Institutional allocation to private equity

A maturing industry calls for a differentiated approach

Willis Towers Watson

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Executive Summary

Institutional allocation to private equity is underpinned by structural tailwinds that are unlikely to fade any time soon. Becoming a public company is less desirable than before - as evidenced by the declining number of listed companies, particularly in the U.S. - and private companies are staying private for longer.

That being said, we also acknowledge that the private equity industry has over time matured with fewer opportunities to grasp low hanging fruit. Average buyout returns have steadily declined over the past three decades. A recent Bain study[1] suggests that for the last 10 years U.S. public equity returns have essentially matched returns from U.S. buyouts, at around 15%.

This calls for a differentiated approach to identify those that are able to outperform their peers. In this paper, we outline several key considerations we believe are vital in managing a successful private equity investment programme:

- A diverse line-up of a small number of high-conviction bets to avoid the peril of over-diversification
- A focus on mid-market segment where there is a larger opportunity set (sub-$500mn private equity deals account for almost 90% of all private equity deal volume), higher potential for operational value creation and less relative competitive pressure
- Understand key megatrends and how they shape sectoral exposure
- Exploit both extrinsic and intrinsic drivers to achieve alignment of interest
- Leverage the size of commitments to seek better terms wherever feasible – this has resulted in an average relative management fee saving of 19bps per year for our clients in private equity
- Sustainable investment considerations are embedded in the investment process and decision-making
- A well thought out and executed co-investment solution complementary to primary fund investments
- A commitment to innovation.

[1]"Public vs. private equity returns: Is PE losing its advantage?", Bain, 2020

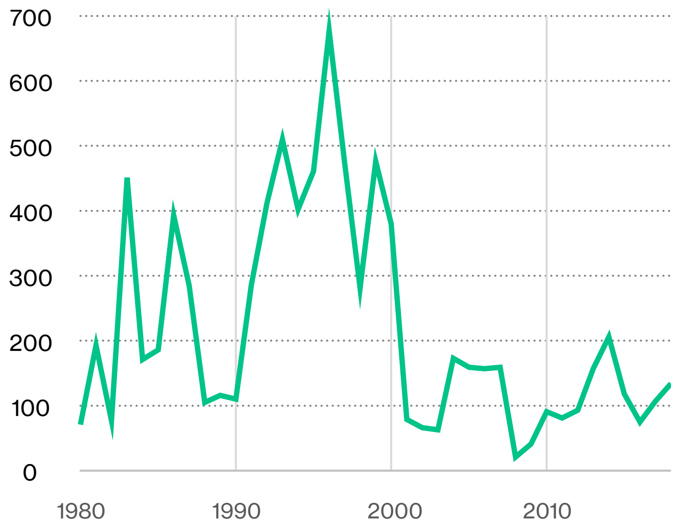
Structural tailwinds continue to support the case for private equity allocation

The quid pro quo of becoming a public company has changed considerably over the past decades, in favour of staying private[2].

Becoming a public company is less desirable than before (see **Exhibit 1** on declining number of listed companies in the U.S. and **Exhibit 2** on the shrinking number of IPOs). Today's knowledge-based business models tend to be asset light and corporate investment is increasingly in intangible assets. Investment in intangible assets is treated under today's accounting standards as an expense, therefore acting as a drag on earnings. Consequently, a business that invests heavily in intangible assets might struggle to "sell" the constantly "depressed" earnings to the public.

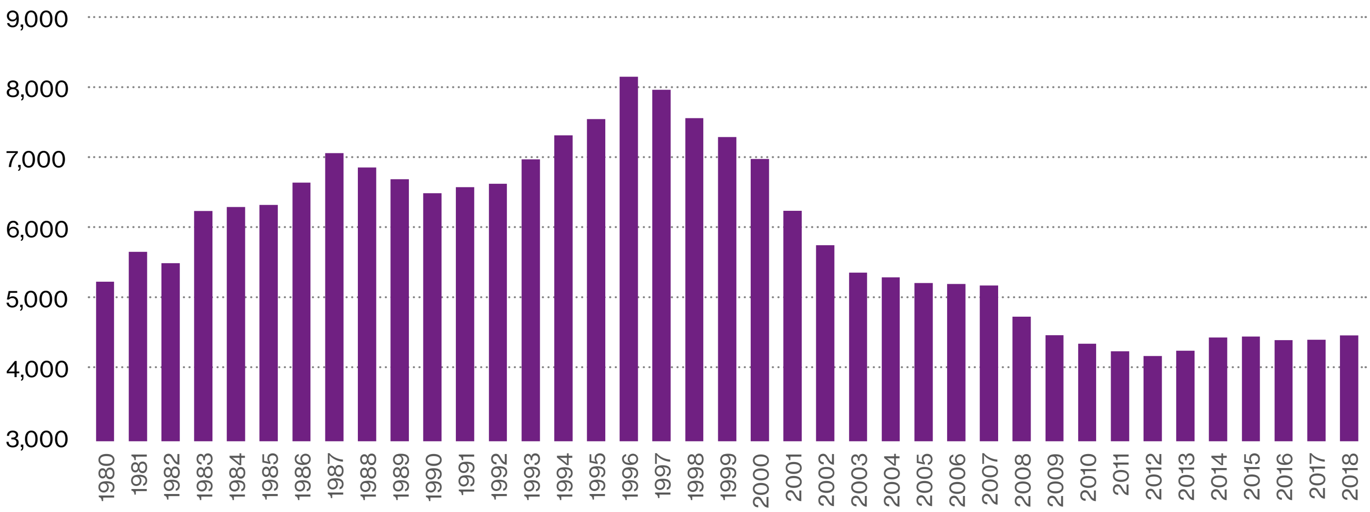
Moreover, the perception of public markets as increasingly short-term focused does not do it any favours in winning over businesses. Added to that is the substantial cost of an IPO (around 5% of the amount raised for U.S. based IPOs[3]) and the rising ongoing costs of being a listed company, driven by increasing regulatory requirements.

Exhibit 2: the shrinking number of IPOs (U.S.)



Source: Jay Ritter

Exhibit 1: the number of firms on listed U.S. equity market



Source: World Bank

[2] "The evolving role of public and private equity markets", Thinking Ahead Institute, 2019
[3] "Where Have All the IPOs Gone?", Ritter et al, 2013

In the meantime, when businesses can raise sufficient capital outside the public market (see **Exhibit 3**) – thanks to a thriving private equity industry – going public stops being a need. It becomes a choice, and more and more companies now exercise that choice to stay private for longer. This brings challenges for investors. Public market investors are now accessing companies at a later stage of their development than in the past, if they can access them at all. The delay could lead public market investors to miss out on a significant period of growth.

Public markets are also increasingly dominated by huge, mature business that generate more cash than they can spend on future growth opportunities. From a business lifecycle perspective, they might not present the most rewarding investment opportunities. When a company's market share is already very large, the limit to growth is no longer a theoretical concept.

The need for private equity allocation becomes obvious as a result. Underpinned by these structural tailwinds, it is our belief that private equity, as a portfolio construction building block, will continue to grow its significance in institutional portfolios.

Exhibit 3: vast amounts can now be raised privately

- **Uber** issued $8.1 billion worth of new shares in 2019, having already raised more than $22 billion in the private space (a ratio of 0.37 to 1).
- **Google** raised over $1.9 billion in new capital in its 2004 IPO. Prior to that, it had raised $25 million of private capital (a public-to-private fund-raising ratio of 76 to 1)
- **Facebook** raised over $16 billion in new capital in its 2012 IPO. Prior to that, it had raised $2.4 billion of private capital (a ratio of 6.7 to 1)

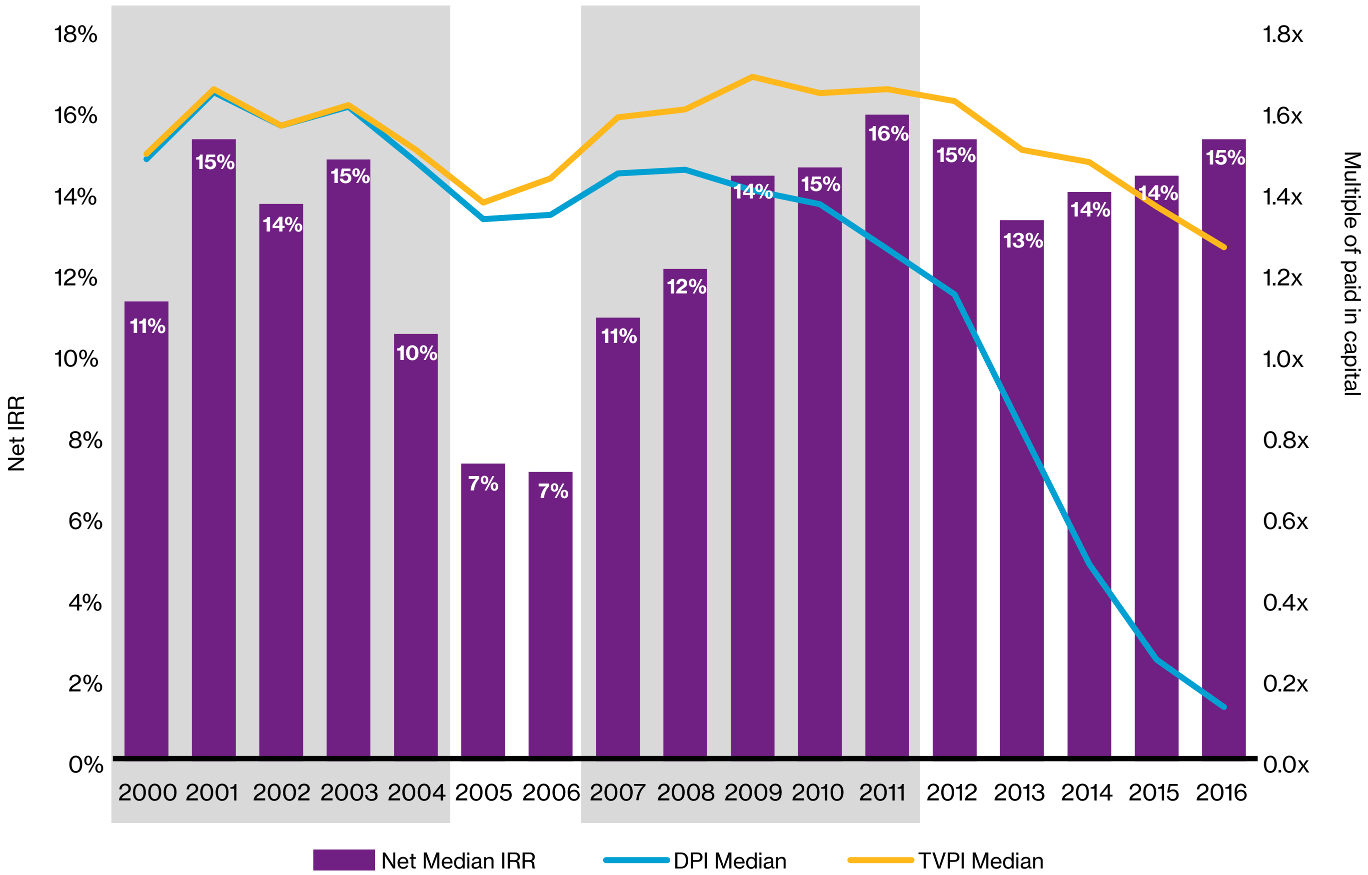
Source: Thinking Ahead Institute

Has the COVID-19 pandemic ruined the party?

No. Quite the opposite. A recent Willis Towers Watson publication[4] shows (**Exhibit 4**) that, historically, private equity fund vintages that started to invest during the last two global economic downturns have actually outperformed other vintages[5] that started to invest two to three years before a recession or more than five years after one. There are numerous underlying drivers for this outperformance: declining deal valuations hence better entry points; lower use of leverage; the long-term nature of the asset class as well as control ownership where management takes onboard operational feedback from private equity advisors.

The message is clear: today's market environment offers as good an opportunity as ever, if not better, to make commitments to private equity.

Exhibit 4: Global private equity: median net IRR's, TVPI and DPI[6] by vintage year



Source: Preqin

[4] "Private equity in the current environment", Willis Towers Watson, 2020
[5] Vintage year in the private equity and venture capital industries refers to the year in which a fund began making investments or, more specifically, the date in which capital was deployed to a particular company or project.
[6] IRR stands for internal rate of return; TVPI stands for total value to paid in capital multiple, which is a return multiple on invested capital; DPI stands for distribution to paid in capital multiple.

Private vs public equity returns: a lost decade of excess returns

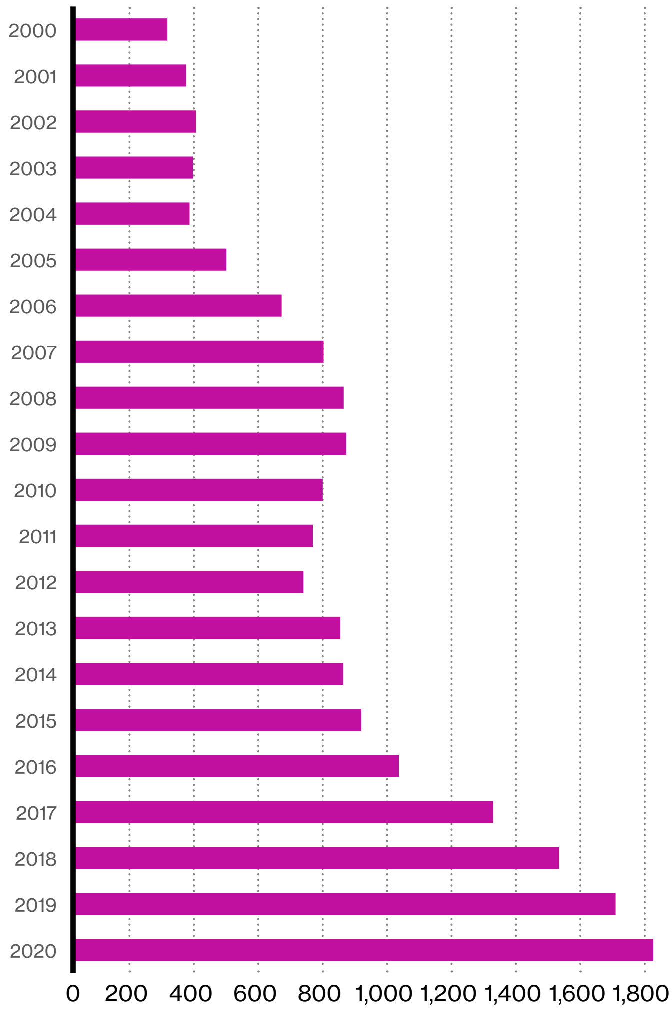
The private equity industry has enjoyed tremendous growth in the past decades. Its global assets under management (AuM) has grown six-fold from a little over half a trillion dollars to more than three trillion dollars over the time span of "merely" 20 years[7].

There is a simple reason for this incredible rise: private equity delivers. As Bain[8] calculated, over the last 30 years, U.S. buyout funds have generated average net annual returns of 13.1%, comfortably beating the public market equivalent – 8.1% – using the S&P500 index as the proxy.

However, if only focusing on the recent past, the story is rather different. Bain notes that for the last 10 years U.S. public equity returns have essentially matched returns from U.S. buyouts, at around 15%. A 2020 research paper by Professor Ludovic Phalippou[9] came to a similar conclusion: from 2006-2015, private equity funds have returned about the same as public equity indices. It is important to note that not everyone agrees with these findings. In fact, Phalippou's findings almost immediately sparked debate and pushback within the private equity community. In Appendix A, we provide a quick review of this subject matter while noting that performance measurement and benchmarking have always been challenging due to the nature of private investments.

Debates about data and methodologies aside, there is little doubt that private equity performance has been coming under some pressure and that pressure is likely to persist. **Exhibit 5** illustrates the increasing levels of dry powder, an industry term referring to money committed to private equity funds but not yet invested. Dry powder levels have been steadily increasing since 2012 and as of October 2020 stood at a record high of $1.8 trillion. High dry powder levels likely lead to a higher level of competition which then feeds into higher pricing multiples paid on deals and significant leverage levels, as shown by **Exhibits 6** and **7**.

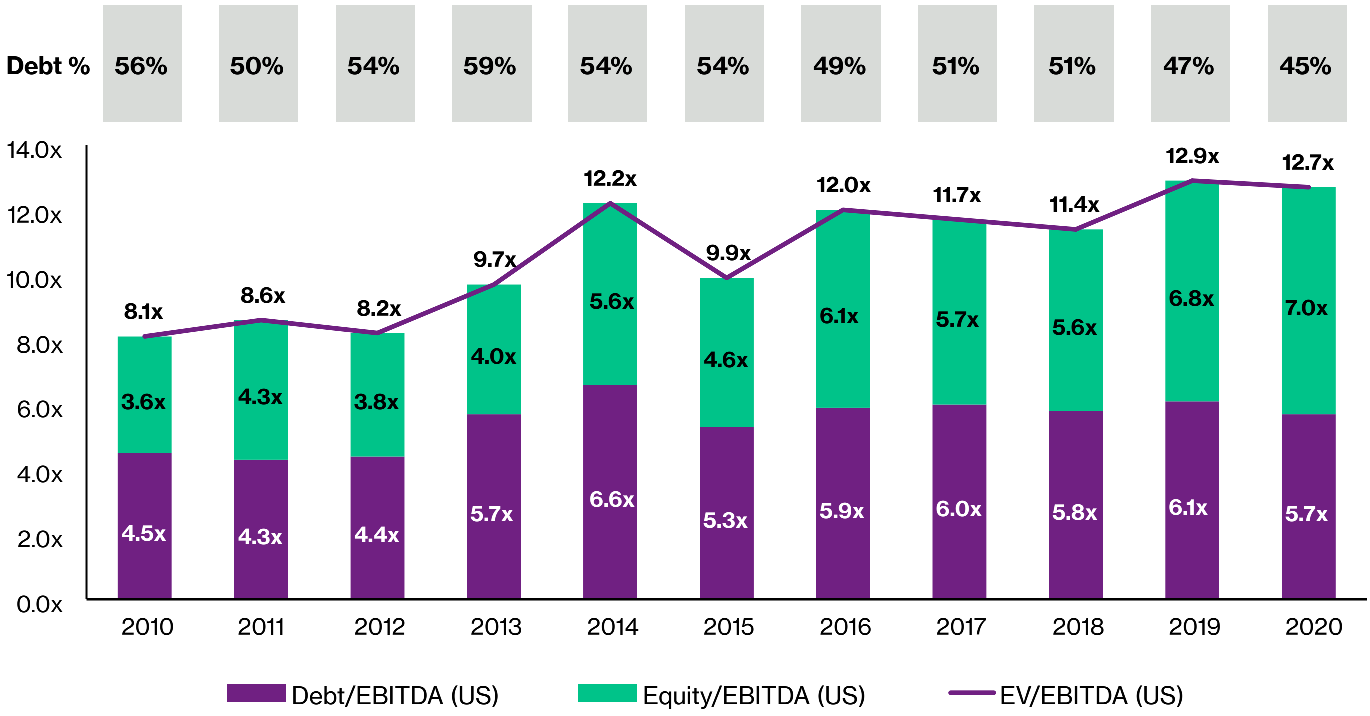
Exhibit 5: Global private equity dry powder year-end levels ($ billion)



Source: Preqin

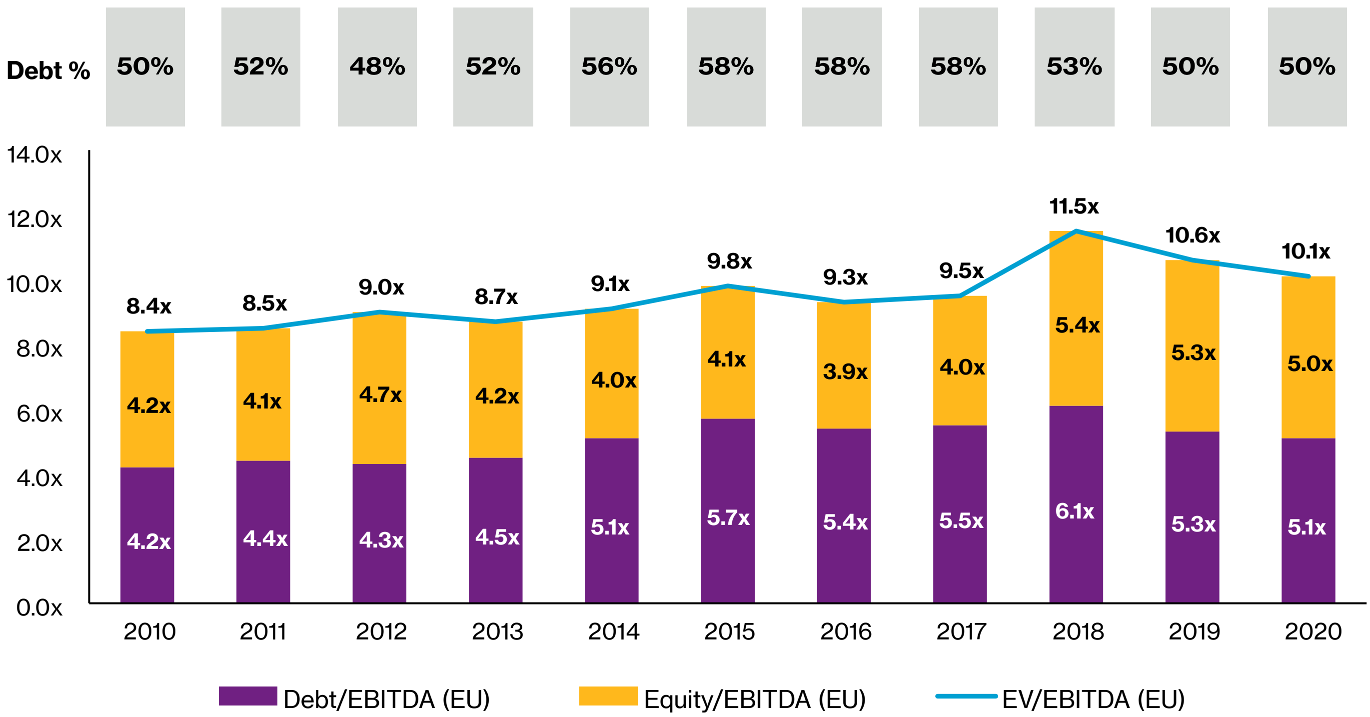
[7] "Capital formation", CFA Institute, 2018
[8] "Public vs. private equity returns: Is PE losing its advantage?", Bain, 2020
[9] "An Inconvenient Fact: Private Equity Returns & The Billionaire Factory", Ludovic Phalippou, University of Oxford, 2020

Exhibit 6: **U.S. private equity buyout multiples**



Source: PitchBook

Exhibit 7: **EU private equity buyout multiples**



Source: PitchBook

Selectivity becomes ever more important in a maturing industry

In the Bain study mentioned earlier, global buyout returns have been trending downward over the past 30 years. This is simply a natural evolution of the market maturing. As private equity's relative outperformance draws increasing amounts of capital from investors, competition for a limited number of high-quality assets increases. That then leads to higher average purchase price multiples, which make it increasingly difficult to generate strong returns.

Nonetheless, it has been possible to buck this trend through the types of managers selected and approach to building a private equity programme. While average returns have declined over time, top-quartile returns have essentially held steady, according to Bain. This is something David Swensen, then CIO of the Yale Investment office, understood decades ago. Yale recognises there is a large gap between top quartile and bottom quartile performance in private equity. It also only invests in managers who add value to portfolio companies rather than generating returns mostly through financial engineering.

We believe that the key to successful private equity investing is the ability to identify high performing managers, consistent with Yale's approach and Bain's findings. The risk of poor manager selection is considerable in private equity given the wide dispersion of returns. With the long-term lock-up nature of the commitment, there are limited options for exit and sporadic opportunities to gain access to the best managers. Investors must therefore be set up and prepared to undertake thorough manager due diligence before a commitment is made.

That due diligence process should focus on a wide range of quantitative and qualitative factors, covering all three key areas of business, people and process. The next part of this paper will explain some of our key considerations when we conduct our investment due diligence. We would like to note that it is not our intention to cover our entire process but instead focus on a selection of its key elements.

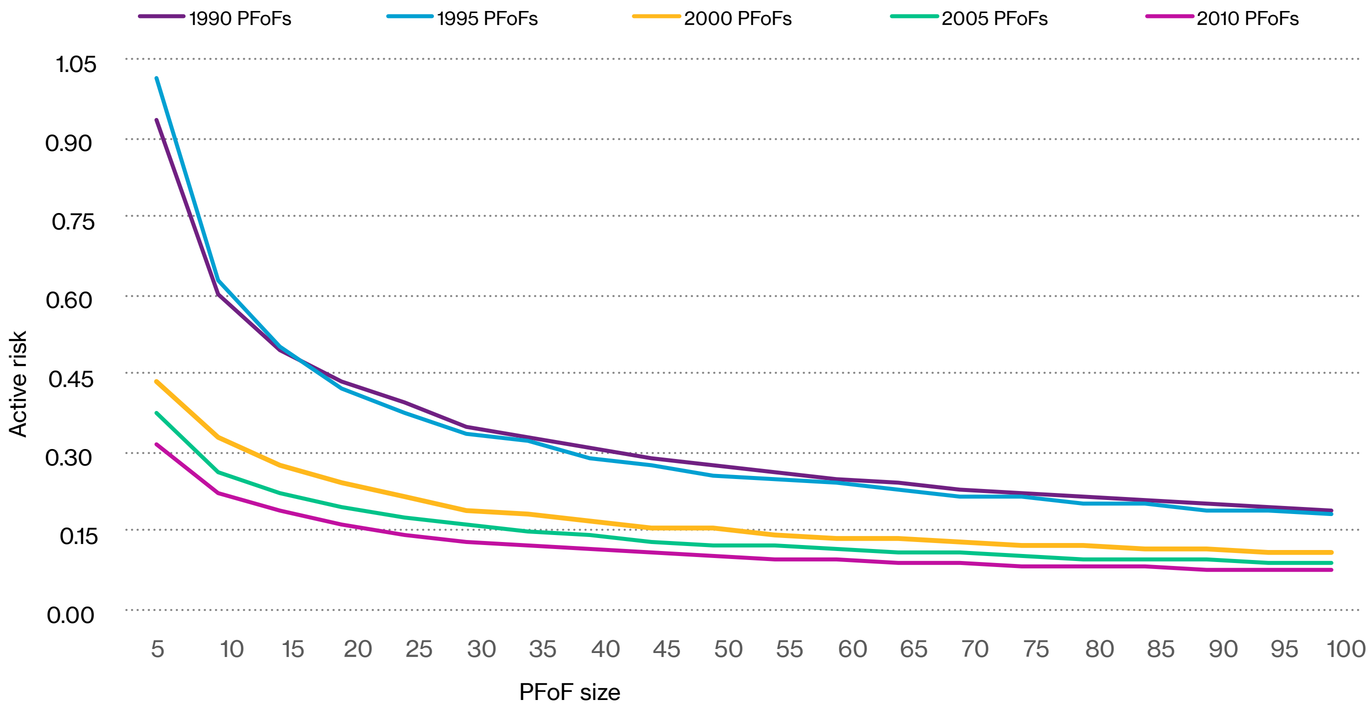
Avoid over-diversification – as often happens in life, too much of a good thing can be bad

In building our private equity exposure, we prefer a diverse line-up of a small number of high-conviction bets to a large number of underlying funds. The logic here is very simple. In an environment where the average is increasingly not good enough, we need to take active risks to be better than the average. Holding a large number of underlying funds can fall into the trap of over-diversification that inevitably leads to mean reversion in performance. That is, investors end up receiving listed-equity-like returns.

A study by global private equity fund of funds investor, Pantheon[10], shows that adding more funds to a fund of funds starts to have a negligible impact on risk reduction once an optimum point is reached, as illustrated by **Exhibit 8**. Anything above that, the diversification effect is marginal and lowers the prospect of achieving top-quartile returns.

Cherry picking the best-in-class private equity managers who can consistently achieve outperformance can be a daunting task. But those who can identify these best-in-class managers should pursue a concentrated strategy to capitalise on those managers' best ideas without diluting performance with over-diversification.

Exhibit 8: Active risk reduction by fund of funds



Source: Pantheon

[10] "Trend Towards More Concentrated Primary Portfolios", Dr Andrea Carnelli Dompé, Pantheon, 2019

Big is not necessarily good – more truffles can be found in the mid-market segment

Small- and mid-cap buyout funds are one of our key focuses in searching for high-performing private equity funds. We believe that smaller funds have a higher potential for outperforming their larger counterparts. An analysis on Preqin data for 1,884 buyout funds globally with vintages between 1985 and 2015 suggests that buyout funds with fund sizes of $1bn and below generated an average net IRR of 17.3% whilst the average net IRR of buyouts funds with fund sizes above $1bn amounted to 14.3%. There are three main reasons why we believe there might be more gems in the small- and mid-cap market segment: (1) larger opportunity set (2) a better chance that a focus on operational value creation can generate good financial returns and (3) less intermediation and competition.

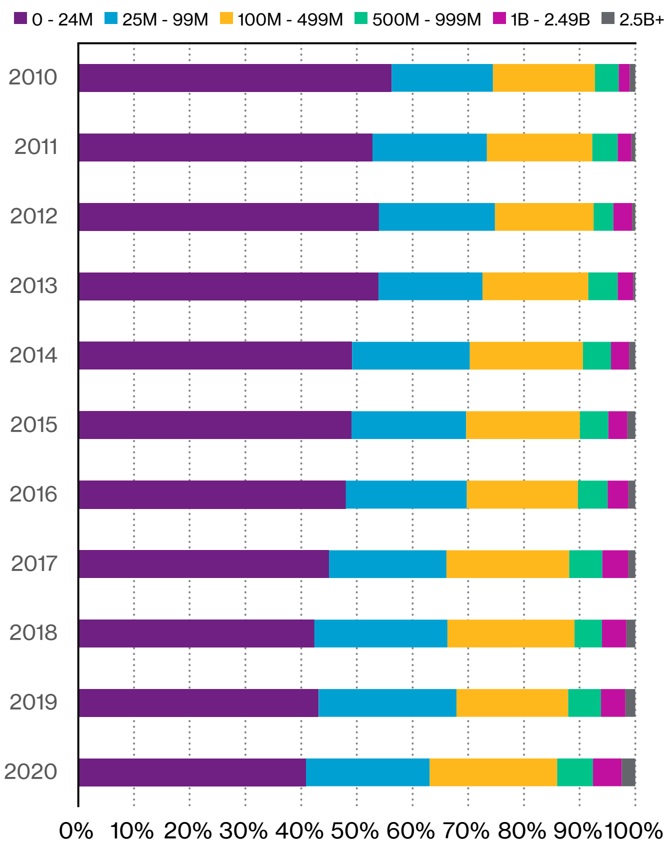
1. Larger investment opportunity set

Data provided by PitchBook (**Exhibit 9**) indicates that sub-$500 million private equity deals account for almost 90% of all private equity deal volume (by deal count). That demonstrates the wide sourcing opportunities available to private equity managers focusing on this segment. In addition, this also allows managers to apply a more sector-focused investment approach and lever off their deep sector expertise to add more value to their portfolio companies.

2. Higher potential for operational value creation

According to a study by Capital Dynamics and the Technische Universität München[11], more than half of the value creation in private equity investments is driven by operational improvements. What is interesting to note is that value creation drivers differ across transaction sizes with small-to mid-cap deals relying more on EBITDA[12] growth and multiple expansion whilst large-cap deals are more reliant on leverage, as shown by **Exhibit 10**. The reasons behind this are difficult to quantify but smaller companies are often less professionalised and benefit more from additional resources, improved corporate governance and management teams, more well-defined business strategy, broader industry network and access to sector experts. In addition, smaller companies may also benefit more from buy-and-build strategies as they are often ideally placed to serve as a platform company and offer private equity managers a chance to consolidate and grow the company externally.

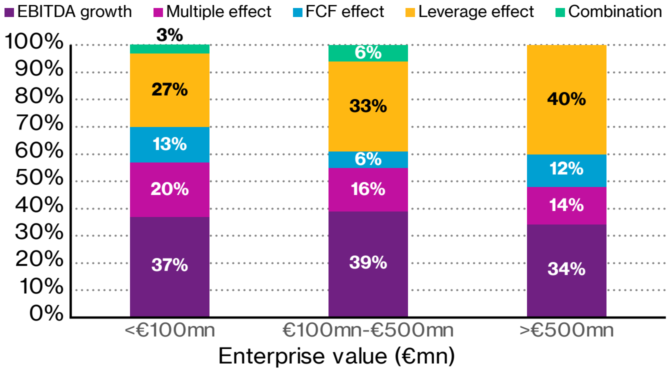
Exhibit 9: Private equity deal count by deal size ($ million)



Source: PitchBook

[11] "Value Creation in Private Equity", Capital Dynamics and the Technische Universität München, 2014
[12] EBITDA, or earnings before interest, taxes, depreciation, and amortization, is a measure of a company's overall financial performance.

Exhibit 10: Value creation drivers



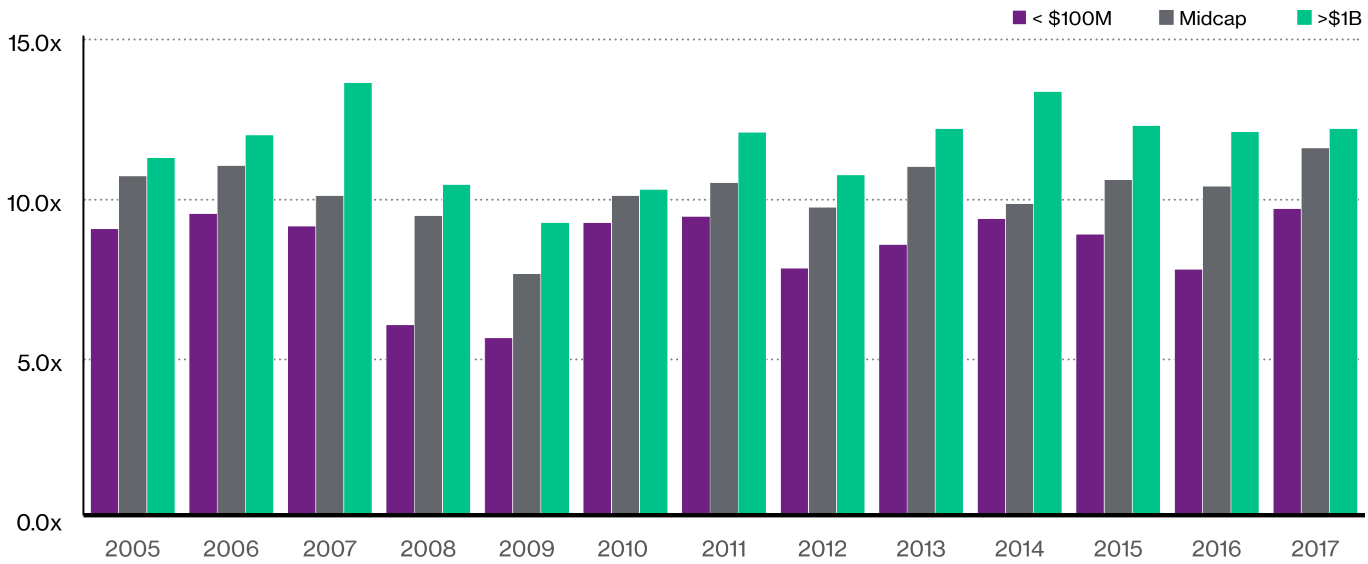
Source: Capital Dynamics and the Technische Universität München

3. Less competitive pressure

A third argument in favour of the small- to mid-cap market can be constructed by looking at the prices paid for deals. Based on deal data provided by Dealogic (**Exhibit 11**), valuations for small- and mid-cap deals have consistently been lower, giving managers more room for multiple expansion. In the large-cap space, a combination of large amounts of dry powder and a smaller opportunity set means there is often considerable competition for deals. In addition, large-cap managers tend to make up for these higher multiples by acquiring companies with more leverage.

[redacted]

Exhibit 11: EV/EBITDA by deal size (U.S.)



Source: William Blair/Dealogic

Although small- to mid-cap performance has been superior, returns have typically also been more dispersed compared to large- and mega-buyout funds. This reinforces the point that investors need to be highly selective in their manager selection and portfolio construction. And we believe a concentrated high-conviction investment approach provides an answer to this, as discussed earlier.

It is worth highlighting that this focus on small- and mid-cap buyout funds by no means acts as a limiting factor for our investment universe. Over the years we have backed managers across all segments of the markets, from venture capital (VC) to the large end of the market. Our belief is that the relative competitiveness and attractiveness of various market segments/sectors/geographies/strategies is an evolutionary process and we commit to being highly adaptable to address the evolving opportunity set (e.g. technological developments in the climate solution space could lead to increasing number of attractive opportunities in the VC space or even in the large end of the market where climate solutions might need a lot of capital to be implemented worldwide).

Sectoral exposure shaped by a deep understanding of megatrends

We believe that megatrend dynamics will result in multi-dimensional transformations across society, technology, economics, environment and politics[13]. Megatrends are at the heart of our work with clients. Whether it is the next big technological leap, or acute climate-rated disruption, these trends have the potential to substantially impact investment portfolios.

An in-depth understanding of megatrends allows us to apply a thematic lens to assess and in turn better construct our sectoral exposures within private equity. Due to the nature of this asset class, many of the business models that private equity – including VC – funds invest in are at the forefront of various key megatrends.

As an example, one of these megatrends is evolving demographics. A combination of an aging population and a global rise in per capita healthcare spending leads to attractive opportunities in various segments of the healthcare industry, including healthcare equipment/services, pharmaceuticals and biotechnology.

Climate change is often described as the defining issue of our time. Climate technology is a broad concept encompassing a wide set of sectors that address the challenge of decarbonising the global economy[14]. As alluded to earlier, this is another area that we are very actively exploring. Investment opportunities are emerging in a number of strategies that seek alignment with decarbonisation goals, including but not limited to development of renewable energy, transport electrification, greening industrials and developing plant-based food. Granted some of these strategies meld into the real asset space but having a close relationship with our real asset research colleagues prevents these strategies from slipping through the cracks in our research process.

[13]"Responding to megatrends", PRI and Willis Towers Watson, 2017
[14]"The State of Climate Tech 2020", PwC, 2020

A holistic approach to ensuring alignment

Alignment of interest can be achieved by focusing on (1) extrinsic factors (e.g. private equity managers committing their own money alongside investors) and (2) aligning intrinsic motivations. We focus on both in our due diligence process.

For example, we have grown increasingly aware of the potential risk linked to private equity managers abusing subscription line financing to artificially boost the internal rate of return (IRR) and therefore the performance fees they are entitled to. We view aggressive use of this facility as a red flag and are prepared to walk away from any opportunities where risk of misalignment is too great. For interested readers, we refer them to Appendix B for a detailed discussion of our view on subscription line financing.

It is our belief that intrinsic motivations can be even more powerful drivers of alignment. Daniel Pink's book "Drive – the surprising truth about what motivates us" reveals how supporting employees in autonomy (our desire to be self-directed), mastery (the urge to get better skills) and purpose (the desire to do something that has meaning and is important) can lead to increased performance and satisfaction. While acknowledging that assessment of such elements is subjective and open to interpretation, we have incorporated them in our culture assessment[15], which is now a standard part of our research process. It focuses on assessing (1) client value proposition: the delivery of value to clients across the firms' services and products (2) employee value proposition: how a firm attracts, retains and develops talent to create an engaged staff and (3) the quality of the firm's leadership in developing and evolving the firm's vision, values and direction. We also believe that teams with more diversity typically produce better long-term outcomes, which is supported by our findings[16] from a cohort of around 400 products across a number of asset classes over several years.

Fees are another key area of focus for us in ensuring alignment. We seek fee deals whenever feasible, using the size of our commitments as leverage. As **Exhibit 12** shows, this has resulted in an average relative management fee saving of 10%, or in absolute terms, 19bps p.a. for our clients in private equity.

Exhibit 12: Willis Towers Watson fee deals[17]

1.84%
Original management fee p.a. (%, weighted average)

1.65%
WTW negotiated management fee p.a. (%, weighted average)

10%
Relative management fee saving p.a. (%)

19 bps
Absolute management fee saving p.a.

[15] "Measuring culture in asset managers", Willis Towers Watson, 2018
[16] "Diversity in the asset management industry", Willis Towers Watson, 2020
[17] As of January 2021

Sustainable investment considerations are deeply embedded

Sustainable investment[18], we believe, is central to successful long-term investment outcomes and a key part of our investment approach. While there has been growing awareness of environmental, social and governance (ESG) issues, sustainable investment continues to face scepticism in the private equity industry, especially in the U.S[19]. The way the industry is wired is that until there is consistent data establishing a positive and decisive link between ESG considerations and financial returns, there will likely always be cynicism among some private equity investors.

Albeit mostly outside the private equity industry, growing evidence of the financial impact of ESG factors and stewardship has started to emerge[20]. We are a strong advocate that it is time for private equity managers to stop viewing ESG issues as a sideshow and consider ESG practice a core part of what differentiates them from competition. This is against a backdrop of a rapid sustainable investment evolution in terms of how the market prices ESG risks and opportunities as well as

Our approach to sustainability starts from an overarching purpose to "invest today for a more sustainable tomorrow".

[18]Our "Sustainable Investment Policy" describes how Willis Towers Watson Delegated Investment Services team currently embeds the best of our sustainable investment research, risk management and idea generation.
[19]"Global Private Equity Report 2021", Bain & Company, 2021
[20]"Sustainable investment, show me the evidence", Willis Towers Watson, 2018

how end savers and policy makers demand a stronger integration of real-world impact into investment outcomes. The investment industry has never experienced this before. It therefore does not make sense to look for guidance in the past.

Better outcomes mean better, long-term returns with well-managed risk along the way. To achieve this, we focus on the forward-looking risks and opportunities, including those associated with sustainability. We have a formal process for integrating sustainability considerations into our manager research decisions. Our assessment of an asset manager's sustainable investment practices and implementation, in the context of individual strategies and products, feeds into our overall view of their ability to sustain a competitive advantage and the suitability of those products for our client's portfolios.

We have developed a set of guiding principles (see **exhibit 13**) to provide a consistent framework for identifying good sustainability practice at asset managers, which is directly applied in the area of private equity. They can also be used to guide engagements with managers.

Better outcomes also mean investing in a way that has a positive impact on the world that savers live in and will retire into. This line of thinking guides us to integrate impact with risk and return, working towards a three-dimensional (3D) investment framework. **Exhibit 14** presents a case study where one of our preferred private equity managers leverages its technology know-how to explore an attractive investment opportunity while creating positive impact in the area of combatting climate change.

Exhibit 13: Willis Towers Watson manager research sustainability principles

Culture and leadership	Sustainability principles, policies and the commitment to meet them should be set by the leadership and transmitted through the firm and to clients via effective culture
Integration of ESG information	Appropriate resources should be allocated to the identification, measurement and management of material ESG information to both portfolios and the underlying investments to improve decision making
Stewardship	Engagements with key stakeholders on sustainability issues should be used to improve investment outcomes
Improving the system	Enlightened self-interest requires asset managers to engage with and improve the investment system to make it more sustainable
Transparency and disclosure	Sustainable investment practices and ESG data should be routinely recorded and reported so that stakeholders can hold them to account for their actions

Exhibit 14: Case study: a private equity investment in a leading electric vehicle (EV) charging service provider in China

This is an investment made by a VC / growth fund that makes minority investments in the healthcare, consumer, supply chain and technology sectors in China. The investee company is currently China's largest EV charging service provider with a market share of around 35%. Given the rapid growth in China's EV industry that is underpinned by accommodating government policies, the manager identified a looming gap in charging infrastructure. The company pioneered a world-leading automatic charging system that is capable of intelligently scheduling the charging process to achieve safe charging during a period of low residential power consumption. This innovation, along with a versatile operational model, allowed the company to quickly expand network with improved utilisation ratio, which augmented its market-leading position. As a trusted partner, the private equity manager has been working closely with the company to organise and monetarise its data pool collected from EVs and also better manage its mobile app.

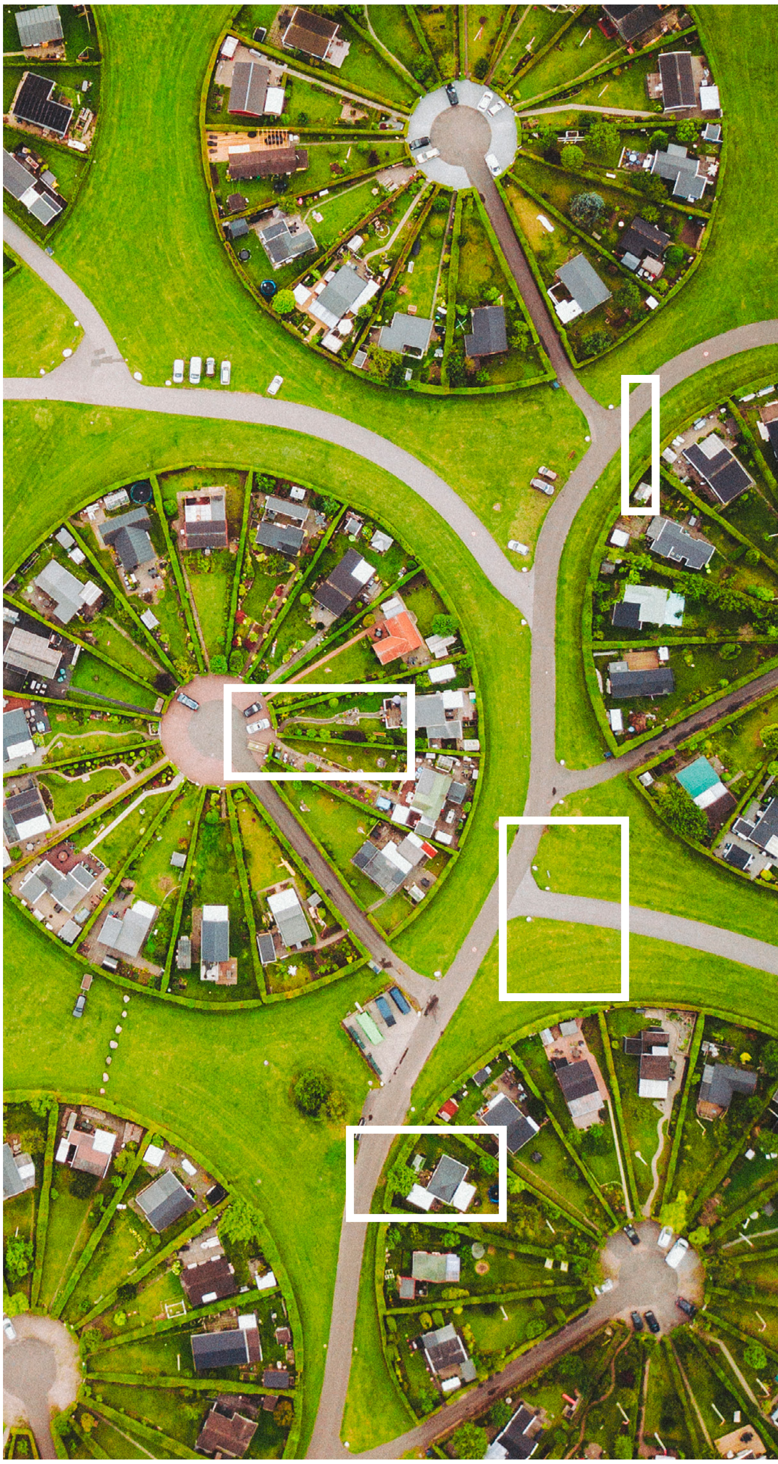
Co-investments become an increasingly larger part of what we do

Co-investments are private equity investments where an investor invests directly into an operating company alongside a private equity manager. From the perspective of investors, it is a more selective and research-driven approach that can reduce blind-pool[21] risk and potentially drive outperformance. Co-investments allow private equity investments in a targeted manner to exploit particular themes and sectors. What's more, they are typically offered on a "no fee, no carry" basis, and don't have the same J-curve[22] effects as primary funds because capital is deployed immediately. Co-investing also benefits private equity managers by allowing them to "flex up" for larger transactions than they could fund alone and by providing an opportunity to deepen investor relationships.

Sourcing and selectivity are key to our approach to co-investments. We prioritise deals with managers with whom we already have strong primary relationships and in selecting the deals we ask the following questions:

- Is the sub-sector focus differentiated from other deals we are seeing in the market?
- Does pricing and debt usage seem reasonable compared to the market?Is the deal in the manager's sweet spot – size, sector, strategy?
- Does the deal play to the manager's strengths?

Our co-investment process includes detailed due diligence - meeting company management and deal team; site visits for real assets co-investments; detailed analysis and re-underwriting deals. It involves the portfolio management group, operational due diligence and legal to provide views on suitability for our client base from a variety of angles. And our ESG due diligence process is to ensure that top tier ESG practices by managers translates to top tier ESG practices for co-investment opportunities. **Exhibit 15** outlines our ESG due diligence process for co-investments and **Exhibit 16** describes a co-investment we made in a cyber security company.



[21]A Blind Pool fund is one in which capital is raised from investors without knowing the exact assets that will be invested into.
[22]In private equity, the J Curve represents the tendency of private equity funds to post negative after fee returns in the initial years and then post increasing returns in later years when the investments mature.

Exhibit 15: ESG due-diligence process for private equity co-investments

Diligence at Fund Level

- Perform standalone ESG diligence
- Ensure high quality policies and monitoring systems in place
- Review ESG diligence factors

Engagement with Manager

- Help craft better policies
- Help put better systems in place
- Engage managers with ESG consultants

Co-investment Diligence

- Review ESG diligence completed by manager
- Re-underwrite the portfolio companies' ESG with our own scorecard (this can lead to a fail)
- In some instances, engage with the manager if areas could be improved over the course of ownership

Exhibit 16: A co-investment case study

This is a co-investment opportunity sourced from a U.S.-based cyber security VC fund investing in transformative companies protecting the digital world. We identified cyber security as an attractive sector for long-term growth and attended a conference where we met with two professionals from another VC firm. After numerous discussions, we helped these professionals spin out and found a new VC firm focusing on cyber security for which we became the anchor investor.

Given our strong relationship with the manager we were able to have open discussions around co-investments and identified a fast-growing U.S.-based network security company as an attractive co-investment opportunity. The manager was able to create capacity for us in the next round of financing.

We have conducted in-depth due diligence, including an onsite meeting with the management team and multiple meetings with the deal team. References were another large part of our diligence process. We leveraged our network to speak to other managers with knowledge of the industry as well as potential customers. We were also able to leverage our firm-wide expertise by speaking to the head of Willis Towers Watson's Cyber Security Insurance practice as well as our Chief Information Security Officer.

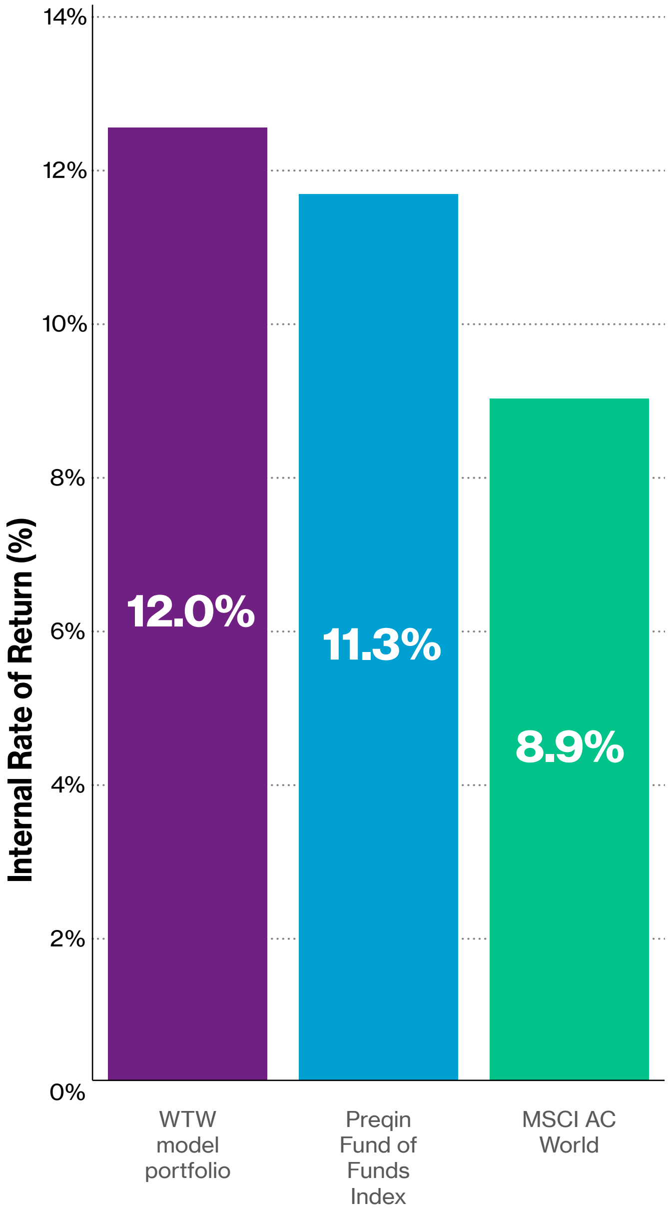
We expect this company to be taken public in the foreseeable future and a material uplift in valuation when it goes public.

Our track record

All of these efforts and considerations have led to significant value-add for our clients over the years. Willis Towers Watson has been running a private equity investment programme since 2006. Analysing the historic performance of private equity funds that Willis Towers Watson has recommended to its clients since inception, it shows a net IRR of 12.0% and a net multiple of 1.7x[23], outperforming versus relevant benchmarks:

- The cumulative performance relative to a public market equivalent (i.e., taking the exact same cash flows experienced by our clients in private markets and investing them in the public equity index) demonstrates outperformance of approximately 3.1% p.a.
- Based on total committed capital of $100 million, the 3.1% p.a. outperformance equates to an additional $23.2 million of returns above those generated by MSCI AC World index
- Using the same market equivalent methodology, we have compared our track record to Preqin Fund of Funds quarterly index. Over the same period, we have outperformed the index by 0.7% p.a.

Exhibit 17: Willis Towers Watson track record



Past performance and simulated past performance are no guarantee of future results.

[23]Willis Towers Watson's track record performance is calculated using an assumed programme of commitments to each highly rated private markets fund that Willis Towers Watson recommended to its delegated clients. The commitment sizes are equal-weighted across vintage years and incorporate performance of 41 underlying funds. Performance is as of 30 June 2020 and net of all underlying manager fees and net of Willis Towers Watson's fees. Commitments made in 2017-2019 have not been included in the analysis due to their immaturity. This data is not audited. Past performance and simulated past performance are no guarantee of future results.

And we continue to innovate

As the market evolves and new ways of investing in private equity emerge, we embrace innovation.

For example, we are seeing more and more public equity managers extending their reach to the private space. Many of their existing skills are transferable, though not all. Some have adopted a standard private equity closed-end fund structure, while others have explored alternative structures, such as listed funds. The latter allows them to pursue a strategy that the current structure is unable to accommodate - that is, to invest in fundamentally sound businesses, whether public or private, and hold them without a pre-set period to exit. We could potentially see the rise of a new breed of investment managers executing investment strategies across the entire equity spectrum. In early 2021, we launched a dedicated working group that brings together expertise from both public and private equity teams to actively search for and evaluate opportunities in this space.

As discussed at the beginning of this paper, we believe there are strong structural tailwinds to support the continuing rise of private equity in institutional portfolios. That being said, we are also of the view that the private equity industry needs to evolve actively to fully capture its growth potential. There are several pitfalls in the current status quo structure. Fee levels are very high and remain one of the key barriers hindering private equity's expansion into the fast-growing defined contribution (DC) pension market. In addition, the investment time horizon is dictated by fund terms. Managers are often under pressure to sell strong performers prematurely in order to facilitate fundraising efforts vis-à-vis investors demanding distributions and verifiable track records. Yet many business owners are understandably averse to "quick flips" from one private equity manager to another, which limits the model's appeal to a broad set of business owners. In this regard, we view the development of long-dated funds and evergreen structures as healthy additions to the private equity investing ecosystem although they bring their own challenges and issues.

Will a beta type of offering emerge? Many private businesses are already well-established with strong management in place and strong cash flows. They are well positioned to compound earnings over a long time horizon without too much help operationally. Will a revolutionary private equity vehicle – dare we say "passive" private equity – allow asset owners to access and hold these investments in a cost-effective way? If so, it might just turn out to be the key that unlocks cost-conscious DC funds and the first step in getting private equity to the masses. And potentially generate attractive net returns[24].

Conclusion – a differentiated approach is now more important than ever

After decades of market developments, the private equity market has inevitably matured with fewer opportunities to grasp low hanging fruit. However top tier funds are expected to continue to deliver strong returns and we believe a differentiated selection process is ever so more valued by investors who would like to allocate to this increasingly important asset class.

While we of course do not have all the answers, we believe there is value in asking these questions.

[24]It is worth clarifying that our view is that under the current fee structure (i.e. 2% management fee and 20% carry), selectivity is key as private equity beta net of fees is likely to deliver returns that are not that dissimilar to those of public equity indices. However, net return wise, private equity beta would look a lot more attractive if the total cost of accessing it significantly reduced.

Appendix A - private equity has not outperformed public indices, or has it?

The private equity industry is no stranger to criticism and controversy. This has again been confirmed by professor Ludovic Phalippou's latest paper 'An Inconvenient Fact: Private Equity Returns & The Billionaire Factory'. Phalippou's paper calls to mind Fred Schwed's Wall Street classic 'Where Are the Customers' Yachts?' in the sense that the key thesis of his paper is centred around the opacity of private equity performance and fees which is facilitating the rise of private equity multi-billionaires without any clear proof of net market outperformance. Since its publication on 15 June 2020, the paper has been downloaded almost 17,000 times and immediately sparked debate within the private equity community and pushback from some of the criticised investment groups.

Clear performance measuring and benchmarking has always been a challenge due to the nature of private investments. Contrary to managing a portfolio of public stocks, private equity investments cannot provide a daily market valuation and buyout funds typically take around four to six years before achieving a positive cumulative net cash flow. Aside from public-to-private and private investment in public equity (PIPE) transactions, private equity funds also typically invest in companies which cannot be accessed through the public market. Its returns can be looked at from two points of view: (i) internal rate of return (IRR) which corresponds to the money-weighted average return taking into account the time value of money or (ii) multiple of invested capital (MoIC) which simply expresses return as a multiple on the invested amount. In his performance analysis, Professor Phalippou states that private equity funds have, on average, returned between 1.57x and 1.65x net MoIC, which translates to an 11% to 12% p.a. return, matching relevant public equity indices. As can been seen from **Exhibits 18** and **19**, drawing a conclusion on whether private equity has or hasn't outperformed public markets is not straightforward and heavily depends on the chosen benchmark and timeframe. Furthermore, deriving and using IRR as a measure of return can lead to false conclusions as this measure can be easily distorted by the use of financing line, as explained in Appendix B.

Exhibit 18: Stock market indices returns

	2006-2019	1996-2009	2010-2019
Vanguard S&P 500	10.3%	7.6%	14.3%
MSCI World	8.6%	6.9%	11.0%
Russell 2000	8.5%	7.3%	11.8%

Source: Burgiss

Exhibit 19: Aggregate PE performance

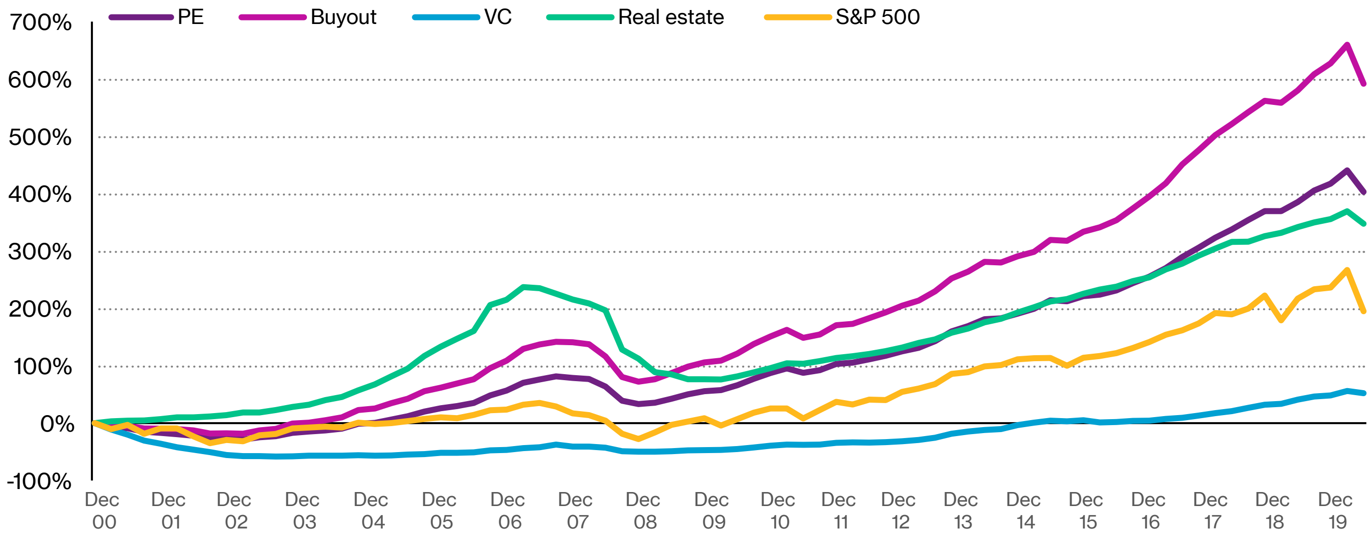
	Vintage	Size ($bn)	#	IRR	MoIC	PME[1]
Private equity	2006-2015	1,698	2,132	11%	1.57x	0.99
Leveraged buyout	2006-2015	741	550	12%	1.65x	1.05

Source: Burgiss

[1]Public Market Equivalent' - PME compares an investment in a PE fund to an equivalent investment in a public market benchmark. The PME can be viewed as a market-adjusted multiple of invested capital (net of fees). A PME of 1.05, for example, implies that at the end of the fund's life, investors ended up with 5% more than they would have if they had invested in the public markets.

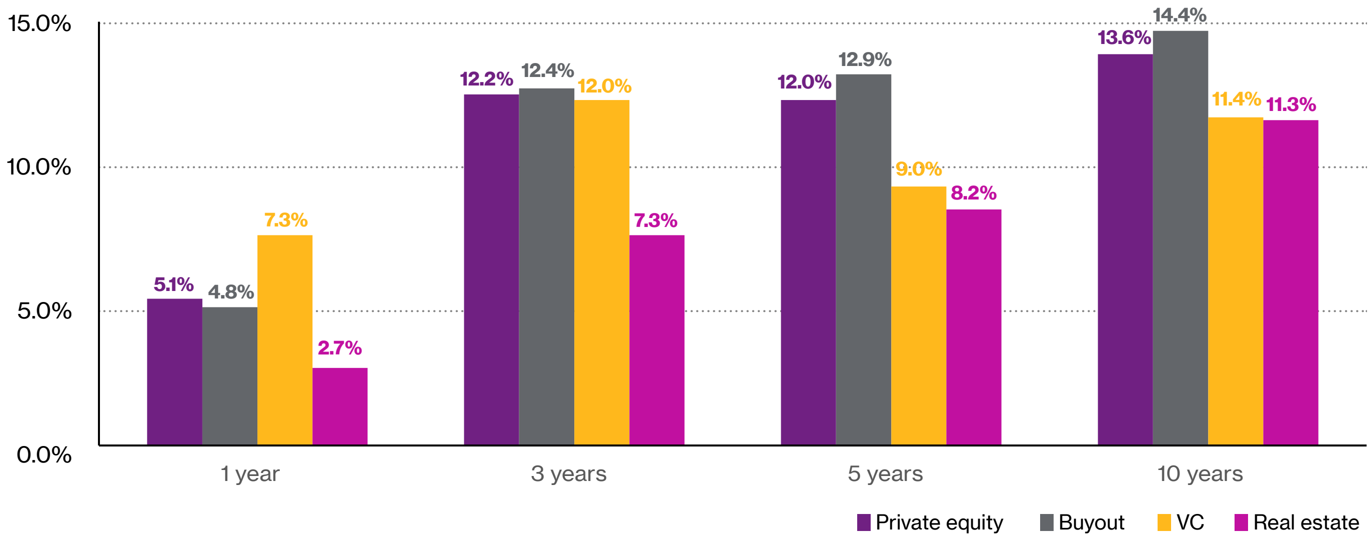
The analysis on the prior page can be further supplemented by two return analyses based on net asset value (NAV) provided by Preqin. **Exhibit 20** plots the Preqin Private Market Quarterly Index, a time-weighted index that allows investors to compare the returns of private equity to the returns of other asset classes and indices based on quarterly NAV changes. Rebased to 2000, this quarterly index shows a significant outperformance of private equity compared to the S&P 500, particularly for the buyout strategy. **Exhibit 21** shows the horizon net IRRs for different strategies within private equity. It is interesting to note here that returns seem to have gone down over the past 10 years and that, aside from the 1-year period, all private equity returns lie above the Burgiss data presented by Phalippou.

Exhibit 20: Private market quarterly return index



Source: Preqin

Exhibit 21: Global private markets horizon net IRRs



Source: Preqin

Appendix B - subscription line financing

Subscription line financing is a loan taken out by a private fund for the purpose of managing cashflows from investors. Typically, once a private equity firm has raised a pool of capital commitments to form a fund, it will call capital from its investors when it wishes to make an investment. However, this money can be slow to arrive, with many agreements allowing 10 business days for the investors to deliver the capital called. Subscription lines were traditionally introduced to enable private equity managers to move quickly on deals, cutting out this 10 day waiting period and repaying the loan as soon as possible in order to minimise costs. However, over time, some managers have been using these lines more aggressively with excessive loan durations and the ability to borrow a significant proportion of the fund at any one time.

Excessive terms by managers can potentially be used in a bid to boost IRR performance, and consequently boost the performance fees a manager receives if the manager is hovering around the preferred return threshold. IRR is a performance measure that is dependent on time, and the shorter the holding period for an investment, the higher its IRR, everything else being equal. Managers take a loan through a subscription line facility and consequently delay calling capital from investors until they wish to pay off the loan, which in turn reduces the holding period for the investors and boosts IRR. Moreover, for a manager to start receiving performance fees, it must meet a certain hurdle rate of return that is typically an IRR target, often 8%. In the industry, this hurdle is a called a preferred return. As a result, by artificially boosting the IRR, it has increased the potential to receive performance fees it might not have been entitled to otherwise. Furthermore, this capital comes at a cost to investors which eats away their net multiple return, reducing the total cash distributions investors will eventually receive. In recent years, there has been a herding effect of managers entering into more aggressive subscription line financing contracts in a bid to stay competitive amongst peers with boosted IRRs.

Finally, a word of warning; subscription lines with excessive terms can be a risk to investors in the face of an economic downturn. When the COVID-19 pandemic first took hold across the world in 2020, some private equity managers had a large amount of capital drawn on subscription lines. As a result of the uncertainty in some portfolios, there were instances where they quickly called capital from investors to pay off the lines, all at a time when public equities had plummeted. This will have been detrimental to the total portfolios of some investors. On top of this, some managers have since used subscription lines to draw down funds to directly support portfolio companies. This is a significant risk to investors since if the business struggles to pay back capital, their committed capital – the collateral – is in jeopardy.

Consequently, IRR as a benchmark measure of returns has become weaker and benchmark analysis based on this performance metric is no longer accurate. For this reason, Willis Towers Watson now instead focuses on net multiple returns for benchmarking purposes. Investors should be mindful of subscription line terms and negotiate caps where possible.

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