consistency makes performance comparison challenging for an investor.

Consider the following example of two service providers, Redium Capital and Plaudio LP. Both firms have an investment track record spanning more than ten years, and both have generated a since-inception internal rate of return (IRR) of approximately 11 per cent (see Table 17.1)². Based on the belief that performance is comparable, the decision to invest may come down to style, reputation or personal preference.

Although performance assessment can be challenging, this process need not begin and end with a single number. It is important to assess what aspects, both within and outside of the service provider's control, have impacted historical performance. Certain aspects, such as consistent selection of outperforming GPs and proactive strategy allocation, are within the service provider's control and indicate skill in investing. Other attributes outside of the service provider's control, such as starting year of the

Table 17.1: **Comparison of since inception returns between two service providers**

	Redium Capital	Plaudio LP
Year established	1995	2000
Since inception IRR	11.1%	11.9%
Capital committed	\$1.6 billion	\$2.3 billion

Note: Data as of 30 June 2013.
Source: Hamilton Lane.

¹ Jacobius, Arleen. Alts managers slow to go with GIPS. *Pensions & Investments*, 1 August 2013.
² All data presented in this chapter are current as of 30 June 2013 unless otherwise specified. Vintage years 2011-13 are excluded since they may be largely unfunded and may not yet show meaningful returns.



**PRIVATE EQUITY
INTERNATIONAL**

PRIVATE EQUITY ACCOUNTING

The global guide for private equity firms and fund accountants

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By
Mariya Stefanova

PRIVATE EQUITY ACCOUNTING

By Mariya Stefanova

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03

Why is private equity accounting different?

By Mariya Stefanova

This chapter discusses:

- The ways private equity accounting is different from accounting for other investment types
- Factors contributing to the uniqueness of private equity accounting, including:
 - ♦ The preferred legal form (limited partnership and equivalents) and its specific – allocations and allocation rules
 - ♦ Limited partnership agreement (LPA)
 - ♦ Fund purpose, activities and structure
 - ♦ Investors' needs for financial reporting information
 - ♦ Accounting frameworks and the 'investor-defined accounting framework' (LPA GAAP)

Introduction

Accounting for a private equity fund (and the other entities within the fund structure described in [Chapter 2](#)) is quite unique – not that accounting rules do not apply, they certainly do, but due to the fact that when accounting frameworks are defined, the standards-setters usually do not write them with private equity in mind (of course there are exceptions, such as US GAAP¹), and therefore some modifications to these rules and accounts formats are required in order for those accounts to be useful to their user – mostly the investors.

So, what is so unique about private equity accounting that sets it apart from accounting for entities of other types of investment vehicles and other industries? If you are new to private equity you will be able to answer that question by the end of this chapter.

In a nutshell, there are six major differentiators that separate private equity accounting from accounting for entities of other industries and other types of investment vehicles:

1. The legal form – a limited partnership with its different investor classes (LPs, GP and FP) – and the way that this legal form is used to cater for the specific needs of the asset class.
2. The fund terms laid down in the limited partnership agreement (LPA).
3. The purpose and nature of the activities of the private equity fund.
4. The needs of the main users of the financial statements – the investors and their reporting requirements.
5. A unique accounting framework used only in this asset class – the 'investor-defined

¹ In US GAAP a separate set of rules applies – the AICPA Audit and Accounting Guide for Investment Companies, where accounting rules are put in the context of investment companies.

Section I: Chapter 3**Legal form
- limited
partnership (or
equivalents)**

accounting framework', also called LPA GAAP (Generally Accepted Accounting Principles) which is still used in certain jurisdictions (for example, the UK).

The combination of these five factors, which are explained below one by one, makes private equity accounting unique and difficult to understand, at least at first, by accountants from outside of the asset class. This guide sets out to give the reader, in a systematic and hopefully comprehensive way, an insight into the mechanics of private equity accounting.

As explained in [Chapters 1 and 2](#), a limited partnership (fund for joint account or other similar forms) is the preferred legal form for private equity funds. The ways in which that legal form is used to cater for the needs of the asset class, particularly the arrangement of the different classes of partners (limited partners (LP), general partner(s) (GP), founder partner (FP)), with different rights and responsibilities, are the framework for the accounting and reporting that dictates the layout of the accounts, how the information is recorded and what level of analysis is used.

**Allocations and
allocation rules**

The first thing to bear in mind is that, in a limited partnership, investors (LPs) have an interest in the partnership. The same logic applies to a corporate form, but instead of interest in a partnership, investors have shares. There are other types of partner. A GP acts in its capacity as a GP with its responsibility to manage the fund, but it can also be an LP/investor. In a UK partnership there may be an FP, which is basically a carried interest partner (CIP) that can act in its capacity as such, but also, similar to the GP, may act in its capacity as an LP/investor; these different entities in the fund can be referred to as 'classes of partners' (but sometimes I may refer to them as 'classes of investors'). A basic premise for the preparation and presentation of the partnership's financial statements is to reflect the interest of each class of partner (or shareholders in a corporate form) in the net assets of the partnership at each reporting date, or in other words the share of each class of partners in all the partnership's assets, liabilities, income and expenses (net income) and gains or losses.

The aim is also to present the return (understand the total profit and loss (P&L)) by partner class, as well as by individual non-managing partner/investor. Therefore a fund's accountant needs to be able to track transactions and identify balances at the partner level, which is achieved by recording the transactions at that level. All the partners - LPs, GP and FP - have certain functions, rights and responsibilities within the structure, as explained in more detail in [Chapter 2](#). Following that logic, when recording transactions that stem from those functions, rights and responsibilities, these transactions should be allocated to each partner; this then allows for individual reporting on each partner in terms of its share in the assets, liabilities, income, expenses and gains or losses which is ultimately their share in the net assets or net asset value (NAV).

From the drawdown to the distribution, from the simplest fund expense or the income from interest on loan notes to the capital gain or loss on realisation of investments, the total amount of each of these transactions must be allocated to each individual partner

Why is private equity accounting different?

Limited partnership agreement (LPA)

in a certain way. This process is called 'allocation' and the ways in which accountants allocate those amounts to each partner is by following certain rules that are usually stipulated in the limited partnership agreement (LPA) – they are called 'allocation rules'. Allocations and allocation rules are explained in more detail in [Chapter 16](#).

An example of how the limited partnership, as a legal form, and the way in which it is used to cater to the needs of private equity is represented in specific sections of the financial statements, that is, the bottom part of the profit and loss/income statement where the net income and gains (losses) are allocated to classes of partners. For more analysis, see the P&L in [Appendix 4](#). Another example is the bottom part of the balance sheet – the partners' accounts with the capital contribution account, loan (contribution) account, income account and capital (gains) account, which is further detailed in the statement of changes in partners' accounts (the 'capital account').

These three elements of the private equity fund financial statements – bottom part of the balance sheet, bottom part of the P&L and capital account/partners' accounts – are the most prominent examples of how the concept of allocation to individual partners materialises in the financial statements.

The uniqueness of the asset class, fund mechanics and lifecycle and the way performance is measured in private equity are discussed in the following section.

The second contributor to the uniqueness of private equity accounting is the terms stipulated in the LPA, which is an essential part of any fund accountant's toolkit. As explained in [Chapter 2](#), the second (although not by importance) crucial document for the fund accountant to understand, after he or she is familiar with the fund structure, is the LPA. Almost all the answers to questions that a fund accountant may have can be answered by reading the LPA. These questions will typically comprise:

- What is the accounting period?
- What reports need to be provided to the investors and when should they be provided?
- How is money drawn down and distributed from/to the partners?
- How is the waterfall/carried interest calculated?
- When and how should the partnership be dissolved?

A comprehensive explanation of the LPA terms for the fund accountant is provided in [Chapter 4](#).

Fund purpose, activities and structure

As outlined in many LPAs, the purpose of the private equity fund can be described as: 'Carrying out the business of an investor to identify, research, negotiate, make and monitor the progress of and sell, realise, exchange or distribute investments.'² These investments include ordinary shares, preference shares, debentures, loan stocks and

² Quote from an anonymised LPA.

04

The limited partnership agreement explained

By Mariya Stefanova

This chapter discusses:

- Limited partnership agreement (LPA)
- The LPA structure, including its important clauses
- Where to look in the LPA
- Implications for accounting and reporting

As explained in [Chapter 2](#), the second crucial document for any fund accountant to understand, after familiarising himself or herself with the fund structure, is the limited partnership agreement (LPA).

What is an LPA

The LPA is the key legal document for a fund set up as a limited partnership. It sets out the relationships, rights and responsibilities of each class of partners – limited partners (LPs), general partner (GP) and, where applicable, the founder partner (FP). The LPA essentially sets out all the rules of the fund. Anything and everything that a fund accountant needs to know should be in the LPA, although this is not necessarily always the case and that poses some challenges for fund accountants. Therefore, a fund accountant needs to have a thorough knowledge of the LPA of any fund he or she looks after.

The partners can agree whatever commercial terms they want, as long as the LPs do not take part in the management of the fund so as to preserve their limited liability status as explained in [Chapter 2](#) (with the slightly modified terms of and the extra limited liability shield for LLLPs, explained in the same chapter). The problem with some LPAs is that they are often not detailed enough, whereas some of them lack detail about important aspects, such as allocations and even the waterfall calculation. In some cases certain parts of an LPA might even contain errors or omissions (with no offence to the lawyers intended, because they usually do a great job, but certain commercial, accounting and reporting aspects are sometime not fully addressed).

A universal wisdom that I learned from a seasoned fund accountant – a partner in one of the Big Four¹ – is that you should never let a lawyer put a formula in your LPA. This is precisely why fund sponsors, lawyers and accountants need to work together from the outset when the LPA is being drafted to avoid making changes to the LPA later in the life of the fund when, for important changes, there needs to be consent from the LPs. In my

¹ The Big Four refers to the four largest global firms offering accountancy and professional services. This group currently includes Deloitte Touche Tohmatsu, Ernst & Young, KPMG and PricewaterhouseCoopers.

Section I: Chapter 4

	<p>experience sponsors more frequently refer to their accountants or fund administrators from an early stage of the fund's establishment to ask for advice on certain practical aspects of the LPA.</p> <p>The following section provides an outline of some of the key clauses in an LPA and should serve as an overview for new fund accountants; it contains the most important clauses for accountants to be aware of in order to do their job properly.</p>
Parties	<p>This section identifies the different parties involved with, and therefore bound by, the LPA. They are usually the GP, the FP (where applicable) and the LPs. Occasionally some LPAs include other specific parties with some special rights, for example, a government body or organisation participating in an infrastructure fund.</p>
Introduction (or recitals)	<p>The 'recitals' set out, by way of a general introduction, the reasons why the LPA is being entered into by the parties. In the recitals, there is some historical information that serves as a short overview of what has happened between the date the partnership was originally established and the date of the relevant version of the LPA, for instance, when the partnership was formed, who originally formed it, which partner retired and who was appointed instead. You will also find information on all the amended versions and the relevant dates on which the LPA has been amended, provided that you are reading a subsequent or final version. Information on initial contributions can also be found here, for example, the FP's initial capital contribution as a carried interest partner and LP. If the final closing date has been extended, this information will be included here as well.</p>
Definitions and interpretations	<p>The definitions are extremely important because they contain some subtle details that can make a significant difference when applied in practice under the terms of the LPA. The following are some of the most common and important definitions, which have the largest impact on the accounting and reporting aspects of the fund, but this is by no means an exhaustive list. Furthermore, fund-specific definitions are sometimes encountered that need to be taken into consideration; obviously it is not possible to cover all of these here, but they are some that will serve you well in dealing with certain specific practical accounting aspects.</p>
Accounting date and accounting period	<p>If you are uncertain about the accounting date of the fund, typically the LPA will hold the answer for you in an unambiguous way, but what might be trickier sometimes is that in most LPAs, the accounting period is defined as a calendar year and, although it may seem obvious, as fund accountants we often think of the accounting period more as a quarterly period, due to the industry best practice of preparing accounts and reports on a quarterly basis. However, in some cases, such as the calculation of the management fee/PPS with the offsetting of transaction and other fees (which, for the management fees/PPS reduction purposes, are typically calculated based on the amounts for the previous accounting period; for more details on the management fee/PPS calculation, refer to Chapter 12), we need to consider that the management fee</p>

06

Initial, subsequent and final closings, rebalancing & equalisation

By *Mariya Stefanova*

This chapter discusses:

- What is a close or closing?
- What is a subsequent closing?
- Funds with multiple closings
- What are the implications of subsequent closings for investors?
- The process of equalisation
- The process of rebalancing

In [Chapter 2](#), I discussed the closed nature of the private equity funds and in [Chapter 5](#) I introduced the closing process, and now in this chapter I will discuss in more detail the accounting implications that result from the subsequent and multiple closings.

What is a close or closing?

As a reminder, a close or closing is any date on which the general partner (GP) admits one or more additional (also called 'subsequent closing') partners to the fund or that is any intake of new investors. On each closing, the GP can admit additional and/or subsequent partners to the fund or permit previously admitted partners to increase their commitments – both types are usually referred to as 'subsequent-closing partners'.

Some pre-closing events

Before admission, any new investors will need to execute and deliver certain documents, instruments and certificates with the most important ones being an application for admission to the partnership and the execution of a deed of adherence, followed by a client due diligence (CDD) (formerly known as a KYC or 'know your client') process which could be performed by either the GP or delegated to an external service provider (for example, the fund administrator the GP has employed).

It is the GP's responsibility to make sure that the admission of any new investor will not result in a violation of any applicable law, not just in the fund's jurisdiction, but also in the investors', for example the Financial Services and Markets Act 2000 (FSMA) in the UK or the federal securities laws and the ERISA legislation in the US.¹

If it is a US fund or if there are US investors investing in the fund, the chances are that there would be some provisions, with regards to the admission of new investors, about

¹ For more implications on ERISA investors please refer to [Chapter 4](#).

Section I: Chapter 6

Initial or first closing

the Investment Company Act and the registration of the fund under that act and the Advisers Act and the registration of the GP, the manager or any other affiliates as investment advisers under that act.²

The initial closing date, also called the first closing date, is the date on which the first investors are admitted to the fund. Very often that date is indicated in the amended and restated version of the limited partnership agreement (LPA) following that closing date, although sometimes if you are an external accountant and you are not involved in the administration, for example if the drawdowns and other processes are kept in-house by the private equity firm and you only prepare the accounts, it may take a little bit more effort to find out, but in any case you would need to know what the initial or first closing date is, as most of the events in the fund's lifecycle start counting from that date.

Subsequent or additional and multiple closings

Subsequent or additional closing is a closing following the initial closing; here, reference is made to multiple closings when there is more than one closing, or in other words, when there is(are) subsequent closing(s) following the initial closing.

As usual, the first consideration for the fund accountant is to check the LPA. Typically there would be either a completely separate section, which might be titled with various headings including: subsequent-closing partners: further partners: admission of further partners; or additional limited partners. Alternatively, it could be a part of a section, for example, it could be in the same section as the partner transfers, called something such as transfers or subsequent closing partners. As explained below, there would usually be a timeframe for the subsequent closings.

A subsequent investor, also referred to as an additional investor or a further partner, is an investor admitted after the first closing date or any investor that increases its commitment (in which case such an investor will only be a subsequent investor in respect of its increased commitment).

Final closing date

The final closing date (in some LPAs it is referred to as the final admission date) is the final date on which additional/subsequent investors are admitted to the fund, or on which increased capital commitments are accepted from existing investors.

The timeframe within which the fund can have its final closing usually counts from the initial closing. Whereas 12 months is very common, 18 months has also become increasingly common during the financial crisis, so it is important to confirm the exact timeframe as it might be more or less than 12 months. I have seen timeframes including nine months, six months (which is not that common), but in tough fundraising conditions the timeframe might be set to more than 12 months.

² Please note the changes to the US Investment Advisers Act of 1940 (the Advisers Act) as a result of the Dodd-Frank Act and the new exemptions and check how these changes will impact your structure. As at the time of the publication, the US SEC has postponed the registration probably until first quarter of 2012 from the originally planned deadline for registration of July 21, 2011.

Initial, subsequent and final closings, rebalancing & equalisation

Documentation

The GP has the responsibility to determine that date and notify the investors about the final closing date. Similar to the initial closing date, the final closing date may be indicated in the amended and restated versions of the LPA following the final closing.

What are the documents that you, as a fund accountant, would need to reflect the events that are to be recorded as a result of a subsequent closing?

- Once again, first you will need the LPA – the LPA provides all the rules governing subsequent closings – and timing, conditions to be met, restrictions and equalisation calculation.
- Since what really is happening at a subsequent closing is accepting new investors or increasing the interest in the fund of existing investors, you will need the deeds of adherence/subscription documents. The deeds of adherence is basically a document according to which investors agree to adhere to the fund's LPA, which also contains some additional useful for the accountant information (for example, contact information, tax status, tax ID, whether the investor is an ERISA investor, and if K-1 is required if the investor is a US investors). In addition to that, CDD (formerly KYC) documents, W-8, W-9³ and other documents may be required.

What are the implications of subsequent closings for the investors?

There are a few implications of subsequent closings for the investors:

The first implication is that subsequent investors are required to contribute to the partnership as if they have joined the fund on day one – on the first closing date – and therefore they will be sharing the benefits, that is, the distributions, in exactly the same way, as if they were investors that had joined the fund at first closing.

- The second implication stems from the first one, namely, if the subsequent investors are treated as if they have joined the fund on day one, then if there were any drawdowns between the initial closing and the relevant subsequent closing, a true-up is required and that true-up is called equalisation. The process of equalisation will be explained in more detail below.
- In addition to the equalisation, regardless of whether there were any drawdowns, another process is required, which is called rebalancing. The process of rebalancing will also be explained below.

Equalisation

As briefly explained above, the process of equalisation is carried out on subsequent closings to true-up all investors as if they had joined the fund on day one, in order to be able to share the benefits (the distributions) as if they were investors that had joined the fund at first closing.

³ W-8 Form (for non-US investors) and W-9 (for US investors) are US tax (IRS) forms usually provided to investors as part of the subscription documents pack and are used when US source income is flowing outside the US, in order to ensure that the appropriate withholding is levied on the outflow of funds. If the investor does not provide W-8 or W-9 form to confirm what kind of an entity it is or what tax residency status is, the partnership would have to withhold from the investor at the maximum rate (30 percent as at the publication) rather than a lower or even a zero rate potentially applicable in accordance with the tax treaty benefits that the relevant investor is entitled to.

08

Partner transfers

By Mariya Stefanova

This chapter discusses:

- What is a partner transfer?
- Vital documents for fund accountants to record transactions properly
- Accounting implications and the impact on financial statements
- Partner transfers in specialist private equity accounting systems
- Some complications and possible reasons

What is a partner transfer?

Following on from the discussion in Chapter 6 about the implications of admitting new investors to the fund at subsequent closings, this chapter will outline the implications of transferring interests in the partnership with or without admitting new investors – substitute investors – to the fund at any one time, before or after the final closing.

The partner transfer is a transaction between two parties:¹

1. A transferor (or assignor) – an existing partner to the partnership that transfers part or the whole of its interest in the partnership to the second party.
2. The transferee(s) (or assignee(s)) – one or more existing partner(s) to the partnership or an external new substitute investor(s).

The partner transfer is conducted by way of sale, exchange, assignment, pledge or any other disposition, typically with the prior written consent of the general partner (GP). It is subject to certain conditions, but the GP will usually waive, in its sole discretion, any or all of those conditions and in many cases the other limited partners (LP) have pre-emptive rights.

The following are some but far from all of the cases in which an LP may transfer all or any part of its interest, including any interest in the capital or profits of the fund and the right to receive distributions from the fund:

- If an LP defaults or envisages defaulting on its commitment, the GP may, usually in its sole discretion, offer the interest of that defaulting/potentially defaulting partner to the existing partners or admit to the partnership a substitute partner(s) to assume the whole or a portion of the defaulting partner's commitment.
- If the GP determines that there is a reasonable likelihood of a certain LP's participation in the fund having a material adverse effect on the GP, the fund, any portfolio company

¹ Regardless of the fact that there may be multiple transferee transactions, the second party – the transferee – is sometimes referred to in this chapter as if it is one single party.

Section 1: Chapter 8

Vital documents to record transactions properly

Limited partnership agreement

or any of their respective affiliates, the LP will try to dispose of its interest – in part or in whole – in the fund.

- When, to accommodate certain legal, tax, regulatory or other considerations of certain investors, interests in the partnership are cancelled to be given equivalent interests in parallel funds that have substantially the same terms as the main fund.
- For ERISA partners or public-plan partners, if a statute or regulation regarding the definition of plan assets changes or if the fund fails to qualify as a venture capital operating company (VCOC) or to satisfy the 25 percent exception in the case of ERISA partners or statute or regulation changes that make the investment illegal for public plan partners.
- Other cases when the GP deems the transfer is in the best interest of the partnership, GP (and/or other related entities) and/or LPs.

By now you will no doubt have figured out that the first thing that a fund accountant always needs to do is to identify the provisions in the limited partnership agreement (LPA). Partner transfers are no exception, so in this case you need to identify the provisions that deal with them. The LPA sets out all the rules for the transfer, such as conditions to transfer, restrictions, pre-emptive rights (if any) and other terms. The section of the LPA that deals with partner transfers may differ between LPAs: ‘transfers’ – completely dedicated to partner transfers; part of a larger section that deals with transfers and subsequent closings called ‘transfers that focus on subsequent closing partners’; ‘transfer or assignment of interests or shares’; or ‘assignment of interest or shares and resignation from the partnership’.

The second task is to make sure that all other required documents are available. When you have them read them carefully to identify the information required for the accounting processes that will be run to reflect the partner transfer.

Transfer agreement/deed of transfer/deed of assignment

Whatever its name, this document sets out the agreement between the transferor and the transferee, for the transferor to transfer part or its entire interest in the partnership to the transferee. This document grants rights to the transferee with regards to the partnership interest being transferred and contains almost all of the information about the partner transfer transactions – names of the transferor/assignor and the transferee(s)/ assignee(s), amount and/or percentage of the partnership interest to be transferred and the effective date of transfer.

GP’s consent to assignment of an interest

As discussed previously, the partner transfer typically requires the GP’s prior written consent; the GP’s consent to assign an interest is the written document endorsing the execution of the transfer. The document is addressed to the transferor/assignor and also confirms the details of the transaction.

Minutes of the governing body of the GP

Again, in respect of the GP’s prior written consent, the minutes of the governing body of the GP is evidence that they have discussed and agreed the partner transfer in line with the provisions of the LPA. Details of the transaction will again be provided in this