Private Equity Market Landscape

The growing interest in private equity (PE) investing has arisen in part as a result of its potential to earn superior long-term returns when compared to those of public equities and in part due to the diversification benefits it provides. Investments in PE funds offer access to privately held companies not available in the traditional investor landscape and to the expertise of intermediaries (the PE managers) in creating value by proactively influencing the management and operations of these companies.

Institutional investors typically focus on the organized PE market, where professional management is provided by intermediaries. There is also an informal PE market, which is composed of angel capital and is, not without justification, often referred to as family, friends, and fools. Companies can also receive funding from the founder's savings and efforts, commonly known as blood or sweat equity. The number of investments made in the informal PE market is probably several times larger than the number in the organized PE market; however, it is difficult for institutional investors to gain the information and access necessary to invest in this informal market effectively.

5.1 MAIN STRATEGIES

Private equity funds refer to a multitude of investment strategies with varying risk-return profiles (see Chapter 10) and liquidity profiles (see Chapter 14). The three primary, and most important, types of strategies are venture capital, buyout, and mezzanine. These strategies form the bulk of a typical institutional investor's private equity portfolio.

Venture capital (VC) relates to equity co-invested with entrepreneurs to fund their young and potentially fast-growing companies and is often active in technology sectors such as telecommunications, life sciences, and clean technology. Venture capital has two subcategories, depending on the stage of development of the funded company:

1. **Early stage.**[1] This stage is split into seed and start-up stages. The seed stage takes place before a company is set up and any new product is sold. The financing provided is used to fund research, to assess an initial concept, and to develop a new product. Once successful, further financing is provided during the start-up stage to establish the company and begin to market its new product.

[1] The term *later stage* refers to expansion, replacement, and buyout stages of investment.

2. **Expansion stage.** A company in this stage (also called development capital stage), which may or may not have reached profitability, has already established the technology and market for its new product. The financing provided is used to allow greater or more rapid growth by increasing production capacity, developing markets or products, or providing additional working capital.

VC investments are not comparable with traditional financial assets, such as public equity or bonds, and have characteristics that make it difficult to apply traditional portfolio management techniques. These investments are still generally in the cash-burning stage and may be several years away from profitability.

Buyout[2] relates to capital provided as a mix of debt and equity to acquire from current shareholders an established business, business unit, or company (generally privately held or a spin-off from a large private or public company). *Buyout* is a generic term that comprises a change of ownership with the support of private equity investors. A management buyout (MBO) occurs when the current management acquires the company, whereas a management buy-in (MBI) takes place when new managers come from outside the company. When a public company is bought entirely and delisted from the stock exchange, the transaction is referred to as public-to-private (P2P). In buyout funds, portfolio companies are established, have tangible assets, and are normally beyond the cash-burning stage, which allows the use of debt to finance part of the transaction. In these cases, buyouts are referred to as leveraged buyouts (LBOs).

Mezzanine relates to capital provided through the issuance of subordinated debt, with warrants or conversion rights to finance the expansion or transition capital for established companies (usually privately held, below investment grade, or both). Mezzanine financing is halfway between equity and secured debt. While mezzanine financing gives a more predictable cash flow profile, it is unlikely to provide capital returns comparable to other private equity financing forms.

Beyond these three strategies, other specific strategies exist:

- **Rescue (or turnaround).** Under this strategy, capital is provided to help established companies recover profitability after experiencing trading, financial, operational, or other difficulties.
- **Replacement capital (also called secondary purchase).** This strategy relates to capital provided to acquire existing shares in a company from another PE investment organization.

5.2 MAIN DIFFERENCES BETWEEN VENTURE CAPITAL AND BUYOUT

VC and buyout transactions differ in several significant aspects, notably their business model, their deal structuring, the role of the PE manager, and valuation. These and other differences are summarized in Exhibit 5.1 and discussed in the following sections.

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[2] Some in the investment industry use the term *private equity* to refer only to buyout investing, while others, as is done in this book, refer to both venture capital and buyout investing as private equity.

EXHIBIT 5.1 Buyout–Venture Capital Comparison

	Buyout	Venture Capital
Sector	Established industry sectors	Focus on cutting-edge technology or rapidly growing sectors
Stage	Stable growth and mature stages	Seed, start-up, and expansion stages
Approach	Financial engineering, corporate restructuring	Industry know-how, product development and commercialization
Uncertainties	Risk is measurable	Risk is difficult to measure (uncertainty)
Source of returns	Leverage, company building, multiple arbitrage	Company (and market) building, finding follow-on investors
Selection	Intensive financial due diligence	Limited financial due diligence but extensive sector/product due diligence
Valuation constraints	Cash flow projections overlooked by credit lenders	None; often no non-VC third party oversight
Business model	High percentage of success with limited number of write-offs	A few winners with many write-offs
Financing	Club deals and large investment	Limited syndication; several investment rounds
Monitoring	Cash flow management	Growth management
Success factor	Backing experienced managers	Backing entrepreneurs

The classic argument presented for diversifying among private equity classes, and especially between buyout and VC strategies, is that they often exhibit negative correlations and differ in terms of growth and value investing. To begin with, buyout transactions are largely debt-financed and tend to perform well during depressed public equity market periods, when debt is cheap. However, if depressed equity prices are accompanied by a widening of credit spreads (e.g., during the financial crisis of 2008–2009), then leveraged buyout transactions may not be feasible. Second, VC relies on the stock market as the most profitable exit route, and therefore, when close to exit, often shows strong correlation with small-cap indices. Consequently, VC would be expected to do better during equity bull markets when initial public offering (IPO) activity is more robust. Historically, buyouts have provided more stable returns with an orientation toward minimizing risk, whereas VC has occasionally produced higher rates of return in certain markets but brings the possibility of higher losses. Thus, investors seeking long-term stable returns would be inclined to overweight buyout, while those seeking higher returns would do so through increased exposure to VC.

5.2.1 Business Model

Attractive VC investment opportunities can be difficult to assess and are usually concentrated in a few high-technology sectors, which often results in a relatively high number of small investments. Returns stem from taking large risks to develop new businesses, and concentrating efforts and capital through several incremental funding rounds. The goal is to build companies that can be sold or taken public with a high multiple of invested capital. These few big wins need to compensate for many failures. VC-funded companies can be seen as works in progress, with intermediate stages of completion. These stages of completion are often distinguished by milestones, such as rounds of financing (rounds A, B, C.) or, in the case of biotech companies, perhaps phases of clinical trials (phases I, II, III). In this respect, they are development projects that cannot be prematurely exited without risking the loss of most, if not all, of one's invested capital. Thus, VC transactions should be viewed as long-term investments.

Large capital requirements and lower risk levels result in most buyout managers making a smaller number of investments compared to venture capitalists. A multitude of approaches can be combined in a transaction, such as divestment of unrelated businesses, vertical or horizontal integration through acquisition, financial engineering, and company turnaround. Buyout managers need to give extensive strategic- and business-planning advice, and they tend to focus on consistent rather than outsized returns. Because they target established enterprises, buyout firms experience fewer outright failures but have more limited upside potential.

5.2.2 Deal Structuring

VC transactions do not typically involve debt, but venture capitalists gain control of a company over time through a series of equity investments. Returns stem from building companies and from managing growth. Valuation is complicated by the lack of appropriate comparisons, which explains why venture capitalists carry out more extensive sector/product due diligence and more limited financial due diligence compared to buyout managers. They typically provide not only financing for building businesses but also industry know-how, relevant contacts, and management expertise. The investments can be relatively small and are overwhelmingly equity or quasi-equity financed, with little or no leverage.[3] Successful exit strategies require VC managers to secure follow-on financing.

Buyout transactions, on the other hand, typically use both equity and debt financing to acquire companies. Assets of the acquired company are used as collateral for the debt, and the cash flow of the company is used to pay off the debt. Buyout managers conduct intensive financial due diligence and occasionally rely on sophisticated financial engineering. **Financial engineering** refers to the process of creating an optimal capital structure for a company. In private equity, the capital structure is often made up of different types of financial instruments, such as multiple layers of debt, mezzanine, and equity, each carrying a different risk-reward profile. The ability to analyze a company's balance sheet and extract operational efficiencies, as opposed to the implementation of financial legerdemain, is the primary driver of a successful transaction. Generally, there are few limitations to investment size, given

[3] One could argue that there is implicit leverage through the intensive use of optionlike mechanisms and due to the fact that there is constrained financing: Start-ups are never fully financed, and seldom do funds have the financial resources to fund all their investments.

the high number of both privately held and publicly traded stable-growth and mature companies that can be targeted.

5.2.3 Role of the PE Manager

Depending on the strategy, the role of the PE manager can differ dramatically. Venture capitalists look to launch new or emerging companies, whereas buyout managers focus on leveraging an established company's assets. Venture capitalists back entrepreneurs, whereas buyout managers deal with experienced managers. Venture capitalists often play an active role in the companies in which they invest, by either sitting on the board of directors or becoming involved in the day-to-day management of the company.

In buyout transactions, a greater proportion of time and manpower is spent analyzing specific investments and adjusting the business model. Buyout managers look to leverage their expertise to turn around underperforming businesses, to improve profitable businesses, or to optimize the companies' balance sheet and the financing. They typically engage in hiring new management teams or retooling strategies. In an operating company, it is easier to give guidance to a seasoned management team, whereas in early-stage investments, one often needs to build and coach the management team from the ground up.

5.2.4 Valuation

The valuation of a VC investment can pose significant problems, given the often limited operating history of the investment, and is compounded in cases in which the company has yet to generate a profit. Traditional valuation methods, such as discounted cash flow methodologies, can be applied to VC investments only by making numerous assumptions, often using unreliable information. The valuation of a VC investment is mainly based on the analysis of intangibles, such as patents or the founder's entrepreneurial skills, competence, and experience, as well as on the assessment of the expected market size for the portfolio company's products or the presumed exit value relative to existing comparable public companies. Thus, VC valuation is usually based not on cash flow or earnings but on multiples where comparable companies exist; where they do not, valuation becomes even more difficult to quantify.

There are relatively few investors and little or no consensus on valuation. A lack of third-party oversight, such as by debt providers, can make venture capital prone to losses from overvaluation. In addition, because the value placed on a young company cannot be verified except through future rounds of investment, it may take years to uncover overinflated and unsustainable valuations.

In buyout investments, valuation risk is more limited. To begin with, the valuation of portfolio companies is more straightforward, enabling one to choose from a rich toolbox of accepted instruments for quantitative analysis, such as discounted cash flows or multiples. The leverage required for transactions leads to scrutiny from a syndicate of commercial lenders and often due diligence by underwriters of a high-yield bond offering. The influence of these credit providers eliminates some of the potential risks inherent in the leverage. There will be restrictions on the amount of leverage they provide, which implicitly sets an upper boundary on the total valuation for the targeted business.

5.3 PRIVATE EQUITY FUNDS AS INTERMEDIARIES

There are different routes for investing in private equity (see Exhibit 5.2). Few institutions have the experience, the incentive structures, and the access that would allow them to invest directly in nonpublic companies, so most investors seek intermediation through the **limited partnership structure**. For institutions, the most relevant approaches to investing in private equity are through fund-of-funds specialists as intermediaries or through similarly structured, dedicated in-house private equity investment programs that invest directly in funds. Other routes are via publicly quoted private equity vehicles or through a dedicated account managed by a private equity specialist.

Reading Exhibit 5.2 from left to right, the various programs are defined as follows:

- In a fund-of-funds structure, the PE fund investment program buys units of a PE fund general partner, which in turn purchases units of a PE fund, which further invests in a portfolio company.
- A PE fund is more direct in that the investment is into a PE fund and then into a portfolio company.
- A PE fund with **co-investment** adds a co-investment leg wherein the PE fund investment program has an additional investment in a certain portfolio company, typically at preferential management and performance fee terms.
- **Going direct** eschews PE funds altogether, as the PE fund investment program makes direct investments into a portfolio company, similar to a co-investment but without the input of a PE fund manager.

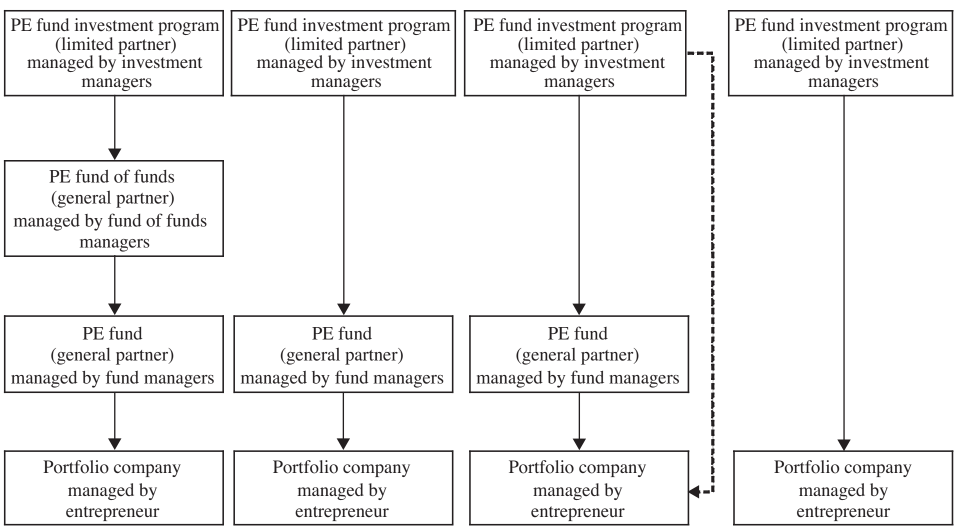

EXHIBIT 5.2 Private Equity Funds Investment Program

The organized private equity market is dominated by funds, generally structured as limited partnerships, which serve as principal financial intermediaries. Fund management companies, also referred to as private equity firms, set up these funds. Private equity funds are unregistered investment vehicles in which investors, or **limited partners (LPs)**, pool money to invest in privately held companies. Investment professionals, such as venture capitalists or buyout managers, known as **general partners (GPs)** or fund managers, manage these funds. Tax, legal, and regulatory requirements drive the structuring of these investment vehicles with the goal of increasing transparency (investors are treated as investing directly in the underlying portfolio companies), reducing taxation, and **limiting liability** (investors' liabilities are limited to the capital committed to the fund). From a strictly legal standpoint, limited partnership shares are illiquid; in practice, however, **secondary transactions** occasionally take place, in which investors sell their shares before the termination of the fund. Private equity funds principally serve the following functions:

- Pooling of investors' capital for investing in private companies
- Screening, evaluating, and selecting potential companies with expected high-return opportunities
- Financing companies to develop new products and technologies, to foster their growth and development, to make acquisitions, or to allow for a buyout or a buy-in by experienced managers
- Controlling, coaching, and monitoring portfolio companies
- Sourcing exit opportunities for portfolio companies

This is a classic principal-agent (LP-GP) relationship, which, because information in PE markets is incomplete and highly asymmetric, requires some specific agreements to cover the resulting problems of moral hazard and conflict of interest. While the specific terms and conditions plus investor rights and obligations are defined in nonstandard partnership agreements, the limited partnership structure—or comparable structures used in the various jurisdictions—has evolved over the last decades to include the following standards (see Chapter 6 for more details on fund structures):

- The fund usually has a **contractually limited life** of seven to 10 years, often with a provision for an extension of two to three years. The fund manager's objective is to realize, or exit, all investments before or at the liquidation of the fund.
- As with wine, the fund will have a **vintage year**, that is, the year in which the first capital is drawn down from investors to be invested in a company.
- Investors, mainly pension funds, endowments, private equity funds of funds, public institutions, banks, insurance companies, or high-net-worth individuals or family offices, are the limited partners and commit a certain amount of money to the fund.
- **Commitments** (capital pledges by investors in private equity funds) are drawn down as needed, or just in time, to make investments or to pay costs, expenses, or management fees. Because private equity funds do not typically retain large pools of uninvested capital, their general partners make **capital calls** (or **drawdowns**) once they have identified a company in which to invest. Therefore, the main part of the drawdown gets invested immediately.

- A significant portion, though not typically all, of the committed capital is drawn down during the **investment period**, typically the first three to five years, during which new opportunities are identified. After that, during the divestment period, only the existing portfolio companies with the highest potential are further supported, with some follow-on funding provided to extract the maximum value through exits. The manager's efforts during this time are concentrated on realizing or selling the investments.
- When **realizations** (sales of portfolio companies) are made, or when interest payments, dividends, or recapitalizations are received, they are distributed to investors as soon as feasible. Funds may have a reinvestment provision, wherein the proceeds of realizations within the investment period or a similar time frame may be reinvested in new opportunities and not distributed to investors. Under this scenario, the fund is self-liquidating as the underlying investments are realized. However, these returns will come mostly in the second half of the fund's lifetime. **Distributions** to investors can also take the form of securities of a portfolio company, known as in-kind distributions, provided that these securities are publicly tradable or distributed when the fund gets liquidated. Legal documentation may also allow for some reinvestment of realizations, normally subject to a cap amount.
- **Management fees** depend on the size of the fund, generally ranging from 2.5% of committed capital for small funds to 1.5% for larger funds. The fees are often based on the amount of committed capital during the investment period and on the value of the portfolio thereafter. There are considerable differences from one fund to the next regarding directorship fees or transaction costs. These can have an impact on the returns and often account for material differences between gross and net returns.

  The main upside incentive for general partners comes in the form of **carried interest**, typically 20% of the profits realized by the fund. Carried interest is usually subject to a **hurdle rate**, or **preferred return**, so that it begins to accrue only once investors have received their capital back and a minimum pre-agreed-on rate of return. Once the preferred return has been attained, GPs typically receive 100% of returns to a point at which they would have received the carried interest on the entire amount. This is called a catch-up and is synonymous with the soft hurdle concept used by hedge funds.
- There is a private equity **fund-raising cycle** that begins anew each time the general partners need to raise capital for another fund. Typically, limited partnership agreements do not allow follow-on funds by the same manager before the end of the initial fund's investment period or until a large part of the initial fund has been invested.

5.4 PRIVATE EQUITY FUNDS OF FUNDS AS INTERMEDIARIES

Many institutions outsource their private equity fund investment program either through a dedicated account or by pooling assets with other investors. Private equity funds of funds are probably the most common type of institutional investment program. The authorizing entity for a private equity fund investment program is the principal who provides the resources, while the manager of the program is the principal's agent and conducts the investments in private equity funds as a limited partner.

Funds of funds, which are generally organized by specialist asset managers, banks, or insurance groups, are vehicles that pool capital from a group of investors to invest in a diversified portfolio of funds. Some funds of funds specialize in certain private equity sectors or geographies, while others follow a more generalist approach. Funds of funds manage the following, often complementary, activities:

- Primary investments in newly formed limited partnerships. Because of the blind-pool nature of such investments, the assessment of the fund management team's skills is key (see Chapter 9).
- Selective, direct co-investments alongside the primary investments. This activity requires direct investment experience and skills.
- Secondary investments in existing funds or portfolios of direct investments. This is generally a niche activity for most funds of funds; however, in recent years, secondary specialists have emerged, such as Coller Capital, Greenpark Capital, and Lexington Partners. This activity requires both co-investment skills for the assessment of the companies already in the portfolio and primary investment skills for the blind-pool part of the transaction.

While investment in a particular private equity fund can have a blind-pool nature, a fund of funds can have established relationships with fund managers via existing investments. Therefore, its future portfolio is somewhat predictable and is not necessarily a **blind-pool investment**. A newly created portfolio is likely to be largely composed of follow-on funds raised by these known managers. In fact, funds of funds are marketed on either a partially blind or a fully informed basis. For a partially blind pool, some of the intended partnership groups are identified, while for a fully informed pool, virtually all of the intended partnerships have been identified.

5.4.1 Private Equity Funds-of-Funds Costs

Funds of funds are often seen as less efficient because of the additional layer of management fees. This double layer of fees is perceived to be one of the main disadvantages of this structure. Funds of funds would have to outperform direct fund investment to compensate for this additional layer of fees.[4] However, given the resources required to manage a portfolio of private equity funds internally, investing through a fund-of-funds structure might well prove more cost-efficient in the end.

An additional cost of outsourcing to a fund of funds is the carried interest. Whether an in-house program can work without investment performance–related

[4] Jo (2002) analyzed 48 U.S.-based funds of funds launched between 1992 and 1999 (13 asset managers, 15 banks, and 20 independent funds). For asset managers, there was an average management fee of 0.85% and an average carried interest of 3.8% (only 5 of the 13 asset managers charged a carried interest). For investment and commercial banks, management fees were in the range 0.88% to 1.25%; 12 of the 15 banks charged a carried interest, with the average being 6.6% and the typical carried interest being just 5%. At the end of the 1990s, annual management fees were in the region of 0.8% and carried interest was at 10%; five years later, the difficult market environment brought those down to 0.7% and 5%, respectively.

incentives is debatable. According to Otterlei and Barrington (2003), the annual costs of an in-house team can be significant compared to that of a typical fund of funds. Even with a 5% carried interest charged by the fund-of-funds manager, these authors find that the fees have an insignificant impact on the net returns of the investor. However, information is an asset in the often opaque environment of private equity. Taking the fund-of-funds route versus that of direct investor can lead to a loss of information and control, essentially a cost in itself.

Because private equity programs follow a learning curve, inexperienced institutions may initially have little option other than to go through a fund-of-funds vehicle. Ultimately, they can become limited partners in funds and, with increasing sophistication, build their own portfolio of companies, either through co-investing or by independently sourcing deals. In conclusion, funds of funds are often used as a first step into private equity and may well be worth the additional layer of fees in exchange for avoiding expensive learning-curve mistakes and providing access to a broader selection of funds.

5.5 PRIVATE EQUITY FUNDS OF FUNDS VALUE-ADDED

Investing in funds of funds can allow investors access to the private equity market in a quick and diversified manner. Before making such an allocation, there are several factors that investors need to consider.

5.5.1 Diversification and Intermediation

Funds of funds can add value in several respects and are seen as safe havens for private equity investors. Especially in the case of new technologies, new teams, or emerging markets, a fund of funds allows for reasonable downside protection through diversification. Not surprisingly, various studies have shown that because of their diversification, funds of funds perform similarly to individual funds but with less pronounced extremes (see Weidig and Mathonet 2004; Mathonet and Meyer 2007). In the absence of funds of funds, smaller institutions may have difficulty achieving meaningful levels of diversification. Even for larger institutions, investments in private equity funds and especially VC funds may be too cost-intensive when the size of such investments is small compared to the administrative expenses. A fund of funds can mediate these potential size issues either by scaling up through pooling of commitments of smaller investors and providing each of them with sufficient diversification, or by scaling down through sharing administrative expenses and making such investments less cost-intensive by allowing larger commitment to the fund of funds.

5.5.2 Resources and Information

Funds of funds can provide the necessary resources and address the information gap for inexperienced private equity investors through their expertise in due diligence, monitoring, and restructuring. Investing in private equity funds requires a wide-reaching network of contacts in order to gain access to high-quality funds, trained investment judgment, and the ability to assemble balanced portfolios. Liquidity management can also be quite challenging. It demands a full-time team with insight and an industry network; adequate resources; access to research databases and models; and skills and experience in due diligence, negotiation, and contract structuring. Depending on the overall market situation, access to quality funds can be highly competitive, and being a newcomer to the market can pose a significant barrier. Funds of funds are continuously involved in the private equity space, speak the language, and understand the trade-offs in the industry.

5.5.3 Selection Skills and Expertise

Investors expect funds-of-funds managers to be able to invest in top-performing funds, either by having access to successful invitation-only funds or by identifying the future stars among the young and lesser-known funds. Funds-of-funds managers may also play the role of educator in explaining to comparatively unsophisticated investors that a particular fund, despite suffering horrible losses in the early years, is still viable and merely reflecting the early stages of its J-curve (see section 5.7). While funds of funds are more willing to give the fund managers sufficient latitude to focus on their portfolio companies, they are often better skilled and experienced in restructuring failing funds, if that is ultimately required. In turn, fund managers often welcome funds-of-funds investors as a more stable and experienced source of cheap pooled capital.

5.5.4 Incentives, Oversight, and Agreements

For institutional investors, direct investment is problematic because such institutions often cannot offer their employees adequate performance-related pay. For typical conservative and seniority-based institutions like banks, pension funds, or insurance companies, a theoretically unlimited carried interest does not always fit well into the compensation scheme. While institutional investors do not lack staff with the intellectual caliber to evaluate investment proposals and to structure transactions, generating profitable exits in private equity programs requires very hard work over protracted time periods. Moreover, the lack of incentive (or the conflict of interest) to take risk and to find value may affect investment decisions. Furthermore, there is a significant learning curve, and without performance-related pay, employees may jump ship as soon as they are competent in the area and understand their opportunities better. Finally, for larger institutions, intermediation through funds of funds allows them to focus on their core businesses. This advantage tends to outweigh most cost considerations.

5.6 THE RELATIONSHIP LIFE CYCLE BETWEEN LIMITED AND GENERAL PARTNERS

There is a symbiotic relationship between limited partners and general partners. A limited partner's investment strategy is built around a small number of relationships with general partners who focus on specific segments, such as stages or sectors, of the market. This specialized focus can often limit the scalability of a particular fund, especially in the case of VC, in which limited partners may find it difficult to identify and access additional fund managers of comparable quality.

General partners, for their part, want financially strong, dependable, knowledgeable, and long-term limited partners. Limited partners should have industry expertise and familiarity with the nuts and bolts (particularly valuations and benchmarking) of the private equity business. Adverse selection exists in the private equity market. Poor-quality general partners, be they lacking experience or falling into decline, will court inexperienced limited partners. Because of poor results, both will sooner or later exit the market.

To maintain continuous investment in new portfolio companies, general partners need to raise new funds as soon as the capital from their latest active fund is fully invested (or reserved for follow-on investments), about every three to five years. Therefore, relationships between limited and general partners follow a life cycle and are forged through various rounds of investment, eventually resulting in a virtuous circle of growing experience and fund size.

Investors, as well as fund managers, depend on forging these long-term relationships. Anecdotal evidence suggests that experienced market players profit over protracted time periods from these relationships. Initial criteria are very stringent, and fund managers usually cannot get rich through their first funds. However, a favorable track record is an asset in itself. For more reputable funds, fund-raising is less costly. To minimize their expenses, fund managers generally turn first to those who invested in their previous partnership, provided that the fund's performance was satisfactory.

While it is easy to see how fund managers benefit from a loyal and reliable investor community, these long-term relationships can also be advantageous for limited partners for several reasons:

- In the opaque private equity market, the search for and due diligence of funds is a costly exercise, and limited partners often prefer familiar fund managers to unproven investment proposals.
- Such long-term relationships may provide access to a quality deal flow of co-investment opportunities in portfolio companies within an established framework.
- It is especially desirable for an investor to hold on to good fund managers, as the best teams will have an established investor base, which may eliminate the need to seek out new funding sources to the detriment of adding value to the portfolio companies when making new investments or exits.
- There is likely to be better planning, as limited partners make clear their intentions to participate in follow-on funds. As limited partners form a network, even if they do not have the means to continue, they often refer other investors to a good team. Predictable closings put money to work more efficiently.

The life cycle of the fund manager–investor relationship (see Exhibit 5.3) can be divided into three phases: (1) entry and establish; (2) build and harvest (or grow and compete); and (3) decline (lost competition), exit (gave up or made it), or transition to new managers (spinouts). The main differences between these phases are summarized in Exhibit 5.4.

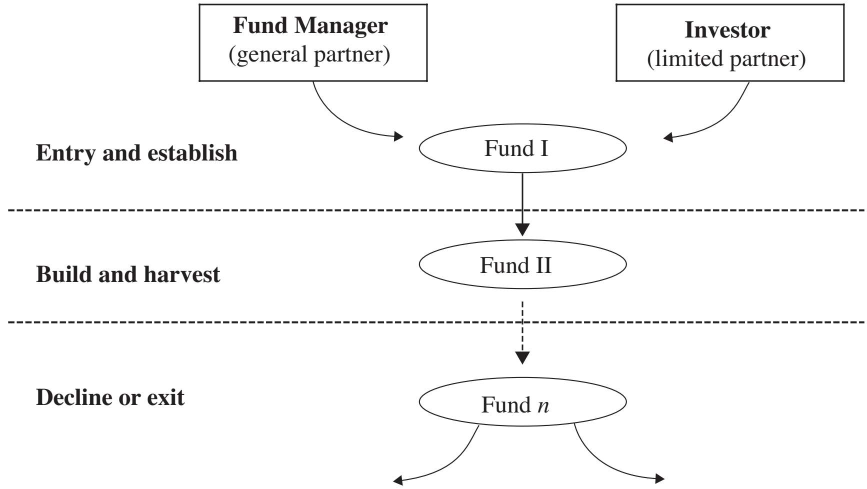

EXHIBIT 5.3 Fund Manager–Investor Relationship Life Cycle

During the entry and establish phase, substantial entry barriers into the private equity market exist for both general and limited partners. Lacking a verifiable track record, new teams find it difficult to raise their first fund. Furthermore, analysis of historical benchmark data supports the hypothesis that new teams suffer from higher mortality than do established or institutional-quality fund managers. First-time funds note the importance of differentiation or innovation as it applies to fund-raising and thus often pursue specialized investment strategies.

New limited partners also face entry barriers, suffering the initial informational disadvantages that make it extremely difficult to identify or gain access to the best managers, particularly when their funds are oversubscribed. For limited partners,

EXHIBIT 5.4 Fund Manager–Investor Relationship Life-Cycle Model

Fund Characteristic	Entry and Establish	Build and Harvest	Decline or Exit
Investment strategy	Differentiation	Star brand	Unexciting
Fund-raising	Difficult fund-raising	Loyal limited partner base	Limited partners leave and are replaced by other types of investors (secondary plays, new entrants in market)
Performance	Unknown: either top or out	Likely top performer	Not top but consistent performer
Size	Fund is too small	Fund size is right	Fund size too large/too many funds
Economies of scale	Fund is too small to get rich	Best alignment of interests	Senior managers made it
Management team	Management team forming	Management team performing	Succession issues, spinouts

it takes the disciplined execution of a long-term investment strategy to build up a portfolio of funds that gives attractive and sustainable returns.

Since investors are mainly interested in the cash returned, the fund manager–investor relationship tends to be relatively stable throughout the build and harvest phase. Lerner and Schoar (2004) present evidence on the high degree of continuity in the investors of successive funds and the ability of sophisticated investors to anticipate funds that will have poor subsequent performance.

It is an oversimplification to assume that investors invest only in top performers and that below-average funds are unable to continue. As in most relationships, there is a certain degree of tolerance for mistakes and failures, at least over a period of time. It is clear that there are limits to disappointing results, but all things being equal, investors will tend to go with fund managers they already know or who have been referred to them through their network even if the fund's performance at times has been subpar.

Eventually, the relationship ends in the decline or exit phase. Not surprisingly, the terms *marriage* and *divorce* are often used in the context of relationships between fund managers and their investors. A gradual decline may occur either as a result of past successes, which potentially decrease the financial motivation of senior fund managers, or due to an improperly planned succession, which leads to the departure of middle management. In addition, the limited partners may eventually end the relationship if they lose confidence or trust in the team—for example, if the team becomes arrogant or fails to deliver. Some limited partners do not invest in follow-on funds and may be replaced by less deep-pocketed or experienced investors, or by secondary investors who choose to invest as a one-off financial play.

5.7 THE J-CURVE

One of the first private equity fund concepts that investors will encounter is the (in)famous **J-curve**, also referred to as the hockey stick (see Exhibit 5.5). The

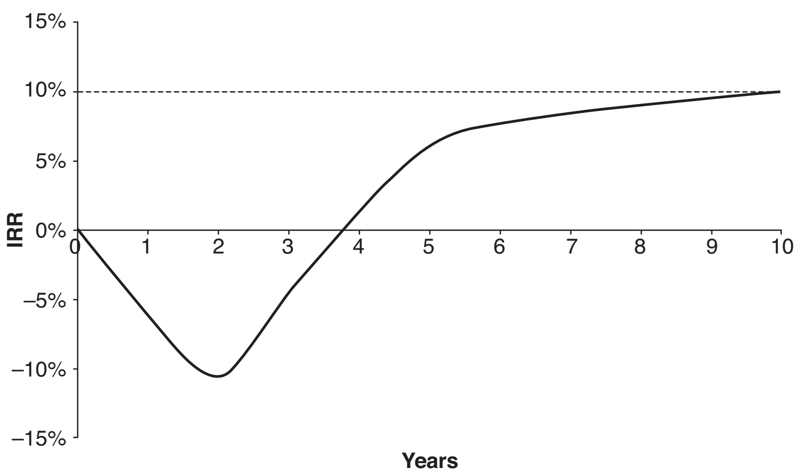

EXHIBIT 5.5 Fund Standard J-Curve

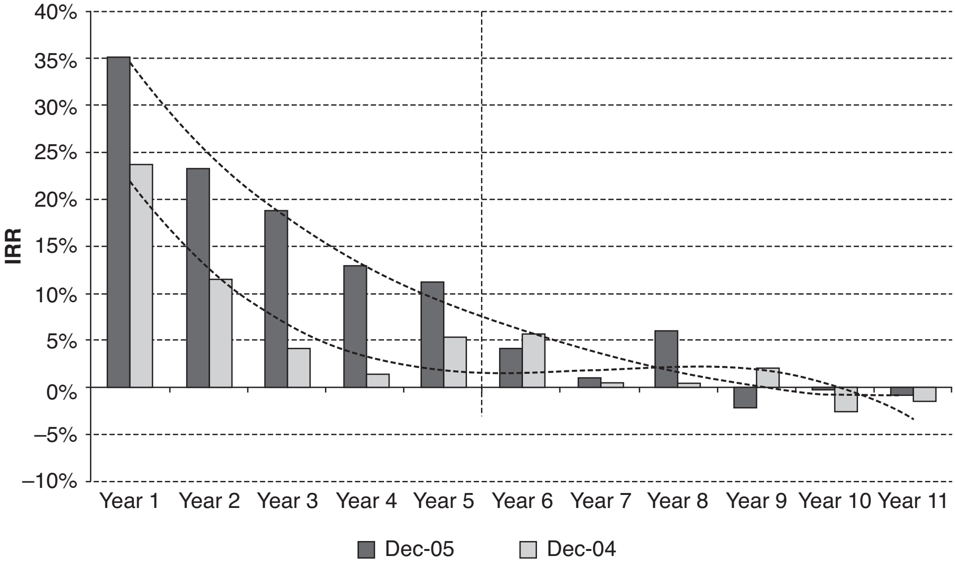

EXHIBIT 5.6 Old versus New J-Curve. Gap between the European Investment Fund (EIF) portfolio's final IRR projections and interim IRRs as of December 2005 versus December 2004
Source: Mathonet and Monjanel (2006) and European Investment Fund.

European Private Equity and Venture Capital Association (EVCA) defines the J-curve as the "curve generated by plotting the returns generated by a private equity fund against time (from inception to termination)." The classic fund performance J-curve is caused mainly by the fact that valuation policies followed by the industry combined with the uncertainty inherent in private equity investments prevent the revaluing of promising investments upward until quite late in a fund's lifetime, while fees, costs, and expenses are immediately deducted. As a result, private equity funds tend to demonstrate an apparent decline in value during the early years of existence, the so-called valley of tears, before beginning to show the hoped-for positive returns in the later years of the fund's life. After about five years, the interim internal rate of return (IIRR) will give a reasonable indication of the definitive IRR.[5] This period is generally shorter for buyout funds than it is for early-stage and expansion funds.

Some time ago, it was postulated that the 2005 introduction of the International Private Equity and Venture Capital Valuation Guidelines (IPEV Valuation Guidelines)[6] would drive the J-curve to extinction, as a truly fair value for funds would eliminate the conservative bias caused by early expensing of costs and deferred

[5] The traditional internal rate of return (IRR) is the implied discount rate that makes the net present value of all cash flows zero. The interim IRR is the IRR of unliquidated funds, as it considers for its computation the fund net asset value (NAV) as a last distribution. Therefore, interim IRRs are estimates rather than realized rates of returns. Chapter 6 presents the formal definition and an example of the calculation of this important concept.
[6] Available at www.privateequityvaluation.com (accessed October 2007).

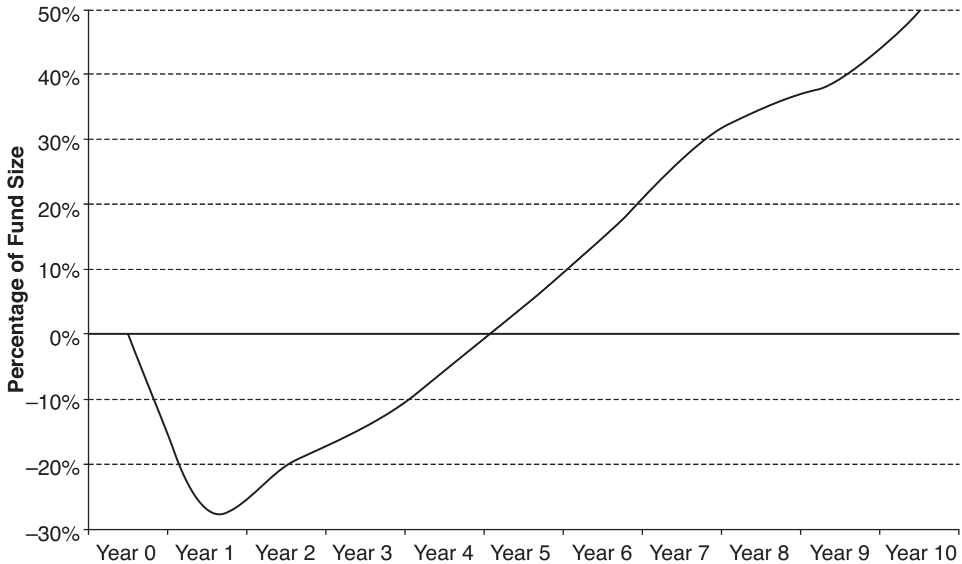

EXHIBIT 5.7 Cash Flow J-Curve

recognition of increases in the values of promising investments.[7] Instead, Mathonet and Monjanel (2006) found that the gap between the final IRR (or the expected IRR) and the IIRR narrowed in years 1 through 5, after which the IIRR became, on average, a reasonably reliable estimator of the final performance (see Exhibit 5.6).

But other J-curves can also be observed in private equity funds: the **cash flow J-curve** and the **net asset value** (**NAV**) **J-curve**. The net asset value (NAV) of a fund is calculated by adding the value of all of the investments held in the fund and dividing by the number of outstanding shares of the fund. The NAV J-curve is a representation of the evolution of the NAV versus the net paid in (NPI), which first decreases during the early years of the fund's existence and then improves in its later years. The cash flow J-curve is a representation of the evolution of the net accumulated cash flows from the limited partners to the fund, which are first increasingly negative during the early years of existence before making a U-turn and becoming positive in the later years of the fund's life. This is explained by the fact that in standard private equity fund structures, commitments are drawn down as needed, or just in time, and when realizations are made after having successfully developed these newly founded companies, they are distributed as soon as practical (see Exhibit 5.7).

5.8 CONCLUSION

This chapter has provided an overview of the private equity industry. Venture capital funds are high-risk, high-return investments in small growth companies. General

[7] See Meyer and Mathonet (2005).

partners of VC funds focus on the entrepreneur's business model and are often involved in the firm's board of directors and strategic planning process.

Buyouts are lower-return, lower-risk investments focused on more mature companies. GPs investing in buyouts may seek to modify the firm's capital structure and implement operational improvements.

Funds of funds diversify over a number of private equity partnerships. Although going this route adds a second layer of fees, funds of funds may be the best way for new and small investors to access the private equity market.

General partners have a life cycle moving through three stages: (1) entry and establish, (2) build and harvest, and (3) decline or exit. There can be high barriers to entry for new managers, but once established, GPs may be able to build long-term relationships with LPs who may invest in funds across several vintage years.