

RUSSELL RESEARCH COMMENTARY

## An Introduction to Private Equity

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Adam Goff

August 1999

Frank Russell Company  
P.O. Box 1616  
Tacoma, Washington 98401  
USA  
253-572-9500

Frank Russell Canada Limited  
1 First Canadian Place, Suite 5900  
Toronto, Ontario M5X 1E4  
Canada

Frank Russell Company  
6 Cork Street  
London, W1X 1PB  
United Kingdom

Frank Russell Amsterdam  
Herengracht 493  
1017 BT Amsterdam  
The Netherlands

Frank Russell Company S.A.  
6, rue Christophe Colomb  
75008 Paris  
France

Frank Russell Company  
590 Madison Avenue, 40th Floor  
New York, New York 10022  
USA

Frank Russell Company Pty Limited  
GPO Box 5291  
Sydney, NSW 2001  
Australia

Frank Russell Company (N.Z.) Limited  
P.O. Box 105-191  
Auckland  
New Zealand

Frank Russell Japan  
Place Canada 3<sup>rd</sup> Floor  
7-3-37 Akasaka  
Minato-ku, Tokyo 107-0052  
Japan

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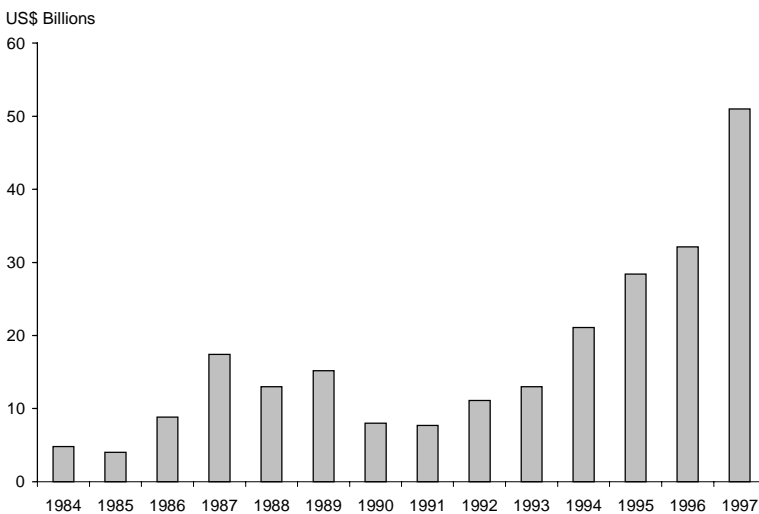
Adam Goff is a Research Analyst in the Manager Research group in London.

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## INTRODUCTION

Private equity is by far the fastest growing source of corporate financing in the United States and a growing source of capital worldwide. As Figure 1 shows, the growth of private equity has been explosive. The growing appeal of this style of financing can be traced to a number of institutional, legal, and attitudinal changes over the past two decades. These changes are driven by both the attractiveness of this financing method to operating companies and the potential for high returns and low correlations with other asset classes that appeal to the institutional investor. This has created an asset class for institutional investors that has progressed steadily from nonexistent to marginal to nearly mainstream.



*Figure 1*  
Capital raised for private equity in the US  
(US\$ billion)

Private equity investing can be defined most broadly as any investing in companies that does not involve public trading. Using this definition points out the fact that private equity, though relatively new to most institutional investors, is in fact not new at all. Most companies, and by extension most equity investments, are private and have been since the dawning of capitalism. Institutions have merely been prevented from participation due to barriers of law and tradition.

As useful as this broad definition is in giving perspective on this style of investing, it is essential for the sake of analysis to have a more finely drawn definition of the market we are discussing. The 1994 Federal Reserve Bank study, *The Economics of the Private Equity Market*, calls this market the “Organized Private Equity Market,” which is defined as “professionally managed equity investment in the unregistered securities of private and

public companies.” This is considered separately from the “Angel Market,” consisting of independent investments by wealthy individuals in small firms; the “Informal Private Equity Market,” which is characterized by trade between institutional and individual investors of unregistered securities; and the “Rule 144A Private Equity Market,” formed in 1990 under a rule allowing the free trading among institutional investors of private securities originally underwritten in private equity offerings.

The distinction of the organized private equity market from the others is a useful one. It focuses on the type of private equity used by pension funds, endowments, foundations, and others. This typically involves a contractual relationship—usually a limited partnership or other limited liability flow-through vehicle—linking a professional private equity specialist who implements a portfolio and more broadly invested institutional investors. For the rest of this paper the words *private equity* will refer to organized private equity as defined above.

As private equity has grown in popularity, a growing body of research is being formed on the asset class, focusing on quantifying the risks and returns of private equity and refining performance management and measurement tools. This paper draws on this research and Russell’s own experience with the goal of presenting a necessary body of knowledge for the private equity investor.

## THE NATURE OF PRIVATE EQUITY

The types of investments that fall under the category of organized private equity are varied, but have some major elements in common.

### *Value-Added Financing*

Being a source of management expertise and long-term capital for growing companies or, conversely, for out-of-favor but promising companies, private equity can be thought of as a value-added financing method for entrepreneurs. Those who seek it often are looking to grow rapidly and do not have easy access to adequate bank financing. Private equity is an expensive form of financing for entrepreneurs; however, in exchange for some loss of ownership and control over the firm, private equity offers benefits such as higher growth rates and experienced professional guidance.

### *Intermediaries, Investors, and Invested Companies*

The professional private equity specialists, the intermediaries in this market, must be both extremely selective and be able to add value to their investments. The opportunities they are choosing between are risky, numerous, and represent a wide quality disparity such that the specialists must have the time, resources, and skills not only to identify the best



opportunities but possess the ability to help shepherd the companies to success. This model has proven that it is the only one that can work well with this type of investment.

The skills of these intermediaries provide a bridge between the large pools of capital of endowments, foundations, and most importantly, pension funds, and the companies in need of a risk-tolerant, value-added provider of capital. The motivations of the investors are easy enough to understand. They seek high returns and, due to their broadly diversified portfolios and relatively predictable liabilities, are capable of bearing the higher risk private equity represents as a portion of their total portfolio.

The motivations of the firms invested in are more varied. Much venture investing fuels firms' desires to grow and expand. There are the tiny start-ups that are desperate for capital to begin production and marketing. It may be an expanding firm that not only is in need of capital but also seeks help in preparing their company to go public. The long-term capital of private equity investors and their specialized expertise in IPOs fit these needs perfectly.

### *Major Investment Types*

There are four major investment types:

*Venture Capital:* Equity investments in companies that have undeveloped or developing products or revenue.

*Leveraged Buyout Funds:* Equity investments in public or private companies that result in the purchase of a significant portion or majority control of the company.

*Mezzanine Debt Financing:* Investment in the subordinated debt of privately owned companies. The debtholder participates in equity appreciation through conversion features such as rights, warrants, or options.

*International Private Equity:* Equity investments in companies that operate in non-US, developed, or emerging states.

Although venture capital was the starting point for the market, the buyout market's rapid expansion has made it the dominant segment of the private equity world. Frank Russell Capital, in collaboration with Goldman Sachs, has conducted a series of surveys of institutional investors on the subject of alternative investing that show this continuing and intensifying dominance of the market (see Figure 2). Also shown in this survey, and most recently, there has been a sudden growth in demand for international private equity funds, which has seen its share in private equity asset allocation rise from not meriting inclusion in 1992 to nearly 10 percent in 1997. One explanation for this is the expectation of high return in overseas private equity. Another possible cause is that the pressure to find a wider universe of opportunities for the flood of money has spurred intermediaries to look overseas.

The growing dominance of leveraged buyout funds in private equity asset totals is linked to the rapid growth in total assets. While venture capital and other subsets have experienced growth, the greater capacity of LBO funds to invest greater amounts of capital have allowed them to grow much faster. We have seen LBO funds recently topping US\$6 billion in assets, an unthinkable total for any other subgroup.

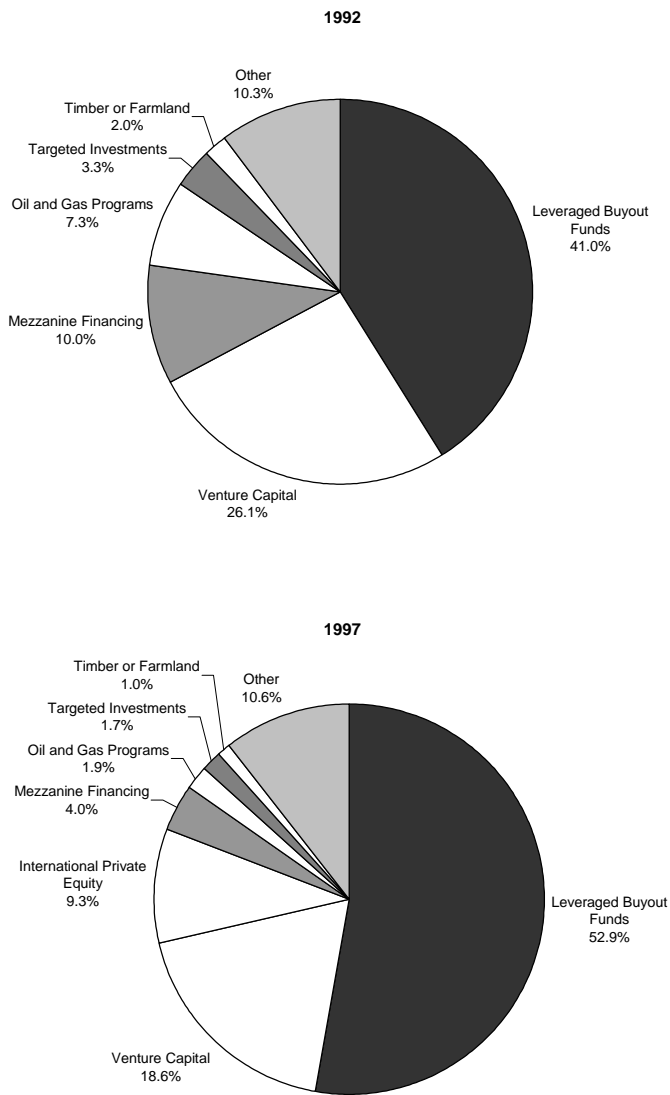


Figure 2  
Asset allocation of large US institutional investors: 1992 and 1997.

Source: Russell/Goldman Sachs Survey of Alternative Investing.

### *The Limited Partnership: The Number One Investment Vehicle*

The private equity market has settled on the limited partnership as the most appropriate vehicle to bring institutional investor money to this market. This structure, though not perfect, is robust enough to tackle the greatest problems of aligning investor and intermediary incentives, but flexible enough to fit individual investors and different types of investments. As a result, the 1997 Report on Alternative Investing by Tax-Exempt Investors by Russell and Goldman Sachs found that 94 percent of the investment in alternative investments was made through limited partnerships. An additional 2 percent was accounted for by funds of funds that primarily used limited partnerships as their main investment vehicle.

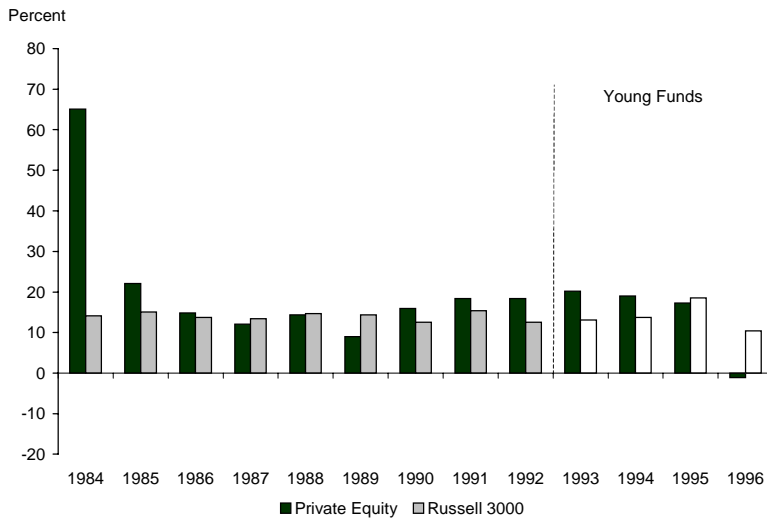
### FACTORS INFLUENCING PRIVATE EQUITY PERFORMANCE

Private equity has seen generally strong, if somewhat cyclical, performance. In Table 1, annualized returns for the average fund formed in each vintage year for a holding period started in that year and ending in the end of 1996 is shown. Figures 3 and 4 show how these compared to public market returns over the same period. Many factors influence performance, but they can be divided into three levels: Private Equity Specific, Market-specific (or cyclical), and Company-Specific. This section will quickly address the variety of factors under these headings.

*Table 1*  
Average IRRs by vintage-year fund groups (not including liquidated funds)

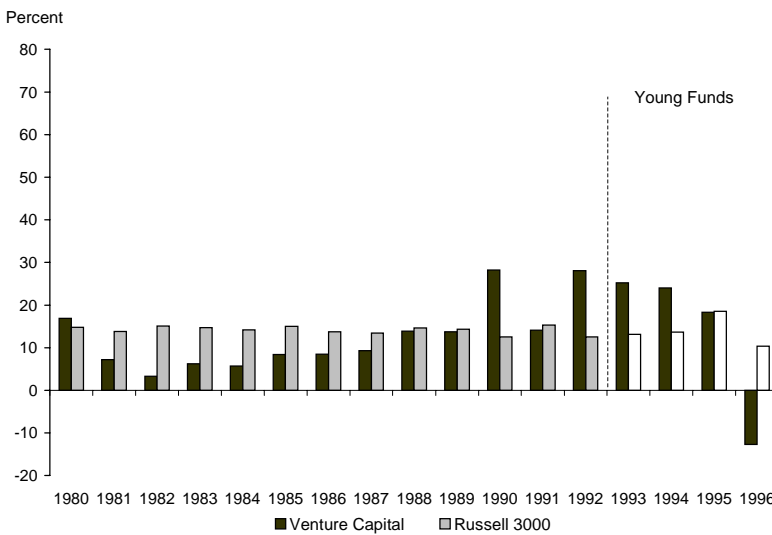
Vintage Year	Buyouts, Mezzanine, Other Private Equity	Venture Capital
1980		16.9
1981		7.2
1982		3.3
1983		6.2
1984	65.1	5.7
1985	22.1	8.4
1986	14.8	8.5
1987	12.1	9.3
1988	14.4	13.9
1989	9.0	13.7
1990	15.9	28.2
1991	18.4	14.1
1992	18.4	28.1
1993	20.2	25.2
1994	19.0	24.0
1995	17.3	18.3
1996	-1.1	-12.7

Source: 1997 *Investment Benchmarks Report: Buyouts and Other Private Equity*, page 53; and 1997 *Investment Benchmarks Report: Venture Capital*, page 48.



*Figure 3*  
Non-venture private equity returns vs. Russell 3000, by vintage year to year-end 1996 holding periods.

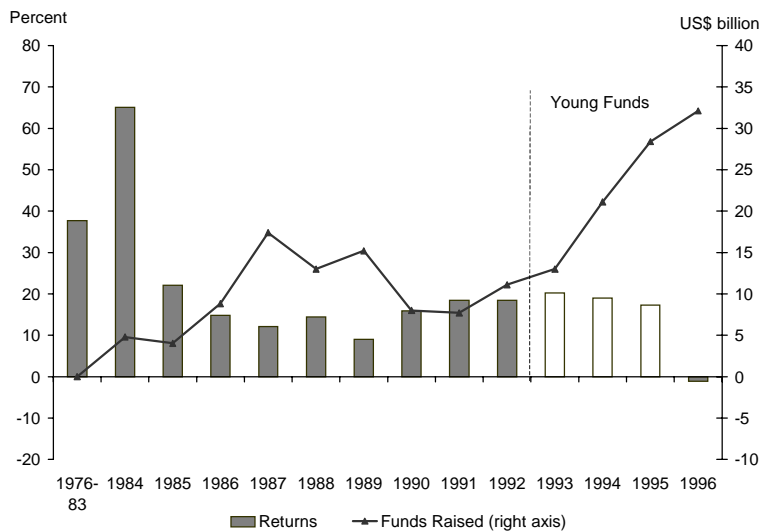
Source: Venture Economics, Russell.



*Figure 4*  
Venture capital returns vs. Russell 3000, by vintage year to year-end 1996 holding periods.

Source: Venture Economics, Russell.

Figures 3 and 4 compare time-weighted returns of the Russell 3000® and internal rates of return (IRRs) for private equity. This is a problematic technique as these two measures are not directly comparable. The Russell 3000 returns cover the whole period equally while the IRRs cover only the time when money was invested and is weighted by the amount invested at each moment. Cash flow timing makes a difference in IRRs but does not with time-weighted returns. Clearly, there are limits to the conclusions that can be drawn from this sort of comparison. It is presented here for the sole purpose of showing what returns investors in private equity funds starting in the years shown would have realized had they chosen to invest in public markets.



*Figure 5*  
Funds raised by and average returns of private equity funds, 1976–1996, by vintage year.

Source: Venture Economics, Russell.

### *Private Equity-Specific*

There are a number of factors influencing the level of return that are characteristics of private equity investing. The ability to benefit from these sources of returns while not taking on unmanageably high risk is the key to successful private equity investing.

#### *Liquidity Premium*

In venture capital investing, investors hope to make a privately owned firm attractive for a public equity offering or a sale to another firm. By taking an illiquid firm and making it liquid, the investor should in theory pocket the “liquidity premium,” the extra amount investors will pay for liquid over illiquid firms. Most consider the liquidity premium to be extremely high, probably higher than a level justified by the risk represented.<sup>1</sup>

#### *Leverage*

High leverage, as used in leveraged buyouts, involves increased financial risk for the investor with increased opportunities for high returns. Successful leveraged investing involves counteracting this financial risk by lowering business risk through direct ownership (see below).

#### *Management Efficiency*

Private equity investors count on the more direct relationship between ownership and management as a motivator for better management of invested companies. Presumably, owner-managers would be stricter about keeping costs down and less likely to take on negative net present value projects than those without a heavy ownership stake. Combine the carrot of equity holdings with the stick of high leverage and debt service expenses and the emphasis on good management is increased.

<sup>1</sup> David F Swensen, “Does Venture Make Sense to the Individual Investor? Part I,” in *Investing in Venture Capital* (The Institute of Chartered Financial Analysts, 1989).

### *Legal Application of Inside Information*

The access to the inner workings of the company and the power to do something about it allows private equity managers to take an active role in managing their companies better. This allows them to take efforts to control business risk where possible and have better insight into the strengths and weaknesses of the company.

### *Market-Specific*

Market-specific factors are factors that have different effects depending on various changing aspects of the market for private equity or the economy as a whole. These effects are customarily cyclical and/or affect certain investments more than others. As such, these factors can be somewhat counteracted by investing across many periods and many segments of the private equity universe.

### *Cash Flow*

Recent research has shown some correlation between the amount of cash flowing into the market and the prices paid for private equity deals. This suggests that, all else being equal, investments made in a high cash flow environment are working at something of a handicap in the race for high returns. Figure 5 shows the rough negative relationship of fundraising and average fund returns by vintage years. Although it is premature to use the performance of still-young funds started after 1992 to estimate their returns, the earlier vintage years show a slightly negative relationship. The relatively robust early returns of the young funds, however, suggest that, at least so far, they may not be following this relationship and are yielding high returns despite high cash flows. It should be noted that cash flow effects can be overwhelmed by other secular and cyclical effects.

### *Economic/Sector Health*

The health of the sector being invested in and the economy as a whole have clear and direct effects on the profitability of many types of private equity investments. Slow growth can hurt the chances of venture firms to grow and can jeopardize leveraged buyout firms' ability to meet interest payments. High growth, on the other hand, can ramp up returns on all investments significantly.

### *Investment Opportunity Market*

As a result of secular changes in the industry mix—taxes, regulatory policy, attitudes toward private equity, or even generational shifts in ownership patterns—the absolute amount of private equity financing demanded by the business community can change dramatically over time. Increasing awareness of and use of private equity financing can potentially serve to counterbalance some of the inflationary aspects of increases in fund-raising.

### *Exit Market*

The existence of and health of public exit markets has a clear and direct impact on returns. A robust over-the-counter market greatly improves the chances to take advantage of the liquidity premium. Also, especially strong periods can allow much higher prices for companies.

### *Investment/Fund-Specific*

Much of the return on an investment in a private equity fund necessarily depends on not only the timing of the investment but also on the particular circumstances of the fund, its manager, and its investments.

### *Management Skill of Both Company and Private Equity Manager*

The skill of the private equity managers to manage the business risk of companies in their portfolios—knowing how to react to circumstances, when to change management, knowing how to incentivize managers, etc.—has a decisive effect on performance of invested companies. The quality of the management of the companies is also important.

### *Deal Flow*

The ability of the fund manager to have access to a large volume of potential deals is a key determinant of fund success. Proprietary access to deal flow is an appropriate basis on which to judge the potential for high fund returns in private equity.

### *Diversification of Investments*

The diversification of investment content or timing within a fund or within a portfolio of private equity funds can have a decisive effect in protecting investors from dramatic problems in particular sectors or time periods.

## KEY ISSUES IN INSTITUTIONAL PRIVATE EQUITY INVESTMENT

### *Asset Allocation for Private Equity*

Investment in private equity combines the possibility of high returns with attractive diversification characteristics. When deciding what share of a multiple-asset-class portfolio to allocate to private equity, an institutional investor must weigh these attractions against the challenges and complications of investing in these assets. This section will first discuss the process of asset allocation in general and then offer some suggestions on how to fit private equity into it.

### *Russell's Asset Allocation Process*

The asset allocation process can be divided into two steps. The first step, *strategic asset allocation*, focuses on the big picture. The choices the investor makes in this first step should have a fundamental impact on the risk and return of the portfolio. Consequently, care should be taken to ensure a high level of confidence in these choices. To this end, the asset classes should be defined so that they are distinctly different, both conceptually and in their observed return behavior. A natural consequence of this requirement is that the asset classes will be very general and few in number. For a US-based investor, a typical set of asset classes might be US equity, non-US equity, fixed income, real estate, and cash. Creating more asset classes by partitioning the broad asset classes might appear to add valuable detail, and the sophisticated optimization and simulation tools available to investors make it possible to generate this detail. But given our current knowledge of asset behavior, adding such detail substantially increases the error in estimating portfolio allocations. The choice between having a broad outline of the asset allocation in which you have confidence and a detailed but essentially meaningless allocation is an obvious one.

With the allocation of the broad asset classes set in the first step, the second step is to add the details by setting the *segment structure* of each broad asset class. Each broad asset class can be divided into identifiable segments. For example, US equity could be divided into large cap and small cap, with perhaps further distinctions between growth and value stocks within each cap tier. The investor can use any level of detail that he or she feels is required, just as long as the segments divide the broad asset class clearly and completely.

Unlike the strategic asset allocation decision where there are a variety of optimization and simulation tools to choose from, the segment structure decision is typically treated as an art. Over the years, Frank Russell Company has developed decisions—knowledge of how to allocate among the segments as well as how to combine money managers within the segments. While quantitative tools may play a more important role in making this decision in the future, an institution's detailed knowledge and experience will continue to be the main ingredient in making intelligent decisions about segment structure.

### *Where Does Private Equity Fit Into This Process?*

Private equity *should not* be treated as a separate asset class in strategic asset allocation. Knowledge of the return behavior of private equity (see section on performance measurement below) is very limited, and decisions about the fundamental risk and return properties of the portfolio should be insulated from this uncertainty. In comparison to publicly traded assets, private equity is extremely difficult to model. There are very limited data on returns. Moreover, the partnership structures used for most of these



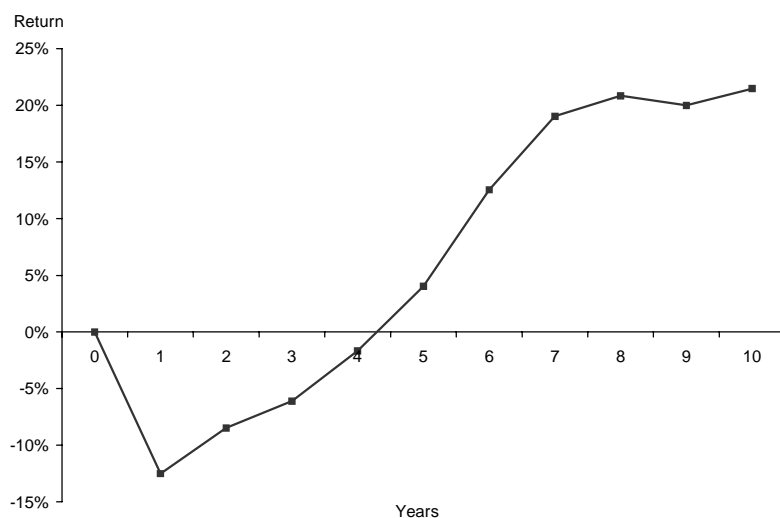
investments generate distinctive cash flow patterns, adding a dimension of behavior not found in liquid equity investment.

The allocation to private equity should be set when determining the domestic or foreign equity segment structure. Rather than a distinct asset class, it should be thought of as an equity segment that can only be obtained in combination with the management strategy of a partnership. Within the context of setting an equity structure, the investor must choose how much to allocate to the private equity segment in total as well as how much to allocate to various subclasses within private equity.

How do you make this segment structure decision? Usually it is done in a subjective manner. An investor believes that private equity will outperform publicly traded assets and intuitively decides how much of the total portfolio should be invested in private equity to achieve a desirable risk-return tradeoff. As part of this decision, the investor should consider that in order to gain the positive impact of these high returns on the portfolio level, a significant amount, at least 5 percent of the whole portfolio, must be invested.

The investor must also use his or her intuition to decide the allocation among the private equity subclasses. This type of reasoning can sometimes be aided with scenario analysis that gives the possible outcomes from specific beliefs concerning the return and risk of private equity. In the absence of reliable models of returns and decision tools that capture the behavior of private equity in an appropriate manner, this is the limit of what can currently be done. While such an approach may seem unsophisticated, an experienced investor who acknowledges the limits of his or her analysis is likely to make a reasonable decision. In contrast, relying on an optimizer that uses questionable inputs may lead to a poor decision.

### *Performance Measurement*



*Figure 6*  
The J-Curve: typical pattern of private equity returns

### *The J-Curve*

As the performance results of long-term illiquid investments, private equity partnership returns have a distinct character. The life span of a partnership is usually firmly set in the partnership contract and typically is ten years. Extensions are often allowed but usually require a super-majority of limited partners to agree. In the early years of the partnership, investor commitments are drawn down as the general partners find investment opportunities. The timing and size of these drawdowns are not determined beforehand, and limited partners are typically given only a few weeks' notice before having to provide capital. General partners (GPs) have a strong incentive to only call for capital that it can use immediately, using "just-in-time financing" in a similar manner that manufacturing companies achieved profit enhancements by using "just-in-time inventory." The internal rate of return measure (explained below) is based upon how long the limited partners' capital is held. All else remaining equal, the longer the holding period, the lower the return will be.

Later in the life of the partnership, the general partner begins to distribute the proceeds from successfully exited investments. Throughout, the general partner receives management fees. Most of the GP's compensation, however, comes separate from management fees, in the form of carried interest (a profit incentive), which represents a sizable percentage of the profits of the fund's investment. The combination of the cash inflows, outflows, and management fees lead to a return pattern typically called the "J-curve." This term describes the shape of a graph of the IRR of a partnership from inception to dissolution. Figure 6 shows a typical J-curve.

### *Measuring Returns*

Investors in private equity are faced with a number of basic problems in measuring the performance of their investments. The characteristics of this kind of investing coupled with the lack of timely and accurate valuation data make it impossible to measure performance of private equity investments and portfolios in the same way as portfolios of publicly traded securities. Investors' need for reliable measures of performance, however, has led to attempts to create methodologies that allow for performance measurement that is timely and allows for comparisons with other asset classes.

Time-weighted rate of return, the accepted method for measuring the performance of publicly traded securities, demands a number of assumptions that private equity does not meet. Time-weighted returns assume that:

- The manager has no control over cash flow timing.
- Market-determined values are available at the times of all cash flows.

- Reinvestment opportunities (for dividends or other distributions) are plentiful and readily available within the asset type.<sup>2</sup>

<sup>2</sup> David E. Tierney and Jeffery V. Bailey, “Opportunistic Investing,” *Journal of Portfolio Management*, pp. 69–78.

None of these are applicable to private equity.

The most appropriate direct measure of returns on private equity investments and portfolios, and the one recommended by The Association for Investment (AIMR), is the IRR, or dollar-weighted return. The advantage of the IRR is that it better matches the reality of private equity partnerships. As implied above, time-weighted returns are unusable because private equity investors have complete control of cash flow timing and market values are not readily available. The IRR, on the other hand, explicitly takes into account the timing of cash flows in measuring returns. This is appropriate for private equity as cash drawdowns and distributions are completely under the manager’s control. The IRR therefore explicitly gives the manager responsibility for the timing of cash flows and punishes or rewards her accordingly. Also, and equally importantly, the IRR measurement demands very little data—only the timing and amounts of cash inflows and outflows are required. Market values are usually not available for private equity partnerships but are measured on a cost or appraisal method, so this factor is also a natural fit for utilizing an IRR.

The IRR, however, does not solve the problem of the third assumption listed above, the reinvestment assumption. The IRR, like time-weighted returns, assumes that intermediate dividends or distributions can be easily and quickly reinvested. While this is the case in public markets, in private markets this is not usually the case. The process of due diligence and negotiation before the commitment of money to a new partnership, plus the time the new partnership takes to draw down the newly committed capital, makes the reinvestment assumption clearly inappropriate. In effect, however well the partnership does, the IRR only accounts for the return while the capital is in the partnership’s hands. The time which the capital is held in a liquid form either in anticipation of a drawdown or after distribution, waiting to be reinvested, must also be taken into account to show the full return effect of private equity.

### *Benchmarks*

The presentation of returns is only the first step in performance measurement. Benchmarks are needed to measure how well the managers have done with their investments on a relative basis. Unfortunately, private equity returns cannot be measured precisely on a period-by-period basis. There are four basic types of benchmarks that are either in use or have been proposed by various market participants:

- Peer universes
- Public equity shadow indexes
- Opportunity cost indexes
- Hybrids

None are perfect but each is a thoughtful attempt to measure investment success in the asset class. Below are brief descriptions of each group

The most commonly used, publicly available private equity benchmarks are peer universes. The most popular of these are the vintage year benchmarks offered by Venture Economics (VE). The funds in the market are surveyed and the data is organized by vintage year, i.e., year-of-fund inception. The vintage year analysis is meant to allow a fair measure of a fund compared to other funds that have existed in the same time period.

These peer universes are a fascinating and useful body of information. As VE itself points out clearly and repeatedly, however, the sample of funds that they present are only part of the market, which on a capital-weighted basis have on average made up only about half of the universe of private equity funds that the database targets.

Another important drawback of peer universe-based benchmarks (and most other private equity benchmarks) is the reliance on residual value estimates. The interim returns reported by funds include an embedded “residual value” of the portfolio. This number is at best only an appraised estimate and represents a portion of the interim return, which is not a true market value. These values are by their very nature smoothed over time and do not respond to transitory fluctuations in market value. As such, they lend an artificial stability to the return pattern, rendering any estimates of volatility and correlation that come from them meaningless.

Imperfections aside, the Venture Economics peer universe return data is one of the best available surveys of actual private equity fund returns. Although it cannot be assumed to be the whole market and should not be represented as such, a sense of many of the funds on the market can be gained. VE is very good at pointing out its own strengths and limitations and should thus be commended for honest presentation.

A number of attempts have been made to create shadow indexes for private equity investments that are based on publicly traded equities. These indexes typically are structured in such a way as to match the characteristics of a segment of the private equity market or individual private equity investments. The advantages of this method are the easy availability of market values for any period of time. One example is the Venture 100, which tries to approximate venture capital performance by measuring the performance of 100 venture-backed companies that have recently made public offerings.

How do shadow indexes work as benchmarks? They suffer from the fact that the underlying securities are publicly traded and thereby do not directly reflect private equity returns. They also suffer from selection bias problems. As a proxy, however, public equity shadow indexes somewhat make up for this shortcoming by being easily attainable and constantly marked to market. The appeal of easily accessible return numbers, however, is limited, especially in light of the use of an index as a passive portfolio. Investors can

easily buy all of the publicly traded stocks in the index, but as they are public equity, this would hardly be seen as a passive holding of private equity.

There are also benchmarks that, similar to the shadow indexes above, compare private equity performance to a group of public equities. The difference is that these opportunity cost indexes are not meant to mirror the characteristics of the universe of private equity investment opportunities. They are simply meant to measure private equity performance against what the investor could have earned in a broadly invested public equity portfolio. The index usually used is a broad index such as the Russell 3000 or S&P 500.

A long-standing method for measuring performance is to expect private equity to exceed a broad public market index plus a hurdle rate in the long run, for example the Russell 3000 plus 500 basis points. The assumption here is that if returns do not exceed the public index by that amount, they are not worth the various kinds of risk being taken.

Those who use a public index as a benchmark recognize that although it is not a proxy for the private equity universe, they are satisfied that it will give a good sense of the opportunity cost of private equity investing over a given period and is therefore useful.

Finally, there are hybrid benchmarks that mix the characteristics of two of the above types to try to create a proxy for the private equity market. Brinson Partners has produced a hybrid index for a number of years. Its return is a weighted average of the returns of the private equity universe Brinson follows and a portfolio of traded small-cap securities.

As this discussion makes clear, there is no perfect private equity benchmark. The fact that market values of private equity cannot be viewed on an interim basis is too great a barrier to completely clear with the innovative attempts listed above. That being said, however, the available tools can be used to great benefit in formulating a plan for and assessing the success of one's investments. We recommend the use of Venture Economics data and, depending on the nature of the investors' commitment to the asset class, also recommend a measure based on opportunity cost. The Venture Economics database is properly regarded as an interesting if imperfect survey of the industry that may reveal many interesting trends in investment vehicles and returns. The opportunity cost indexes are straightforward measures of an attainable alternative if not truly a benchmark for private equity.

## INVESTOR STRATEGIES FOR OVERFUNDED PRIVATE EQUITY MARKETS

As the amount of capital raised for the private equity market has risen dramatically over the past few years, concern has grown over whether returns can continue to be favorable. The overwhelming demand for private equity investment opportunities has put considerable pressure on the industry. Large investors now commonly compete to get into the most popular funds, while investors who might previously have been wary of investing in a first-time fund are considering doing so. Partially in order to absorb the new capital available, a number of international private equity funds have been formed. These funds usually combine the allure of the popular and successful private equity model as applied in the United States and argue that in less developed markets it could be even more successful.

The growth of the private equity industry has been explosive, whether one measures in terms of capital raised, capital invested, number of partnerships, number of professionals, or any other conceivable measurement. It clearly fills a need on the part of entrepreneurs for financing that banks cannot provide and has over the past few years more than satisfied investors' desires for high returns. Even with all of this positive momentum, the present stage in private equity's history is fraught with uncertainty. Although the secular growth in the industry through the past two market cycles can be expected to continue, there is some concern that the overpopulated market may push the prices of deals too high and that too many inexperienced managers may ruin the field for everyone else. In the back of many investors' minds is the concern over what will happen the next time the IPO markets experience a lull.

Although fund-raising records have been broken for the past five years and high returns have driven enthusiasm for private equity to unprecedented highs, investors who accept the long time horizon of private equity have mostly stayed put, refusing the temptation to try to time the market. This is a sensible approach as the market is not very transparent—for example, there is no index that can show effectively how overpriced a market is, only the very loose indicator of cash flows. Also, a mistaken timing decision can end up costing a tremendous amount. Fund sponsors have, however, implemented strategies to prepare themselves for temporarily lower returns in the US with a number of portfolio and funding changes:

- *Diversify Private Equity Portfolio*—Many fund sponsors have looked to add international private equity funds, funds in investment stages they may not have invested in before, and so-called contrarian funds.
- *Spread Out Funding Policy*—Dollar-cost averaging and other methods are being utilized to lower the risk of having too much money invested in any one particularly bad time.
- *Lower Expectations*—A number of large fund sponsors have begun to talk about looking forward to a fall in returns in order to create buying

opportunities. The assumption behind this strategy is that as less committed investors are scared away by falling returns, the best investment opportunities will arise. Only the investors who are in the market at that time will reap the full benefit of private equity's potential to yield high returns. This also has the effect of cushioning the blow of an actual fall in returns and preparing boards for the worst.

Investors in private equity have responded to the specter of falling returns by resolving to stay invested throughout the cycle of fund-raising, counting on the average long-term return and the advantages of a diversified portfolio to beat whatever their fund's hurdle rate is. Timing the market is not seen as a viable option.

## IS PRIVATE EQUITY A GOOD INVESTMENT FOR YOUR PORTFOLIO?

Private equity represents a huge universe of exciting opportunities. Through drastic selectivity and hands-on management, venture capitalists and buyout investors endeavor to profit from heightened incentives and the success of the best new ideas in the economy, ideas not represented or supported by the public markets. By shepherding successful companies to market, investors can collect on both the growth of the companies and the embedded liquidity premium.

Private equity is a high-risk investment and therefore should receive a high return on investment. Although private equity returns can rise and fall dramatically as a result of changing economic situations and cash flows, the long-term average returns appear to be strong. Investors with a long time horizon and the ability to weather occasional disappointing performance should do reasonably well. Besides a long-term frame of mind, there are several other ways to limit risk in investing in private equity. Dollar-cost averaging, diversification across different segments of the private equity market, and the use of a variety of managers can help to lessen the risk of large falls in returns.

While there are good reasons to invest in private equity, it is not for everyone. There is also a powerful argument against it under certain circumstances. First and foremost, investors unable or unwilling to accept the long-term illiquidity and high variability of the asset class would do best to stay away. Private equity can improve your portfolio returns but can only reliably do so in the long run—timing the market due to levels of cash flow, economic forecasts, or hot tips is not advised. An investment should be entered into as a long-term decision and stuck with through thick and thin.

Another argument against private equity is based on the rapidly changing structural foundations of the industry and poor underlying data. The secular growth of private equity fundraising is so great that one may see the

industry heading for inevitable difficult times ahead. Related to this is concern over lack of information about the statistical behavior of the asset class. There are no reliable measures of period returns, correlation with other asset classes, or drivers of returns. All useful precise data that exists is after the fact and imprecise at best. The uncertainty surrounding asset behavior and contribution to portfolio return and variance may be a handicap when compared with other, more liquid asset classes.



## REFERENCES

1997. "Alternative Investing by Tax-Exempt Organizations." Report from Goldman Sachs & Co. and Frank Russell Capital Inc. (December).
1997. "Investment Benchmarks Report: Buyouts and Other Private Equity." Venture Economics Investor Services, Securities Data Company.
1997. "Investment Benchmarks Report: Venture Capital." Venture Economics Investor Services, Securities Data Company.
1997. *Private Equity Analyst*. (January) Vol. 7, Issue 1.
1998. *Private Equity Analyst*. (January) Vol. 8, Issue 1.
- Fenn, George W., Nellie Liang, and Stephen Prowse. 1995. "The Economics of the Private Equity Market." Federal Reserve.
- Nesbitt, Stephen L., and Hal W. Reynolds. 1997. "Benchmarks for Private Market Investments." *Journal of Portfolio Management* (summer): 85–90.
- Swensen, David F. 1989. "Does Venture Make Sense to the Individual Investor? Part I." Investing in Venture Capital. *Institute of Chartered Financial Analysts*. pp.46–51.