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# Skill vs. Luck in Private Equity Investors' Hunt for Excess Returns

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## SUMMARY

Most investors are keenly aware that private equity returns differ substantially not only across funds but can also vary significantly from fund to fund over time. Although some fund managers have generated consistently superior returns for their investors, the generally limited degree of persistence in returns requires a highly disciplined due diligence process in fund selection. As new research finds, the performance of limited partners' investment portfolios varies almost as much as the net returns of individual private equity funds. As a result, limited partners with superior selection skills have harvested substantially higher risk-adjusted private equity returns than the average public market equivalent would suggest.

Global investors made a record $1.3 trillion of commitments to private equity funds during the past four years, exceeding even the previous boom that ended in 2008,[1] and limited partner (LP) interest in global private equity has remained strong in the first months of 2017.

Driving this demand: LPs seeking better returns than they can achieve in other asset classes, notably in public equities, in a low interest rate environment. Historically, buyout funds have outperformed various public market indexes by around 300 to 400 basis points (3-4 percentage points), an "illiquidity premium" that compensates investors for the fact that private equity investments are less liquid than public market holdings.[2]

The computation of this premium is based on the average performance of all funds raised in a given vintage year. However, private equity investors know that there are huge variations in how particular private equity funds perform. While some funds generate substantially higher premiums than 300-400 basis points (bps), others fail to generate any premium at all.

For instance, researchers Harris, Jenkinson and Kaplan found that for the vintage years 1994 to 2010, top-quartile U.S. buyout funds achieved an average return fully 79% higher than similarly timed investments in the S&P 500—or around twice the average 300-400 bps. In contrast, private equity portfolios whose LPs had consistently picked third-quartile funds would on average have achieved an excess return of only 5%—implying still better returns than in public markets, but a significantly more meager compensation for the illiquidity of their investments.[3]

**These findings clearly suggest that fund selection is critical**. However, identifying outperforming fund managers is a daunting task, given the sheer number of choices LPs have. In the buyout segment alone, there were 280 funds in the global fundraising market at the beginning of May,[4]—funds whose performance can be assumed to have as wide a variance, or dispersion, as in previous vintage years.

The substantial dispersion of returns would not matter so much if performance could be repeated in successor funds over time (and, of course, all funds, including the top-performers, were perfectly accessible). If returns were persistent, a top-quartile fund would be preceded by a top-quartile fund, and a third-quartile fund's predecessor would also be a third-quartile fund. Conversely, if returns were not at all persistent, the probability a fund would be preceded by a top-quartile, second-quartile, third-quartile or bottom-quartile fund would simply be 25% each.

The reality is somewhere in between, and at least for buyouts, the degree of

persistence appears to have declined since 2000.[5] Importantly, to the extent that persistence *is* found, the occurrence may not mean much because there is typically a partial overlap of consecutive funds that are managed by the same private equity firm. This partial overlap implies that two consecutive funds are subject to similar market conditions. Additionally, re-up decisions are typically made when the predecessor fund is still in its investment mode and its performance is subject to substantial uncertainty.

Still, even if persistence is more than just spurious, is it a smart strategy for an LP to narrow due diligence to the performance of a private equity firm's previous fund?

According to recent academic research, **focusing on how a firm's previous fund performed would be overly simplistic, because it fails to distinguish between a fund manager's investment skills and sheer luck**.[6] As this research shows, the knowledge that a fund manager had three consecutive top-quartile funds would still by itself be insufficient evidence to conclude that the fourth fund will also be top quartile. In fact, among the more than 3,500 global private equity firms, there are numerous examples where impressive track records reached a breaking point due to strategy shifts, departures of key professionals or unanticipated changes in the investment environment.

This suggests that **due diligence must be much deeper and broader than just following a fund manager's past performance; people and process also matter greatly**. Additional elements that should play a critical role in the due diligence process include a GP's strategy and its consistency over time; industry expertise, market opportunities and competitive advantages to exploit them; deal sourcing; team cohesiveness; succession planning; and the distribution of economics within the team and the firm. Other essential factors concern the alignment of interest through appropriate governance structures; CSR policies and reporting; and the implementation of a rigorous risk management approach.

While all this may seem obvious, due diligence processes vary substantially within the LP community, which is reflected in the significantly varied returns they have achieved. Examining investment portfolios of 630 unique LPs who made commitments to private equity funds between 1991 and 2006, researchers found an average Internal Rate of Return (IRR) for buyout funds of 10.96% (net of fees), with the performance of the first-quartile and the third-quartile portfolio ranging from 21.30% to -0.10%.[7] So, the data suggests, **varied diligence practices result in a range of returns that is almost as broad as the average return differentials of the underlying funds themselves**.

It is indispensable to hire and retain experienced investment professionals, provide them with adequate due diligence resources and put in place appropriate investment processes.

To what extent are these measured differences due to skills rather than luck?

Employing a bootstrap approach, the same researchers simulated a return distribution where all differences in performance reflect random luck. In a second step, this distribution is compared with LP portfolios' actual performance. The results suggest that there is significantly more variation in performance than one would expect. The upshot: **the impact of investment skills on performance is large**—an increase of only one standard deviation in skill (the biggest part of the range of total outcomes) is found to lead to about a 3% increase in IRR. Importantly, these results hold true with regard to various sub-samples in terms of time periods and investor types (e.g. endowments, family offices, pension funds or insurers). **So selection skills matter greatly.**

Superior investment skills are rare, however. For investors attracted by the substantial excess returns private equity has generated in the past, **it is indispensable to hire and retain experienced investment professionals, provide them with adequate due diligence resources and put in place appropriate investment processes**. This is as important for LPs as it is important for GPs to hire and retain the best talent and follow rigorous and systematic investment procedures.

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1. Includes commitments to partnerships focusing on buyouts, venture capital, growth capital, mezzanine, and distressed debt from 2013-16. Data from Preqin; accessed 5/4/17.
2. Harris, R.S., Jenkinson, T., & Kaplan, S.N. (2016). How do private equity investments perform compared to public equity? Journal of Investment Management 14 (3), 1- 24. Table 4.
3. Harris, R.S., Jenkinson, T., & Kaplan, S.N. (2016). Table 4.
4. Data from Preqin. As of 5/4/17.
5. Harris, R.S., Jenkinson, T., Kaplan, S.N. and Stucke, R (2016). Has persistence persisted in private equity? Evidence from buyout and venture capital funds. Unpublished Working Paper. University of Chicago.
6. Korteweg, A.G. & Sorensen, M. (2015). Skill and luck in private equity performance. Unpublished Working Paper. Stanford University. Forthcoming in Journal of Financial Economics.
7. Cavagnaro, D.R., Sensoy, B.A., Wang, Y., & Weisbach, M.S. (2016). Measuring institutional investors' skill from their investment in private equity. Unpublished Working Paper. Ohio State University. Valuations as of end-2011.

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