Reprinted from Morningstar Advisor,
Winter 2008 issue.

Another Block in Building a Portfolio

By Tom Idzorek

It's now possible to prove that private equity has a place in a diversified collection of assets.

New research from Ibbotson Associates is shining light on the role private equity should play in portfolios.

The extraordinary performance of leading asset allocators, like the Yale Endowment, coupled with a lower perceived risk premium for traditional equities, has created considerable interest in alternative asset classes. Over the past few years, Ibbotson has completed a series of studies that demonstrate that adding asset classes to a typical allocation can improve investors' risk and return trade-off.

The free lunch of diversification remains the easiest and most cost-effective method of improving a portfolio's risk/return trade-off. To that end, Ibbotson encourages all investors to look at the all-inclusive Sharpe-ratio-maximizing market portfolio of modern portfolio theory's capital asset pricing model (CAPM) and consider expanding their opportunity sets to include what some investors might view as alternative asset classes. All else being equal, investors who expand their opportunity set and allocate to each of the available asset classes will likely improve their risk/return trade-off.

One key alternative asset class is private equity[1]. A new Ibbotson study examined the roles of U.S. and non-U.S. private equity in a strategic asset allocation and found that—similar to other asset classes that Ibbotson has studied—private equity improved the risk/return characteristics of a model asset allocation.

Until our study, the role of private equity in a well-diversified portfolio had not been clearly understood. While defining the private equity asset class was straightforward, there wasn't a widely-agreed-upon time series of data representing the beta of the asset class. The illiquid nature of the private asset class created performance measurement issues and significantly reduced individual investors' access to the asset class.

The lack of widely accepted benchmarks prevented investors from understanding the risk, return, and correlation characteristics of private equity, and hence, the role of private equity in a diversified portfolio. The few private equity indexes that existed had the standard problem of how to measure the performance of private assets. The inability to determine a true market price for private assets forced investors to use appraisal-based prices that typically led to artificial smoothing of returns. Smoothed returns result in lower estimates of volatility, lower correlations with most other asset classes, and artificially high risk and return relationships, all of which can lead to a dramatic over-allocation in a traditional mean-variance optimization setting that attempts to maximize return per unit of risk.

A new way of gaining access to the private equity asset class is emerging, however. It is accessible by all investors, it is easy to maintain a target strategic asset allocation, and it results in a mark-to-market time series that does not suffer from return smoothing. The equities of publicly traded firms whose businesses are similar to those of traditional private equity firms are being bundled together, and these bundles can serve as proxies for the private equity asset class. These firms—whose revenue stream comes mostly from investing in or lending or providing services to privately held companies—trade on public exchanges, so performance measurement is straightforward and investors can easily purchase the individual assets or products that are built around this new type of private equity index.

Securitization is changing the private equity asset class, and over time, what was once an alpha, skill-based strategy will become a traditional beta asset class. In our study, we used two new indexes composed of publicly traded companies as proxies of the private equity asset class: the Red Rocks Listed Private Equity Index for U.S. private equity and the Red Rocks International Listed Private Equity Index for non-U.S. private equity. (The research for this article was prepared for Red Rocks Capital Partners.)

In a series of historical optimizations, we found that including U.S. private equity in the opportunity set would have dramatically improved the risk and return characteristics over the past 10-year period. From the beginning of 1997 to the end of 2006, U.S. private equity and non-U.S. private equity were the best-performing asset classes in the opportunity set, although the performance of the private equity proxies appears to be highly sensitive to the weighting scheme of the proxies. This sensitivity highlights that all private equity investments still contain a high level of specific risk. Over time, we think securitization will reduce the amount of specific risk associated with private equity portfolios.

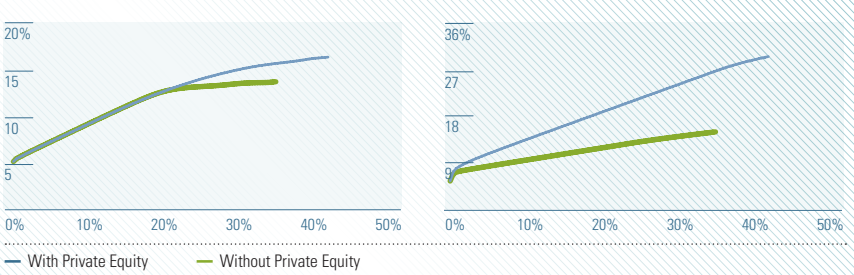
For the study, we created two historical efficient frontiers. Including U.S. private equity and non-U.S. private equity—based on both Red Rocks private equity indexes using backfilled histories—dramatically improved the risk/return characteristics of the efficient frontier. Over the common standard deviation range from approximately 0.67% to 34.1%, the average improvement in returns from including the two private equity asset classes in the optimization is an impressive 633 basis points.

We also created a forward-looking optimization using a set of returns based on a global implementation of the CAPM. In a finding that is qualitatively similar to that of Ennis and Sebastian[2], the benefit of including private equity is most significant for higher-risk, equity-centric asset allocations. The benefits are most pronounced in asset allocations with a standard deviation above 19%, which in our analysis corresponds to asset allocations with approximately 85% or more in equities.

In both historical and future-looking optimizations, including U.S. private equity and non-U.S. private equity in the opportunity set improved the available risk/return characteristics of the asset allocations. The portion of the private equity asset class that is available for purchase represents approximately 2.6% of the worldwide investable universe. A range around this 2.6% market-neutral allocation—varying from 0% to 10%—seems appropriate for most investors, according to the optimizations. For investors with average risk tolerances, an allocation below 2.6% could be regarded as underweight in private equity. Allocations to private equity above 10% should be entered into with great caution and are only appropriate for very aggressive, knowledgeable investors with access to top-quartile managers. Institutional investors with access to top-quartile managers should use traditional private equity funds to implement a target

How Private Equity Improves a Portfolio

An efficient frontier of portfolios with stakes in private equity offers better risk/return characteristics historically (left) and forward-looking (right) than one without private equity.



Public Firms, Private Investments

As of Dec. 31, 2007, the Red Rocks Listed Private Equity Index had 32 holdings and the Red Rocks International Listed Private Equity Index had 39. Here are each index's top 10 holdings.

Red Rocks Listed Private Equity Index

Company	Weighting %
Leucadia Natl Cp LUK	9.75
Fortress Investment Group FIG	9.00
American Capital Strategies ACAS	8.50
Blackstone Group L.P. BX	8.00
Capitalsource Inc CSE	6.00
Allied Cap Corp ALD	6.00
Apollo Investments AINV	4.75
Macquarie Infrastructure MIC	4.50
SVB Financial Corp SIVB	4.50
KKR Financial Corp KFN	4.50

Red Rocks Intl Listed Private Equity Index

Company	Weighting %
3i Group	8.75
Wendel Investment	8.25
Eurazeo	7.75
Onex Corp.	6.00
Ratos AB	5.50
Macquarie Infrastructure Group	4.75
KKR Private Equity Investors	4.75
Macquarie Airports	4.25
Babcock & Brown Infrastructure Group	4.00
Jafco	3.75

Source: Red Rocks Capital

private equity allocation. For other investors who want to include an allocation to private equity, investing in listed private equity is a viable and exciting alternative that, over time, should more accurately reflect the private equity asset class.

While the focus of our research has been on the role of private equity in strategic asset allocations, one of the most exciting implications of the development of listed private equity indexes is the ability to make tactical asset allocations to the private equity asset class. The illiquid nature of traditional private equity funds prevents tactical asset allocators from quickly increasing or decreasing allocations to the asset class. Listed private equity indexes and the introduction of ETFs based on them enables investors to quickly and easily make tactical shifts.

Fund-specific risk cannot be hedged, and the degree to which listed private equity proxies reflect the true beta characteristics of the private equity asset class is somewhat limited. We believe that the securitization of private equity investments is just beginning. This will have two significant impacts. First, moving forward, listed private equity proxies will more accurately reflect the beta characteristics of the private equity asset class, as more private equity investments are securitized. Second, while most current investments in private-equity funds are dominated by fund-specific risk, securitization will generally lead to more-diversified private equity investments. As this happens, typical private equity portfolios will be characterized less by investment-specific risk and more by the beta characteristics of the true private equity asset class.

The diversification of private equity portfolios and the diversification of listed private equity indexes will enable investors to hedge unwanted private equity asset class beta and begin to practice portable alpha/portable beta strategies with private equity portfolios. Because of securitization, we believe that what was once considered a pure alpha strategy is becoming exotic beta and will relatively quickly become standard beta. Additionally, what was once an institutional-only asset class will begin to appear in the strategic asset allocation of individual investors—something that was unheard of 10 years ago.

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Read the full white paper of this study at: http://MorningstarAdvisor.com/uploaded/pdf/PrivateEquity.pdf

Footnotes

1 In general, we are not fans of the "alternative" label, because it is often used as a catch-all bucket for more esoteric asset classes and newer investment strategies, which prevents a clear separation of alpha and beta. Strategic asset allocation is the beta decision and the implementation of that strategic asset allocation is the alpha decision.

2 Ennis, Richard M. and Michael D. Sebastian. "Asset Allocation With Private Equity" (2004).

Listed Private Equity Companies are subject to various risks depending on their underlying investments, which could include, but are not limited to, additional liquidity risk, industry risk, non-U.S. security risk, currency risk, credit risk, managed portfolio risk and derivatives risk (derivatives risk is the risk that the value of the Listed Private Equity Companies' derivative investments will fall because of pricing difficulties or lack of correlation with the underlying investment).

There are inherent risks in investing in private equity companies, which encompass financial institutions or vehicles whose principal business is to invest in and lend capital to privately – held companies. Generally, little public information exists for private and thinly traded companies, and there is a risk that investors may not be able to make a fully informed investment decision.

Listed Private Equity Companies may have relatively concentrated investment portfolios, consisting of a relatively small number of holdings. A conse¬quence of this limited number of investments is that the aggregate returns realized may be adversely impacted by the poor performance of a small number of investments, or even a single investment, particularly if a company experiences the need to write down the value of an investment.

An investor should consider investment objectives, risks, charges and expenses carefully before investing. To obtain a prospectus, which contains this and other information, call 1.866.759.5679 for the Listed Private Equity Fund and 1.866.514.3949 for the Listed Private Equity Portfolio or visit www.lpefund.com. Read the prospectus carefully before investing.

Shares of the Portfolio are offered only to participating insurance companies and their separate accounts to fund the benefits of Variable Contracts, and to qualified pension and retirement plans and registered and unregistered separate accounts.

Past performance is no guarantee of future results.

Diversification cannot assure a profit nor protect against a loss.

ALPS Distributors, Inc., distributor for the Listed Private Equity Fund and Listed Private Equity Portfolio.

AVS Listed Private Equity Portfolio is a series of ALPS Variable Insurance Trust.

Listed Private Equity Fund is a series of Financial Investors Trust.

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Alpha – The excess return of the fund relative to the return of the benchmark index is a fund's alpha.
Beta – A measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole.
Correlation – A statistical measure of how two securities move in relation to each other.
Capital Asset Pricing Model (CAPM) - A model that describes the relationship between risk and expected return and that is used in the pricing of risky securities.
International Listed Private Equity Index – The Index is designed to track the performance of private equity firms which are publicly traded on nationally recognized exchanges outside the United States. These companies invest in, lend capital to, or provide services to privately held businesses. The Index is comprised of 30 to 50 public companies representing a means of diversified exposure to private equity firms.
Listed Private Equity Index – The Index is designed to track the performance of private equity firms which are publicly traded on nationally recognized exchanges in the United States. These companies invest in, lend capital to, or provide services to privately held businesses. The Index is comprised of 25 to 40 public companies representing a means of diversified exposure to private equity firms.
Sharpe Ratio – A ratio developed by Nobel laureate William F. Sharpe to measure risk-adjusted performance.
Standard Deviation - A measure of the dispersion of a set of data from its mean. The more spread apart the data, the higher the deviation.

Red Rocks Listed Private Equity Index and the Red Rocks International Listed Private Equity Index are indexes. You cannot invest directly in an index.

RRC000194 | 3/31/09