Introduction
Recent months have seen a number of questions being raised about private equity and its role in a portfolio, such as:
• Are returns more limited today because of competition?
• Is the lack of liquidity in private equity justified by returns?
• How significant are the diversification benefits of holding private equity in a portfolio?

In this white paper, we will consider each of these questions, review the basics of private equity (page 2), and examine where private equity may add the most value for investors in the coming years.

Our bottom line up front: We believe that private equity’s unique characteristics make it an investment that, when used appropriately, can add significant value to a well-diversified portfolio. That said, average returns in the asset class are insufficient and would not warrant an allocation, so accessing top managers is paramount. Returns also vary greatly by year. Therefore, we believe it is very important to invest in the asset class over a multiyear period.

Too Much Capital?
The large amount of capital raised by private equity firms coming into the 2008 crisis has heightened the competition for a limited pool of deals. In 2008 alone, over $600 billion was raised for private equity investment. Managers, especially of larger buyout funds, have since been slow to deploy that capital, creating “capital overhangs” of between roughly $450 billion and $600 billion over the last five years — that is, capital raised but not yet invested (Exhibit 1). As of year-end 2011, data from Preqin showed the capital overhang ranged from approximately 2.5 to 4 times global buyout investment activity in 2011, implying that — even if no new capital were raised going forward — it would still take 2.5 to 4 years to invest this capital. As the end of the investment period nears for those funds raised in the peak fundraising years of 2007 and 2008, upward pricing pressures are being felt throughout the large-deal landscape, likely resulting in lower returns for that segment.

Exhibit 1: The “Capital Overhang”

In fact, competition for deals is one reason behind venture capital’s disappointing average returns over the last decade. “Hot” areas such as social networking, digital media, and gaming attracted too much capital, resulting in lofty valuations. Only top-performing managers who were early investors in these sectors and beneficiaries of the rising valuations, and who could attract the best entrepreneurs and the most deal flow through proven track records, were able to stand out.

Perhaps not surprisingly given the financial crisis and subsequent global recession, the fundraising environment has become more difficult. Indeed, many weak or unproven managers are now spending two years or more trying to raise capital, and even then with limited success. This shakeout, in our view, is long overdue. The decrease in competition should result in a more attractive investing environment for the survivors. Capital overhang-related risks in private equity should continue to abate at the margin, supporting private equity returns in the years ahead.
What Is Private Equity?
Private equity encompasses any investment in a private company, private investments in public companies, and take-privates of quoted companies. This is typically done through a limited partnership, in which a limited partner (LP) commits capital to a general partner (GP) to invest in a portfolio of private companies on the LP’s behalf. These partnerships are referred to as private equity funds and are generally focused on a particular strategy or geography.

Private equity funds largely fall into one of three categories: (a) venture capital, which is primarily comprised of minority investments in start-up and other early-stage companies, (b) growth capital, which also typically involves minority investments, but in later-stage and mature companies seeking to accelerate growth, and (c) buyouts, which generally feature controlling investments in mature businesses and are often financed in part with leveraged loans. Other private equity strategies include distressed debt investments in underperforming companies, or mezzanine debt investments, which are subordinated to senior debt in a company’s capital structure and have some equity-like characteristics.

The circumstances that lead a company to accept private equity investment are varied and case-specific. A start-up might receive venture capital investment to hire key staff or develop prototypes, whereas a buyout transaction could be the product of a generational ownership transition, corporate restructuring, privatizations, or financial distress.

Venture capital is an important asset class that has helped create a multitude of successful businesses and innovations over recent decades. High risks involved in venture investing have often been justified by high potential returns.

Like venture capital, buyouts have also been key in advancing modern management practices and corporate governance. But unlike venture investing, buyout investing typically carries less risk because of the maturity and size of the companies involved. Return expectations are lower but can be boosted through leverage. Considering the complementary characteristics of venture capital and buyouts, a well-diversified private equity portfolio may include both strategies to create a more attractive risk-reward profile.

Investment time horizons, liquidity needs, and risk tolerance are all important factors in assessing an individual investor’s ability to participate in alternative investments such as private equity. Generally speaking, the lower an investor’s liquidity needs and the longer the time horizon, the more an investor may be in a position to tolerate risk and allocate to alternative investments. Exhibit 2 highlights the spectrum of investments from most to least liquid. Theoretically, an investor seeking multigenerational growth, whose family will have no liquidity needs, could invest entirely in a well-diversified portfolio of alternative investments. As time horizons shorten and liquidity needs increase, however, allocations to more-traditional investments should increase.

Exhibit 2: The Illiquidity Premium

The relative positioning of asset classes is for illustrative purposes only, and performance can vary substantially from one investment vehicle to another.
Illiquidity and Fees: Are They Worth It?

While we believe that consolidation within private equity should help reduce competition for deals in the coming years, liquidity constraints tied to private equity investing are structural. Investors therefore need to ask if tying up their capital for this asset allocation is worth it.

A long-term focus is important for any private equity investment strategy, as is the ability to weather the ups and downs that are common to cyclical asset classes. This cyclicality emerges from a number of sources, including the dependence on leverage to facilitate buyout transactions. There are also inherent risks in early-stage investing, as start-up companies often do not have proven business models or steady revenue streams and can experience high rates of failure. Venture capital is a “hits” business where a handful or fewer companies may return a multiple of a fund’s invested capital. Indeed, a successful venture capital fund will generate strong returns despite a significant number of investments losing money or being wiped out entirely.

The duration of private investments varies widely but often can be as long as a decade or more. As noted in Exhibit 3, as of August 2012, the vast majority of private equity investments made in 2006 were still unrealized. Because of the timing of the recession, many 2006 and 2007 investments are likely to be held longer than initially expected.

Many private equity skeptics note that, beyond liquidity constraints, private equity investments also involve relatively high fees. Certainly, management fees charged by private equity funds tend to be higher than those of other investment vehicles such as mutual funds. This is in part a result of the high costs of thorough diligence and investment monitoring on the part of the fund manager and the expertise and resources necessary to add value to private companies.

In the early years of a fund’s life, management fees are typically based on a percentage of committed capital before stepping down to a percentage of remaining capital under management after the fund’s investment period. Fees are based on total committed capital at the fund’s outset, in part to incentivize the fund managers to make sound, attractive investments, rather than rush to deploy capital to collect fee income. Management fees typically range from 1-2% of committed capital for buyout funds and 2-2.5% for venture funds. The difference is primarily attributed to variances in fund sizes.

In addition to management fees, private equity fund managers are usually entitled to receive what is known as “carried interest,” a share of the profits they generate, which usually ranges from 20-30%. While carried interest can significantly raise the cost borne by investors, it generally aligns the interests of the GPs with those of their LPs, as both benefit from higher-performing investments. Before collecting carried interest, fund managers are also often obligated to return at least a portion of management fees to investors, and may even have to return capital including preferred returns.

The higher expected returns from private equity may justify these relatively higher fees. The National Bureau of Economic Research recently published a report suggesting that private equity firms with relatively higher fee structures outperformed their lower-fee peers on an after-fee basis. We believe fees should always be closely evaluated, but are typically not the most salient determinant of a private equity investment decision.
With liquidity constraints and fees in mind, we go back to our earlier question: Are investors adequately compensated for holding private equity?

If the private equity manager is just average, our answer is no. There is a wide disparity between the best- and worst-performing funds, which makes access and manager-selection decisions critical (Exhibit 4). Median returns in private equity are not sufficient, in our view, to justify the illiquidity and resources needed to manage a portfolio. In fact, even top-quartile performance in venture capital funds is not sufficient. With an 8.6% annual return for the top quartile over the last 20 years, the asset class did not provide attractive returns relative to traditional equity. In our view, one would need to capture closer to top-Decile performance (26.6% annual return over the last 20 years) to justify the risk of investing in the asset class.

Where does the outperformance by top managers in private equity come from?

We would highlight three main factors: the longer-term nature of the asset class, the private equity firms’ control over the direction of their companies, and the access private equity provides — both to micro and macro trends.

In contrast to public companies, which must publicly report performance on a quarterly basis, private companies are relatively free from such short-term scrutiny, allowing them to focus on driving meaningful longer-term improvements. The private equity model also attempts to align the interests of all constituent parties, including the company, its management, investors, and employees, where all can benefit by improving a company’s performance through shared ownership and objectives. Company management can also be held more directly accountable for performance given the more concentrated ownership structure.

Private equity managers typically have significant influence over the companies in which they invest. This may include hiring or firing key executives, approving management compensation, setting the company’s long-term strategy, attracting board members, and even making customer introductions. They also have considerable decision-making authority over operating, financing, and acquisition and divestiture strategies. It is often through this involvement that a private equity firm can distinguish itself from other sources of capital and private equity peers.

Separately, private equity investments source attractive returns through specific micro and/or macro views. Consider emerging markets as an example. Private equity funds can focus on privately held, smaller emerging-market companies that will benefit from structural growth of these countries’ consumers, whereas many key emerging-market

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<th>Exhibit 4: Dispersion of Active Management Returns</th>
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<tbody>
<tr>
<td>20 Years Ended March 31, 2012</td>
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<tr>
<td>Asset Class</td>
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<tr>
<td>-------------------------------</td>
</tr>
<tr>
<td>Global Fixed Income</td>
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<td>Global Equity</td>
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<td>Global Venture Capital</td>
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<td>All Private Equity</td>
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Private equity data represents returns on funds formed between 1992 and 2008, excluding more recent funds so that immature investments will not influence reported results. “All Private Equity” includes venture capital, buyouts, mezzanine, energy, turnaround/distressed debt, and other types of private equity funds. Source: Thomson Reuters
equity indexes are heavily focused on more mature and/or export-oriented companies, and therefore do not capture the growing domestic-demand trend in emerging markets. In Brazil, the Bovespa Index primarily consists of large cap companies in sectors such as financials (27%), basic materials (21%), and energy (20%), with less exposure to the consumer sector (15%).

In China, meanwhile, public equity markets are dominated by industrial and energy companies, usually state-owned enterprises with objectives that may be tied more to government priorities than profits (Exhibit 5). Further, Chinese banks in recent years have channeled most of their capital to these state-owned enterprises. Small- and medium-sized companies, trying to grow, have often been starved for capital — representing an opportunity for private equity.

**Exhibit 5: Chinese Public Companies by Sector**

![Sector data based on Shanghai Stock Exchange Composite Index as of July 23, 2012. Figures indicate number of companies as percentage of index. Source: Factset](image)

Another path to secure attractive returns for private equity, and especially venture capital, is via early-stage companies with innovative technology; companies such as Facebook and Google come to mind. Such efforts allow investors to participate in the full life cycle and gains of a successful company, rather than whatever public markets may deliver after IPOs.

**Private Equity and Asset Allocation**

For appropriate investors, we believe private equity has an important, constructive place in asset allocation — not only through potentially attractive returns, but also via diversification from other asset classes such as stocks (Exhibit 6). Sophisticated institutional investors have benefited from allocations to private equity for years. Indeed, large endowment portfolios (over $1 billion) with the greatest allocations to illiquid alternative investments (including private equity) had the best performance in their peer group over trailing 5- and 10-year periods, according to the 2011 NACUBO-Commonfund Study of Endowments.

Over the past two decades, private equity’s correlation of 0.73 to the S&P 500 is low relative to other equity indexes. Correlations remain positive in part because of the relevance of IPOs and strong corporate M&A activity for “exiting” private investments.

**Exhibit 6: Equity Correlations**

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<th>S&amp;P 500</th>
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<tbody>
<tr>
<td>Russell 2000</td>
<td>0.89</td>
</tr>
<tr>
<td>NASDAQ Composite</td>
<td>0.86</td>
</tr>
<tr>
<td>MSCI EAFE</td>
<td>0.85</td>
</tr>
<tr>
<td>U.S. Private Equity</td>
<td>0.73</td>
</tr>
</tbody>
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Correlations based on 20-year, end-to-end quarterly returns ended December 31, 2011. Private equity valuations are not marked to market as frequently as the other equity indexes depicted above. Source: Thomson Reuters, Cogency

Investors who successfully use private equity in their portfolios tend to buy into “vintages” of private equity offerings, as returns in this asset class will vary over the economic cycle. Vintages that follow recessions have generally outperformed. For example, 2001-2003 vintage funds significantly outperformed their 2000 vintage peers, and the same contrast is developing between the 2009-2011 vintages and their 2007 vintage peers.

Vintage diversification is also helpful in order to manage cash flow needs of a successful private equity investment strategy and to appropriately manage exposure to the asset class.
Let’s walk through the cash flows in more detail, as this can impact how much capital should be allocated to private equity within a portfolio.

Private equity funds are usually drawdown funds, which means that investors commit to funding a certain amount of capital over the fund’s investment term. This capital is called down over time, as the investment manager finds suitable investments. When the manager sells underlying investments, the proceeds of the sales are distributed back to investors.

Experience suggests that the maximum out-of-pocket expense for an investment in a typical private equity fund is approximately 60-70% of the initial commitment amount, although this can fluctuate greatly (Exhibit 7). The gold line in Exhibit 7 shows cumulative contributions and the blue line shows cumulative distributions. The green shaded area shows net contributions (contributions minus distributions). If an investor committed $100 to a private equity fund, even though the investor will contribute about $100 over the life of the fund, because the investor may receive distributions during the fund’s life, he or she will typically not be “out-of-pocket” more than $60-$70. As a result, when thinking about private equity in an asset allocation context, an “overallocation” to private equity may be justified, as capital actually invested will tend to be lower than that initially committed.

When considering private equity’s role within a broader portfolio, at least two other key issues should be considered: taxes and transparency.

Under the current tax code, the long-term nature of private equity investing often results in tax-efficient, long-term capital gains rather than current income. While taxes should never be the key driver of an investment strategy for individuals or families, they are an important consideration. With respect to administration and oversight, privately owned companies have lower transparency obligations than their public market counterparts; in fact, confidentiality and limited disclosure are typical for strategic and competitive reasons, particularly in venture capital.

Additionally, because of tax reporting obligations at the asset and fund level, investors in a private equity fund should assume that they will be required to request extensions of their income tax filings. Financial reporting from private equity funds also tends to lag reporting from mutual and hedge funds by a meaningful margin for the same reason.

**Measuring Private Equity Performance**

Beyond looking at private equity within a broader portfolio’s returns, how should an investor judge performance?

We would define three primary measures of private equity performance. The most widely followed is the internal rate of return, or IRR, an annualized rate of return that measures the profitability of an investment. Private equity managers typically expect a greater IRR for a given investment than a public market investor, primarily to compensate for the illiquidity over the life of the investment — and the greater role they can play in adding value. A “net” IRR is important to LPs, as it strips out all the fees and expenses in reporting performance.
In the early years of a private equity fund’s life, it is common for investments to have negative net IRRs because of fees and expenses, the effects of the time value of money, and early write-downs and write-offs (particularly in venture capital). As the performance of the investment improves, the net IRR becomes positive, in an effect known as the “J-Curve” (Exhibit 8).

The other two important performance measurements for private equity are ratios: distributions compared to paid-in capital (DPI) and total value to paid-in capital (TVPI). Paid-in capital refers to the amount of a commitment that an investor has contributed at a given time, rather than measuring the ratio using the entire commitment amount.

Some investors are more focused on current returns and are thus more inclined to emphasize net IRR, whereas others are more focused on absolute long-term returns and DPI and TVPI, depending on their investment objectives. Investors such as pension funds tend to pay closer attention to current returns, whereas endowments and foundations tend to look at absolute long-term returns. We believe individual investors should consider all three.

**Exhibit 8: Hypothetical Cash Flows and the “J-Curve”**

![Graph showing hypothetical cash flows and the J-Curve]

IRRs and cash flows are for illustrative purposes only and can vary substantially from one investment vehicle to another.

For more information on private equity, please contact your Client Account Manager. You may also want to refer to the following links:

- National Venture Capital Association
  [www.nvca.org](http://www.nvca.org)

- Preqin Private Equity Monthly Spotlight, August 2012
  [http://www.preqin.com/listNewsletter.aspx](http://www.preqin.com/listNewsletter.aspx)

- Bain Global Private Equity Report 2012

- The McKinsey Quarterly — The Voice of Experience: Public Versus Private Equity

- Private Equity International — Alternative Insight: Managers Do Earn Their Fees

- Coller Capital Global Private Equity Barometer