CHAPTER 1

# Introduction to Private Equity Operational Risk

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Private equity investing is a unique asset class that can offer a number of attractive benefits to investors. Compared to more traditional investments, some of the benefits associated with private equity investing can include the ability to focus on long-term capital growth with higher uncorrelated returns. Despite these benefits, as is the case with any asset class, private equity investing is also fraught with a number of unique risk sets and challenges that investors must consider. These risks can include traditional investment-related risks such as style drift, excessive risk taking, and overall poor performance. When investing in private equity, investors are also exposed to a series of what may be thought of as risks that are not purely related to investments. These risks have become commonly grouped together under the moniker of operational risks. But what exactly is this mysterious risk category known as operational risk?

## INTRODUCTION TO OPERATIONAL RISK

Noninvestment-related risks can be often grouped into different categories due to certain shared similarities. These noninvestment risks also go by many names depending on with whom you are speaking. Some may refer to these noninvestment related risks as fat-tail risks. The term *fat-tail risks* is used due to the severe effects that these risk may have, coupled with the perceived infrequency with which they actually cause damage. Others may use the terms *business risk* or *organizational risk*. The term that most individuals who focus on analyzing and monitoring these risks have settled on in recent years is *operational risk*.

The concept of operational risk is not unique to the world of private equity. Indeed, it is not even unique to asset management or the financial

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industry in general. Concerns related to risk management falling under the heading of operational risk are present across a number of industries that have nothing whatsoever to do with the business of investing or managing money. The FAA System Safety Handbook for pilots has a section dedicated to Operational Risk Management (ORM) and defines the goals of ORM as "protecting people, equipment, and other resources, while making the most effective use of them."[1] In the medical field, surgeons have procedures in place to mitigate literal operational risk, to prevent mistakes such as wrong-side surgery when conducting actual operations on patients.[2]

With such a well-developed field spanning multiple disciplines, why in recent years has there been a flurry of interest in a subject that is supposedly so well fleshed out? After all, with a large body of research on operational risk in other fields not related to asset management or private equity, could a discussion of operational risk and due diligence in a private equity context actually yield anything new? While the field of private equity investing has continued to increase in complexity and specialization, the issues of operational risk and due diligence areas applicable to private equity as they are in other fields. This ambivalent situation can perhaps be best summed up by a comment that Pablo Picasso is rumored to have made following a viewing at Lascaux Cave of some of the earliest prehistoric cave paintings ever discovered: "We have invented nothing."

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Regardless of the field or context in which operational risk is being discussed, often times it seems both practitioners and academics alike have a difficult time pinning down an appropriate definition of this broad topic. Part of this problem perhaps stems from the typically broad number of topics and disciplines that operational risk generally encompasses. Within the financial and specifically asset management world, defining operational risk is often a contentious exercise at best. Indeed, as Chapter 2 discusses in more depth, many in the asset management world and private equity communities in particular, may not even see a real need to devote material resources toward analyzing operational risk in private equity funds.

Indeed, why bother attempting to develop a definition of something if there is a commonly held belief that the very thing attempting to be defined is not itself of any consequence? Stated plainly, as the reader may be able to gather from the title of this book, operational risk not only matters but should be of paramount importance to any investor even considering investing in private equity. As an aside, for those in the private equity community who may disagree with this statement, I invite them to read this book, fully consider the benefits of developing a private equity operational risk assessment program and ultimately think about whether or not they would find making a more informed decision (e.g., a decision based on an understanding of not only the investment risks of a particular private equity investment, but the operational risks as well) to be the most prudent course

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**EXHIBIT 1.1** Common Private Equity Operational Risk Categories

| Risk Category |
|---|
| Cash controls |
| Trade life cycle processing |
| Valuation |
| Transparency and fund reporting |
| Liquidity management |
| Technology and systems |
| Legal and compliance |
| Counterparty oversight |
| Quality and roles of service providers |
| Business continuity and disaster recovery |

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by which to proceed. Ultimately, more informed investors tend to make better investment decisions and realize fewer losses due to operational risks.

Within the private equity world, there are any number of factors that can fall into the category of operational risks. Common operational risks are outlined in Exhibit 1.1.

The list of common private equity operational risks in Exhibit 1.1 are the general risks that come to most individuals' minds when they first hear the term *operational risk*. As this chapter discusses in more detail, the operational risk category lacks a true universal definition. Within the private equity world, there is no operational risk rule book. Furthermore, no private equity legislation, regulatory guidance, or other laws describe what falls under the term *operational risk* and it is therefore usually defined by what is covered by the operational due diligence process. As such, in a private equity context, *operational risk* is very much a term whose definition is driven by the market. Investors, fund managers, and private equity service providers alike are effectively left to their own devices in some regards to come to terms with this concept. That being said there are certain risk factors, as discussed throughout this book, which most in the private equity community would group into the category of operational risk. It is upon this foundation that we will begin to place the building blocks of the discussion of the operational due diligence process.

## OPERATIONAL RISK COMPARED TO OPERATIONAL DUE DILIGENCE

Now that we have introduced a basic understanding of what is commonly meant by operational risk we can next focus on operational due diligence. The two terms are occasionally used synonymously in practice; however,

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there is a distinction between the two. The term *operational due diligence* is correctly utilized when employed to refer to the processes of gathering data about a particular private equity fund. The type of data collected during the operational due diligence process is operational risk data. After this data has been collected during the operational due diligence process, an investor then can perform an analysis of this data to come to a determination as to the amount of operational risk present at a particular private equity fund. This analysis stage, as compared to the data collection stage, is also typically considered to be a part of the operational due diligence process.

Operational due diligence can be thought of as the process of performing due diligence on these operational risks. But this definition does not really tell us much. So, what exactly do those in the private equity community mean when they refer to operational risk and operational due diligence?

## WHAT IS OPERATIONAL DUE DILIGENCE?

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With the basic understanding now in place we can now begin to think about what exactly operational due diligence actually entails within a private equity context. Operational due diligence is a peculiar subject. Indeed the acronym that is commonly used in the industry is "ODD," although this book will use "ops dd." Many investors and fund managers may have a general idea about what operational due diligence encompasses. Some investors may even think operational due diligence to be limited to the seemingly easy-to-diagnose areas such as post-trade analysis and other back-office processes. Any such risks would certainly be obvious to detect for anyone who devoted the time to take a look—they are hiding in plain sight. While these statements are certainly overgeneralizations, they definitely contribute to the understanding of what encompasses operational due diligence.

What is less obvious perhaps is that while each individual's exact notions of what is meant by operational due diligence may vary, the range of variations can be quite wide. This is one of the reasons why operational due diligence is a multifaceted and fairly deep field of due diligence and lacks one universal definition that would sum up all of these aspects into one unique package. The lack of a universal definition is brought even more into focus in the complex work of alternative investments.

Under the broad umbrella category of alternative investments, it is even more difficult for investors and fund managers to explain how operational due diligence processes may vary among different types of investments such as hedge funds and private equity investing. It is the latter category, private equity, upon which this book will focus. By introducing the various related concepts, due diligence techniques and approaches, as well as trends in

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this field, this book attempts to provide guidance toward fostering a more complete understanding for the parties involved in private equity investing, including investors, fund managers, and private equity service providers of what the field of a robust operational due diligence program entails. Perhaps this will foster a more universal definition of the term among members of the private equity community.

But perhaps we are getting ahead of ourselves. As intimated earlier, the world of private equity is a category of alternative investing unique unto itself, replete with its own series of challenges and opportunities. This uniqueness and the general ways in which investors and fund managers may have approached the concept in the past have developed into a situation in which, among most individuals in the private equity community, operational due diligence in the private equity world tends to be an amorphous concept.

### Focus on Fraud Detection

When many private equity investors first hear the term operational due diligence, they may immediately begin to focus on fraud detection. Indeed, when first beginning to think about the subject of items that may influence the ultimate investment decision other than purely investment-related concerns, there is a strong temptation for investors to focus on concerns related to fraud in the management of a private equity fund. Certainly, this is understandable for several reasons.

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Due to the fat-tailed risks associated with fraud it is certainly reasonable, and from a pragmatic standpoint logically prudent, that due diligence surrounding potential issues of fraud should be of penultimate concern during every stage of the entire due diligence process. Private equity investors logically want to avoid all losses, but losses due to fraud can leave a particular sting and any potential recovery from such losses is often a sticky business. When an asset management fraud occurs it can generally lead to total losses with little hope for recovery. Indeed if recovery by defrauded investors does occur it is often only after a long extended process steeped in legal costs. Moreover, any recovery process typically only results in partial recovery because the capital "pie" to be divided does not meet the needs of all investors. Of course, there are rare exceptions in which investors recoup the entire amount of their initial investment.

Additionally, in the wake of a series of frauds, Ponzi schemes, and the like, in the alternative investment arena concerns related to fraud are still at the relative forefront of the general investment collective consciousness. Furthermore, regardless of whether a private equity fund manager has a long track record of stellar performance, coupled with experienced well credentialed professionals and a highly compelling investment thesis for a

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fund—if the entire thing is a fraud—none of the other due diligence that may have been performed regarding the merits of the investment strategy (i.e., investment due diligence) and the quality of the managers' reputation (i.e., reputational due diligence) matters very much.

In the context of fraud detection, the distinction matters little whether an investor is performing investment due diligence, operational due diligence, or any other subcategory of the two. Stated plainly, if the due diligence process fails to detect fraud, it has failed.

Now of course there are different levels of fraud. There is the complete and total fraud often employed under the model of the Ponzi scheme (e.g., Madoff) and then there are other types of fraud that may not be so apparent or so completely ruinous to an organization (e.g., a private equity manager claiming that they have 80 percent of the portfolio independently valued when in actuality it is more like 70 percent). In the latter example, the fraud may not result in any losses at all, however, the private equity fund manager is still committing a fraud in the broadest sense of the word by misrepresenting the truth of the facts and circumstances relevant to their particular organization. So if a due diligence process fails to detect these "white lie" lesser frauds, has it failed?

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It would be easy perhaps to give into the temptation to state, quite directly, yes. However, this seeks to impose black-letter bright-line pedagogy on a mutable subject matter. In fact, one approach toward reaching an answer to this question relates to issues of the weights with which a particular areas of the underlying items queried by the due diligence process both matter to an investor and directly relate to the potential severity with which overlooking such an item could create losses or future liabilities (i.e., clawback) for investors via fraud.

So, for example, there may be little potential for investor losses due to fraud solely related to the fact that a private equity firm may claim to use the more well respected, and expensive, Fund Accounting System A while in fact they utilize the cheaper and less robust Fund Accounting System B. Certainly this is an important misrepresentation that would raise red flags, lead investors to consider what else a fund manager may be lying about, and ultimately affect an investor's determination whether or not to invest with a particular private equity manager. However, if the private equity manager utilizes the accounting system in only a limited capacity and accomplishes all the necessary accounting tasks with Fund Accounting System B, then the potential for direct investor losses due to fraud (i.e., perhaps that the fund's accounts were not properly maintained) is minimal as related to the fund manager's misrepresentation of accounting systems utilized.

Therefore, in the overall scheme of things certain instances of fraud may be more or less deadly to a particular investor in terms of their

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ultimate consequences to generate losses. However, the opportunity for fraud is still prevalent throughout multiple areas of a private equity organization at both the management company and fund level. As such, investors' sometimes seemingly zealous focus on fraud detection and prevention is certainly reasonable. Fraud concerns however, should not overshadow other goals of the operational due diligence process. After all, an organization can be run with the best of intentions in a nonfraudulent manner but still be a complete operational disaster. In such cases, whether a private equity fund fails due to fraud or a weak operational infrastructure, regardless of the potential recovery options when a fraud occurs, both situations have the same initial destructive effects.

### Universal Definition of Operational Due Diligence

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Depending on who you talk to and what their general role is (e.g., investor, fund manager, fund operations personnel, service provider, etc.), you will likely receive a multitude of answers to questions regarding the meaning of operational due diligence. From the investor's perspective, the author has heard the head of an alternative investment allocation platform describing the work of their operational due diligence team along the following lines, "*Sure we do comprehensive work. These operational due diligence guys go in and make sure that the fund manager doesn't have two different driver's licenses or has never spent time in jail.*"

If you talk to someone with an accounting background they may interpret the term literally to mean due diligence on the operational aspects of a firm, such as the back office accounting work. They would be correct. Others, as our example illustrates, may consider operational due diligence to consist of fraud detection and background investigations (e.g., making sure that their private equity manager is not the next Bernard Madoff). They, too, would be correct.

Others with a focus on controls might describe operational due diligence as focusing on the flow of cash throughout an organization.

Still others might describe operational due diligence as making sure that the fund manager is properly valuing securities and not stealing from the firm. Still others may consider operational due diligence to be all of the leftovers from the rest of investment due diligence process (e.g., things that don't quite fit neatly into the parts of due diligence that are used to determine the merits of a particular private equity fund and whether it will be profitable or not). These opinions are also correct. We could go on with this list but by now the reader should have the idea that operational due diligence is viewed by some to be a catch-all hodgepodge of different disciplines and subjects cobbled together into a developing field with its own unique moniker.

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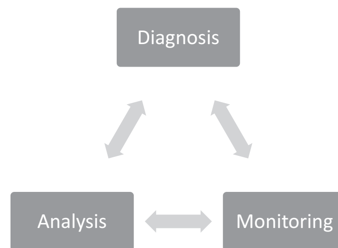


**EXHIBIT 1.2** Functions of a Core Operational Due Diligence Process

### Core Operational Due Diligence Process Functionality

Within this potpourri of concepts and terminology, as with all areas of due diligence, be they operational investment or otherwise, are a series of basic processes, techniques, and risk factors that can be found. It is these areas that are the core of operational due diligence, and should be the bedrock upon which a larger due operational diligence process is founded. As outlined in Exhibit 1.2, by diagnosing, analyzing, and monitoring operational risk in private equity investments, investors can foster a deeper understanding of any operational risk exposures, mitigate those exposures, and avoid taking unnecessary operational risks when investing in private equity.

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## OPERATIONAL DUE DILIGENCE IN THE FIELD OF PRIVATE EQUITY

Many investors will not be directly managing their own private equity funds but instead entrusting capital to a third party to manage on their behalf in a commingled investment vehicle also known as a private equity fund. There are several categories of private equity fund strategies including:

- Venture capital (VC) funds
- Leveraged buyout (LBO) funds
- Mezzanine financing funds
- Distressed debt investing funds
- Crossover funds
- PIPE transactions
- Interval funds
- Real estate funds

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In addition to these strategies there also exist private equity fund of funds, which are private equity funds that invest with other private equity funds. This book will provide an overview of the general universal elements of operational due diligence for private equity funds in general and will also pay particular attention to certain of the specific risks associated with different classes of funds just referenced including real estate funds. With an understanding of the basic landscape of private equity fund strategies, we can begin to discuss in greater detail the investor's role in the private equity process.

To begin with, despite all of the benefits that an investment in private equity funds may offer, the asset class does have its detractors. It is an asset class that has been referred to as having "lottery-like characteristics."[3] Private equity groups have been called "amoral asset strippers" and "casino capitalists."[4] Franz Müntefering, former vice-chancellor of Germany, referred to private equity firms as "Heuschrecke," or locusts, and went so far as to publish a so-called locust list that included such firms as Carlyle, Goldman Sachs, KKR, and Deutsche Bank.[5] Others have referred to private equity investors as vultures or buzzards.[6] Groups such as the Service Employees International Union have criticized the tax advantages enjoyed by many private equity firms as compared to the employees of the portfolio companies that they manage.[7]

Putting the rhetoric aside, private equity can indeed be classified as one of the alternative investment asset classes in which manager selection plays the most crucial role in all asset classes.[8] Therefore, one of the key considerations in assessing the potential benefits and risks that will be factored into an investor's decision making process to invest in private equity will not only be related to the scope of the underlying investments and/or portfolio companies that will be held in the private equity fund, but also to the competency, skill, and quality of the operational infrastructure of the private equity fund manager themselves.

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## OPERATIONAL DUE DILIGENCE AS DISTINGUISHED FROM OPERATIONAL MANAGEMENT OF PORTFOLIO COMPANIES

As is the case in many disciplines and particularly in finance, the terms and concepts associated with operational risk and operational due diligence can have more than one interpretation, particularly in a private equity context. As such it is important to clarify the specific context within private equity in which the term is being used here. For the purposes of this book, operational due diligence refers to the due diligence on operational risks that investors will perform on *private equity funds*.

This is to be distinguished from any operational planning or management assessment that a private equity fund manager would perform on underlying portfolio investment companies. While many of the core operational concepts and techniques that will be discussed in this book are certainly relevant, those types of operational reviews fall more into the context of investment management than they would operational due diligence and are therefore best left for other texts focused more exclusively on such subject.

Before we proceed, so that all readers are on the same page it is worth pausing for a moment to define some basic terminology that will be used throughout this book:

- **Private equity firm.** For the purposes of this text, a *private equity firm* will refer to the management company of a private equity organization. A private equity firm will typically manage several private equity funds.
- **Private equity fund.** The term *private equity* fund refers to a private equity investment vehicle that adheres to a particular strategy. A particular private equity fund may be offered in a variety of different investment vehicle formats so that investors from different jurisdictions can invest in a particular investment strategy. Motivations for such different investment vehicles can include jurisdictional and tax concerns.
- **General Partner or GP.** The *general partner*, commonly referred to as a GP, is the managing partner of a private equity company. To clarify the General Partner is not typically a single individual but rather a legal entity that is organized by the private equity firm's principals to oversee the management of a private equity fund. These entities are commonly organized as a limited liability companies.
- **Manager or Investment Adviser.** In many cases, a private equity fund will have an intermediary level entity known as the *Manager* or *Investment* Advisor between the general partner and investors, which technically may serve as the manager of a particular private equity fund.
- **Limited Partners or LPs.** Investors in a private equity fund are commonly referred to as *Limited Partners* or *LPs*. This term comes from the fact that many private equity funds are organized as limited partnerships and, therefore, the investors that subscribe (i.e., invest) in those funds are limited partners.

## TIMING OF OPERATIONAL DUE DILIGENCE IN THE INVESTING PROCESS

During the initial private equity fund assessment process investors are faced by a series of due diligence challenges. These challenges often broach the due

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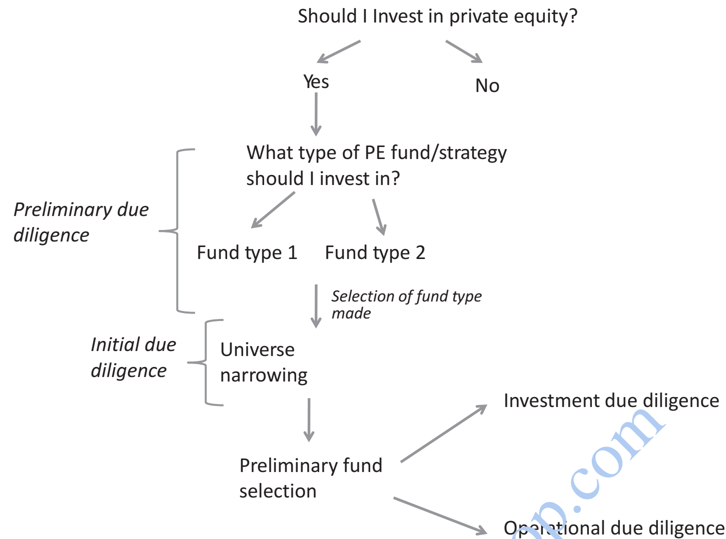


**EXHIBIT 1.3** Typical Private Equity Decision Making Process

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diligence process first with investment considerations, which are then subsequently followed by various stages of both investment and operational due diligence. Exhibit 1.3 provides an outline of a typical decision-tree process that may be followed by investors as they progress from first considering an investment in private equity down through to the actual due diligence processes that such an investment may entail.

The process shown in Exhibit 1.3 is by no means set in stone. An investor may begin the operational due diligence process in parallel with the investment process. In certain cases, in much the same way that an investor may have certain minimum criteria regarding the investment merits of a particular private equity manager or fund, so too may similar operational requirements be in place. In these cases, in order to prevent an investor from unnecessarily expending the necessary time and resources required to perform a full operational due diligence process on a particular manager, an investor may attempt to perform an initial operational screening, or smell test, as it may sometimes be called, in order to evaluate whether the private equity fund or manager should be discarded out of hand, based on a preliminary failure to adhere to an investor's minimum operational requirements.

An example of such a requirement might be that an investor may, as either a function of their own internal policies or perhaps on a case-by-case basis as determined by the sector of the particular market a private equity

fund is anticipated to be active in, determine that as a minimum operational requirement the investor will not allocate capital to a private equity fund that is not associated with a firm that has managed capital before. For nonprivate equity firms, such a minimum operational requirement could be perhaps equated to the presence of a minimum track record that is maintained for a number of years. A requirement that would be typical for a hedge fund, for example, is a three-year track record. Returning to private equity, another operational requirement could be previous experience in managing funds in a particular sector. To illustrate, an investor may come across a private equity fund that has traditionally invested in health-care (pharmaceutical) funds and then launches a fund focused on infrastructure or technology-based sectors.

While the technology-based sector may indeed be related to health care, such as a private equity fund that invests in medical device companies fueled by technological innovations, the original fund in our example invested primarily in pharmaceuticals and an investor may consider these two funds to be different enough that the technology-based sector fund would not pass the minimum screening requirements. As such, if these initial screens or filters are not successfully met by the funds then, regardless of the results of the subsequent operational due diligence process and any operational risks or strengths detected, the fund has effectively been doomed to fail before the process even started because it has been determined by the investor that such a fund will not be suitable. Exhibit 1.4 outlines a typical process

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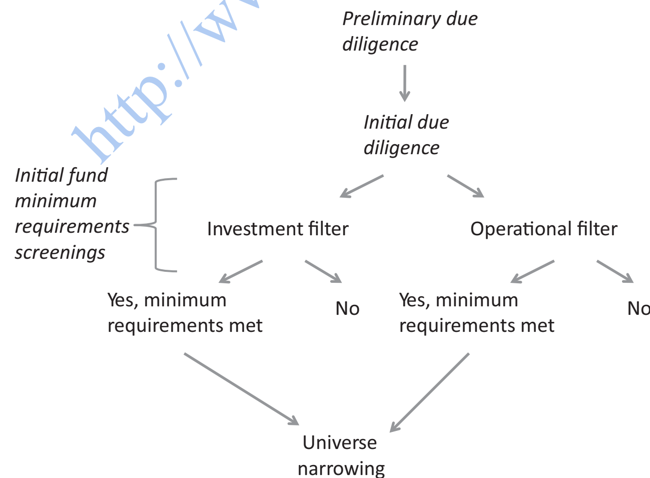


**EXHIBIT 1.4** Investment and Operational Filtering Stages in Private Equity Decision-Making Process

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employing these initial investment and operational screens, which must be passed before proceeding through the remaining due diligence process flow.

## OPERATIONAL DUE DILIGENCE PROCESS

Once an investor has moved through the initial fund screening and selection processes, it is time to begin the operational due diligence process. This process, to which the bulk of this text is devoted, will focus on performing operational due diligence on a particular private equity fund and its affiliated entities, such as a management company. This is in contrast to the more general operational due diligence screening outlined above, which facilitates the universe defining stage of the process. To mark our progress along the path of an investor's fund-focused operational due diligence review, it is at this stage that a number of funds have successfully passed the operational minimum criteria. We will limit our focus at this stage to operational universe definition criteria as opposed to either solely investment universe definitions or both investment and operational minimum universe criteria.

With the universe now defined by those funds that an investor has both a sufficient amount of investment interest in, as well as those that possess the required minimum operational qualities to merit further due diligence, an investor can now proceed. At this point, an investor will typically approach a new series of sequential stages focused less on minimum criteria requirements and more on assessing minimum operational practices and weaknesses within each particular fund and firm. In making these determinations, these operational due diligence processes often are marked by a number of broad stages through which an investor progresses before coming to a final operational determination regarding the private equity fund. A common four-stage process is outlined in Exhibit 1.5.

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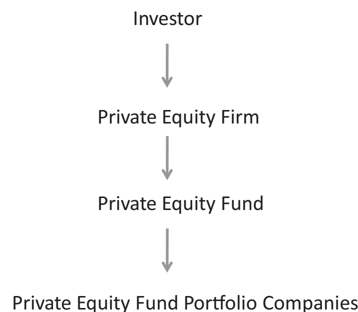


**EXHIBIT 1.5** Stages of Analysis in Investor Private Equity Due Diligence Process

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As the firm stage in the process suggests, the operational due diligence process typically begins with an investor being approached by, or approaching, a private equity firm. The first stage of the operational due diligence process will therefore generally begin with an investor developing a dialogue with the private equity firm. During this stage a basic understanding of the firm's key players, the funds managed, and its organization will come to light.

The next stage of the operational due diligence process typically involves investors focusing their efforts more on an investment strategy managed by the firm. During the course of this stage, investors will likely begin to focus their due diligence process on items specifically related to a certain fund. Generally, this process will entail investors familiarizing themselves with investment personnel, such as portfolio managers who may devote the majority of their time to a particular fund. Additionally, this stage is often where the real meat of the operational due diligence process occurs and many fund specific operational policies, procedures, and controls are discussed.

The final stage in the broad four-stage process involves investors reaching through the private equity fund itself and looking through to the investments, actual or proposed, in which the fund under consideration currently invests or intends to invest. In many of the private equity situations investors will face, the private equity fund under consideration will be allocating capital to an underlying company or series of companies.

In such cases, the operational due diligence process may involve not so much an assessment of the investment merits of such investments (e.g., why is the private equity fund planning on investing in this particular sector, or why is company A more deserving of funding from the private equity fund than fund B?) but rather may pose questions regarding appropriate policies, procedures, controls, and transparency at the private equity firm, and oversight and reporting of these investments such that the operational risks associated with funding these underlying companies is appropriately monitored and mitigated. Of course, contingent on the scope and amount of other due diligence being performed, an investor may gauge the depth at which he looks through to such underlying companies. The point of referencing this stage in the operational due diligence context is that just because an investor has put on their operational due diligence hat and has undertaken a review focused primarily on operational type risks, it is often not advisable for investors to shut themselves off completely from a particular area of review because it may border, however tangentially, on investment-related matters.

Based on this description, one may imply that the broad stages in the operational due diligence process are sequential in nature (i.e., first operational due diligence is performed on the fund, then the firm, and then, if

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applicable, portfolio companies). This is not necessarily the case, and many investors may opt to advance through each of these stages out of order, or simultaneously, or in an overlapping fashion.

The suggested sequence seems to be the most logical and practical route for most investors to follow. Many investors prefer this approach because it allows them to start with a big picture view and then drill down into more focused areas. The reason for conducting the process in an incongruous fashion may be due to considerations of the operational due diligence process aligning with any investment due diligence. Additionally, as is often the case in private equity, an investor may need to fire on all cylinders in order to meet a particular funding date upon which a fund will realize a close and stop accepting new capital.

In the case where an investor is performing operational due diligence on a private equity fund of funds, a fifth stage can be added to the process. This five-stage process is summarized in Exhibit 1.6.

Under this five-stage category operational due diligence process, the "Private Equity Fund" category is effectively transformed into "PE Fund of Funds." This switch is made in reference to the fact that there is now an additional player in the mix, the fund of funds, as not just an investor making a direct investment into a private equity fund. The previous, "Private Equity Fund" category, which was used to reference the stage of the process at which an investor approaches performing operational due diligence on a direct private equity manager now is slotted beneath the "Private Equity Fund of Funds" stage. If you think about it for a moment, this addition

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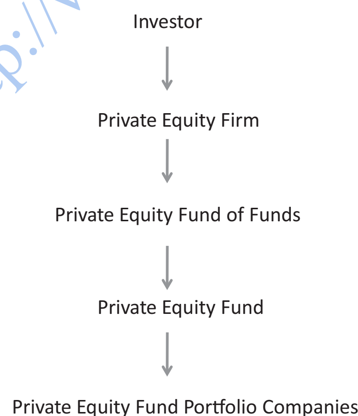


**EXHIBIT 1.6** Stages of Analysis in Investor Private Equity Due Diligence Process

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of the Private Equity Fund of Funds category and subsequent reordering of the process adheres to the same logical process utilized in the four-stage process. An investor will typically start with a big-picture view of the private equity firm, a category that is the starting point for both four- and five-stage processes, and then progresses into subsequent levels of more refined detail.

## HISTORICAL PERSPECTIVES OF PRIVATE EQUITY OPERATIONAL RISK

Now that we have established a basic understanding of what is generally implied by the term *operational due diligence*, we can next proceed to a discussion of the roles of operational risk and operational due diligence in a private equity context. To facilitate this discussion, it is perhaps useful to first consider the current state of the private equity operational due diligence world. In recent years investors have begun to focus more on operational risk across all investment classes ranging from traditional long-only investments to alternative investments. As with the evolution of most areas of risk management and due diligence, in the early stages of this acceptance reviews of operational risks were typically couched into primarily investment-related processes.

Before going any further, it is important to highlight that the purpose of this discussion is to provide the reader with a general sense of the development of operational due diligence in a private equity context. Due to the general nature of this discussion, the goal is not to imply that there were organizations several years ago, for example, that did not have distinct dedicated operational due diligence functions. Rather, such organizations were generally more the exception rather than the norm. As there was an increased acceptance of the importance of operational risk management in an asset management context, the carving out of distinct operational due diligence functions then became more common. In recent memory, perhaps the most obvious and notable point of demarcation fueling the development of operational due diligence was the uncovering of Madoff's Ponzi scheme.

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### Madoff's Ponzi Scheme and Operational Due Diligence

Some may say, perhaps rightly so, that the Madoff scandal was the exception rather than the norm. Others may say that Madoff was not a private equity manager and, therefore, any increased awareness or lessons learned from the Madoff scandal are simply not applicable. Many practitioners in the hedge fund profession had immediate gut reactions that Madoff's scheme was not

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a hedge fund and, therefore, it should not be held up as an example to which the entire hedge fund or even broader alternative investment industry should be compared.

While well-intentioned, such notions are patently incorrect. This head-in-the-sand attitude borders on asset-class xenophobia and certainly does not foster an open-minded approach toward learning from mistakes. By conducting such operational case studies of fraudulent activities both investors and fund managers, regardless of what asset classes they primarily participate in, can certainly learn a great deal about not only what steps they may take to prevent fraudulent activity, but also what concerns might be at the forefront of their current or prospective investors' minds.

Corgentum Consulting, an operational risk consultancy (and also your author's employer) that works with investors to perform operational due diligence reviews on asset managers places an emphasis on studying historical operational due diligence case studies. Corgentum has found that case studies can not only inform an investor's operational due diligence processes in order to avoid fraud, but can often provide a framework by which an investor can expand the existing scope of their operational due diligence reviews to focus on areas previously not vetted, in which the opportunity for fraud may be more apparent than previously through. In general, while the merits of modeling fraud to predict future fraudulent activity with any certainty is limited by the nature of the next unanticipated fraud, such research and analysis of prior frauds certainly yields a much more comprehensive operational due diligence process and results in more informed investors, as compared to not analyzing such frauds.

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Returning to our discussion of the development of operational due diligence, the pre-Madoff and post-Madoff worlds of operational due diligence is perhaps best thought of as the 23rd equatorial parallel above and below which lie investors who either have embraced operational due diligence or those who have not. The Madoff fraud was also important because it had a resounding effect on the way in which many investors approached the concept of operational due diligence. A Corgentum Consulting study found a so-called *Madoff Effect* by which investors tend to tailor their operational due diligence around recent frauds while minimizing certain other operational risks.[9]

The Madoff scheme has become one of the most-cited illustrations of fraudulent activities and Ponzi schemes. It is used in this context because of the preeminent initial and subsequent attention and media coverage from investors and the press. Many other frauds in recent years, which occurred both before and after Madoff's Ponzi scheme were revealed, have fueled an increased awareness of the dangers of ignoring operational risk and not performing operational due diligence. Examples of these fraudsters include

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R. Allen Stanford (Stanford Financial Group), Tom Petters (Petters Group Worldwide), Arthur Nadel (Scoop Management), Nicholas Cosmo (Agape World), and Helmut Kiener (K1 Group). Even service providers got in on the act with the revelation of fraudulent activity by prominent attorney Marc Dreier that stole millions from asset managers with the fraudulent sale of nonexistent securities.

Such was the spate of Ponzi schemes, as opposed to other fraudulent schemes, in the media, that the term "Ponzimonium" came into the public consciousness. This increased awareness on the part of investors and fund managers of the importance of understanding operational risk and performing operational due diligence had a lasting effect among investors across all asset classes, including private equity. It is in this post-Madoff world that the techniques described in this book are focused.

However, before discussing operational due diligence techniques and approaches, it is first helpful to obtain an understanding of how we arrived at the current environment as it relates to the world of private equity investing. To that point, before analyzing the current framework for operational risk analysis in private equity funds, it is useful to gain an initial understanding of the basic history of private equity investing. This historical perspective will allow investors to better understand how we arrived at the present state of private equity operational due diligence.

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## A Brief History of Private Equity

The earliest private equity investments were not really via modern pooled fund structures as we know them today. Instead, the concept of individuals pooling together capital to fund private, and often risky, ventures has in its earliest beginnings extending back hundreds, if not thousands, of years. For example, merchants in the ancient world would pool their assets together to finance trade expeditions with other countries.

The first private equity deals of the modern era consisted of groups of financiers and companies putting together private pools of capital to extend loans or fund various infrastructure projects. The focus was on one project or deal at a time. Examples of such early private deals include the financing of the Transcontinental Railroad in the United States via the conglomeration of Credit Mobilier and Civil War financier Jay Cooke in the mid-1800s.[10] These types of transactions were eventually followed by more sophisticated deals, such as the buyout of the Carnegie Steel Company by J.P. Morgan from Andrew Carnegie in 1901.[11] Even the roots of large companies such as International Business Machines (IBM) grew because of the combined efforts of groups of wealthy individuals combining pools of capital with

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combinations of other less-successful businesses to produce better managed, more efficient, and profitable firms.

For the next 40 years or so, the sophistication of private equity deals continued to gradually increase; however, deal originations predominately remained limited to a select group of wealthy individuals. The mid-1940s saw the rise of the first modern private equity firms and fund structures, with a particular focus on venture capital. During this period the appeal of private equity firms was broadened and firms began to solicit capital from a number of sources and did not limit capital inflows solely to wealthy families. This was especially true with the growth of venture capital firms during this time, such as the American Research and Development Corporation (ARDC).

ARDC was founded by General Georges Doriot and Carl Compton to invest in developing firms that had technologies rooted in military applications from World War II. ARDC invested primarily in companies with ties to the academic juggernauts of MIT and Harvard and the firm's investments included the High Voltage Engineering Corporation and the Digital Equipment Company.[12] The focusing on continued investment in innovation in science and technology continued to fuel the growth of venture capital into the 1950s with the growth of Silicon Valley firms such as Draper Gaither and Andersen.[13]

In the more modern era, private equity has gone through a number of so-called boom and bust cycles. These include the increased focus on junk-bond-financed leverage buyouts throughout the early 1980s through the early 1990s. The firm of Drexel Burnham Lambert was a leader in this area until the firm was effectively shut down as a result of an insider trading scandal involving Dennis Levine and Ivan Boesky. Perhaps the most famous leveraged buyout (LBO) deal during this time was the record-setting $25 billion takeover of RJR Nabisco. This deal was immortalized in a book and a movie, both called *Barbarians at the Gate*.[14]

It was during this period that the modern focus on regulation first began to have a noted impact on private equity investment activities. Fueled in part by a political backlash against jumbo deals such as the RJR Nabisco buyout, firms that underwrote junk bonds came under increased scrutiny, particularly in relation to their beneficial tax treatment. After the failure of Drexel Burnham Lambert, coupled with significant increases in defaults among junk-bond-issuing companies, the U.S. Congress took action. In August 1989, they implemented the Financial Institutions Reform, Recovery and Enforcement Act of 1989. This Act, driven by the savings and loans (S&Ls) crises of the 1980s, prevented S&Ls from investing in junk bonds.

For the next few years, post–RJR Nabisco, private equity continued to grow and shirk with the ebb and flow of investors' demand. Notable deals

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during this time period include the sale of Snapple Beverages to Quaker Oats, and buyouts by private equity groups of Continental Airlines, Domino's Pizza, and Petco.

The next stage of private equity was realized by the growth of the venture capital investment in technology and Internet companies. Notable firms that received venture capital funding during this dot-com period included Netscape, Yahoo!, and Amazon.com. The dot-com bubble eventually burst, turning into what many have called a "dot-bomb".

It was around this time that additional legislation had a material impact on the activities of private equity. After the failure of such firms due to a number of accounting and management scandals that brought down companies such as Enron, Tyco International, and WorldCom, the Sarbanes-Oxley Act of 2002, commonly referred to as SOX, was enacted. SOX imposed a number of increased reporting and transparency requirements for publicly listed companies. After the passage of SOX, many venture capital firms could no longer afford the increased cost of compliance for initial public offering exit strategies, which further stagnated the growth of such private equity investments.

After this period of decline, and the eventual resurgence of private equity during the 2000s, several private equity firms took a page from their own playbook and considered pursuing their own offerings via a combination of private and public offering strategies. One of the most notable offerings during this time period was the initial public offering of the Blackstone Group in 2007. The credit crisis of 2008 saw many private equity firms transition to focus on purchasing debt in existing LBOs or private investments in public equity, commonly known as PIPEs.

Now that we have developed a basic summary understanding of the modern roots of private equity investing, it is worth noting a few items. First of all, private equity, as its name implies, has largely succeeded in remaining just that, private. While some of the large mega-deals and tax benefits granted to asset managers such as private equity firms have garnered attention, in general from a regulatory perspective private equity firms—as compared to banks, insurance companies, and even hedge funds,—have for the most part undergone less scrutiny.

These historical developments have served to drive a wedge between both the efforts investors allocate toward performing operational due diligence on private equity firms as well as a growing desire among investors in other asset classes for operational transparency. As such, if one looks at the development of operational risk standards in general, private equity investors have been seemingly less focused on leveraging developments in the field of operational risk management and due diligence to push for increased operational transparency and best practices.

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**EXHIBIT 1.7** Milestones in Recent History of Operational Risk Development

| Year / Time Period | Notable Development in Operational Risk |
|---|---|
| Mid-1980s | U.S. House of Representatives' Committee on Energy and Commerce inquiries into accounting profession |
| 1985 | (i) National Commission on Fraudulent Financial Reporting / Treadway Commission; (ii) formation of Committee of Sponsoring Organizations ("COSO") |
| 1988 | (i) Creation of the Basel Capital Accord by the Basel Committee on Banking Supervision; (ii) Publication of the Hampel report |
| 1990s | Series of rogue trader events |
| 1991 | Formation of the Cadbury Commission |
| 1992 | Publication of the Cadbury Code and the COSO report, "Internal Control-Integrated Framework" |
| 1995 | Report of the Greenbury Committee |
| 1996 | Formation of the Hampel Committee |
| 2001 | Myners report published |
| 2002 | Enactment of Public Company Accounting Reform and Investor Protection Act of 2002 (SOX) |
| 2004 | Basel II implemented |
| 2007 | (i) Markets in Financial Instruments Directive ("MiFID") enacted; (ii) Publication of Guidelines for Disclosure and Transparency in Private Equity (the "Walker Guidelines"); |
| 2010 | (i) Enactment of Dodd-Frank Wall Street Reform and Consumer Protection Act; (ii) Passage of Alternative Investment Fund Managers Directive ("AIFMD") |

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The development of operational risk in a modern context can be traced back to the work of groups such as the Treadway Commission and the development of the Committee of Sponsoring Organizations through to the Basel Accords and the enactment of SOX.[15] Exhibit 1.7 provides an overview of the major highlights in the development of operational risk.

As a result of the impact of these regulatory developments, throughout the course of the development of operational risk, investors in other classes seemed to gain leverage from these developments and began to integrate them, with varying degrees of success, into their own due diligence processes. Perhaps facilitating their focus was the ease by which the targets of

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regulatory developments could be equated to funds in which they invested. Another contributing factor toward integration was likely the market events driving the implementation of subsequent regulations that promoted increased operational transparency and quality.

For example, it is easy to imagine how an investor reading about rogue-trader-type events in the early 1990s carried out by individuals such as Nick Lesson at Barings Bank, could begin to integrate questions regarding any controls or processes a firm may have in place to prevent rogue traders from operating. As more and more types of these questions were integrated into an investor's operational due diligence process over time, coupled with increased regulatory action, so too does the scope of an investor's operational due diligence focus begin to grow.

Private equity funds however, do not have many of the high-profile characteristics associated with such frauds and subsequent losses. Continuing our trading example, private equity firms generally do not trade nearly as frequently as more traditional funds or even some low volume hedge fund strategies. As such, an investor performing due diligence on private equity funds during the same time period may not have brought any such concerns to the forefront of their due diligence process because of the seemingly different nature of the risks. Furthermore, even if they had, such an investor would likely have been the exception rather than the norm. To borrow from Keynesian economics, the invisible hand of the market will dictate the appropriate course of action.

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If enough investors or regulators do not place enough pressure on a particular manager, industry, or asset class, then a manager may believe, however foolishly, that they have nothing to gain from either establishing high degrees of operational quality or being able to demonstrate operational transparency in a digestible, easy-to-follow format that highlights their operational strengths. This has in effect created what economists refer to as a multiplier effect. However, it seems in relation to operational risk concerns related to private equity (as compared to other asset classes) that the effect has been virtually stagnant on an absolute basis and effectively negative as compared to both other asset classes and the increasing complexity of private equity operational infrastructure.

So is it fair to say that operational due diligence is merely a poor victim of circumstance, cast by the wayside as a field of lesser import, subservient to other more legitimate areas of due diligence? Not necessarily, as recent developments have suggested an increased interest in this area. Consequently, when examining the history of the development of operational due diligence in a private equity context from an investor's perspective it seems as if it is only in very recent times that the majority of investors have opened the door to entertaining discussions of private equity in the operational due

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diligence process. Without this increased investor attention and pressure brought to bear an environment is continually created that not only accepts poor operational quality but fosters it.

This trend of increased attention and resource allocation makes sense for a number of reasons that Chapter 2 discusses in more detail. For now, one of the most notable reasons that readers should keep in the back of their minds is the fact that, all else generally being equally, there is a positive correlation between an operational quality and positive investment performance.

## ITEMS TYPICALLY COVERED DURING THE OPERATIONAL DUE DILIGENCE PROCESS

Earlier in this chapter, we refer to something known as a "basic" or "core operational due diligence process." The term *core process* is utilized here to refer to the basic building blocks of operational due diligence. A core process encompasses a review of, at a minimum, those operational risk factors that are necessary to allow an investor to reach an informed opinion, and ultimately come to an operational determination, regarding a particular private equity fund. In an absolute bare-minimum core process, if one of these operational risk factors is not examined it is highly unlikely, if not impossible, to question if an investor has truly taken the operational due diligence process seriously. The bare-bones minimum items in a private equity operational due diligence core review process are included in Exhibit 1.8.

After reviewing this list, an investor may comment, "I think that business continuity is a very important risk factor, particularly because the private equity fund I am considering is located in Caribbean country X, which is prone to hurricanes and power outages. So I would consider it very important to look at these areas during the operational due diligence process as well."

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**EXHIBIT 1.8** Sample Core Operational Risk Factors

| | |
|---|---|
| Trade flow analysis | Legal documentation review |
| Cash oversight, management and transfer controls | Valuation policies and processes |
| Compliance infrastructure | Quality and appropriateness of fund service providers |
| Fund reporting | Financial statement review |
| Human capital | Custody procedures and third-parties |

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Such a question certainly raises valid concerns and often arises during early discussions concerning core operational due diligence process factors. It affords us with an opportunity to reiterate exactly what the goal of a core process often is. It is, as the name implies, to get to the heart of what key operational risks are typically associated with private equity. In developing a core process, an investor may consider the operational risk factors included in the core list to be thought of as containing the low-hanging fruit of the operational risk spectrum.

Cash oversight, management, and transfer controls, for example, is one of the operational areas that is fertile ground for the breakdown of operational processes resulting in either outright fraud and theft or operational risks with less nefarious motivations such as improper transfers of cash due to a lack of appropriate transfer controls. The opportunity for noticeable operational weaknesses and subsequent actual losses due to the breakdown of operational processes is prevalent in this area. As such, most investors would include a review of the cash management and transfer process in one form or another, in their core operational due diligence process.

This can be contrasted with a category such as business continuity and disaster recovery. As our hypothetical investor questioned, depending on the circumstance, business continuity can be an important factor to review as well, is it not? The answer, of course, is yes. But as the rewording of the investor's query may have suggested, the answer to such a question is very circumstance dependent. Such is the case with most rules or maxims in life–there are exceptions.

As a general rule however, in the field of operational due diligence exceptions to such rules tend to lean more toward conservatism in approach. Such conservatism ultimately results in the inclusion of more operational risk factors, which necessarily broadens the scope of the operational due diligence review. Therefore, to clarify, two different private equity funds under review could each have different core operational due diligence processes that would vary by the number of operational risk factors included in each review. What then is the point, you may ask, of having a core process? The answer is that a core process gives investors a starting point from which to work. Additional factors can be added to the process on a case-by-case basis for each fund as prudence and common sense dictates. So, returning to our hypothetical investor's original example, it would be considered certainly advisable to add to the core process the business continuity and disaster recovery category for a private equity manager located in an area that experiences a great deal of weather-related events such as hurricanes.

This list of factors, as with any of the core lists included throughout this book, are by no means all-inclusive. Rather, the purpose of discussing a core process is to provide investors with a general idea of the baseline amount of

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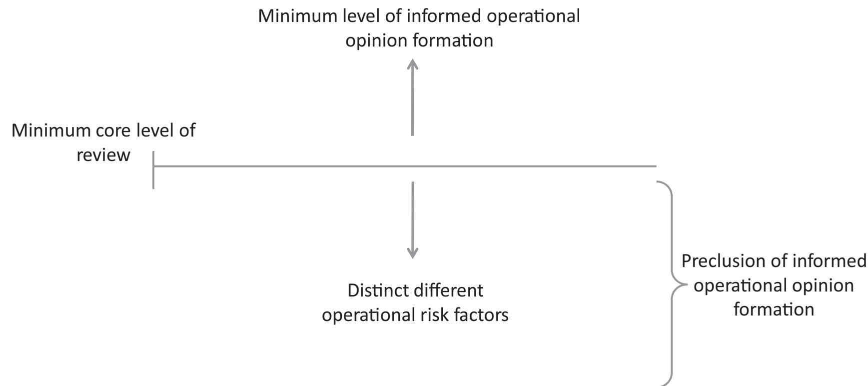


**EXHIBIT 1.9** Core Process and Informed Operational Opinion Formation

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operational risk factors they should consider analyzing before deciding to pursue an operational due diligence program. If an investor is not prepared to devote the necessary resources, time, and energy into vetting each of the types of factors included in a core process, then they may want to reassess their goals in performing operational due diligence to begin with.

Corgentum Consulting advises clients that as a firm we cannot give an informed opinion regarding a private equity manager unless, at a minimum, the firm has the opportunity to review certain core operational risk factors. Think of it this way: How can an investor form any sort of opinion regarding the operational strength of the private equity firm or fund if they do not understand the basics of the operations? In order to get these basics down there are certain key fund documents and processes that must be reviewed. The goal of the core process is to draw a line in the sand, below which a risk opinion cannot be formed. This concept is summarized in Exhibit 1.9.

## CORE VERSUS EXPANDED OPERATIONAL DUE DILIGENCE REVIEWS

Once a core process has been developed and then amended or enhanced, it is no longer a core process. Rather, depending on your perspective, these additions have effectively altered the DNA of a core process such that it has become a different species of operational due diligence review entirely. Perhaps we could refer to this process as a core plus level of review. At some point, depending on the number of additional operational risk factors added to the core process, an investor may be more comfortable with dropping the core association all together. We can refer to a more broadly scoped process

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**EXHIBIT 1.10** Sample Core Operational Risk Factors

| Operational Risk Factor | Operational Risk Factor Type |
|---|---|
| Trade flow analysis | Core |
| Cash oversight, management and transfer controls | Core |
| Compliance infrastructure | Core |
| Human capital | Core |
| Legal documentation review | Core |
| Valuation policies and processes | Core |
| Quality and appropriateness of fund service providers | Core |
| Custody procedures and third parties | Core |
| Technology and systems | Expanded |
| Review of regulatory interaction | Expanded |
| Business continuity and disaster recovery | Expanded |
| Information security | Expanded |
| Insurance coverage | Expanded |
| ISDA reviews | Expanded |
| Board of directors | Expanded |
| Tax practices | Expanded |

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as an expanded level of review. Exhibit 1.10 outlines an example of the operational risk factors included in a core as compared to an expanded operational due diligence review process.

Due to the number of additional operational factors included in the expanded operational due diligence reviews, these require more resources to complete. The same can be said when comparing a below-core level of review to a core level of review, which necessarily contains more operational risk factors. Exhibit 1.11 provides a theoretical outline of the resource allocation percentages dispersed among the components of the due diligence equation (e.g., investment due diligence and operational due diligence) for each of the three levels of review previously discussed.

A few comments should be kept in mind when considering the theoretical resource allocation guidelines outlined in Exhibit 1.11. First, a critical assumption in reviewing the resource guidelines is that the sum of each of the respective processes totals 100 percent. It is further worth clarifying that this 100 percent sum of all due diligence efforts is to be applied on a case-by-case basis. This is in contrast with an investor's total due diligence resources. It is worth noting this distinction because an investor may have access to more total due diligence resources than they are deploying to a particular fund review. These other nondeployed due diligence resources could simply be sitting on the sidelines or employed in other projects. This situation does

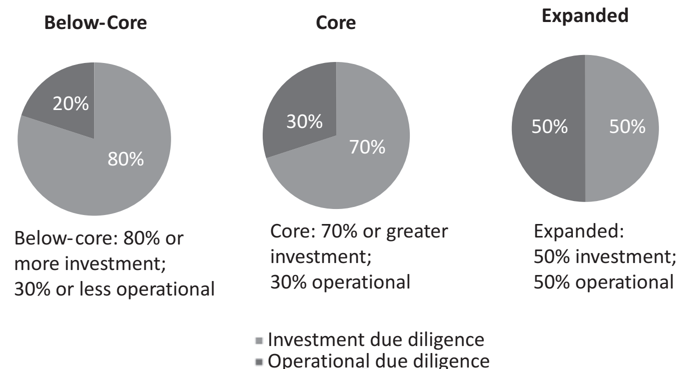


**EXHIBIT 1.11** Resource Allocation among Below-Core, Core, and Expanded Operational Due Diligence Review Processes

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not necessarily represent an investor being spread too thin by performing too many due diligence projects in any single time period.

Furthermore, an investor may deploy these due diligence resources toward funds on which they may be performing only preliminary due diligence. This initial screening could then feed the more comprehensive due diligence reviews further down the line. As such, one series of due diligence resources are being utilized to keep others busy. Regardless of the situation, this 100 percent assumes that for each particular project an investor is allocating 100 percent of designated due diligence resources toward a particular review. An example of a scenario that would not apply to the theoretical allocation guidelines outlined earlier would be when an investor decides to reduce the percentage of resources dedicated to investment due diligence but does not reallocate these resources to operational due diligence. This of course assumes that such investment and operational due diligence resources are swappable and available, which in the real world might not be the case, but in order to facilitate our discussion of resource allocation such theoretical guidelines and assumptions are employed.

Secondly, it is worth reiterating that the percentages in Exhibit 1.11 are intended to represent resources allocated toward the respective areas of due diligence and not the time allocated to such processes. While there is generally a positive correlation between the extent of resources dedicated toward a particular due diligence function and the time it takes to complete such a review, there are a number of variables involved that can skew such notions that a direct correlation is present. For example, one must first consider what is meant by the term *time* in this context. Is it the number of cumulative hours required to complete an initial due diligence review or

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perhaps the absolute time period necessary for completion of an initial due diligence review?

The difference in these two slightly different interpretations in the use of the time principal is perhaps best illustrated by the following example. Consider two different investment organizations making an investment in the same private equity fund. The first such investment organization, Firm 1, employs a total of five due diligence analysts. Four of these analysts focus on investment due diligence and one on operational due diligence. Next let us consider the second investment organization, Firm 2. This company employs three due diligence analysts. Firm 2's due diligence analysts are primarily dedicated to investment due diligence but donate a portion of their time as necessary toward operational due diligence. Putting aside the requisite competencies and skill sets of each analyst, as well as the likely benefits in quality and efficiency to be realized by Firm 1 in having a dedicated operational due diligence analyst, we can now examine a scenario by which the time to completion of each review is evaluated. Let us further assume that both Firm 1 and Firm 2 begin their due diligence reviews of our private equity fund on Monday, January 1, in the year 20XX. Further, let us assume that Firm 1 dedicates its one operational due diligence analyst to the review but only dedicates two out of its four investment due diligence analysts to the review of the fund (the other analysts are busy reviewing different funds).

Contrast this with Firm 2, which dedicates all three of its due diligence analysts to the job. As the due diligence work proceeds, Firm 2, having an overall smaller due diligence team as compared to Firm 1, decides to burn the midnight oil and dedicate all of their waking hours solely on this review. Firm 2, however, has the disadvantage of not having a dedicated operational due diligence analyst. As such, the review process takes longer for Firm 2 than it would have if it had regarded the analysts as being two individuals, with one dedicated to investment due diligence and the other toward operational due diligence. (Chapter 4 discusses strategic operational due diligence allocation in more detail). As a result of their stalwart dedication to the process, the due diligence process for Firm 2 subsequently takes two-and-a-half weeks (approximately 300 hours). Firm 1's due diligence process for the private equity firm in regard to total time is completed over a span of four weeks but in total takes only approximately 250 hours. The question now becomes which process took longer, Firm 1's or Firm 2's? The answer of course depends on the particular definition of process time to completion. Most investors would likely view the four-week time period taken by Firm 1 to be the longer time period. Viewed from the perspective of an investor performing an initial due diligence review of a private equity fund with an eye toward meeting a particular funding deadline, such an absolute view of time would likely be more practical.

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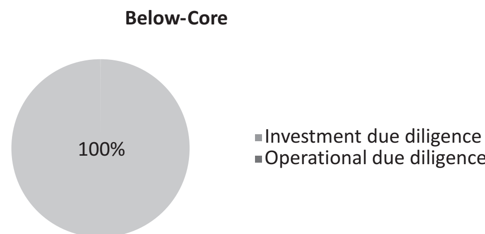


Below-core extreme example:
100% investment due diligence and no operational due diligence

**EXHIBIT 1.12** Extreme Example of Below-Core Process Allocation to Investment Due Diligence

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It is also worth noting that the percentages in Exhibit 1.11 are merely guidelines. Certainly, as compared to the chart, an investor performing operational due diligence at a below-core standard could certainly increase the amount of resources dedicated to investment due diligence and dial down the percentage increased toward operational due diligence. While such a change is certainly not advisable, some operational due diligence is better than none at all. An extreme example of such a change in allocation percentages with 100 percent of an investor's due diligence resources being allocated toward investment due diligence and no resources allocated toward operational due diligence is shown in Exhibit 1.12.

Furthermore, returning to our original theoretical resource allocation paradigms, the allocation separation points themselves are once again merely guidelines and not to be viewed as hard checklist points of demarcation among the different levels of review that are set in stone. So, for example, an investor may allocate only 65 percent of their total due diligence resources toward investment due diligence. Does this mean that they cannot claim to have a core process? No; rather, this indicates two points to be considered.

First, because they are dedicating less time (e.g., 65 percent as opposed to 70 percent) of their total due diligence resources toward investment due diligence, it is assumed that this 5 percent is being reallocated toward operational due diligence to account for the entire 100 percent of allocated resources. As such, a trade-off from investment due diligence resources that increases the operational due diligence resource allocation certainly can be viewed as pumping up a process that might not, according to the theoretical guidelines, be considered a core process because of the increased allocation toward operational as opposed to investment due diligence. Second, the terms *below-core, core*, and *expanded* utilize operational due diligence as a frame of reference as opposed to investment due diligence. Therefore, as

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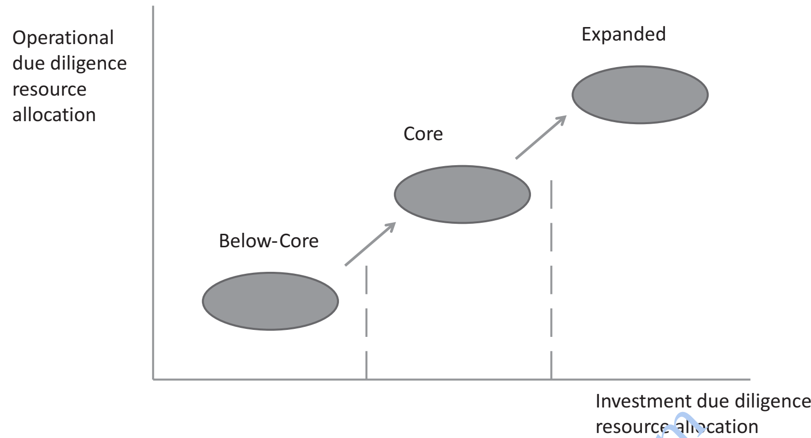


**EXHIBIT 1.13** Operational Due Diligence Resource Allocation as a Driver among Transitions from Below-Core, to Core, to Expanded Review Levels

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described earlier, by increasing the amount of resources dedicated to operational due diligence, an investor would tend to progress along the spectrum from below-core to expanded as summarized in Exhibit 1.13.

## SHARED COMMONALITIES BETWEEN PRIVATE EQUITY AND REAL ESTATE OPERATIONS RISK

For the purposes of this text, we will consider real estate funds to be a subset of the larger category of private equity funds. That being said, due to the unique challenges of the real estate asset class, and associated real estate funds, this book will outline several of the differences and similarities between private equity and real estate funds.

In general, regardless of the asset class there are certain universal categories of due diligence considerations that are applicable. This maxim applies to both investment due diligence and operational due diligence. From an investment perspective, these similarities could include performing due diligence on a manager's research function, the ability of a fund manager to generate alpha, and a manager's approach toward and execution of a risk management program. Regardless of whether an investor is considering an investment in a mutual fund, separate account platform, hedge fund, private equity, or real estate fund, general universal categories of investment considerations would likely be present in the due diligence programs of prudent investors. This is not meant to imply that cookie-cutter, one-size-fits-all due

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diligence approaches are employed across all asset classes. On the contrary, once these general categories are established, the difference in the due diligence process among the asset classes in terms of the diagnostic approach, as well as the types of risks being vetted, should be necessarily customized to each specific asset class, subclass, and fund type. For example, an investor would likely utilize a different approach to analyze the risk management function of a mutual fund than it would an event-driven hedge fund.

Similarly, there are certain universal categories that generally arise from an operational perspective as well. Some examples of the types of operational risk areas that prudent investors would incorporate into their operational due diligence function regardless of the asset class or fund type under consideration could include such axiomatic categories as valuation, business continuity and disaster recovery, and cash transfer controls. Similar to the manifest investment considerations, each of these operational risk areas would likely be incorporated by investors into their operational due diligence process, regardless of the asset class or fund type.

This larger, universal group of factors, both investment and operational, can be further narrowed down when performing due diligence on similar asset classes. Turning specifically to private equity and real estate, there is a subgroup of universal factors that are certainly more applicable among these two asset types than among two dissimilar types of investments. In other words, when performing operational due diligence on a private equity fund and real estate fund, many more similarities in approach will be employed than when performing operational due diligence reviews of a mutual fund and a real estate fund.

One prevalent issue in an operational due diligence analysis of a private equity and real estate fund is valuation. Both types of funds typically involve investments in hard-to-value and illiquid companies and pieces of property. Long gone are the days when a statement from a private equity or real estate firm claiming that everything is held at cost was sufficient. An investor performing operational due diligence on both real estate and private equity funds should devote substantial efforts to not only understanding the particular type of illiquid assets being held but also the valuation processes and approaches employed in determining such valuations. See Chapter 5 for further discussion of valuation.

As this example illustrates, there are a number of similarities between the two operational due diligence processes for both private equity and real estate funds due to some of the shared similarities between the two types of funds. Investors can utilize these similarities to enhance the efficiency of their operational due diligence reviews. That being said, a number of operational differences also exist between the two types of funds, as discussed in more detail in the following section.

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## DIFFERENCES IN OPERATIONAL RISK FACTORS BETWEEN PRIVATE EQUITY AND REAL ESTATE

In addition to a number of similarities, private equity and real estate funds also have differences that become apparent during the operational due diligence process. As previously suggested, real estate funds present a number of unique considerations for investors. These considerations may be asset or industry specific, but for ease of reference and for the purposes of this discussion we can consider real estate to be the odd-man-out and private equity the norm. Under this approach, an investor more familiar with common private equity operational risks, when approaching an operational due diligence review of a real estate fund may be unfamiliar with some of the differences to be on the lookout for. For example, a private equity fund that invests in underlying companies may not have to deal with considerations related to a fund that owns property or manages and rents structures on that property.

So continuing our example, consider the difference in assets that may be held by a private equity fund and a real estate fund. Let us say a private equity fund, PE Fund 1, owns equity in a company that makes applications for smart phones. Next consider a real estate fund, RE Fund 1, which owns a shopping mall located on Main Street. Now let us consider both of these funds with regards to the universal operational risk category of cash controls referenced above. An investor performing operational due diligence on PE Fund 1 would likely focus on a number of different cash-related considerations, including the ways in which cash moves into and out of the fund, the cash transfer and approval process, and the processing of any subscription and redemption. We can now contrast this to an investor performing operational due diligence with regard to cash controls on RE Fund 1.

Remember, this is a real estate fund that owns and manages a shopping mall. A shopping mall has tenants. Tenants pay rent. Rent payments need to be collected and processed. This means that in addition to the cash considerations outlined with regards to PE Fund 1, an investor performing operational due diligence on our real estate fund, RE Fund 1, also needs to consider these additional levels of tenants cash flows. The additional areas an investor would likely need to delve into during the operational due diligence process include how rents are actually collected, to which bank accounts rents are deposited, and how interest on any overdue rents is accrued and collected. These are all additional operational risk considerations that would not otherwise be relevant for the investors' operational due diligence review of PE Fund 1, and are therefore specific to real estate funds.

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As this example illustrates, there are a number of additional and unique considerations specific to real estate and private equity. While there are certain similarities among private equity and real estate funds, there are also a number of differences between these two types of funds. Investors cannot simply lump the two groups together into a generic operational due diligence process. A more detailed discussion of operational due diligence approaches and the unique operational risk consideration related to real estate is presented in Chapter 8.

## COUNTRY- AND INDUSTRY-SPECIFIC RISK CONSIDERATIONS

Before proceeding any further, it is perhaps advisable to pause for a moment to discuss country- and industry-specific concerns that arise in the context of an operational due diligence review. While these concerns are applicable to both private equity and real estate funds, in certain cases each type of fund may have their own unique considerations, as well.

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### Country-Specific Considerations

First, we turn to country-specific considerations. Different countries have their own laws, regulatory structures, tax codes, and approaches toward fund establishment and operations. When performing operational due diligence on different funds located in different countries, it is advisable for investors to familiarize themselves with any country-specific matters. Regional considerations often come into play in the context of operational due diligence reviews. These regional considerations may be particularly prevalent in the context of operational reviews of real estate funds when the manager is often located in the region or country around which property holdings of a particular fund may be centered. To illustrate, a U.K.-based fund may be focused on pan-European properties. By contrast, a German-based fund might invest in German properties. Each of these countries may present a regulatory backdrop that can be rife with unique operational challenges.

These types of country-specific items can include unique laws, regulatory requirements, and investor reporting or financial statement preparation formats. Oftentimes, investors performing operational due diligence outside of their nature country may be unfamiliar with the landscape, legal or otherwise, outside their own primary jurisdiction. In these cases, many times an investor runs the risk of relying too heavily on the local (i.e., outside the investor's primary jurisdiction) private equity manager to provide guidance on certain issues. Now of course, any sort of guidance contained in a

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private equity fund manager's documentation will usually be surrounded by so many legal disclaimers that an investor would virtually lack any recourse if they were given bad advice, but nonetheless investors need a starting point by which to familiarize themselves with the lay of the land.

However, an investor should not solely take the private equity manager's word for it. Oftentimes laws and regulations, regardless of which country they were created in, are open to interpretation. After all, arguments in favor or against certain interpretations of laws are what keep lawyers, judges, and politicians employed in the first place. Consequently, an investor may need to seek the advice of local legal counsel, tax advisors, or others to get a sense of not only the local general practice (e.g., in Country X most private equity funds are organized as a limited liability company), but also an investor's options within a particular jurisdiction (e.g., under the rules of Country X the private equity manager could have decided to create a legal structure that minimized taxes, but opted for a different legal structure because it would benefit the firm itself more directly).

Depending on the jurisdiction of the private equity fund structure, as opposed to the respective jurisdiction of any investors, a private equity fund may have a number of advantages regarding tax regimes. Indeed, the selection of a particular jurisdiction for the creation of a fund may be highly influenced by not only legal concerns, but tax considerations as well. In the hedge fund world preferential tax treatments are the primary motivating factors for the growth of fund registrations in offshore jurisdictions throughout the Caribbean and Europe such as the Cayman Islands, Luxembourg, Liechtenstein, the Isle of Man, and the Channel Islands–based Gemini tax treaty twins, Jersey and Guernsey. The same is true in the private equity world, with many traditional hedge fund offshore jurisdictions being utilized for fund structures. Additionally, depending on where the investing activity of the private equity fund is centered, either the private equity firm and/or the manager or investment adviser for the fund may be registered in a location that has beneficial tax status, as compared to the nature of underlying investments.

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This is true even in the situation of a private equity fund-of-funds where the underlying investments are themselves investments in other private equity funds. An example of one such structure would be a private equity fund of funds with a focus on Indian private equity funds. Many such funds, via the previously mentioned affiliations with a parent firm and investment advisers, are legally centered around an unexpected location—Malta.

Malta, one of the world's smallest and most densely populated countries, is separated from India by the Arabian Sea and a distance of approximately 4,000 miles. Yet Malta, like many other small offshore jurisdictions, had the foresight to make enough political changes to effect a favorable tax

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environment and encourage many companies, investors, and asset managers to engage in business relations with a country they would not have otherwise considered. The tiny island country of Malta has over 50 tax treaties in place with countries such as India, Switzerland, France, Germany, Sweden, and the United Kingdom. The United States and Malta have also recently ratified a new income tax treaty that became effective on January 1, 2011.

Through Malta's numerous double taxation tax treaties, foreign (i.e., non-Maltan) investors receive relief in the form of tax credits that significantly lower the tax bill for foreigners who utilize Malta as a registration hub. However, the point of this discussion is not to inform investors about the intricacies of structuring Maltese tax efficient private equity structures. Rather, the point is this: Investors seeking to invest in an India-focused private equity fund of funds may, because of the favorable tax regimes outlined, find themselves forced to at least obtain a basic familiarity with the sometimes technical laws of a completely different country. In order to perform an informed operational due diligence review of a fund, investors need first to understand what they are analyzing.

So if an investor is simply told that a particular fund is based in Malta because of tax treaties, and then has no understanding or experience with common practices in a particular country, they are left with two options. Option number 1 involves effectively taking the private equity manager's word for it. Option number 2 is for an investor to attempt to make an independent assessment of the manager's statements and opinions in this regard. Chapter 2 provides a more detailed analysis of performing operational due diligence on private equity investments, which will necessarily involve investors developing an independent understanding of any information provided by a private equity manager. Suffice it to say that the second option is clearly superior. Indeed, most prudent investors would certainly prefer to put the time and effort into not simply taking a private equity manager's word for it, but independently determining the facts and coming to their own individual assessment of the situation. At a minimum, such a process allows investors to make more informed allocation decisions, which should after all be one of the primary goals of due diligence to begin with.

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### Industry-Specific Considerations

Among the larger subset of private equity funds there are a number of fund-specific factors that can arise during the course of the operational due diligence process. As outlined above, these items can relate either to the unique structuring of the fund, jurisdictional issues, or these operational risks can also be the result of risks inherent in the underlying portfolio companies or assets in which the private equity fund itself invests. For the

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purposes of this text, we will refer to such risks as *industry-specific risks*, in contrast with the previously mentioned country-or regional-specific risks.

It is worth noting that investors should not run the risks of placing these industry- and country-specific risks into independent silos. In much the same way that investment risk and operational risk interact, so too must investors consider in parallel the interactions between country-specific and industry-specific operational risks. But what exactly are these industry-specific risks? After all, from an operational perspective, aren't the nuts and bolts of most private equity and real estate funds the same?

For example, an investor may consider private equity funds that primarily invest in timber or timberland. At first glance, due diligence, apparently falling into the category of investment due diligence, would focus on the benefits of timber investing and any correlation timber may have to other assets. When narrowing down the universe to a specific private equity fund timber fund, investment due diligence may then focus on questions such as:

- What competitive edge does this manager bring to the table?
- Is the methodology utilized for biological tree growth in line with industry standards?
- How does this manager sustain their investment edge?
- What factors are considered in coming to a determination regarding the appropriate timing of tree harvesting?
- What, if any, risk management oversight does the manager have in place for this fund?
- Is this manager making accurate projections about the future market for hardwoods and softwoods?

When the operational due diligence process begins, often in conjunction with the timing of the investment due diligence process, other asset-specific considerations may come to the forefront (some of which may be related to investment due diligence). For example, investing in a timber fund, which is sometimes referred to as a *timber investment management organization* (TIMO) is a unique exercise as compared to other types of private equity investments. Timber investing involves knowledge about a number of distinct fields including forestry, botany, and cutting, milling, and processing trees. The skill sets that are involved in investing in private equity funds that invest in other real assets besides timber are completely different. Other types of real asset funds could include those that make investments, either directly or indirectly, in oil and gas, gold and other precious metals, energy, infrastructure, and agriculture. These funds each have different areas of focus.

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The considerations of investing in agriculture are completely different from those invested in funds whose development of real assets such as oil and gas involves drilling or mining operations. Depending on the type of operation and the source material (e.g., oil, gas, coal, etc.) being sought, drilling and mining operations similarly involve unique skill sets such as knowledge of geology, the storage of waste products from drilling and mining operations, and safety concerns and appropriate insurance amounts required for dangerous activities. Compared to timber, these knowledge bases are completely different. Specifically, when investing in TIMO funds, some areas that should be understood by an investor performing operational due diligence include:

- If new timberland is acquired, does the manager take steps to ensure experienced lumberjacks and foresters continue to work with the same land as it changes hands from owner to owner?
- What systems are in place to model disease rates in the trees produced to grow timber?
- What precautions are taken to ensure disease does not infest trees?
- How does a manager account for increases in land value on which trees are located?

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As potential investors in private equity funds are reading this discussion, they may comment, "Wait a minute. I understand these concerns and the unique considerations of different assets classes even among similar subsets of asset classes such private equity funds that invest in real assets. But I thought that these were more investment-related concerns; why would I need to consider such issues in an operational due diligence process?"

The answers can lie in several areas. Every investment due diligence process is different. Certain investment due diligence processes may pursue a broader scope of review than others. As unfair as it may seem, operational due diligence is sometimes the dumping ground for the leftovers that were not covered, either intentionally or inadvertently, during the investment due diligence process. As suggested, this may not be as the result of any sinister plan or design to punish or overwhelm the operational due diligence process.

On the contrary, due to a number of factors unique to each individual investor or investment organization, considerations, including time and resource constraints, may be in place that influences this decision. For example, an investment organization that allocates to private equity could make a strategic choice to have investment personnel focused on sticking to their knitting and focusing more on the purely traditional investment-related merits in the due diligence process whereas, the operational due diligence

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function could be asked to fill in the holes in these areas. Therefore, the operational due diligence role becomes increasingly expanded in such due diligence frameworks.

Returning to our original investor query, operational due diligence is one of the most important functions of the entire due diligence process. Yet operational risk cannot be viewed in a vacuum. The investment and operational processes can often play off each other in a symbiotic relationship to produce due diligence synergies that yield risk insights greater than the sum of their respective investment and operational parts.

A law student in the United States, and most likely in other countries around the world as well, is taught that a good lawyer is able to defend both sides of an argument. After all, when the student graduates and eventually goes into practice, there is no guarantee, regardless of which area of law they may specialize in, that they will become either solely a plaintiff's or a defendant's lawyer. As such, there is a joke about a lawyer who is engaged by a client to represent him or her in a particular matter. The details of the court appearance are arranged by the client's assistant and the lawyer shows up at the courthouse on the appointed day. Before the hearing begins, the lawyer turns to the other side's legal counsel and asks, "Which side am I representing?" and then begins to argue accordingly. Clearly, no reasonable lawyer would undertake a court appearance without adequate preparation; however, this story is in some cases a bit like operational due diligence in certain organizations, particularly in those with dedicated operational due diligence functions.

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An operational due diligence process typically starts after that of investment due diligence. When the handoff to the operational due diligence department occurs, an investor is typically fairly far along in the process and progressing rapidly toward making an investment decision. Typically, the investment side of the due diligence process has already developed a number of opinions and convictions regarding the strengths and weaknesses of the private equity fund and organization. This process can serve as a guide on which the operational due diligence function can hang its hat, and can utilize to begin to navigate through the operational due diligence process.

These types of risks might not have been the type that the operational due diligence process may have traditionally focused on. Oftentimes, such issues will be driven, or certainly rooted in, investment-related considerations. As such, during the operational due diligence process an investor may likely read the investment related file and have to argue a particular side one way or another with a manager in order to utilize as leverage to either obtain additional information or ultimately negotiate better terms prior to investing. As Chapter 2 discusses in more detail, knowing where to pick your battles in the operational due diligence process can be an important strategic

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skill set that investors must master in order to maximize the benefits of the operational due diligence process.

## INVESTMENT AND OPERATIONAL DUE DILIGENCE: NEXUS OR BLURRED LINES?

The beneficial nexus between investment and operational due diligence processes should not be confused with the establishment of a homogenous due diligence process that perhaps compromises efficiency and shared understanding with a lack of independence and functional due diligence competencies. The entire due diligence equation is displayed as follows:

$$\text{Investment Due Diligence} + \text{Operational Due Diligence} \\ = \text{Total Due Diligence}$$

From this equation we can see that an investor's entire due diligence process consists of a combination of both investment due diligence as well as operational due diligence. With due diligence performed exclusively in one area, such as investment due diligence, the equation is unbalanced and incomplete. Both components of this equation, investment and operational due diligence, should not operate in isolation. This is particularly true of the field of operational due diligence. In order to make a fully informed operational risk assessment of a private equity fund, an investor must be cognizant of several investment-related facts specific to a private equity fund's basic investment strategy and tenants. Such understandings are useful for a number of reasons. Examples of this can be found in such operational risk areas as valuations.

An investor performing operational due diligence cannot determine the effectiveness of valuation policies and procedures if they do not have an understanding what the private equity fund is investing in. Without such discussions, the operational due diligence process runs a risk of being separated from the investment process. Furthermore, such collaborative dialogues between investment due diligence and operational due diligence functions can also yield both sides of the total due diligence equation, developing a deeper understanding of the total risks involved in investing in a particular private equity manager.

If such collaborations between the investment and operational due diligence processes become too involved, then, of course, the lines between such processes may become blurred and investors run the risk of dissolving these two distinct processes into a homogenous process. Such a homogenous process is detrimental to the benefits provided by an investor maintaining an

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independent operational due diligence process. When such independence exists, the ultimate operational determination is much less likely to be tainted by investment considerations. In summary, the benefits of collaboration between the investment and operational due diligence processes must be tempered with the measured concern of the loss of independence of each distinct process.

## DIFFERENCES AND SIMILARITIES WITH HEDGE FUND OPERATIONAL DUE DILIGENCE

### Similarities with Hedge Fund Operational Due Diligence

Due diligence processes across all asset classes, whether within the realm of alternative investments or more traditional investment strategies, share certain characteristics and goals. These similarities certainly apply to both traditional notions of investment and operational due diligence. As outlined earlier, there are a number of differences and similarities even among similar asset class types such as private equity and real estate. Similarly, narrowing our focus to alternative investment operational due diligence, there are both a number of similarities and differences between hedge fund and private equity operational due diligence. The similarities between such funds may have been first driven by the investment side, with activist hedge funds being considered as alternatives to private equity funds.[16]

It should be noted that the previously mentioned similarities are fundamentally found in the core operations of fund management and certain shared commonalities of operational risk. Also contributing to similarities among the operational due diligence processes and actual operations management of hedge funds and private equity is the increasingly shrinking operational divide between traditional notions of both types of funds via a growing wave of hybrid funds. The term *hedge fund* is an umbrella term that encompasses a wide variety of trading strategies. Increasingly, these trading strategies may have an increasing number of private equity-like features. This has resulted in the growth in recent years of so-called hybrid or crossover funds.[17] Further blurring the line between hedge funds and private equity are rumors and concerns of collusion between hedge funds and private equity funds.[18]

In order to highlight some of the similarities between the operational due diligence processes employed for both private equity funds and hedge funds, it is perhaps best to frame this discussion first in the context of the goals of the due diligence process. The shared goals of investors performing

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operational due diligence on both private equity funds and hedge funds include risk diagnosis, mitigation, and monitoring. While the specific ways in which such processes are carried out differs, as discussed in more detail in the "differences" section further on, there are common goals to both approaches. Indeed, these goals may be shared among investors performing operational due diligence not only on hedge funds and private equity funds but on other types of funds as well.

In terms of the actual operational risk factors analyzed during the operational due diligence process, many investors may incorporate the same basic operational risk factors into their own core review process. These factor similarities, as with the other similarities outlined in this section, should not imply that hedge fund operational due diligence and private equity operational due diligence are interchangeable processes, as will be highlighted in the section on differences. Returning to the core factor similarities, these sometimes overlapping operational risk factors are not necessarily exact copies of each other in every respect.

On the contrary, the similarities are more likely to be among generic umbrella operational risk categories. Differences are often apparent as investors begin to dig into the meat of these categories. This should make sense, as certain core operational processes of hedge funds and private equity funds are similar in basic function; however, such similarities only extend up to a certain point. In pure private equity and hedge fund plays, each of these different asset classes involves a fund possessing markedly different portfolio of assets. These differences are of course blurred by the previously mentioned evolution in recent years of private equity and hedge fund hybrids that may hold increasingly similar asset types, particularly in terms of an illiquid asset profile. That being said, despite any asset type differences, similarities in large umbrella core operational risk factor categories still exist.

Another way we can view the similarities in the investor operational due diligence reviews between hedge funds and private equity is to evaluate the due diligence exercises in terms of the actual due diligence processes employed. On a high level from a process perspective, the basic waypoints along the operational due diligence process for hedge funds and private equity funds have many similarities. Such a process is outlined in Exhibit 1.14.

Chapter 3 outlines the intricacies of each of the different steps regarding this process in more detail. However, for the purposes of our current discussion, a number of similarities exist in terms of the core steps necessary to perform operational due diligence reviews of both hedge funds and private equity funds.

With the previously mentioned similarities in the high-level operational due diligence processes related to hedge funds and private equity, it is also

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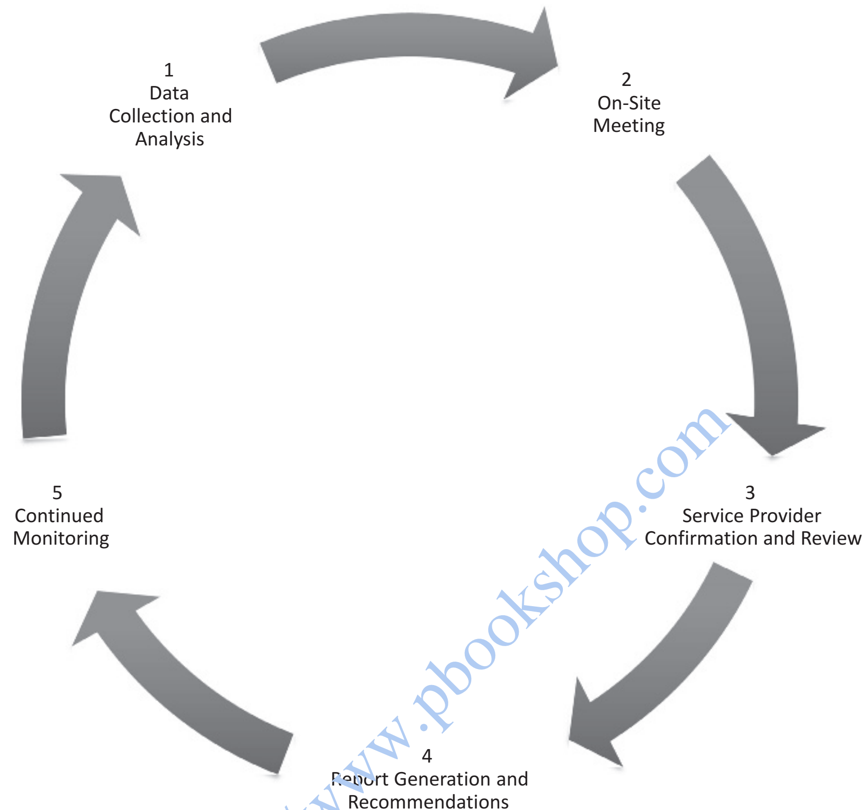


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**EXHIBIT 1.14** General Operational Due Diligence Process for Private Equity and Hedge Fund Operational Due Diligence

worth considering the similarities between the operators of the processes. In certain cases, this will be a single investor performing both investment and operational due diligence on their own behalf. In other cases, an investor may represent an institutional entity such as an endowment, foundation or corporate pension or a professional larger investment allocator such as a fund of funds.

Regardless of the organizational affiliation of a particular investor, the role of an investor may fall into a number of different roles depending on a number of factors including the size of their particular organizations as well as their organization's approach toward operational due diligence. That is to say, an investor may be solely dedicated toward investment due diligence related matters, or solely dedicated toward operational due diligence, or, as

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is more likely the case in the current state of the private equity community, dedicated to a blended due diligence analysis consisting of a combination of investment and operational rules. In the latter case, these blended roles typically slant more heavily toward the investment due diligence side as opposed to the operational side. However, a growing number of investment organizations are allocating dedicated resources toward monitoring operational risk in private equity investments.

Regardless of the specific designated role of the individual, there are certain skill sets that are recommended to perform operational due diligence. On a core level, many hedge fund and private equity operational due diligence reviews will have some degree of overlap among operational risk factors covered on a high level. Logically, it then follows that there will be other similarities in the skills and basic competencies required to perform these reviews. But exactly what skills are required to perform operational due diligence in this regard?

While other texts provide a more complete overview in this regard, for the purposes of our discussion, we can begin developing our understanding in this regard by first acknowledging that operational due diligence is a multidisciplinary subject.[19] Due to the multifaceted nature of this subject, an individual performing operational due diligence will at a minimum need to have some degree of experience with many different disciplines. Some of the common requisite basic skills can include knowledge of accounting, back-office operations, information technology, the law, compliance, and vendor evaluation. Many times a single individual will not, even on a generic level, possess a sufficient degree of familiarity with all of these different areas to be an effective operational due diligence analyst. In these situations, often an investor may work in a team environment consisting of operational due diligence analysts from different backgrounds that as a group possess such requisite skills.

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Alternatively, an investor may opt for the sometimes more efficient solution of engaging the services of a third-party operational due diligence consultant who specializes in this field. For reference, a more detailed description of operational due diligence consulting arrangements is offered in Chapter 3. For now, the point of this discussion is to highlight that, due to some degree of shared similarities in the underlying core operational risk factors typically analyzed by investors during the operational due diligence process on both hedge funds and private equity funds, similarities also exist in the skills sets required to properly execute operational due diligence on these funds. Similarities between Private Equity Fund of Funds and Hedge Fund of Funds

It should also be noted that many of the similarities outlined above are also applicable to funds that invest in private equity funds and hedge

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funds. When investors are seeking to invest in fund of private equity funds and fund of hedge funds, it is advisable that they perform operational due diligence on these types of investment vehicles as well. While performing operational due diligence on such funds is a bit of a different exercise than performing operational due diligence on a direct private equity fund or hedge fund, there are a number of similarities between such vehicles (e.g., fund of private equity funds and fund of hedge funds) that are comparable to goal and process similarities of direct funds outlined above.

### Differences with Hedge Fund Operational Due Diligence

Based in part upon the different traditional investment approaches and operational infrastructures supporting these approaches of both hedge funds and private equity funds a number of differences are apparent with regards to operational due diligence on both hedge funds and private equity funds.

**Less Trading Frequency** One notable difference between private equity and hedge funds relates to the analysis of a factor that is generally a shared factor in the umbrella core operational risk category discussed in the similarities section. As suggested above, cracks begin to emerge once investors start the process of digging into the details of the different umbrella categories between private equity and hedge funds. One of the most obvious factors in this regard is trade life cycle analysis and posttrade operations. Hedge funds as a whole tend to engage in much more frequent trading activity as compared to private equity funds.

Such generalizations are of course contingent upon the investment strategy around which a particular hedge fund or private equity firm is based. However, to utilize an extreme example, let us consider a venture capital fund as representative of our private equity fund and a high-frequency *commodity trading advisory* (CTA) to be representative of our hedge-fund strategy. CTA hedge funds may execute tens of thousands of trades, or more, on a daily basis. A venture capital fund, putting aside any consideration of trading around positions or currency hedging, may execute a trade once a month if it is lucky. These are two very different operational animals. As such, an investor performing operational due diligence on these types of funds will still inquire into the subject of trade operations, but this is effectively where the similarities end.

A high-frequency trading operation must have the ability to execute trades in real time. On a postexecution basis the staff, systems, policies, and procedures must be in place to confirm, allocate, and settle large volumes of trades in an efficient, if not automated, manner. With such high-frequency

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trading operations, even with direct-exchange *Financial Information Exchange* (FIX) connectivity, trade breaks between the hedge fund and the trading counterparties can occur. In such cases, the posttrade operations team's middle and back offices must be capable of investigating and resolving any such breaks in an effective manner. Without such operational systems and knowledgeable staff, the hedge fund will, at best, not be able to function efficiently, and at worst just grind to halt.

Contrast this with a venture capital firm. When the decision is made to allocate new or additional capital to a particular portfolio company after a capital call, this is generally a fairly straightforward repeatable process that occurs infrequently and with a generally low trade volume (certainly low, compared to most CTA funds). However, because such trading activities are chunkier and less frequent in nature does not mean that there are not just as many operational risks that could result in significant losses as there are in a high-frequency trading operation. On the contrary, the deadly magnitude of such risks may be even greater in a private equity fund precisely because of the chunky nature of these trades, which are often at much larger individual amounts, compared to thousands of very small high-frequency trades. The operational risks are still there, they just may be in different places.

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**More Concentrated Portfolios** Similar to the notions of different trading frequencies outlined previously, private equity funds, as compared to hedge funds, often have more concentrated portfolios consisting of fewer total aggregate positions. Such general trends can have ramifications across a number of different operational risk areas, as analyzed during the operational due diligence process for both hedge funds and private equity. An example of such an area is valuation. To explain this in more detail, it is worth introducing the context in which valuations are commonly evaluated in the scope of an operational due diligence review. While Chapter 5 offers a more detailed discussion of valuation, we can begin here with an introduction to valuation.

Before discussing valuation, we must consider a few points regarding the operational due diligence process itself. An operational due diligence review is not the same as a traditional audit. First, an auditor is typically engaged by an investment vehicle (e.g., a hedge fund or private equity fund) to perform an audit. In this case, an investor is typically performing operational due diligence on their own behalf and not at the behest of another individual. Second, an operational due diligence analyst will most likely not have the level of transparency that an auditor will have.

This is likely due in part to the point mentioned earlier. Many hedge funds and private equity funds may approach the entire due diligence process in general, beyond the pleasantries of the initial marketing efforts, as an

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exercise in information control. Furthermore, a skilled hedge fund or private equity firm can often conduct a sleight-of-hand, employing the age-old magician's aid of distraction, regarding the levels of transparency and types of information they provide to certain investors. Furthermore, based on their already prepared materials, such as a stock off-the-shelf due diligence questionnaire or marketing presentation, they may be able to lead an investor down a primrose path of operational distractions, which can cause an investor to focus their operational due diligence efforts on certain risk areas, while certain operational weaknesses are shielded from inquiry. Despite the cat-and-mouse elements of these processes, a skilled operational due diligence analyst can navigate this process effectively and can generally collect all the necessary information to perform a detailed operational assessment of a fund.

With these points in mind we can now return to the subject of valuation. An operational due diligence analyst will likely never have sufficient information to conduct an independent valuation of an asset held in a portfolio of a private equity fund. Furthermore, for a newly forming private equity fund, when operational due diligence is typically performed there is no fund yet likely in existence, or if it has been formed it is likely just a legal shell with no capital funding as yet, and, therefore, there is nothing in the portfolio to value.

Rather an investor performing operational due diligence at this stage must evaluate what is available to them. That is the policies and procedures regarding the valuation process. It is from these pieces of operational information that a due diligence analyst can make a determination as to how conservative and consistent a fund will be with their valuation process. Examples of the areas an investor can look at include the frequency at which such valuations will occur; the processes, methodologies, and valuation inputs that are utilized; and whether any independent parties such as third-party valuation consultants, will be utilized in determining valuation. Valuations are typically a paramount concern among many investors performing operational due diligence on private equity funds because of the highly concentrated nature of private equity portfolios.

This can be contrasted with the issue of valuation in the hedge funds. Depending of course on the hedge fund strategy, the number of positions in a hedge fund, as compared to a private equity fund, is likely to be much more diversified and less concentrated. In more liquid hedge-fund strategies, such as equity long-short, the bulk of the portfolio is publicly listed, highly liquid, and can be priced virtually in real time from a variety of third-party independent pricing sources such as Bloomberg and Reuters. Such positions from a valuation perspective are the complete antithesis of concentrated, illiquid private equity fund holdings. Consequently, an investor approaching the

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issue of valuation during the course of an operational due diligence review of a hedge fund must take a different approach to understanding valuation. Yes, there are similarities with regard to the evaluation of valuation policies and procedures, as there was when an operational due diligence review of private equity was performed. However, different considerations that were absent in a private equity context, such as which valuation sources are utilized by the manager and the way in which a larger number of valuation inputs are accounted for, must also be considered.

**No Actively Traded Portfolio for New Funds** Another key difference between the operational due diligence processes for hedge funds and private equity relates to the nature of new private equity vehicles that are undergoing initial capital raises. Many investors seeking to invest in a private equity fund may do so during the initial capital raising period of a private equity fund. It is at this stage of the funding process, depending on the structure of the fund, that investors may be asked to put up a certain amount of capital to get the ball rolling. Beyond this initial investment, investors are also expected to make capital commitments, which are called upon by the private equity fund. When the call comes, investors commit their funds, subject to their previous agreements.

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This is to be contrasted with most hedge fund strategies. Oftentimes, even for a newly formed hedge fund, the fund is actively trading in some form. This trading could be with the hedge fund principle's own proprietary capital, sometimes referred to simply as prop capital, or via a combination of prop capital and external funds. Additionally, due to the ongoing rolling nature of hedge fund subscriptions and redemptions, putting any considerations of lockup periods and gates aside, money is actively flowing into and sometimes out of the fund, on an ongoing basis. The point is that an investor approaching a fund is trading and therefore, has to be able to handle the related pretrade and posttrade operational processes. Therefore, when an investor is performing operational due diligence, they then have an opportunity to analyze an active functioning organization that is likely operating, at least from an operational perspective, in much the same way it will be after an investor allocates capital. This results in an investor being likely to have a much better opportunity for operational data collection and analysis in a hedge fund, as compared to a private equity fund.

**Document Collection Differences** Due to the fact that a newly formed private equity fund has not yet been in operation for a substantial period of time, a number of differences can be seen in the operational due diligence document collection process, as compared to hedge funds. A hedge fund that has been in operation for a period of one year has likely produced audited

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financial statements. An investor can then collect and review such statements during the operational due diligence process. A newly formed private equity fund does not have such documentation available. Investors can utilize a number of techniques to broach this issue, including examining statements of any previous vintage funds managed by the private equity firm. Despite such techniques, an investor familiar with performing operational due diligence on hedge funds who is now performing operational due diligence on private equity funds should approach the document collection process with these differences in mind.

**More Asset-Specific Knowledge Required** Another difference between private equity fund and hedge funds from an operational perspective is related to the more concentrated nature of private equity portfolios. Hedge funds, depending on the strategy, may generally trade in instruments and securities for which exchanges or markets may exist. These markets may not necessarily the highly liquid markets that are present from equities but in general there is some sort of exchange by which assets may be traded, however thinly. This is not to imply that hedge funds solely hold liquid positions. In particular, since 2008 many hedge funds realized that positions that they believed to be quite liquid were in fact not, and many such positions were placed and still remain in side-pockets. As we move along the spectrum of liquidity from highly liquid to less liquid we tend to be more in the arena of private equity. With this drought of liquidity comes a number of both asset type and individual asset-specific concerns that investors must consider during the operational due diligence process.

In a general sense, asset-type concerns for private equity funds can include items such as the general category of investments made into underlying portfolio companies. Certainly additional granularity can be added by inquiring into what a particular private equity fund may be exchanging capital for. Is a fund receiving direct equity in an underlying portfolio company, a combination of equity and stock options, or perhaps equity in a particular deal alone? Regardless of the type of security held, there is likely less of a secondary market for such assets as opposed to more highly liquid positions, which are commonly held to some degree by hedge funds.

Asset-type concerns can be further contrasted with individual asset-specific concerns. Typically such concerns arise in relation to one-off unique assets commonly seen in real estate. While it is true that certain similarities do exist among certain property types (i.e., there are common characteristics that are applicable among two different shopping mall properties), each property also has unique considerations. Oftentimes during the operational due diligence process for such funds, an investor will need to gain an understanding of these asset-specific considerations such that they can

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effectively analyze operational risk areas including valuation, as referenced previously. Such asset-type and individual-asset specific concerns are often not as prevalent in hedge fund operational due review processes.

## NOTES

1. FAA System Safety Handbook, Chapter 15: "Operational Risk Management," December 30, 2000.
2. See Dennis I. Dickstein and Robert H. Flast, *No Excuses: A Business Approach to Managing Operational Risk* (Hoboken, NJ: John Wiley & Sons, 2009).
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4. See Christine Buckley, "TUC Calls for Action on 'Casino Capitalists,"' *The Times*, February 21, 2007 (summarizing the comments of Brendan Barber from the United Kingdom's Trades Union Congress).
5. See Ralph Atkins and Patrick Jenkins, "German Business Welcomes the Private Equity 'Locusts'," *Financial Times*, May 5, 2005.
6. See Richard A. Booth, "The Buzzard Was Their Friend—Hedge Funds and the Problem of Overvalued Equity," *U. Pa. Journal of Business and Employment Law* 10:3, Summer 2008.
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10. See M. John Lubetkin, *Jay Cooke's Gamble: The Northern Pacific Railroad, the Sioux and the Panic of 1873* (University of Oklahoma Press, 2006).
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13. See William H. Draper III, *The Startup Game* (Palgrave MacMillion—a division of St. Martin's Press LLC, 2011).
14. See Bryan Burrough and John Helyar, *Barbarians at the Gate: The Fall of RJR Nabisco* (HarperCollins, 2009).
15. See Jason Scharfman, *Hedge Fund Operational Due Diligence: Understanding the Risks* (Hoboken, NJ: John Wiley & Sons, 2008), Chapter 1.
16. See Douglas Cumming, *Private Equity: Fund Types, Risks and Returns and Regulation* (Hoboken, NJ: John Wiley & Sons, 2010), 159.
17. See Pierre-Yves Mathonet and Thomas Meyer, *J-Curve Exposure: Managing a Portfolio of Venture Capital and Private Equity* (West Sussex, England: John Wiley & Sons, 2007), 34 (discussing the convergence of private equity and hedge funds).

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18. See James Mackintosh and Martin Arnold, "French Probe Buyout 'Collusion,"' *Financial Times*, June 6, 2007 (outlining the inquiry by the French financial regulatory authority, Autorité des Marchés Financiers, into allegations that activist hedge funds may have pressured a company's management to put companies up for sale without disclosing agreements in place to sell the hedge fund's stakes in those companies to private equity firms).
19. See Jason Scharfman, *Hedge Fund Operational Due Diligence: Understanding the Risks* (Hoboken, NJ: John Wiley & Sons, 2008), 69.

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