

Private Equity at Work

Buying High When Financial Markets Are Flying High May Mean Disappointing Returns

By Eileen Appelbaum and Rosemary Batt*

The California Public Employees' Retirement System approved an interim plan to cut its private equity strategic asset allocation for the second time in three months... (Private Equity Law 360, May 22, 2014)

Private equity investments and fundraising last quarter reached their highest first quarter levels since 2008...
(Private Equity Growth Capital Council Press Release, May 22, 2014)

Private equity draws on financial commitments from large institutional investors and wealthy individuals for its investment funds. Pension funds are the industry's biggest investors and supply 35 percent of the capital committed to PE funds. On the advice of high-paid consultants and advisors, private equity investors commit a minimum of \$10 million to a private equity fund and often much more. Our analysis of PitchBook data finds that the current allocation to private equity of the top 32 pension fund investors averages \$7.9 billion each. At these levels of investment, it is usually assumed that investors are sophisticated players in financial markets who are not intimidated by numbers, not easily fooled by pitches for too-good-to-be-true investment opportunities, and, unlike naïve retail investors, too savvy to rush into investments at market peaks. But are they?

It's true that PitchBook Data's latest benchmarking and fund performance report [behind a paywall] reports that 2012 was a banner year for distributions from PE funds to their investors; and 2013 looks to have been even better. Distributions hit \$233 billion in 2012 and net cash flow



Center for Economic and Policy Research 1611 Connecticut Ave. NW

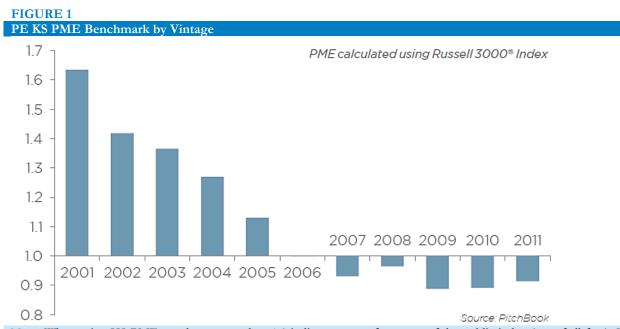
Suite 400 Washington, DC 20009 tel: 202-293-5380 fax: 202-588-1356 www.cepr.net

^{*} Eileen Appelbaum is a Senior Economist at the Center for Economic and Policy Research, in Washington D.C. Rosemary Batt is the Alice Hanson Cook Professor of Women and Work at the ILR School, Cornell University.

(distributions to investors less contribution to PE funds from investors) was a healthy \$54 billion – a ten year high. Net cash flow through the third quarter of 2013 (latest available) at \$105 billion is already nearly double the 2012 total. 2013 was a great year for PE fundraising as well, as cash-rich limited partners ploughed a good part of their distributions back into investments in PE funds. What could go wrong?

Private equity returns may be up, but so is the stock market: the question for pension funds and other investors in this asset class is whether these returns beat the stock market. After all, private equity investments are illiquid and require a 10-year commitment of capital, and they carry risks that investors in the stock market don't have to worry about. If PE investments don't provide returns that handily beat a less risky and highly liquid stock market index fund, what is the point of investors paying private equity firms 2 percent of the millions in committed capital in management fees each year?

The <u>public market equivalent (PME) benchmark</u> developed by Steven Kaplan and Antoinette Schoar makes it possible to directly compare private equity fund performance to the performance of a stock market index such as the Russell 3000 that consists of publicly traded companies of the same size as most companies acquired by PE funds. **Figure 1** below, from the 2014 Q2 PitchBook benchmarking and fund performance report, shows how the performance of the typical PE fund from the date of its inception compares with that of the stock market over the same period.



Note: When using KS PME, a value greater than 1.0 indicates outperformance of the public index (net of all fees). For example, the 1.27 value for 2004 vintage PE funds means investors in a typical vehicle from that year are 27% better off having invested in PE than if they had invested in public equities over the same period.

Figure 1 shows quite dramatically both that PE returns are highly cyclical and that they have fallen

steadily since the 2001 vintage year. Funds launched in the years immediately following the dot-com bust, when the stock market was in the doldrums and enterprise values for publicly traded and family-owned businesses were low, typically outperformed the stock market by a wide margin in subsequent years – enough to make investing in private equity worthwhile. The 1.27 value of the PME for the typical fund launched in 2004, while below the value in earlier years, indicates an outperformance of 27 percent since the fund's inception 9 years earlier, or an annual outperformance of just under 2.7 percent. The typical fund launched a year later, in 2005, beat the stock market by just 10 percent since inception, or by 1.2 percent a year over the subsequent 8 years. Funds launched in any year after 2005 have done much worse and have typically failed to beat the stock market.

The cyclical nature of private equity returns does not bode well for pension funds and other investors who are currently piling into private equity funds. The booming stock market has let PE funds exit investments via successful initial public offerings (IPOs) and distribute returns to investors. Investors have turned around and ploughed these returns back into new private equity funds; indeed, private equity fund raising in the first quarter of 2014 was the strongest first quarter since the financial crisis struck in 2008. But successful fund raising means PE buyout funds have lots of cash on hand - so-called dry powder - that they need to deploy, and they are competing for a limited number of attractive companies. Along with the high stock market valuations for publicly traded companies, this competition among PE funds for desirable acquisitions has led PE funds to pay prices that are close to historic highs. This year U.S. PE funds have paid an average price equivalent to 9.2 times ebitda - close to the 2007 peak of 9.7 times. Paying 12 times ebitda is not unheard of. Acquiring companies at these high prices will make it difficult to exit these investments at a profit. This will be doubly true if the bull market in stocks slows in the future, as is likely. Moreover, despite guidance to banks by the Federal Reserve and the Office of the Comptroller of the Currency to limit debt in leveraged buyouts to 6 times earnings before interest, tax, depreciation and amortization (ebitda), many private equity takeovers have used leverage above this ratio.

Funds launched in 2009 to 2011 when financial markets were in turmoil, when there was a bear market in stocks, and when prices paid to purchase companies were low are likely to do well if they are able to exit investments while the stock market is still on a tear. As in the early 2000s, these PE funds may be able to benefit from having bought low and selling high. But what of funds launched now, when the stock market – and enterprise values – are both high and the global PE industry has \$412 billion at the end of March 2014 (up from \$380 billion in December 2013) in dry powder waiting to be deployed? The historical record suggests these funds will not fare so well.

We learned in the financial crisis that history is not the strong suit of seemingly sophisticated financial market actors. Not unlike naïve investors, they tend to pile into an asset class that appears to be performing well at the moment without regard for the likely effect of buying high on subsequent returns. This tendency is exacerbated by the private equity industry, which prefers to

measure fund performance using the internal rate of return (IRR) – a flawed performance measure as we document in our book <u>Private Equity at Work: When Wall Street Manages Main Street</u>. The IRR remains the gold standard of benchmarking by the industry despite the fact that it, unlike the public market equivalent, cannot be directly compared to the performance of the stock market. While PE funds have failed since 2004 to deliver on their promise of an IRR of 20 percent or more, their performance looks much better on this measure than the PME. This can be seen in Figure 2 below, also taken from the PitchBook benchmarking and fund performance report.

FIGURE 2

IRR Benchmark by Vintage											
Vintage Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Top Quartile IRR Hurdle	34.1%	29.1%	25.7%	17.1%	11.8%	10.8%	13.5%	15.6%	17.2%	16.2%	13.9%
Median IRR	18.5%	16.2%	12.0%	12.1%	8.0%	6.8%	8.0%	10.3%	10.0%	8.8%	8.5%
Bottom Quartile IRR Hurdle	10.3%	8.0%	5.9%	5.3%	3.0%	2.4%	4.2%	5.0%	6.8%	1.8%	-1.0%
Source: Pitchbook											

While the IRR for top quartile funds has declined dramatically from the heady returns of funds launched in the 2001 – 2003 period, the IRR of 14 percent or better earned by top performing funds launched more recently is likely to appear attractive to pension funds and other institutional investors. And indeed, several academic studies (see here, here, and here) find that investments in private equity funds that are top quartile performers generally do beat investments in publicly traded companies. Median returns are probably more relevant for investment decisions, however, as most investors will not be invested in the top quartile funds, and there is no longer a tendency for this year's top performers to do as well in subsequent years. Despite an IRR in the 7 to 10 percent range, the median fund as we saw in Figure 1 has not outperformed the stock market since 2005. Pension funds and other private equity investors would have seen higher returns from putting their capital into a Russell 3000 index fund than from committing it to the typical PE fund.

The cyclical nature of private equity performance is well known to academic researchers (see here, and here, but many investors seem unaware of this phenomenon. Past experience suggests that most investors committing capital to PE funds near a stock market peak are unlikely to achieve returns in subsequent years that beat the market. Private equity performance that appears acceptable when measured by a fund's internal rate of return may actually underperform public equities. There is a good chance that many investors piling into PE funds today in the belief that these investments will return a premium over the stock market that justifies the added risk and illiquidity will face disappointment.