



Private Equity Market Insights

An overview of the evolution and
importance of the Private Equity Market

March 2019



Dear Network Member,

We are pleased to introduce our newest publications, iCapital's ***Alternative Investments Compendium***, ***Private Equity Market Insights***, and ***Hedge Fund Market Insights***.

We have developed these tools in response to advisors' growing interest in exploring the private capital markets and hedge funds as they seek to diversify and grow their client's portfolios – and, specifically, their interest in augmenting their understanding of the fundamentals of traditional alternative investments.

The ***Alternative Investments Compendium*** provides a current snapshot and the historical progression of key information that is essential for understanding these markets. This data includes returns, fundraising volume, dry powder, deal volume, valuation multiples, asset flows, and market volatility.

To provide broader context around the data and some historical perspective as to how these markets have evolved, we have produced ***Private Equity Market Insights*** and ***Hedge Fund Market Insights***. These guides discuss the fundamental trends that are impacting investors, such as the profound shift in capital from public to private markets and the advantages of hedge fund strategies at various stages of the economic cycle.

Each quarter we will provide an update to the Compendium, along with our market perspectives, a summary of notable industry news, and commentary on significant changes in the underlying data, which has been provided by our partners Preqin and Hedge Fund Research, Inc.

At a time when the markets are volatile, valuations are high, and the alternative investments landscape is growing more complex, we believe advisors in our network will benefit from having a consistent source of relevant data and insights in their toolkit.

We hope you enjoy these new publications. As always, we welcome and value your feedback.

A handwritten signature in black ink, appearing to be "LC".

Lawrence Calcano
Chief Executive Officer

A handwritten signature in black ink, appearing to be "Nick Veronis".

Nick Veronis
Co-Founder, Head of Research and Due Diligence

PRIVATE EQUITY

A NEW ERA FOR PRIVATE EQUITY

It is hard to overstate the profound impact that the private equity (PE) industry is having on the global investment landscape. Over the past 15 years, the dramatic expansion of the industry on multiple levels, coupled with a shrinking number of publicly-listed companies, is transforming the capital markets, making the universe of private assets an increasingly important component of any diversified portfolio. This new era of scale is also driving private equity firms to focus on the multi-trillion-dollar retail channel to further support their growth and diversify their investor base.

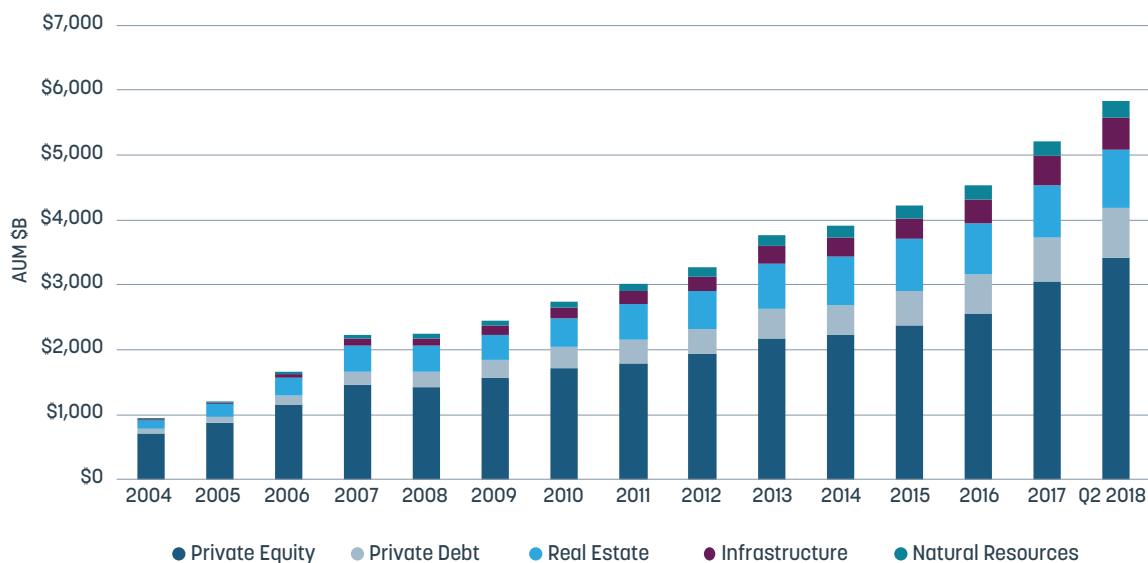
The amount of assets that private capital fund managers oversee has increased by 6x since 2004, expanding from \$941 billion to \$5.8 trillion today.¹ To put that into perspective, today, the four largest firms manage more capital than the entire buyout industry had 15 years ago. To be sure, bigger isn't always better, especially when it means more capital and competition chasing the same end markets. However, in this case, the opportunity sets have also greatly expanded.

The PE industry has diversified aggressively into other private asset types, including credit, real estate, and infrastructure.

While the amount of private equity assets under management (AUM) grew almost fivefold from 2004 to 2018, the amount of capital targeting private infrastructure and natural resources grew 29x and 14x, respectively. The amount of private credit has increased almost tenfold during this period as banks have pulled back from lending to the middle market, and private fund managers have stepped in, raising hundreds of billions of dollars.

In addition, as the private capital markets continue to evolve around the world, the industry has expanded geographically. Fifteen years ago, private equity was relatively nascent in many regions. Today, it exists in virtually every market. The growth in the Asia-Pacific region has been particularly strong, rising from 9% of total global dollars raised a decade ago to about 25% in recent years, with record levels posted in 2016 and 2017 (\$129 billion and \$154 billion, respectively). And while many institutional investors appeared to tap the brakes last year, which saw a sharp reduction in fundraising in Asia-Pacific, there are still an estimated 1,540 funds currently targeting the region that are seeking \$259 billion in capital.

Assets Under Management by Asset Class, 2004-2018



Source: Preqin Online Products

PERMANENTLY CHANGING THE INVESTMENT GAME

The PE industry has also significantly increased the number of sector-focused investment professionals and funds dedicated to specific industries, further propelling the shift in capital from public to private assets. This has been most pronounced in technology, which has become the largest target market for PE firms, accounting for over \$235 billion of global buyout deals in both 2017 and 2018. In particular, the rapid rise of software-as-a-service (SaaS) has attracted vast amounts of private capital due to the recurring nature of the revenues and potential for high growth. This is a good example of private equity expanding alongside a business model that is well-suited for a leveraged buyout, and that was virtually non-existent 15 years ago. The few firms that initially specialized in later stage technology investments and SaaS businesses (notably Silver Lake, Thoma Bravo, and Vista Equity) have built deep expertise and strong brands within the space, with each raising new funds well in excess of \$10 billion in recent years.

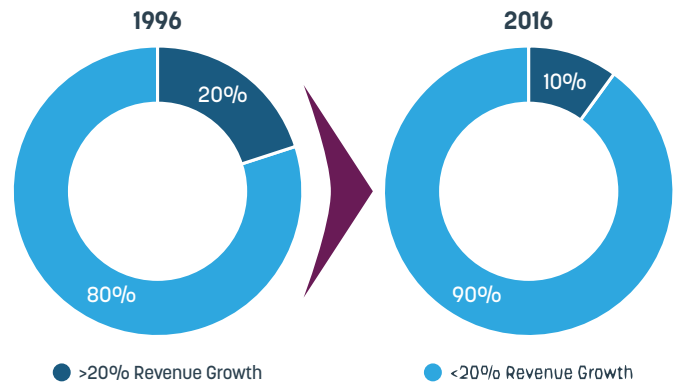
With technology transforming almost every segment of the global economy, and with the number of private tech companies dwarfing the public universe, investors who confine themselves to the public markets are missing out on more and more of the growth that tech is driving. In addition, private companies known as “unicorns” – worth hundreds of billions of dollars in aggregate – have opted to accept numerous rounds of private capital to fuel their growth and provide liquidity, forgoing the public markets, which used to be the only way that entrepreneurs could secure the financing necessary to scale their businesses.

There is not a single endowment in the top quartile for performance with less than a 15% allocation to private equity.

A 2018 report by the CFA Institute on the evolving role of public and private markets points out that “the concept of shareholder value maximization has become so entrenched in management theory that share buybacks are now at historic highs while investment in new growth opportunities happens mostly in private markets.”² Indeed, over the past two decades, the number of companies in the S&P 500 that generate revenue growth above 20% has halved. This shift can be attributed to a number of factors, including the rise of private equity and increased public company disclosure requirements and listing standards.

Not surprisingly, there is not a single endowment fund in the top quartile for performance with less than a 15% allocation to private equity. Moreover, the top decile performers have steadily increased their allocations over the past two decades, with many in this elite group investing 40% or more in private equity.³ Surveys of large institutional pension plans show that their PE portfolios have been able to earn

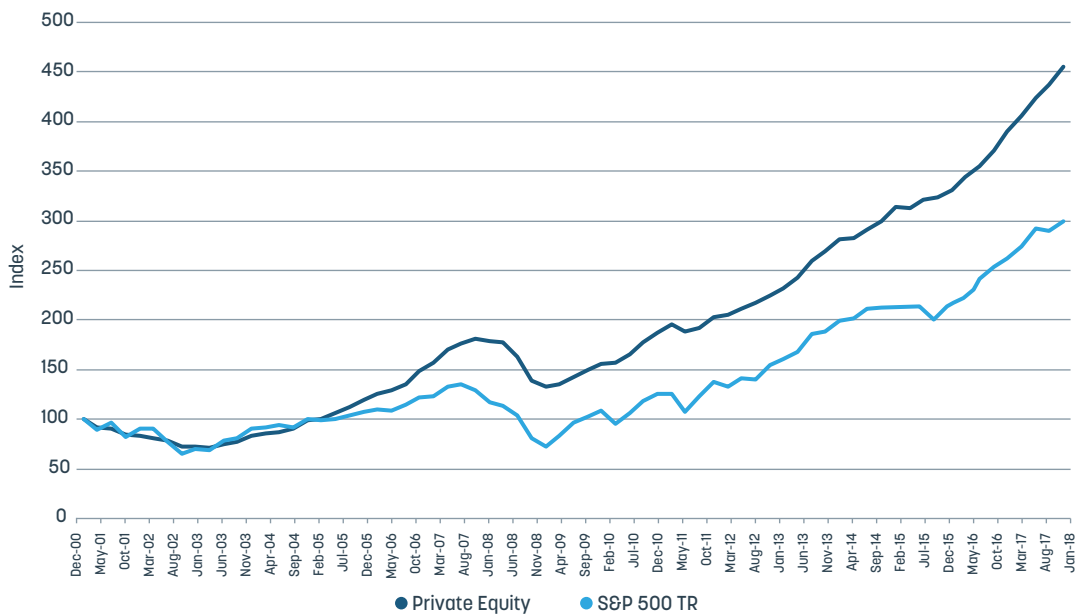
Number of S&P 500 Companies with Revenue Growth Greater than 20%



Source: Pantheon AMG; Capital IQ

returns 300 to 500 basis points above public stock returns, after fees, by investing in a diversified portfolio of buyout and venture capital partnerships.⁴

Private Equity vs. S&P 500



Source: Preqin as of November 2018. Preqin’s Private Equity Index is calculated on a quarterly basis using data from Preqin’s Performance Analyst Product. Past performance is not indicative of future results.

GREATER RISK MANAGEMENT

In general, as the PE industry has grown and matured, many firms have become more professionalized, with improved risk management and more sophisticated infrastructure. Once a cottage industry, many of the larger PE firms have become truly institutional, putting in place succession plans, databases for prospecting, and implementing formal processes for deal sourcing and due diligence. Also, the Global Financial Crisis taught private fund managers several valuable lessons, including sharpening their focus on stress testing the performance of cyclical businesses to deepen their understanding of the potential effects of a recession.

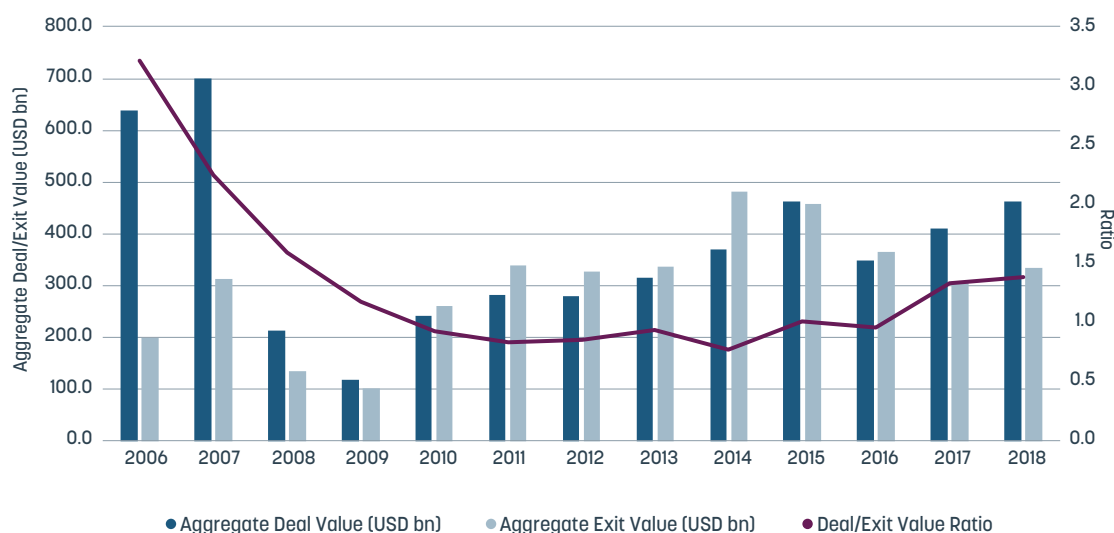
The increased pace of exits (private equity firms selling portfolio companies and returning capital to their limited partners) and the more cautious approach to deploying capital over the past several years reflect the industry's improved discipline, as shown in the chart below. Annual deal volume has been running at 40% to 66% of 2007's peak levels, while distributions have remained at historically high levels since 2013. Since 2010, the total dollar value of PE exits has exceeded (albeit slightly) the total amount that

the industry has put to work in new deals. In contrast, the industry invested 2.6 times more money than it took in from selling companies during the 2006-07 period leading up to the financial crisis.

It should be noted, however, that even though total exit values have exceeded new deals in six of the past nine years, both 2017 and 2018 saw that trend reversing with new deals outpacing exits by 1.4 times. This is at least partially driven by the large amount of uninvested capital, or "dry powder" that the industry is under pressure to deploy, and thus this ratio of exits to new deals bears watching.

The increased pace of exits and the more cautious approach to deploying capital over the past several years reflect the industry's improved discipline.

Aggregate Value of Private Equity-Backed Buyout Deals vs. Exits Globally, 2006-2018

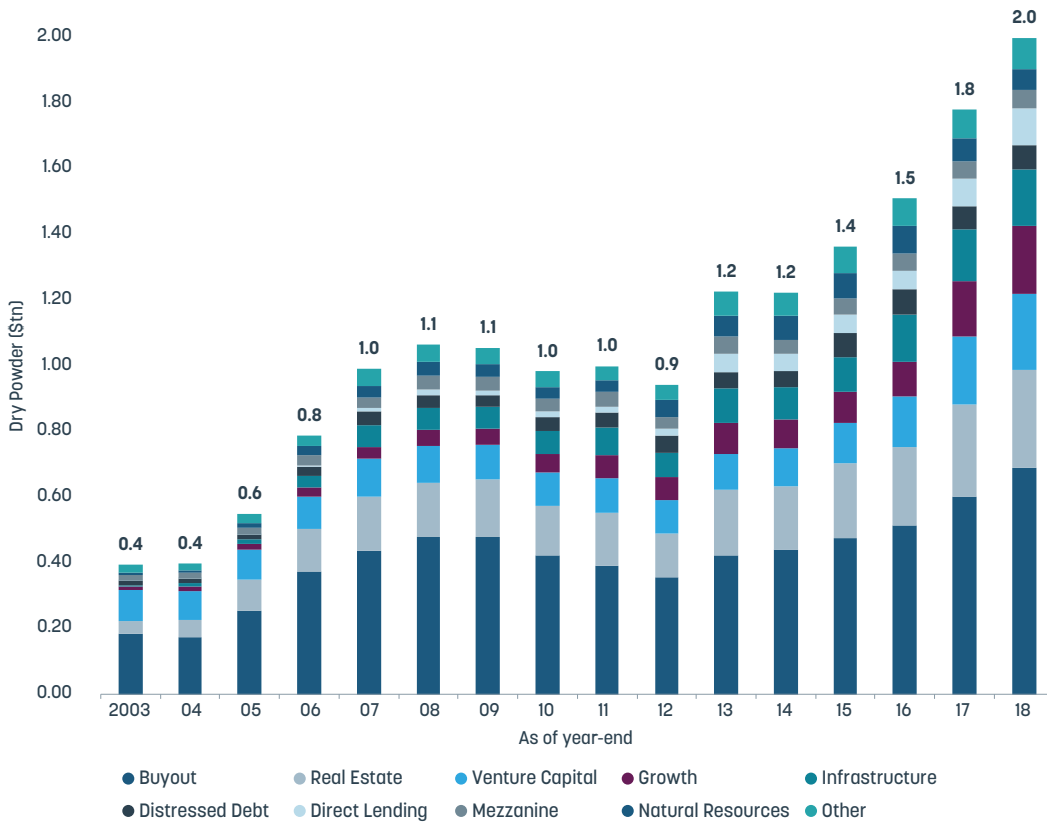


Source: Preqin Private Equity Online

TOO MUCH DRY POWDER?

At the end of 2018, the total amount of dry powder stood at a record \$690 billion for buyouts and almost \$2 trillion for all private capital (including real estate, venture capital, growth, infrastructure, distressed debt, mezzanine, direct lending, and natural resources). As the following chart shows, the significant growth in dry powder reflects the industry’s expansion across these various asset types and strategies.

Global Private Equity Dry Powder (\$tn)



Source: Preqin as of December 31, 2018

When viewed as a percentage of total global PE AUM, dry powder has been running at a relatively low level. In 2018, it represented only 35% of overall AUM, compared to the early-mid 2000s when it ranged from 48% to 43%. According to a 2018 McKinsey report⁵ which measured years of PE inventory on hand, the amount of dry powder did not seem out of proportion to deal flow. By dividing dry powder by deal volume on a seven-year trailing basis, the McKinsey report noted that “the industry seems to have cycled through its capital in a stable way for the past several years.”

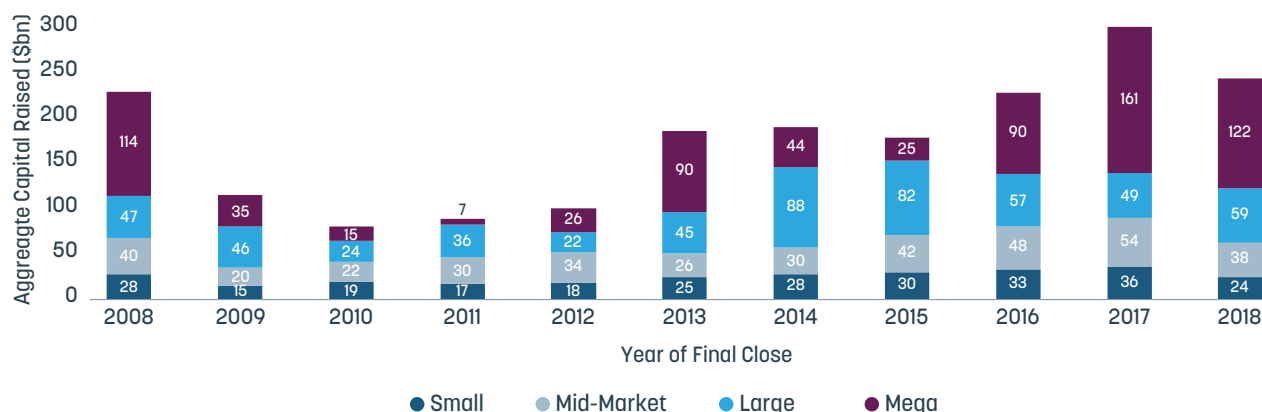
MEGAFUNDS ARE TILTING THE SCALES

Megafunds' (\$5+ billion) share of total dry powder has risen sharply in the past three years, as many large institutional limited partners (LPs) have been consolidating the number of PE managers in their portfolios and often seek to deploy capital into funds with scale. Following the Global Financial Crisis, megafunds fell out of favor, and the percentage of dry powder held by these large funds dropped to 33% in 2012. That pause, however, didn't last long. Of the \$235 billion raised by buyout funds that closed last year, \$122 billion was

of the public markets. The total dollar volume of take-privates was \$112 billion in 2017 and almost \$80 billion in 2018. And although these transactions accounted for less than 2% of the total number of buyout deals in each of the last three years, they accounted for 21% of the total amount of deal value or dollars put to work in buyouts.

It's worth noting that while there has been an uptick in public-to-privates, it is nowhere near the perilous levels of 2006 and 2007, and the overall mix of deal types over the past several years has been fairly balanced with a significant amount of capital going into add-on acquisitions as private equity

Annual Buyout Fundraising by Fund Size, 2008-2018



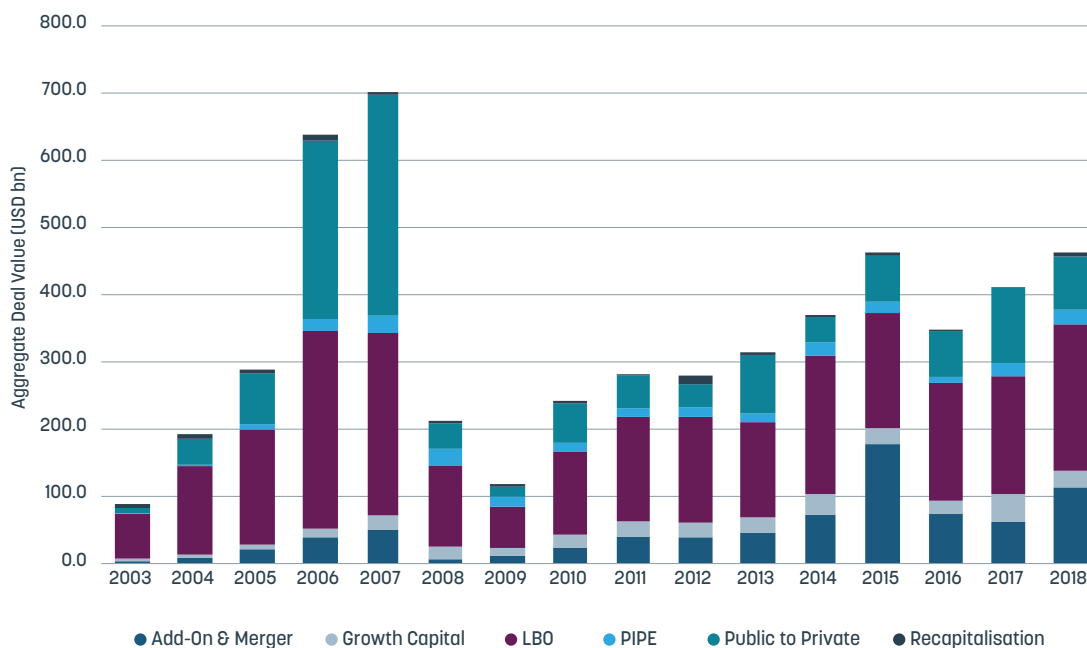
Source: Preqin Private Equity Online

raised by megafunds, which now account for 46% of buyout dry powder. Not surprisingly, the number of large deals is rising alongside the growth of these funds. In 2018, PE firms completed 119 buyout deals of \$1 billion or greater, the highest level in the last ten years, and it is a safe assumption that the industry will continue to see more large-scale deals in the coming years.

With the ability to write ever larger checks, these megafunds are also turning the public markets into their hunting ground, targeting listed companies that they perceive to be mispriced and that may be able to pursue long-range value creation strategies more effectively without the short-term pressures

firms realize they cannot rely on multiple expansion today to create value. The industry has generally avoided the large "club deals" that partly defined the 2006-07 period when there was an unprecedented swell of take-privates, many of which ended badly. To provide some perspective, over the last 15 years, there have been 21 public-to-private deals with values north of \$10 billion, and 13 of those transactions were executed in 2006-07, with five deals in 2007 alone valued in excess of \$20 billion.

Private Equity-Backed Buyout Deals by Type, 2003-2018



Source: Preqin Private Equity Online

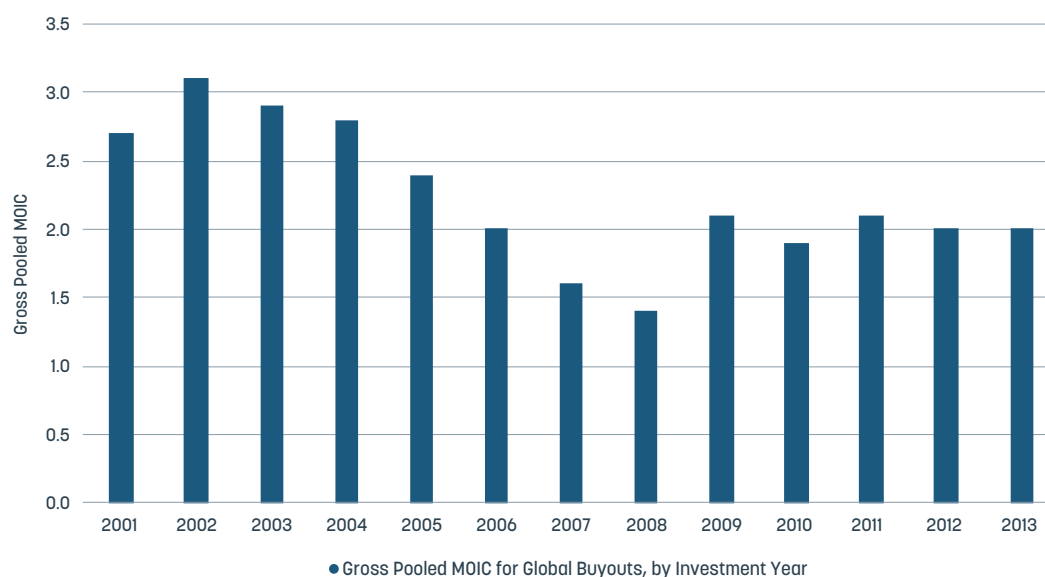
There has been some debate over the relative performance of these megafunds. Some believe they represent a safer bet because they're inherently designed to focus on larger more stable companies that generate significant cash flow. The major PE firms argue that because there are relatively few players that can write checks big enough to pursue large-scale deals, there is less competition at this end of the market, giving them a distinct advantage. Indeed, a 2018 McKinsey report cited data showing that the megafunds, on a pooled basis, have outperformed their large, mid and small cap counterparts since 2008. However, examining the top quartile reveals that the best small and mid-sized funds still generate the highest returns.

RETURNS WILL LIKELY DECLINE, BUT PREMIUM OVER PUBLIC MARKETS SHOULD REMAIN HEALTHY

Of course, even with a more measured approach to deploying capital and evaluating risk, a likely consequence of the industry's new scale, vast dry powder, and increased competition is that overall returns will decline on an absolute basis. In fact, this "reset" of return expectations has already begun – recent mature vintages (2009-2013) are generating a gross pooled multiple-of-invested-capital (MOIC) of around ~2.0x, well below the 2001-2004 heights of 2.7x-3.1x when there was less private capital chasing deals.

Despite expectations of lower absolute returns going forward, private equity is still projected to produce strong relative performance compared to public markets, driven largely by the longer-term strategic nature of PE ownership.

Gross Pooled MOIC for Global Buyouts, by Investment Year

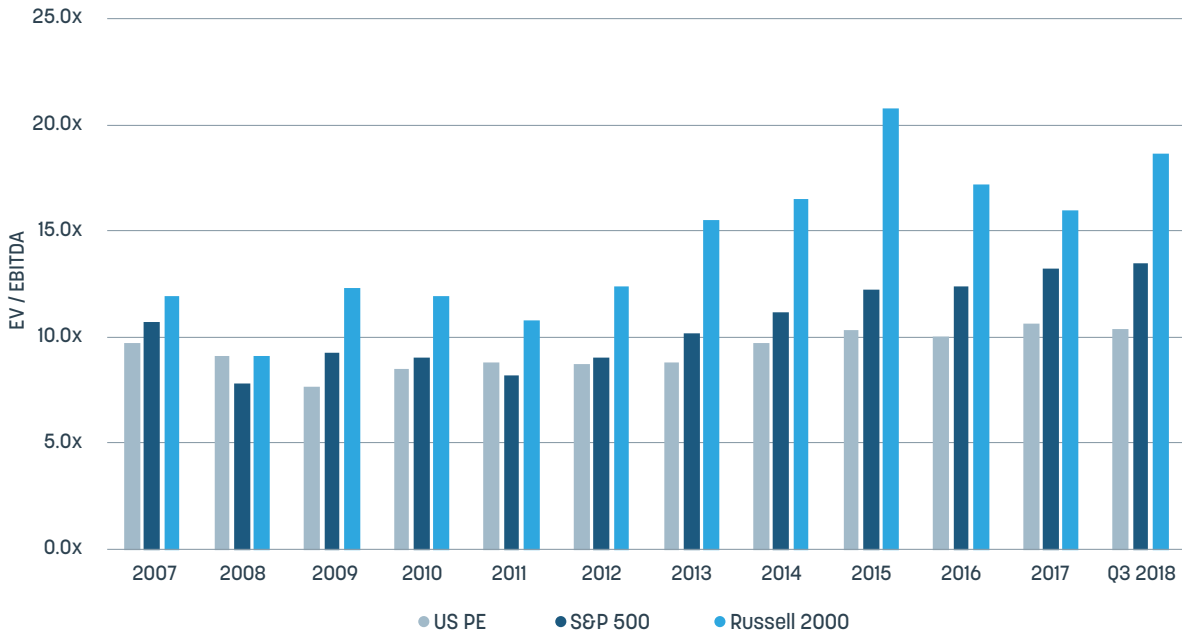


Source: Bain & Company Global Private Equity Report 2019

Another driver of potentially lower absolute returns in today's market environment has been the transaction multiples for private assets – which have steadily risen over the past decade and are currently near all-time highs with an average 10.5x multiple of Enterprise Value / EBITDA in 2017-18. Taking technology as an example again, there was approximately \$187 billion in dry powder targeting tech companies as of June 30, 2018, with more firms competing for deals and pushing multiples to often disconcerting levels. Thus, it seems unlikely that the incumbent leaders in this field will be able to repeat the same exceptional returns they generated when they caught the SaaS wave relatively early on, and when there were far fewer funds targeting the space. With greater competition and historically high valuation multiples across most sectors, fund managers today have to work harder to create value and it is more important than ever to implement operational improvements, drive top-line growth, and/or execute accretive add-on acquisitions to generate returns.

It should also be noted that leverage ratios are increasing, as is the percentage of covenant-lite loans. As of Q3 2018, the average leverage multiple (debt/EBITDA) was 6.5x, slightly below peak levels but nevertheless still high.⁶ And while the ratio of debt-to-equity in PE-backed deals is more conservative today than it was during the 2006-07 period (the average percentage of equity that managers were committing to their deals reached a low point of 30%-31% in 2006-08 compared to 36-46% in the period since), what this really means is that PE firms are putting up more equity at these elevated valuations – which will likely lead to lower returns.⁷ Many PE firms are acknowledging that it may be difficult to match the returns of prior funds, which should come as no surprise to experienced investors (for example, a Preqin survey found that 30% of institutional limited partners are expecting lower PE returns over the next year).

Average Purchase Price Multiple of Trailing EV / EBITDA⁸

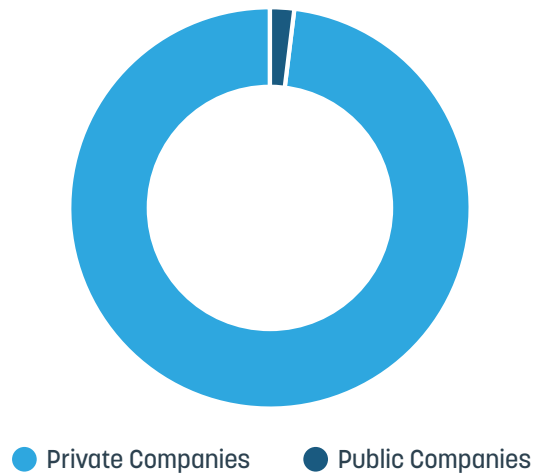


Sources: Partners Group, Bloomberg, S&P LCD. Data represented herein is Enterprise Value and trailing twelve-month EBITDA as of September 30, 2018. (1) Average EV/EBITDA values vary by sector and industry, generally an EV/EBITDA below 10 is commonly interpreted as healthy and a favorable entry point.

Despite expectations of lower absolute returns going forward, the asset class is still projected to produce strong relative performance compared to public markets, driven mainly by the longer-term strategic nature of private equity ownership and the sheer size of the opportunity set. In the U.S. alone, there are an estimated 200,000 middle market companies, of which approximately 98% are private.⁹ Many industry consultants and institutional investors expect private equity to generate a net 250-300bps premium on average over public markets, while the top quartile should far outpace that.¹⁰

As the economic cycle shifts and the next downturn sets in, the pendulum will swing back in the other direction and valuations will normalize. When this happens, the PE industry will accelerate its deployment of capital and will also likely extend the hold periods of many existing portfolio companies

Largest 185,000 Companies in the U.S.



Source: NAICS Association, Firmographic Breakdown of Business Establishments by Company Size (March 15, 2018)

as the selling environment cools. PE firms will use their dry powder not only to acquire companies but also to shore up their existing portfolios and try to strengthen their positions. A joint study last year by professors from Harvard, Stamford, and Northwestern concluded that PE-backed companies generally performed better than non-PE-backed companies during the Global Financial Crisis.¹¹ The deep pockets of PE firms allowed them to selectively increase the market share of many portfolio companies by investing in their operations and helping steer them through the crisis.

Tougher economic conditions will also expose undisciplined managers who have used excessive leverage, over-paid for portfolio companies, and/or failed to properly analyze how susceptible some of their businesses are to a recession. This will shake out the weaker players and remind many investors just how wide the interquartile spread is in the private equity industry, and how critical the manager selection process is in constructing a successful portfolio. Over 3,000 new private capital funds were raised in 2017 and 2018 – and not all those managers will survive over the long-term. In a 2017 analysis covering 1,300 discrete funds raised between 1995 and 2013, only 41% of bottom-ranked PE firms were able to raise more than three successive funds.¹² We would expect this metric to grow even more pronounced as investors become more discerning in terms of whom they entrust with their capital.

MANAGER SELECTION REMAINS KEY – NOT TIMING

As we always remind wealth advisors, the key to investing in private equity is canvassing the manager universe and conducting thorough due diligence. You cannot “buy the private equity market” and invest broadly across managers without a rigorous process, as the spread between the top and bottom quartile in private equity is massive compared to other asset classes. And contrary to what some may think, trying to cherry-pick “vintage years” is also not a wise decision as most funds deploy their capital over a 3- to 5-year period, making it virtually impossible to predict the outcome of today’s vintage without knowing how the future investment environment will play out.

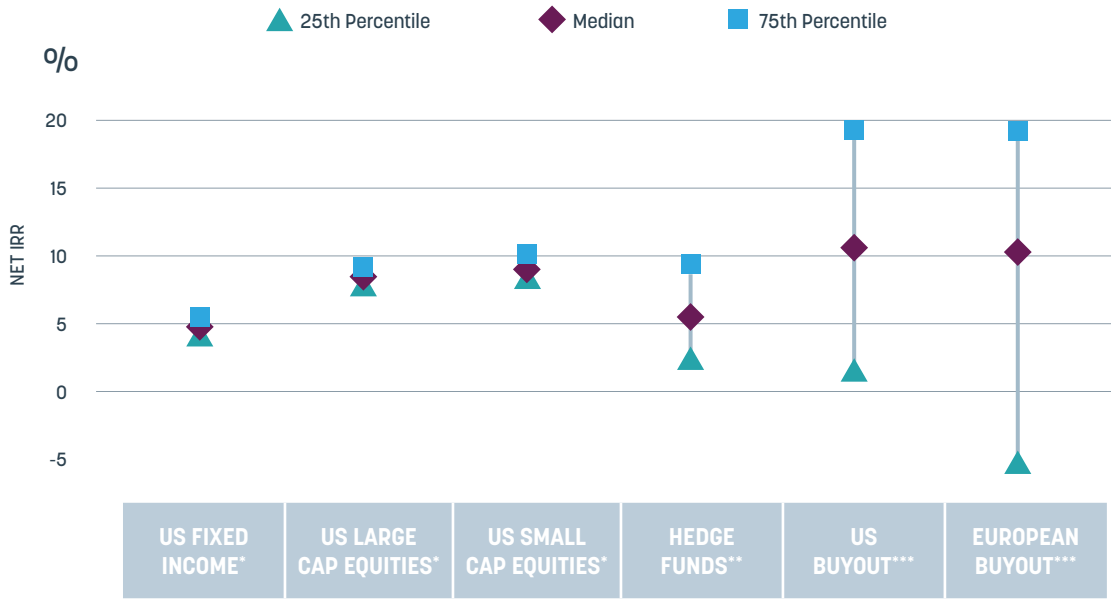
AIMING FOR THE INDIVIDUAL INVESTOR

One somewhat less obvious effect of the private markets expansion is that it is causing the PE industry to focus more on the wealth advisory channel. As many institutional investors reach their private equity allocation limits, fund managers are increasingly searching for new sources of capital, such as qualified individual investors. Put another way; the PE industry has extended its reach into so many areas of the global economy that it is logically turning its attention to the \$61 trillion pool of global individual investor capital to sustain its growth. This pool is expected to increase to almost \$70 trillion by 2021 and is remarkably underexposed to alternatives, which represents an enormous opportunity for forward-thinking alternative asset managers. Blackstone, the world’s largest private equity manager, was one of the early believers in tapping the wealth management channel and now sees ~15-20% of its annual fundraising coming from individual investors.¹³

This trend is motivating private equity firms to educate the high-net-worth market and create products designed to allow individual investors to tap into the private capital markets with lower investment minimums and, in the case of registered funds, structures that provide greater liquidity and that cater to accredited investors. The next generation of these 40 Act funds is currently rolling out and we expect to see more competitive fee structures and a growing number of high caliber managers enter the mix.

Because the spread between the top and bottom quartile in private equity is massive compared to other asset classes, a rigorous manager selection process is critical to successful investing.

Interquartile Spread by Asset Type¹⁴



* Source: Investment Metrics. Represents 10-year time-weighted return as of September 30, 2017.
 ** Source: Eurekahedge and Bloomberg. Returns from December 31, 2009 through December 31, 2016.
 *** Source Cambridge Associates, 10-year pooled investment horizon IRRs. Data as of June 30, 2016.
 Net annual rate of return after deduction of management fees, expenses, and carried interest.

It is no coincidence that the increase in registered funds incorporating private capital is occurring at the same time as the universe of public companies continues to shrink and grow older. The combination of fewer IPOs, continued consolidation through M&A, and take-privates has led to a sharp reduction in the number of publicly-listed companies – nearly halving in the U.S. since 1998. Meanwhile, the average age of a U.S. public company has increased from 12 years in 1996 to 20 years in 2018¹⁵ – with dynamic high-growth companies primarily finding their home in the private markets, out of reach for the average equity market investor.

In its 2018 report, the CFA Institute made a number of policy recommendations, including improving access to private market investments by pension savers. The Institute concluded that “it is not credible to allow an entire generation

of individual investors to be left with only diversified public market exposure to generate retirement returns, while institutional investors crowd into innovative business models [through the private markets] that offer potentially higher returns.” We couldn’t agree more.

One somewhat less obvious effect of the private markets expansion is that it is causing the PE industry to focus more on the wealth advisory channel.



Nick Veronis
Co-Founder & Managing Partner

END NOTES

¹Prequin as of Q2 2018

²CFA Institute 2018

³Cambridge Associates as of Q2 2018

⁴Cliffwater LLC 2019 Asset Allocation Report

⁵The Rise and rise of private markets, McKinsey Global Private Markets Review 2018

⁶Source: S&P Global Market Intelligence; U.S LBO Q3 2018

⁷Source: S&P Global Market Intelligence; U.S LBO Q3 2018

⁸The S&P 500 or Standard & Poor's 500 Index is a market-capitalization-weighted index of the 500 largest U.S. publicly traded companies. The index is widely regarded as the best gauge of large-cap U.S. equities. Russell 2000: The Russell 2000 index is an index measuring the performance of approximately 2,000 small-cap companies in the Russell 3000 Index, which is made up of 3,000 of the biggest U.S. stocks. The Russell 2000 serves as a benchmark for small-cap stocks in the United States

⁹Source: The National Center for the Middle Market, Q4 2017 Middle Market Indicator

¹⁰Cliffwater LLC 2019 Asset Allocation Report

¹¹https://www.gsb.stanford.edu/sites/gsb/files/publication-pdf/blm_final_march7.pdf

¹²Source: Pitchbook, Analyzing persistence in private equity fund performance

¹³<https://www.bloomberg.com/news/articles/2018-03-06/blackstone-sees-half-of-assets-coming-from-individual-investors>

¹⁴Past performance is not indicative of future results. There can be no assurance that any fund will achieve top quartile returns or that any fund in the top quartile will match the historical returns of top quartile funds, or any funds, demonstrated in charts provided.

¹⁵Source: The National Bureau of Economic Research: The Shrinking Universe of Public Firms: Facts, Causes and Consequences

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