The Magic of 15: Investing in Private Equity

Most investors, particularly entrepreneurs, instinctively gravitate toward the excitement and potential value associated with investing in successful private companies. Private companies such as Uber, Skype and Nest are market disrupters that find a way to operate on a massive scale relatively quickly. Because of the significant growth opportunities and the potential returns created by these companies, the private equity space is often seen as more intriguing than traditional asset classes. So, why doesn't everyone invest a large percentage of their assets in private equity?

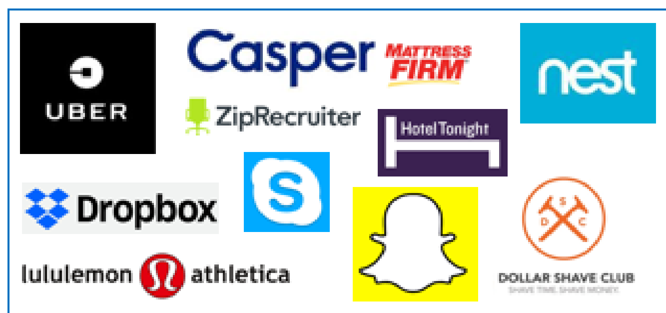

Figure 1: Example of WA investments through private equity and venture capital funds both past and present.

Navigating the world of investing in private companies is complex, opaque and quite difficult. In fact, many private fund investors experience lackluster returns. Performance varies greatly from one manager to the next resulting in the widest dispersion of returns in any asset class. In addition, the illiquid nature of the investment is difficult to weather and high fees erode performance. If this isn't bad enough, some companies never get off the ground!

In this paper, we aim to demystify private equity. Our goal is to not only help you understand why it makes sense to allocate a sizeable portion of your portfolio to this asset class, but also provide a road map to a successful program.

Value Creation

Investments in privately-held companies are often referred to as Private Equity (PE). Within this asset class, investments are made along a company's lifecycle, from early-stage venture capital to large company buyout investments. We know, definitively, that most large institutional portfolios invest a meaningful amount in PE, and sophisticated HNW investors incorporate PE into their portfolios due to the return potential and the tax efficient nature of the investments. The adoption of PE in portfolios is partly due to the "persistence of returns". Empirical evidence shows this phenomena to be much more evident with PE managers than with public equity managers[1]. Figure 2 shows the allocation percentages to PE within the portfolios of some of the most sophisticated endowment investment offices in the US[2]. Institutions invest in this asset class because they believe they will earn a premium to the performance of public markets as well as increase portfolio diversification. The private market is less efficient and performance is less dependent on the broader public markets. PE managers who invest in undervalued companies with enormous growth potential can create significant alpha, or excess return. With decades of data in this space, we can prove out the value—or not—that is added and glean some best practices.

Institution	AUM	PE & VC Allocation
Princeton	$23.8B	33%
Yale	$27.2B	31%
Stanford	$26.9B	25%
UTIMCO	$29.3B	20%
MIT	$14.8B	18%

Figure 2: Data reported for each institution are as of end of fiscal year 2017.

[1]Private Equity Performance: Returns, Persistence and Capital Flows. Steve Kaplan and Antoinette Schoar.
[2]The reported and effective date of the private equity and venture capital allocations among the institutions is through their respective end of fiscal year 2017. Data on AUM and asset allocation were taken from each institutions website.

Over the past 20 years, a blended US private equity and venture capital index portfolio generated an annualized return of 13.3%, which is almost two times the performance of the S&P 500 at 7.3%[3]. The chart below illustrates the performance benefits of PE vs. public equities over a 10 and 20-year period. As consensus driver of performance, both recently and over the long term, and referred to as the "illiquidity premium" one should expect in exchange for a long-term investment. Data compiled by Cambridge Associates shows a strong positive correlation between a sizable allocation to PE and increased portfolio returns.

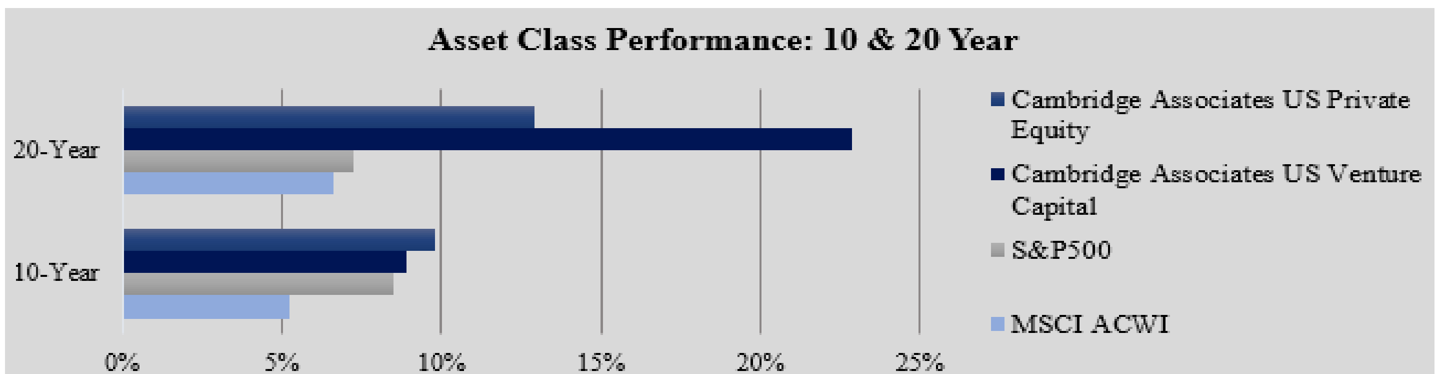

Figure 3: Data as of December 31, 2017. Source: eVestment and Cambridge Associates. PE & VC performance is a pooled IRR calculation.

points toward the benefits of PE and as significant dollars flow into the asset class (Figure 4), investors face additional challenges when it comes to correctly sizing their PE allocation. The first issue investors need to solve is determining how much of a portfolio to dedicate to the asset class. The second problem is determining the right number of discrete fund investments to maximize the probability of success. These two issues are not the only challenges, but they feed into concerns investors rightly have over the optimal way to construct a PE portfolio.

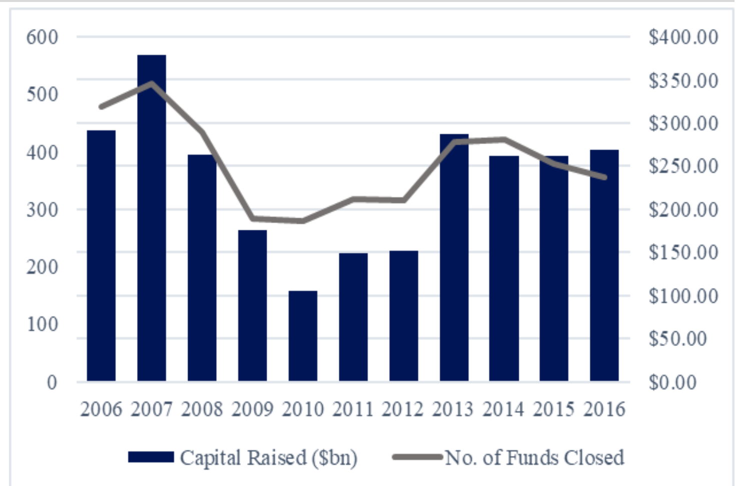

Figure 4: Private Capital Fundraising 2006-2016. Source: Pitchbook.

How Much to Invest?

Investing in PE comes with the caveat that you must be able to accept the illiquid nature of the investment. For many investors, this becomes the defining factor in sizing their PE allocation. For this reason, it has historically been the case that investors with long-term investment horizons and fewer liquidity needs, such as endowments, foundations and pensions, are the largest investors in PE. The ability to accept a level of illiquidity in portfolios has been identified as a primary

The following below shows data from trailing 10-year returns against average allocations to PE over the same period for 242 endowments and foundations. Notice that institutions with top quartile performance have above-median allocations to PE and most of the bottom -quartile performers had below-median allocations. Cambridge Associates research also shows that institutions with PE allocations above 15% had a median annualized return of 7.6%, which is 1.5%, more per annum than the return of organizations holding less than 5% in PE. This means that if an investor had put in $5

[3]The private equity return of 13.3% is a 50/50 blend of the Cambridge Associate US Private Equity Index and US Venture Capital Index 20-year returns as of December 31, 2017.

million and allocated 15% or more to PE, within a 10-year period, that investor would have earned roughly $1.4 million more than the investor who allocated less than 5% to PE at $5 million. This pattern of outperformance based on a sizable allocation to PE holds true across 15-year and 20-year periods, where institutions allocating 15% or more in PE have stronger return potential than those with less than a 15% allocation[5].

high returns above their benchmark repeatedly over multiple funds. In reality, individual managers will underperform from time-to-time, whether it is due to poor execution or bad luck, and they should be replaced. One or two underperformers can negatively impact performance and increase the volatility of a portfolio with a small number of managers, to the point where allocating to PE does not make sense.

Ten-Year Average Returns & Allocations to Private Equity by Institutional Investors				
PE Allocation	**25th Percentile Returns**	**Median Returns**	**75th Percentile Returns**	**Mean Returns**
Under 5%	6.8	6.1	5.5	6.2
5% - 15%	7.0	6.8	6.2	6.7
Over 15%	**8.6**	**7.6**	**7.0**	**7.7**

Figure 5: Private Investment Allocation vs Investment Return: Trailing 10 Years as of June 30, 2015. Source: Cambridge Associates.

It is likely that a higher allocation to private investments is not the only reason for outperformance in long-term portfolios, but it does offer strong evidence that a higher allocation is an important factor for realizing higher returns. Other factors that may influence returns are well-timed tactical decisions, manager selection, expertise, and available resources.

How Many Managers in a Portfolio?

Executing a private equity strategy, whether targeting a 15% or 25% allocation, requires finding the right number of managers as well. Investors want to avoid concentration risk and control portfolio volatility, but also avoid over-diversification, which can hinder overall performance. Choosing poor performing managers, hiring too many managers and overpaying for investments are the three legs of a broken private equity stool.

One approach is to build a very concentrated portfolio of five to ten managers who are capable of generating

Another approach is to construct a highly diversified portfolio of 25 to 30+ managers, which is the strategy of many private equity fund-of-funds. This method may reduce volatility, but can also reduce the chance of beating the benchmark by a significant margin. Selecting a large number of successful managers requires a team exceptionally gifted at manager selection, a skill not easily gained.

Finding managers who persistently outperform and generate alpha takes time, knowledge of the ecosystem and exclusive access. Many of the best-performing funds only take capital from institutional investors (and determine how much capital LPs can invest), such as WA, who represent long-term capital, world-class investment thinking and have key relationships from decades of experience working at leading endowments and investment firms. In addition, the over-diversification approach tends to deliver benchmark-like performance, and becomes even less appealing after fees (sometimes layers of fees) and taxes are taken out.

[5]Cambridge Associates . The 15% Frontier 2016.

WINDROSE ADVISORS

Windrose Advisors' strategy is to build a portfolio comprised of roughly 15 core managers who are consistent in creating outsized alpha and with whom we can reinvest in over time. A portfolio constructed this way provides enough diversification to help reduce downside risk, and is not so overly diversified that it inhibits investors from beating the benchmark.

Given that the typical private fund has an investment period of four to five years and PE managers normally raise a new fund every two to five years, we believe this strategy requires making four to five new commitments per year in order to sustain an ongoing program.

Conclusion

Sophisticated, value-add investors in top-performing private equity funds enjoy greater incremental returns.

At Windrose, we rely on our practical experience and very much believe patience, independence, confidence and expertise are a powerful combination. Our investment team enjoys many years of investing experience combined with deep knowledge across all asset classes and several market cycles. For investors comfortable with illiquidity and a long time horizon, our portfolios typically start with a minimum of 15% in private equity. Those dollars are generally allocated to four to five managers each year as we build out a diversified mix of roughly 15 core managers. This construction method is what we call The Magic of 15 and is the foundation of our private equity program.

Addendum

The following two sections lay out Windrose Advisors' approach to identifying best-in-class managers and how we have constructed a diversified private equity portfolio using the Magic of 15.

Windrose Advisors Manager Selection Process: Manager selection is a critical component in any private equity portfolio. Historically, top quartile managers have significantly outperformed second quartile managers and delivered more consistent returns over time. Research from Stanford University's Graduate School of Business finds that funds in the top quartile add 7%-8% to returns, compared with funds in the bottom quartile[8]. This means investors who wish to invest in private equity need to spend a considerable amount of time and resources to identify and gain access to the very best managers.

Our process is a multi-prong approach, including both qualitative and quantitative screens. The first step is knowing the private equity ecosystem and the most well respected players. This is done by meeting hundreds of managers each year as well as utilizing the networks our professionals have built over many decades to identify under-the-radar and best-in-class managers. Our manager specific diligence includes identifying a high quality investment team with a disciplined and focused approach, attractive historical performance and risk mitigation, alignment of interests, full transparency, and an institutional infrastructure.

Our manager selection process does not end after we make an investment. We continually monitor, visit with management, and perform diligence on underlying fund investments to ensure our managers are well positioned to outperform going forward. We also continue to scour the universe for emerging managers as we build a pipeline of talent to augment (add or replace) our existing roster of managers.

[7]Landmark Partners. Navigating Uncertainty: Diversification for the Alpha-Centric Portfolio. Barry E. Griffiths and Sean Silva. January 2016.

[8]Stanford University Graduate School of Business. Skill and Luck in Private Equity Performance. Arthur G. Korteweg and Morten Sorensen.

Windrose Advisors Private Equity Portfolio Construction: Since the formation of our private investment program in 2010 we selectively invested across different strategies, ranging from seed-stage venture capital to large market buyout funds to special situations funds. Our approach is not focused on filling top-down strategy 'buckets' or mandates for some aggregate number of commitments per strategy each year. Rather, we opportunistically invest with the best managers who consistently produce top-quartile returns and can demonstrate a repeatable process is in place.

A snapshot of our current portfolio demonstrates it's important to have strategy diversification across the lifecycle of private investments, but not at the expense of investing in mediocre managers. Diversification provides our clients' exposure to different stages of the life cycle of a company, as well as varying sectors, geographies and market capitalizations. We aim to strike the right balance of a diversified mix with acceptable concentration.

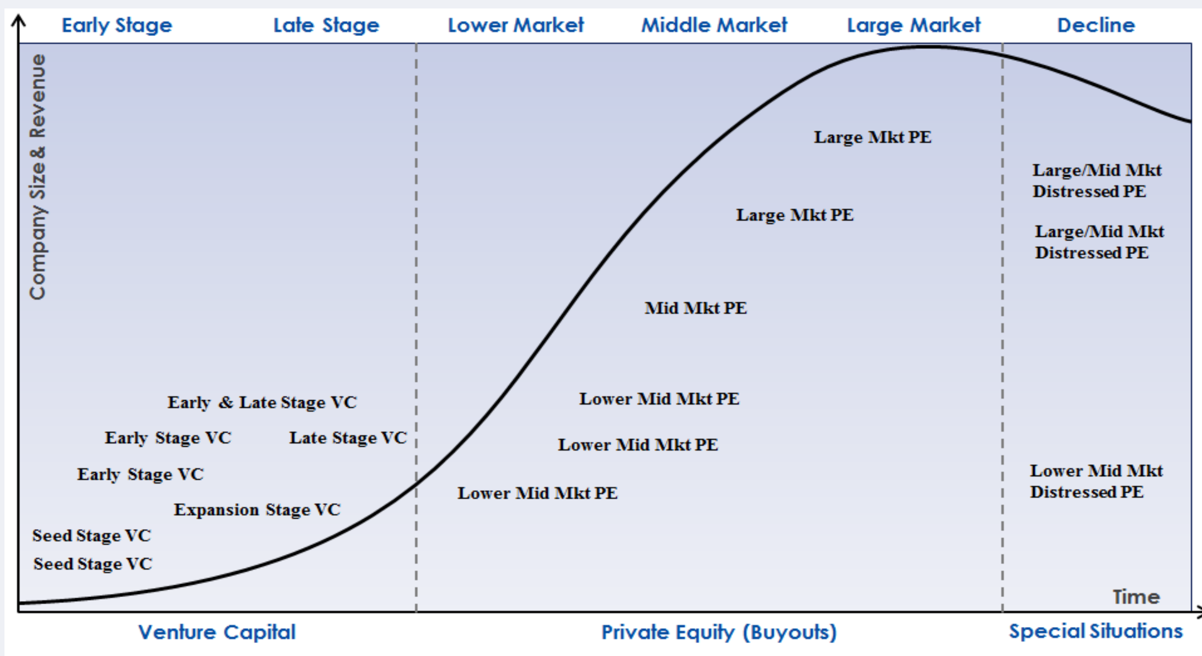

Figure 7: Lifecycle of private equity

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