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TOPICS OF INTEREST

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Private equity portfolios for small plan sponsors

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Executive summary

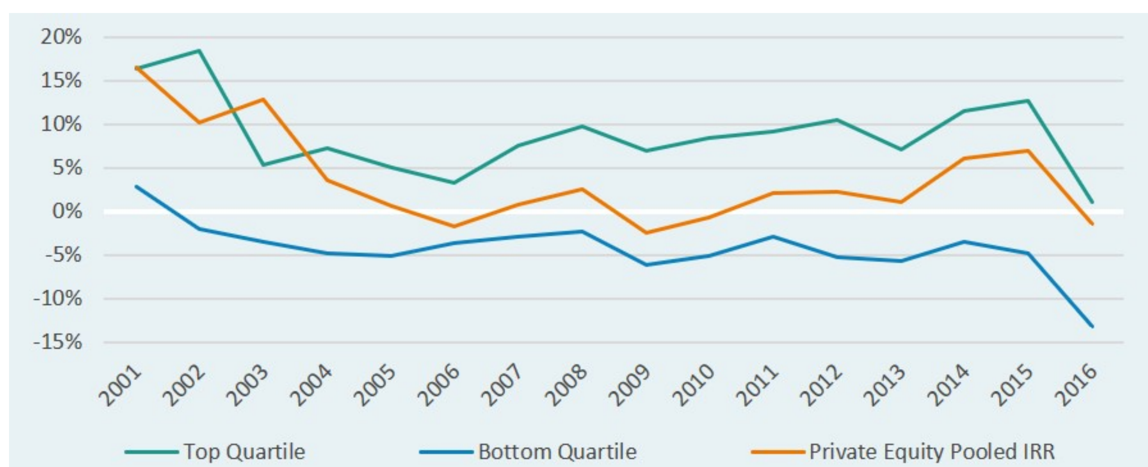
This paper will seek to address whether smaller institutions (<$200 million in AUM) should add private equity (PE) to their portfolios and how best to implement PE, if so. Using data from a number of sources, we will seek to quantify what the historical experience has been for smaller institutions that have invested in the asset class. We will highlight some of the pitfalls that have likely contributed to any poor results and present a path for smaller institutions to improve their performance in the asset class.

Does private equity have a role in smaller portfolios?

Private equity serves one role in a diversified portfolio: to enhance returns above those available in public equity markets. Institutions have turned to private equity as a way to achieve their required rates of return in the face of low bond yields and low expected returns in public equity. In fact, over the last 20 years, private equity has achieved these goals, on the whole, outperforming U.S. public equity markets by 300-400bps[1]. However, investing in private equity is expensive, administratively difficult, requires considerably larger research and legal infrastructure and the dispersion of outcomes is far greater than those found in public markets. That last point is particularly important because if you fail to pick top performing managers in private equity, you will likely underperform a simple public market index.

As *Figure 1* highlights, bottom quartile private equity funds underperformed the Russell 3000 Public Market Equivalent (PME) across most vintage years since 2001. The aggregate level of private equity returns (Private Equity Pooled IRR) has outperformed public market returns over most time periods but the spread has noticeably compressed since the early 2000s. There are several factors likely driving this compression in excess returns, but a key contributor is a more efficient private equity market, which appears to be here to stay. In the future investors will need to manage the gap between gross and net returns more effectively, ensure access to skilled managers, create and update detailed cash flow pacing models and actively manage their private equity portfolios to optimize returns and relationships with managers.

FIGURE 1: PITCHBOOK – PRIVATE EQUITY FUND EXCESS RETURNS – RUSSELL 3000 PME



Source: Pitchbook

Russell 3000 PME is calculated using the Private Equity Pooled IRR cash flows. Private Equity Pooled IRR is a composite index created by Pitchbook using the aggregate cash flows within their private equity universe.

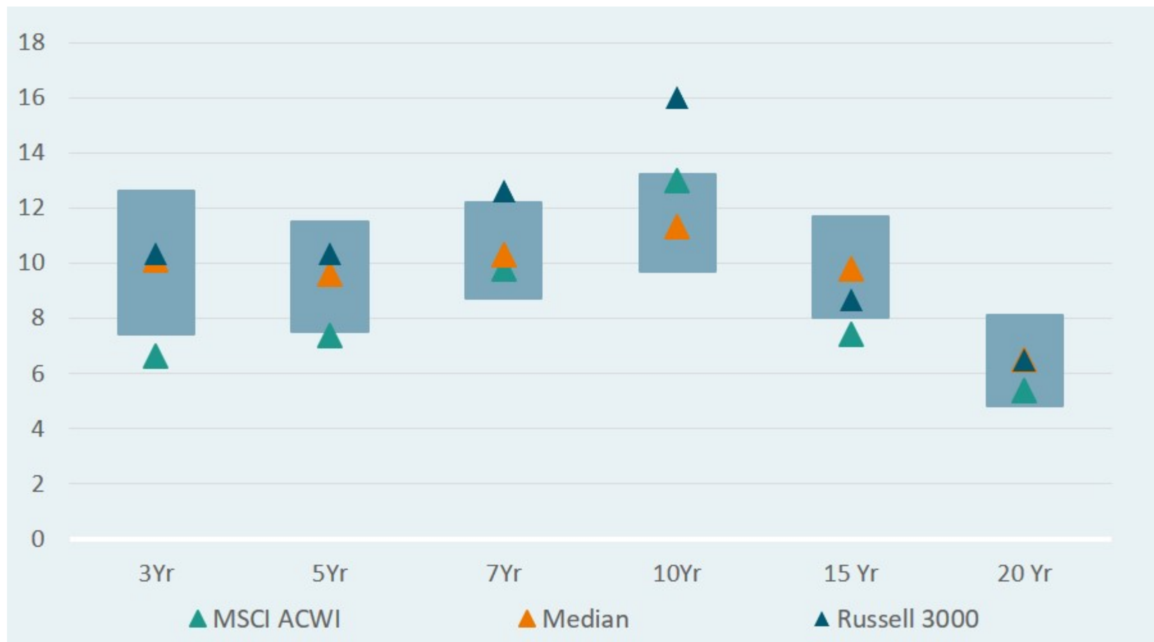
Returns shown are vintage year IRRs (net of fees) in excess of the Russell 3000 PME from 2001-2016

It is important to recognize that the private equity experience for specific investors is influenced by their size. When we reviewed data from InvestorForce on private equity portfolios among a sample of small-medium sized institutional plans[2], we found that rather than producing outperformance, the median private equity portfolio for these smaller plans in fact underperformed US public equities by 80bps over the trailing 20 years (*see Figure 2*). The trailing 15-year period looks more favorable for private equity relative to public market returns for these plans, no doubt helped by significant outperformance for private equity during 2008[3]. We would highlight two issues with the InvestorForce data. First, the returns shown are time-weighted for all observations which for private equity can diverge meaningfully from dollar-weighted returns. Second, the number of observations within the dataset is quite small going back 15 and 20-years. With those two caveats in mind, the data shows how difficult it has been for many institutional investors to outperform the public

markets. There are some plans that have achieved meaningful excess returns. The blue bars highlight the large dispersion in performance between top and bottom quartile plans, reflecting not only dispersion within private equity funds but also differences in implementation between plan sponsors.

Overall, the data reveals that for many institutional investors private equity is either only marginally outperforming the public markets or underperforming altogether. Smaller institutions can and have built impressive private equity programs which perform as they were intended but those results are generated through manager selection skill, rather than simply from allocating to the asset class. A healthy dose of skepticism and a thorough assessment of the institution's infrastructure and capabilities should accompany any decision to embark on building out a private equity portfolio. Does private equity have a role in smaller institutions portfolios? We believe that if the investor can provide the necessary resources from a staffing and infrastructure standpoint, private equity can play a role for institutions of varying sizes. However, if those hurdles are beyond the reach of the organization then it may be more appropriate for the investor to search for other ways to add value to their portfolio.

FIGURE 2: INVESTORFORCE PLANS <$1B AUM - PRIVATE EQUITY UNIVERSE RETURN DISPERSION



Source: InvestorForce (IF); IF universe shown includes all defined-benefit, endowment and foundation plans less-than-or-equal to $1 billion in total plan assets; MSCI Indices; Russell Indices

Time-weighted returns shown for IF, Russell 3000 and MSCI World indices; all returns as of 3/31/19

Without knowing exact details of the PE portfolios included in the InvestorForce dataset, we can make some safe assumptions about why some plans may not have kept pace with public markets. First, PE portfolios vary greatly in the make-up of the underlying investment strategies and the types of fund structures used. For example, some portfolios will include private debt strategies while others may exclude them, some will have large allocations to venture capital, while others will mostly allocate to buyout funds. On the fund structure side, institutions will use fund-of-funds, primary funds or a mix of both. As we will detail later, fund-of-funds have generally lagged primary fund investments on average which may be a reason for potential underperformance. Plans that choose to use primary funds but which fail to diversify by sub-strategy (debt, buyout, venture capital or growth equity) or those that have concentrated bets in particular vintage years will also likely have diverging performance. Simply ensuring appropriate fund structure and diversification across investment strategies and vintage year will go a long way towards a more successful outcome in private equity.

How should smaller institutions implement private equity?

Smaller institutions considering an allocation to private equity on a primary basis should first have a realistic assessment of their ability to implement a proficient program. At a minimum, we would define a "proficient program" as one having the ability to do each of these.

— Source and commit to primary funds across, debt, buyout and venture capital/growth equity

— Vet funds that on average should rank at-or-above median in their respective universes

— Develop a streamlined decision-making process that reduces the amount of time needed to commit to funds

— Provide the resources and staff necessary to manage the reporting, monitoring and cash flow management needs that private equity funds involve

Figure 3 provides a rough summary of our recommendations for institutions considering a private equity program. In general, institutions should have at least **$200 million** in total assets in order to build a direct private equity portfolio. They should also have the necessary infrastructure to model fund commitments, source investments and monitor their holdings. Plan sponsors need to have both sufficient capital to meet private equity fund minimums AND the capabilities to implement a quality portfolio.

FIGURE 3: SUMMARY RECOMMENDATIONS

Total Portfolio Size	<$200M in AUM	$200M+
Implementation Options	Too small for typical direct private equity funds; Ideally consider secondary funds or liquid private equity "beta" solutions	Direct funds
Staff	N/A	— 1-2 investment staff members — 3rd party investment advisor — Legal counsel — 1-2 operations staff to track cash flows
PE Investment Policy Statement	No	Yes
Pacing Plan	No	Yes
Commitments/Year *(assumes a 10% allocation to private equity)*	1-2 funds/year; ~$16M in total commitments	2-5 funds/year; $20+M in total commitments
Monitoring/Reporting	— Standard time-weighted performance reporting — Low manager monitoring — Track diversification within any fund-of-fund exposures	— Semi-annual updates on fund investments — GP annual meetings — Dollar-weighted performance reporting — Tracking exposure by industry and geography

PRIMARY FUNDS VS FUND-OF-FUNDS

Smaller institutions have historically used fund-of-funds ("FoFs") as a way to gain exposure to private equity. FoFs do alleviate many of the challenges described above but many have failed to deliver the excess performance that investors require for moving out of public equities. According to data from Thompson Reuters C|A (*Figure 3*), the fund-of-funds universe median manager has trailed the private equity universe by 200-300bps, historically. Data from Preqin showed similar results with the Fund-of-Funds median returning roughly the same as the Russell 3000 and the Private Equity Buyout Funds median and Secondary Funds median outperforming by a substantial margin (*Figure 4*). The performance drag is caused by a combination of issues, with fees & expenses being the most important, but a related problem is how capital is deployed by a traditional Fund-of-Funds. When investors commit to a direct private equity fund, they often experience a j-curve caused by fees and expenses being charged before meaningful capital has been invested. The negative cash flow and returns early in the fund's life should correct over time as capital is invested and valuations improve. The issue facing Fund-of-Funds is that there is a dual set of fees charged, one at the underlying fund investment level and one at the Fund-of-Fund level, all while capital is being deployed over many years. This can result in a an extended j-curve that weighs on future returns. Fund-of-Funds have begun using leverage, secondary funds and other strategies to help alleviate this extended j-curve but working against them is the compression in excess returns between private equity and public markets which makes the additional layer of fees harder to justify.

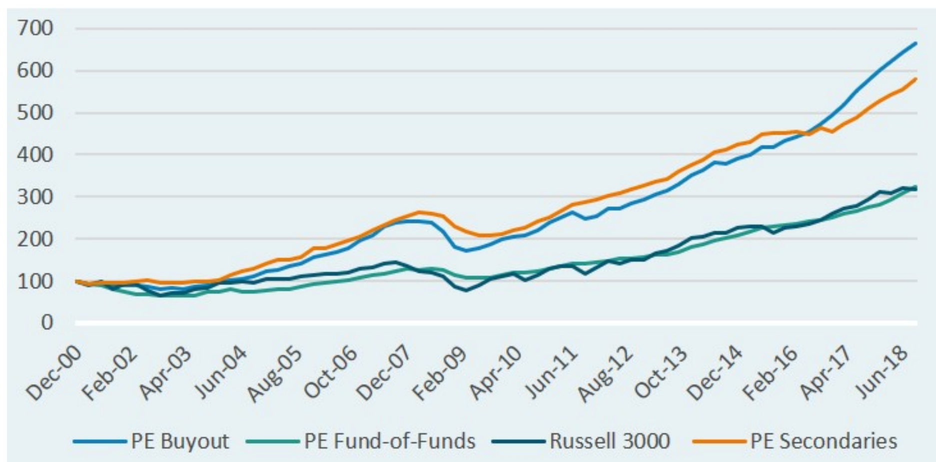
FIGURE 4: THOMPSON REUTERS C|A PRIVATE EQUITY UNIVERSE – 9/30/18

Pooled Returns by Implementation Approach	1 Year	3 Year	5 Year	10 Year	20 Year
U.S. Pooled Returns					
U.S. All Private Equity Direct*	18.65	13.61	14.75	12.41	13.33
U.S. Fund of Funds	16.81	9.53	12.82	9.96	9.4
U.S. Secondary Funds	15.58	9.72	11.38	10.41	11.9
Russell 3000 Index	17.58	17.07	13.46	12.01	7.82
Global Pooled Returns					
Global All Private Equity Direct**	16.8	13.87	13.79	11.54	12.96
Global Fund of Funds **	16.16	10.44	12.36	9.36	9.31
Global Secondary Funds **	15.74	10.72	12.22	10.57	12.38
MSCI World Index	11.24	13.54	9.28	8.56	6.15

** All PE Direct excludes Natural Resources, Real Estate, Infrastructure, Fund of Funds, and Secondaries.*

*** Global Funds invest across the globe, without any targeted regions for investment.*

FIGURE 5: PREQIN CUMULATIVE GROWTH CHART (BASE YEAR - 2000)



Source: Preqin; as of 9/30/18

Index base year is 12/31/2000 with a value of 100; index returns are calculated quarterly; returns shown are net of fees

SOLUTIONS FOR SMALL PLAN SPONSORS

If, as we believe, most traditional FoFs look relatively unappealing as an option, what options should investors consider if they are unable to implement a direct private equity program?

1. Maintain their exposure to equities via the public markets
2. Use secondary funds which appear to offer a more attractive return profile
3. Consider liquid private equity “beta” solutions
4. Reaffirm the process by which Fund-of-Fund selection is expected to succeed

The first and often the best solution is for plans to avoid a potentially costly mistake of trying to incorporate private equity when they lack the necessary capabilities, and instead look for excess returns in public markets or other asset classes with less complexity. Making the decision simply to avoid private equity may be challenging, but if a board can focus on the probability weighted return outcomes, rather than the best-case scenario, it should be considered.

Secondary funds have historically provided attractive excess returns when that market was highly illiquid and there was a high degree of informational asymmetry. Unfortunately, the secondary market has become efficient rapidly as capital has been raised to capture the discounts that were once readily available in that market. Today, secondary transactions routinely trade close to their net-asset-value which has reduced their return potential. In many cases however they still may offer a more attractive option than many traditional fund-of-funds, and with the right manager they could deliver some of the excess returns found in private equity.

The third option is likely the most controversial as the strategies being marketed today as private equity “beta” lack meaningful historical performance, among other issues. Liquid private equity solutions typically hold a portfolio of factor exposures (i.e. value, size and leverage) in public market securities in an effort to replicate the returns found in private equity. There is some academic support to the idea that private equity returns are largely the function of these factor exposures. Investors considering liquid beta alternatives would need to be comfortable with a leveraged public market portfolio and explicit style biases. These products do have the advantage of being cheap and liquid, however.

The fourth option should be adopted where the investor has a strong belief that they are able to successfully identify those Fund-of-Funds which are going to produce performance that is strong enough both to fall significantly above the median for the relevant universe and to be high enough in absolute terms to justify the allocation. This requires a clear understanding and analysis of the tools used by the Fund-of-Funds involved, and the leverage, factor and risk bets being taken by the Fund-of-Fund to achieve strongly positive outcomes. It is important that this analysis is dispassionate and focuses on the probability of achieving specified high outcomes.

Lastly, we mentioned earlier that pacing commitments and diversifying across strategy types and vintages are important variables to get right when building a private equity portfolio. A common mistake we see is the rifle-shot portfolio where an institution will try and commit every 3-4 years to a small number of private equity funds. Inevitably, the resulting portfolio is concentrated in a few vintages and becomes mired in a j-curve because as the first set of funds are beginning to emerge from their negative returns, the investor commits to new set of funds which plunges the portfolio back into a negative cash flow situation. This problem reiterates the importance of being consistent with commitments and having a pacing plan so you can manage the j-curve effect. A previous Topics of Interest (TOI) paper, released in 2018 titled, "***Building effective private market portfolios***" provides some of the key considerations we believe investors should consider when implementing a private equity portfolio. In addition, we released a follow-up paper specifically addressing pacing models called, "***Private markets commitment pacing and cash flow modeling***" which gives a series of best practices when building a pacing model for private equity portfolios. You can find these Topics of Interest papers on our website at ***https://www.verusinvestments.com/category/insights/toi/***.

Conclusion

Smaller investors face a difficult challenge in private equity. The returns available from a successful private equity program can be compelling, and the pressure to be involved in a space which has driven significant returns for other investors in the past can be strong. Investors with the talent, time and staffing to implement a well-run private equity program may well benefit from doing so. However, investors without the scale, bandwidth or skillset to allow them to do so should approach this space with care, considering other approaches to enhancing return and possibly even avoiding private equity altogether if they are unable to ensure effective outcomes. While Fund-of-Fund allocations may on occasion provide the outcomes desired, investors need to be clear how their manager selection process will allow them to select providers who are significantly above average – and if unable to make that determination with confidence they should consider other options.

Notes & Disclosures

1. *See Figure 4 data, Thompson Reuters C|A, as of 9/30/18*
2. *Includes all endowment, foundation and defined benefit plans with less than $1 billion in total plan assets within the InvestorForce universe*
3. *In no small part likely due to the lack of mark-to-market in private market holdings – this supposed outperformance is more likely primarily reporting arbitrage than real*

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