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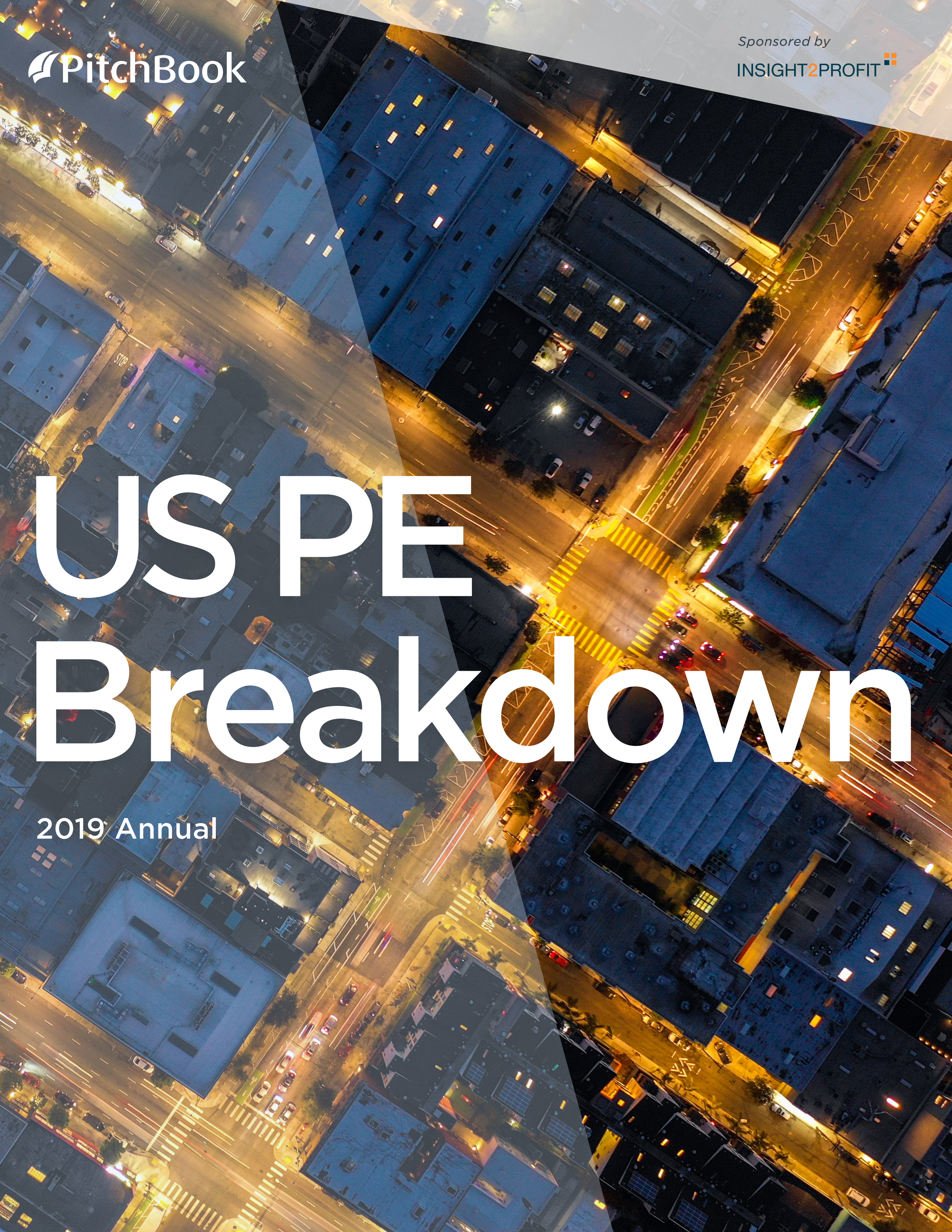

US PE Breakdown

2019 Annual

Sponsored by INSIGHT2PROFIT

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Introduction

US PE dealmaking activity registered another healthy showing in 2019, though fell shy of last year's record-setting pace, with over 5,000 deals worth more than two-thirds of a trillion dollars. An economic backdrop fraught with trade war uncertainty and a brief inversion of the two-year and 10-year points on the yield curve likely played a role. Dealmakers refocused on limiting downside risk as recession rhetoric escalated. Despite all this, PE firms ramped up usage of EBITDA adjustments and buyout multiples remained elevated at 10.9x. Multiples also remained aloft due to increased competition from nontraditional investors, such as sovereign wealth funds (SWFs) and public pensions, which are looking to do more direct deals and coinvestments. Software deals—which tend to be expensive—also gained share, which helped propel buyouts of VC-backed companies.

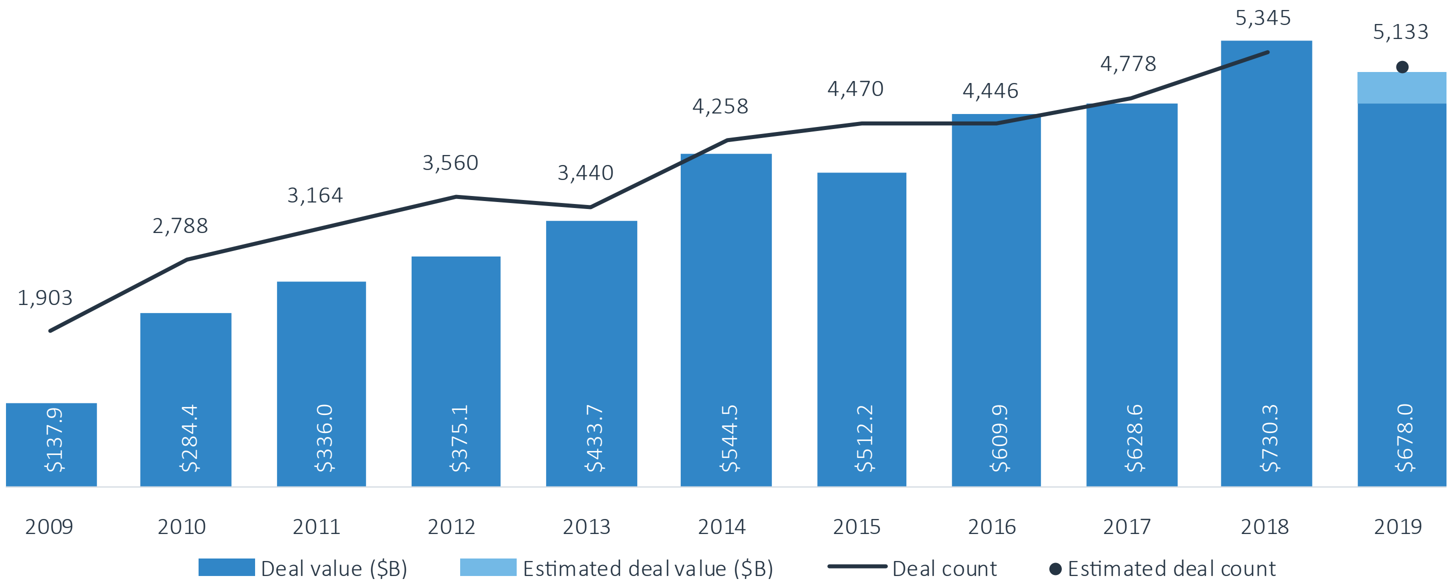
Exit value recorded one of the lowest totals in recent years. Many GPs may be talking about recession fears but have yet to sell. The proportion of PE-backed IPOs to overall exit value came in around the five-year average despite a jump in public EV/EBITDA multiples. Many GPs are also choosing to pursue GP-led secondaries transactions or partial sales, which could be delaying exit activity. For their part, other financial sponsors have been fervent buyers, accounting for more than half of all exits on a count and value basis for the first time on record.

US PE fundraising hit record highs in 2019, with over $300 billion raised despite a reduction in fund count. After a lull in activity in 2018, PE mega-funds ($5 billion+) roared back in 2019 and accounted for the highest proportion of capital raised since 2007. Tech-focused PE funds—a growing trend in the industry—also had a record showing, and several hedge funds raised their first PE funds. Amid such an eager environment, over 95% of funds raised were larger than their predecessor funds, another record. While 2020 will likely see less capital raised, the PE fundraising outlook remains bright as distributions to LPs and performance remain healthy. Hefty returns require LPs to recommit to new funds and PE continues to outperform public markets, driving investors to the space.

Wylie Fernyhough
Senior Analyst, PE

Overview

PE deal activity



Source: PitchBook | **Geography**: US

US PE deal activity topped 5,000 deals and two-thirds of a trillion dollars in 2019. Despite year-end figures falling slightly short of 2018's mammoth $730.3 billion deal value, we believe the industry remains strong and that a minor YoY dip is not indicative of a pullback in PE dealmaking. PE activity comes in uneven spurts; deal value fell in 2015 before posting a significantly higher sum in 2016.

With that said, we are seeing some peak-like behavior including the rumored and audacious $70 billion+ potential buyout of Walgreens. Such a deal would dwarf the largest-ever PE deals, would likely require outside financial sponsors and may signal that massive PE firms are growing desperate to spend down dry powder. Other concerning events of the year include the US-China trade war, which continues to be a drag on economic growth. Interest rates, although steady, were cut three times during the year and the yield curve briefly inverted along the two-year and 10-year points, bad omens for continued expansion. Lastly, the growing usage of add-backs for adjusted EBITDA, whereby PE firms account for synergies and growth before they're realized, may also prove problematic.[1] Recent reports show that "more than half the companies that were part of a leveraged buyout in 2016 missed their earnings projections by more than 25% last year."[2]

PE firms are also starting to expect a recession, which could perpetuate a slowdown in dealmaking. According to Alison Mass, Goldman Sachs' investment banking chairman, "every one of our clients is focused on being prepared for a recession."[3] By focusing more stringently on downside risk and bare essentials, PE firms could limit deal flow going forward and alter the composition of deals by diverting capital away from cyclical businesses toward healthcare or technology companies. One notable healthcare deal was Goldman Sachs' $2.7 billion buyout of Capital Vision Services out of the firm's 2017 vintage $7.0 billion West Street Capital Partners VII fund. The deal sparked some concern among industry observers that as Goldman expands its PE capabilities, the firm could face conflicts of interest in which Goldman competes against PE firms that its own banking arm advises. Recessionary fears may suppress deal activity in 2020, though 2019's record fundraising haul will pressure firms that recently raised capital to buy anyway, presenting an interesting dichotomy to watch in the coming year.

Looking back at the year, a healthy fourth quarter propelled 2019's totals to 5,133 deals and $678.0 billion—YoY reductions of 4.0% and 7.2% off record highs, respectively. One of the largest deals in the quarter was

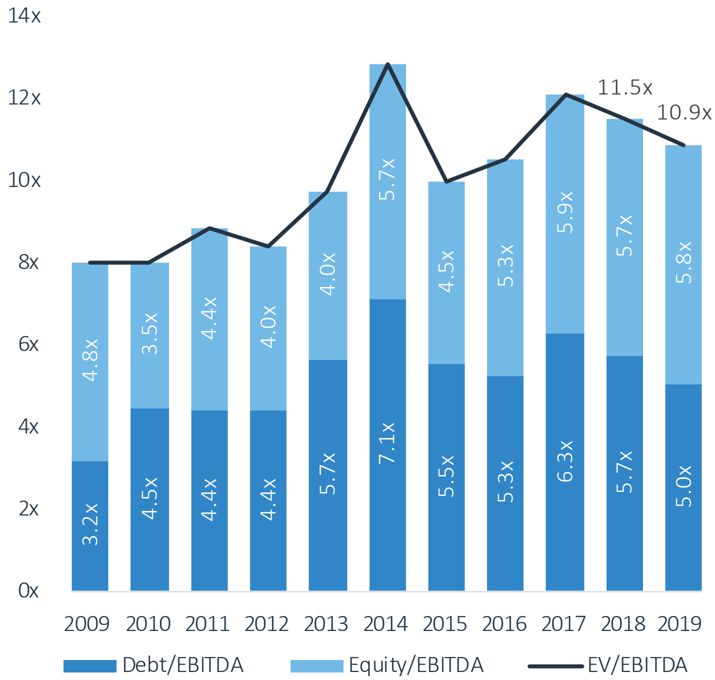
1: "Fuzzy Math That Fueled Junk Debt Boom Is Sparking Jitters," Bloomberg, Davide Scigliuzzo, December 13, 2019.
2: "'Fake Ebitda' to Worsen Next Slump, $33 Billion Debt Maven Warns," Bloomberg, Sridhar Natarajan and Katia Porzcanski, December 5, 2019.
3: "Goldman Sees Private Equity Firms Bracing for a Downturn," Bloomberg, Luke McGrath and Ed Hammond, December 4, 2019.

CDPQ's purchase of a 40% stake in Allied Universal at an enterprise value above $7 billion.[4] The multibillion-dollar transaction highlights several of the key themes we have been discussing in PE over the past year and some of our 2020 PE outlooks, namely the effectiveness of add-ons, a rise in growth equity and SWFs doing more direct deals. Through a combination of organic and inorganic growth—partly funded by a growth equity round—Allied more than tripled revenues from 2015 and similarly boosted its enterprise value.[5]

Turning to deal multiples, the median figure remained relatively unchanged in 2019, sinking to 10.9x from 11.5x. Dealmakers continue paying up despite ongoing recession fears. These conflicting actions likely stem from PE firms agreeing to pay elevated prices because they feel pressured to invest freshly raised capital. Additionally, GPs are investing more heavily in technology companies, which tend to come at higher multiples. The rise in multiples may also stem from larger deals closing. We saw the median PE deal value tick above $250 million for the first time on record in 2019.

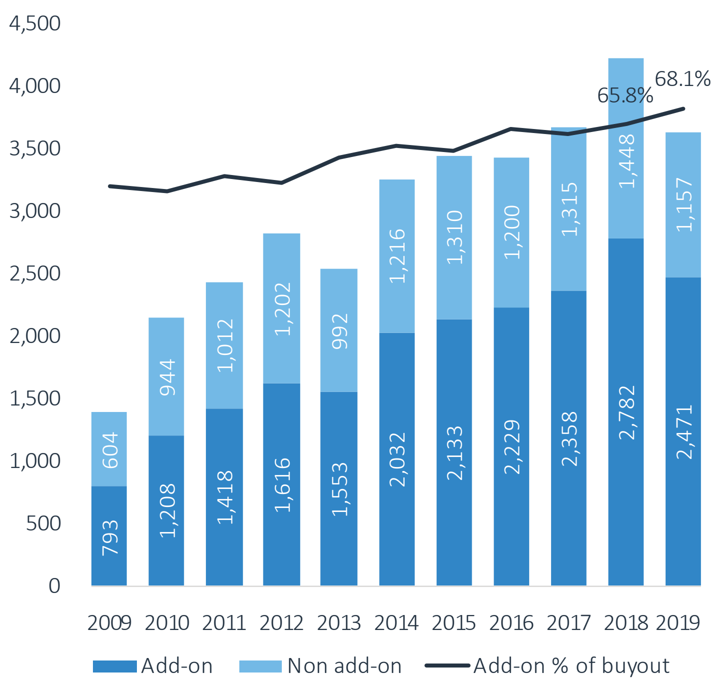
In a high multiple environment, PE firms have had to get creative to generate multiple expansion. We have discussed blending down the multiple with less expensive add-on acquisitions and sale leasebacks, which allow PE firms to take advantage of owned real estate trading at a higher multiple than the company. Now, though, we are seeing another method of multiple arbitrage—buying parts of complex companies and simplifying them. After a decade-long economic expansion, many large public companies have completed dozens of acquisitions and are massive conglomerates with noncomplementary business entities. These corporate behemoths tend to trade with a discount to their sum of the parts and other businesses with simpler structures, though some have a conglomerate premium. This, coupled with activist shareholders, has driven many large-scale carveouts for PE firms to scoop up. The $13.2 billion Clarios carveout from Johnson Controls was the largest US-based transaction of this type, but Europe had several as well, including the carveout of data provider Refinitiv from Thomspon Reuters and subsequent sale to London Stock Exchange (LSE). The sale to LSE allowed Blackstone, GIC and CPPIB to double their money in under a year, illustrating that these outsized deals can reap outsized rewards.[6] We believe large public companies will look to carveouts to simplify corporate structures and boost share prices. These deals, which often stretch into the multibillion-dollar range, will provide fertile hunting

Median PE buyout EV/EBITDA multiples



Source: PitchBook | **Geography:** US

Add-ons as proportion of PE buyouts (#)



Source: PitchBook | **Geography:** US

4: Caisse de dépôt et placement du Québec, a Canadian sovereign wealth fund for Quebec.
5: "Wendel and Existing Shareholders to Sell Additional Stake in Allied Universal," Wendel, September 18, 2019.
6: "Blackstone Bets on Further Refinitiv Gains After Doubling Value," Bloomberg, Dinesh Nair, Aaron Kirchfeld and Benjamin Robertson, July 29, 2019.

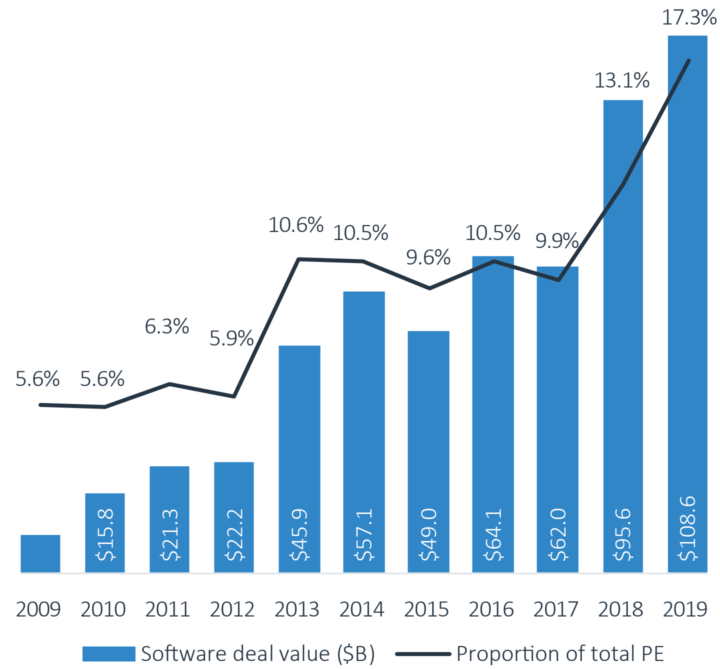
grounds for PE firms with mega-funds seeking to spend down dry powder.

As multiples remain aloft, PE firms have also focused more on operational improvements to produce returns. Improving IT, marketing, the supply chain and more has allowed operations, rather than financial engineering, to drive a mounting portion of PE returns. A recent study found that PE portfolio companies lifted revenue by 89% and employment by 44% on average.[7] This focus on top-line growth and operations typically comes easier in growing sectors such as healthcare. KKR and some other firms have found similar sucess by using added bonuses and increased ownership among employees to drive operational improvement in industrial companies.[8,9]

Not only do these strategies help PE firms propel returns for LPs, they also address persistent public and political criticism. PE came under heavy fire in 2019 from myriad politicians including Elizabeth Warren, and other well-known public figures such as Taylor Swift. Continued scrutiny and backlash surrounding a lack of transparency, the fees charged to portfolio companies, ruthless tactics and asymmetric outcomes when PE firms succeed while portfolio companies fail will likely push the industry to change in some ways going forward. Blackstone chairman and CEO Stephen Schwarzman even addressed some of the criticism on a recent earnings call citing that Blackstone's portfolio companies have added over 100,000 net jobs during its ownership over the past 15 years.[10] While Mr. Schwarzman is not an unbiased observer, independent analyses support a more nuanced picture of PE. A study on the economic effects of buyouts found that their impact on target firms and their employees differs by market condition and deal type. It also found that portfolio companies saw an 8% rise in productivity over two years post-buyout compared to controls.[11] As PE becomes a more commanding force in the US (and global) economy, the industry will have to change to effectively address the past negative perception of PE, especially if these asset managers hope to attract some of the vast capital sitting in retail accounts.

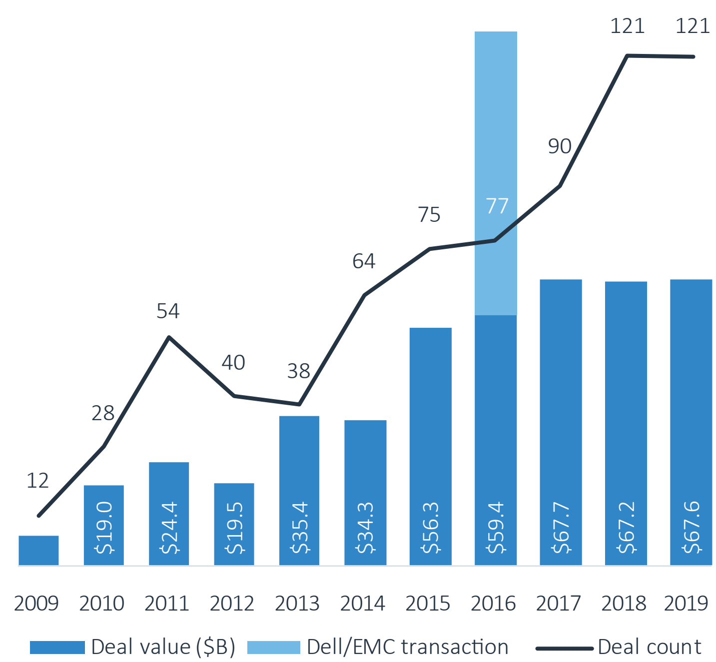
Two other large pools of capital, SWFs and public pensions, are increasingly bypassing the traditional fund structure and pursuing more direct deals, coinvestments and separately managed accounts. Not only can direct deals boost returns by diminishing fee drag, they can

Software PE deals as proportion of overall PE deals ($B)



Source: PitchBook | **Geography**: US

PE deal activity with SWF or public pension participation



Source: PitchBook | **Geography**: US

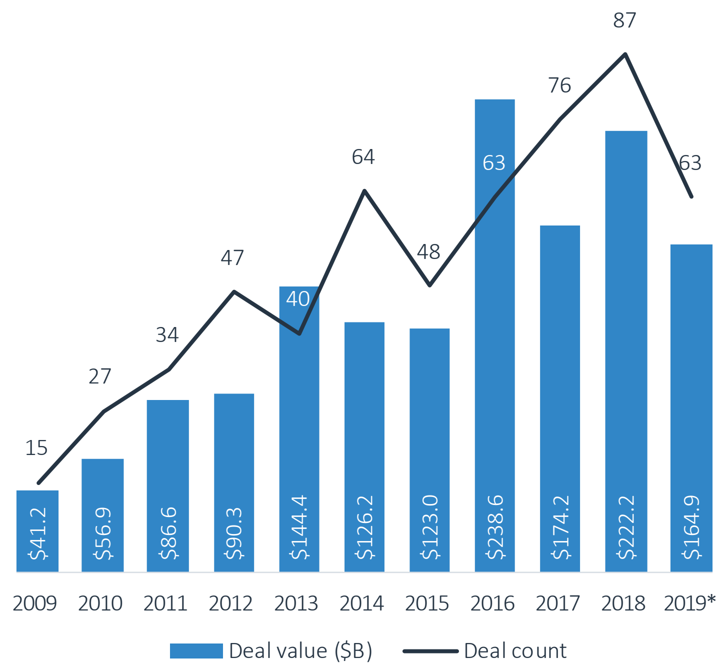
7: "Value Creation and Persistence in Private Equity," Markus Biesinger, Çağatay Bircan and Alexander Ljungqvist, December 15, 2018.
8: "KKR Provides a Counterpoint to the 'Bad Private Equity' Narrative," Private Equity News, Ted Bunker, December 3, 2019.
9: "Pro Rata," Axios, Dan Primack, December 11, 2019.
10: Blackstone Third Quarter 2019 Earnings Investor Call, October 23, 2019.
11: "The Economic Effects of Private Equity Buyouts," SSRN, Steven J. Davis, et. al., October 7, 2019.

help these massive LPs better control their uncalled commitments. In the US, we saw 121 deals totaling $67.6 billion where either a SWF or public pension participated in the deal. Singapore's GIC is the most prolific SWF in the PE sphere, constantly partaking in massive deals, including the $8.4 billion take-private of railroad operator Genesee & Wyoming expected to close in 2020, in which GIC teamed up with Brookfield. We also saw Qatar Investment Authority, GIC and Texas TRS, along with two PE firms, join forces to purchase half of American Express's global travel business in December. As GIC, CPPIB and others find success in direct deals, we expect more SWFs and public pensions to exercise further control of their PE investments in 2020.

Traditionally, SWFs and public pensions tend to team up with major PE firms and target only the most significant deals, but they are now participating in just 12.3% of PE mega-deals ($1 billion+), down from 24% in 2015. As SWFs participated in fewer PE mega-deals, the total number of these deals fell in 2019. Going into 2020, however, we expect deal activity above the $1 billion threshold to remain fervent as SWFs and public pensions get more involved and mega-funds from Blackstone, Hellman & Friedman and Vista Equity Partners, among others, look to spend down mountains of dry powder on deals that will move the needle.

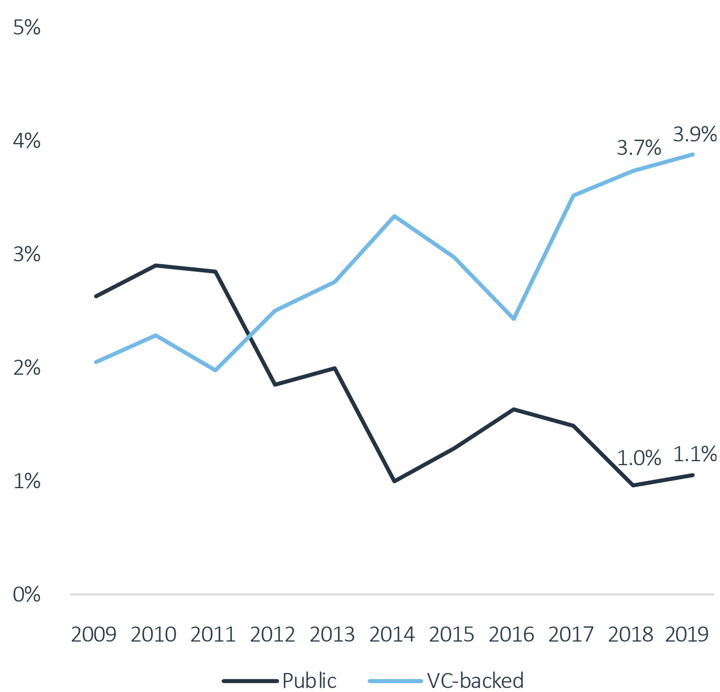
Along with the growth of nontraditional investor involvement, we saw software continue its meteoric rise as a proportion of PE deal value. The sector accounted for 17.3% of total deal value in 2019, up from just 5.6% a decade prior. Along with software deals, PE firms have been targeting VC-backed companies at a rapid clip. These VC-to-PE buyouts are becoming more frequent as dealmaking in the software sector balloons and a growing cohort of mature late-stage VC-backed companies becomes more attractive to PE firms. There are several factors boosting PE's overall investment in software that we expect to drive investment in the sector even further in 2020. For example, tech companies can be more recession-resistant than companies in other sectors due to the necessity and stickiness of their products and services, a real concern for PE firms that believe the cycle is nearing a peak. Additionally, tech-focused PE funds, which tend to outperform non-tech-focused PE funds by several percentage points annually despite using lower leverage, raised the most capital ever in 2019. The two most active firms in the space, Thoma Bravo and Vista, raised $10 billion+ funds in 2019 and will be looking to deploy that capital in 2020.

$1B+ PE deal activity



Source: PitchBook | **Geography**: US
*As of December 18, 2019

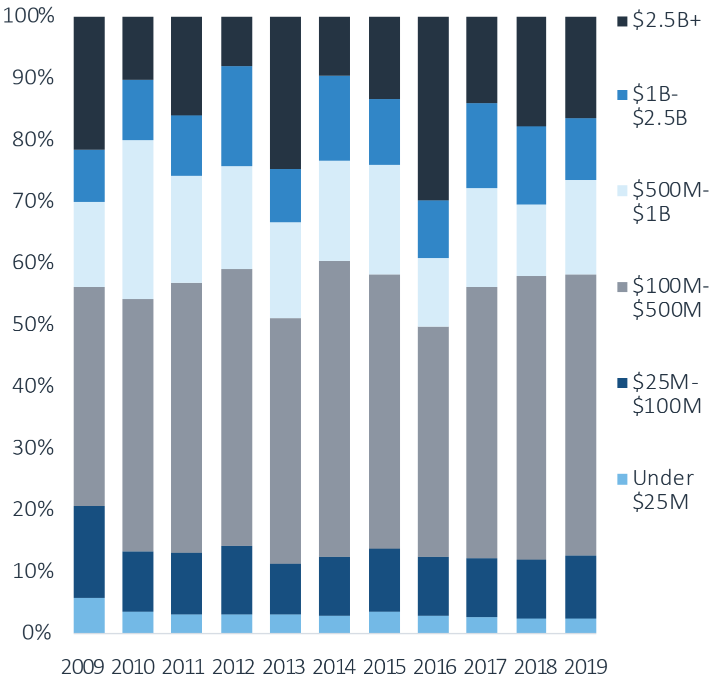
Proportion of PE deals (#) by backing status



Source: PitchBook | **Geography**: US

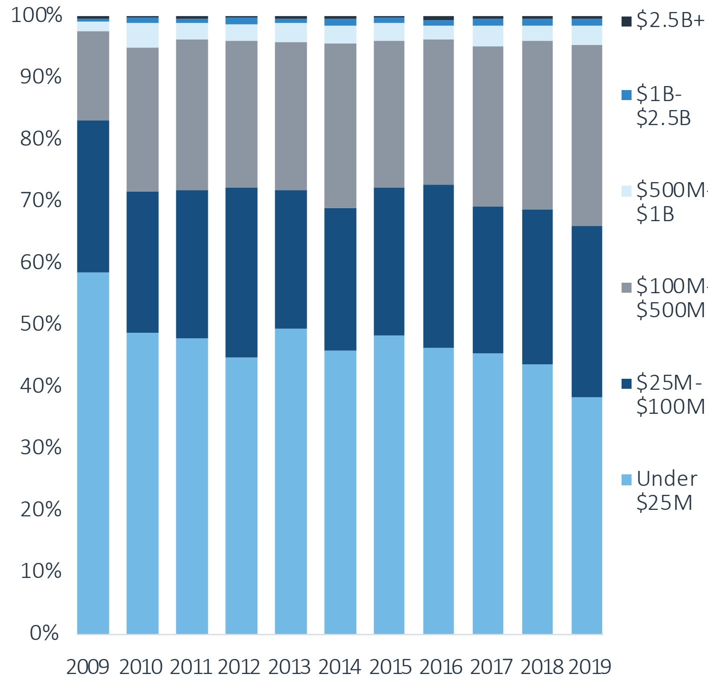
Deals by size and sector

PE deals ($) by size



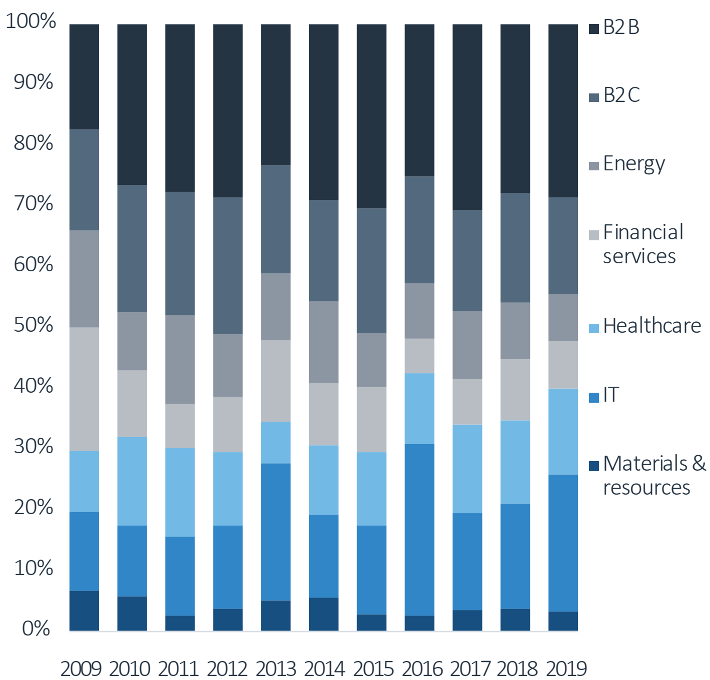
Source: PitchBook | **Geography**: US

PE deals (#) by size



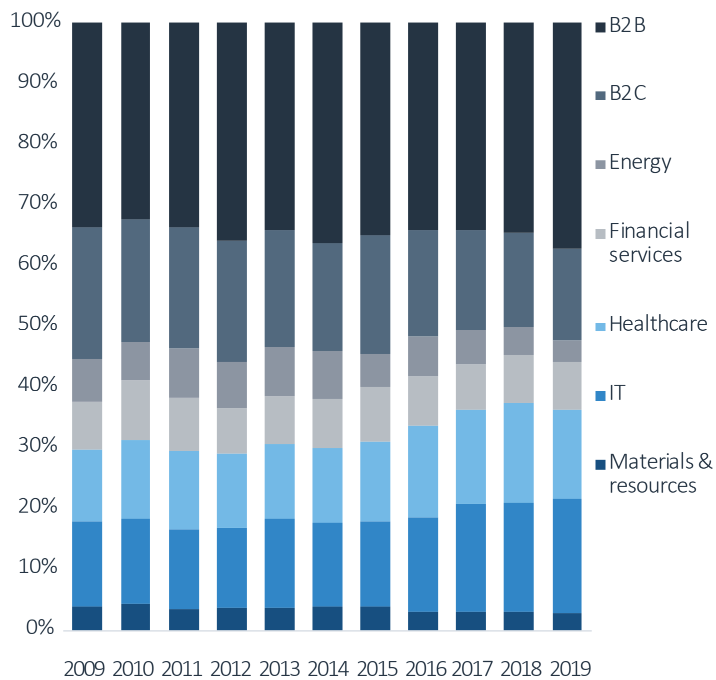
Source: PitchBook | **Geography**: US

PE deals ($) by sector



Source: PitchBook | **Geography**: US

PE deals (#) by sector



Source: PitchBook | **Geography**: US

INSIGHT2PROFIT Q&A: Continuous improvement in an uncertain market

INSIGHT2PROFIT is the go-to partner for private equity firms and investment banks. From due diligence to portfolio value creation to exit strategy, we bring our pricing expertise, data analytics and proprietary technology to create competitive advantages and margin improvement throughout the investment lifecycle.

Terry Oblander

Chief Growth Officer

INSIGHT2PROFIT

With over 15 years of experience working with senior executives, he is passionate about helping businesses run better and unlocking hidden profit opportunities. Terry has deep experience with PE firms and their portfolio companies to improve both top-line and bottom-line performance.

Given the broader macroeconomic environment and occasional market jitters, what is your broad take on the sentiment of the companies you work with? Are businesses battening down hatches or are they more optimistic?

Right now, if you asked 10 businesses their views of 2020, you may get 10 different answers. With tariffs, Brexit, US elections, labor signals, manufacturing production, etc., sentiment is hard to read. While there are clearly real factors at play, the companies with which we work are focusing on their fundamentals: creating customer value, removing inefficiencies from their processes and more clearly aligning customer incentives to the right behaviors. Leaders are hungry for quality information on the health of their businesses, so they don't make decisions with bad or incomplete data.

Let's turn to PE firms. As you engage with PE portfolio companies or get contracted by PE firms as part of a transaction, what is general PE sentiment in the market?

With dry powder growing and deal flow slowing, competition for deals is at an all-time high, causing multiples to continue to rise. We are seeing many PE firms shifting to be more operational in their approaches to generating value in their businesses. This includes evaluating pricing, customer profitability, cross-selling, product profitability, inventory management and more. We provide our clients throughout the PE space with profit optimization—supporting firms in their buy-side evaluations via our Quality of Pricing (QoP®) due-diligence offering and assisting sponsor-backed businesses as the teams work their value creation and improvement plans.

As of late, has there been any material shift in the types of services or the priorities of PE firms that you work with, as well as their portfolio companies? It seems there is a burgeoning number of PE firms utilizing third-party service providers such as INSIGHT2PROFIT. Any broader thoughts around that?

We are seeing more PE firms prioritizing initiatives that have clear paths to continuous improvement rather than a one-time impact. Continuous improvement ensures that core competencies are being built to provide advancements and improvements to our clients' businesses to drive ongoing profit growth. Too often our past experiences with consulting firms can be described as: "They were really smart, gave us a nice PowerPoint, but when they left, so did the energy and impact." We think continuous improvement is a healthy trend, and third-party service providers will need to be more implementation-focused and offer technology solutions to augment their existing playbook.

Could you walk us through some recent or in-progress examples of how you are working with a PE portfolio company in order to improve its performance? Especially given the broader economic and market climate, feel free to go into detail regarding whether PE firms and their portfolio companies are focusing more intently on how robust their metrics are given any detrimental impacts.

In 2018, at the recommendation of its financial sponsor, we were asked to evaluate the pricing maturity of a global medical device manufacturer. After a quick evaluation of its market, pricing performance, value drivers, systems and processes, we recommended that the company needed to quickly execute a price change in order to maintain profitability. For years, the manufacturer absorbed cost increases without passing along these increases to customers. The INSIGHT2PROFIT team built and implemented a dynamic pricing engine that took into consideration customer, product, order and performance metrics to calculate a target price. We worked hand-in-hand with the client team to review price recommendations and build communication plans. A good deal of change management needed to be done, as the sales team was skeptical about implementing a price increase in the medical space given the pressures on cost management. The business executed the price changes flawlessly and saw a transformational increase to EBITDA. We are still actively engaged with this client with a quoting tool that is embedded in its sales process, and we are leading a transformation of the company's inventory replenishment systems in order to ensure appropriate working capital to sustain their growth trajectory.

Within B2B, how does your approach vary across segments such as manufacturing and logistics, especially in the current market environment?

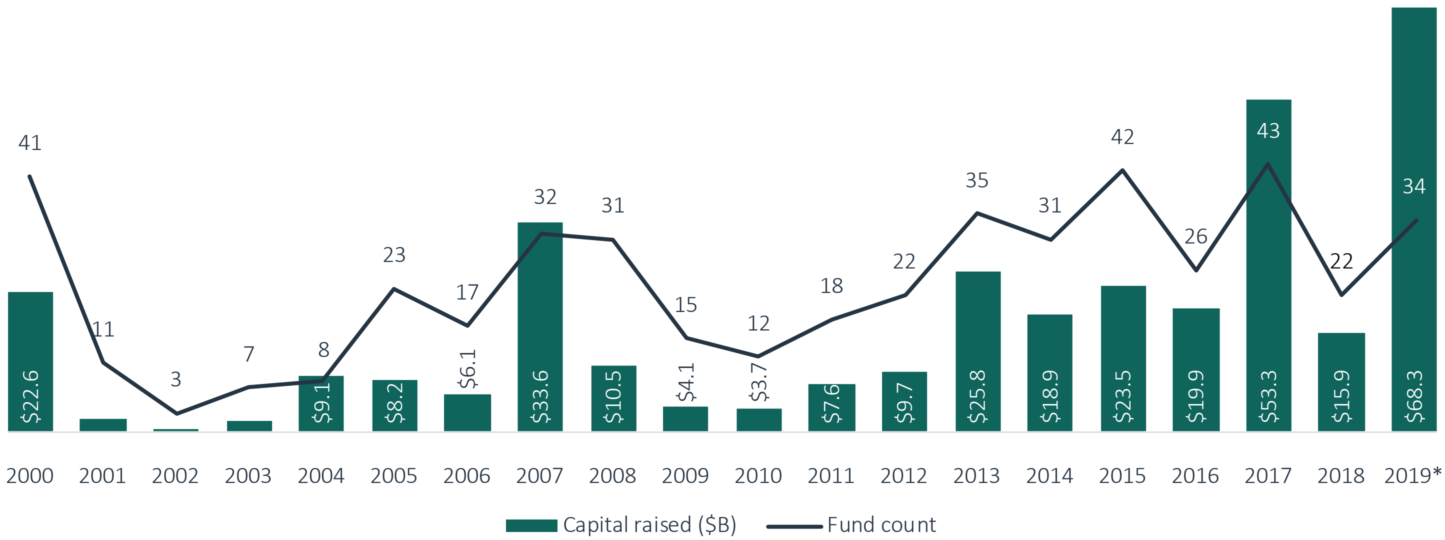
Every business is different, and you must take the time to get to know what makes each company special and how it wins in its marketplace. Our discovery process enables us to go into great depth, quantitatively leveraging our profit-optimization solutions to identify gaps while partnering with leadership to understand qualitatively the intangibles that make changes possible. While there are clearly themes that we see in different segments with regards to opportunities, the real value is created by tailoring a solution to each customer in order to help them realize their competitive advantages.

Please feel free to expand on any of the topics raised above or address any that have not yet been broached.

We see PE firms accelerating their buy-side diligence for attractive targets by maximizing the data room to evaluate businesses and demonstrating their interest and certainty of close to the seller. INSIGHT's QoP® services leverage our proprietary analytics platform and strategic pricing expertise to provide clarity on commercial opportunities and risks to improve EBITDA. Further, on the sell-side, PE-sponsored portfolio companies are preparing for exit earlier in the hold cycle. As such, they are bringing in advisors like INSIGHT well in advance of the sale to drive EBITDA growth for enterprise value creation and lay out a roadmap of future opportunities for the next buyer to realize post-acquisition.

Spotlight: Tech-focused PE funds

Tech-focused PE fundraising activity



Source: PitchBook | **Geography:** North America & Europe
*As of December 16, 2019

Tech has permeated business models in every industry. Similarly, tech has become pervasive in PE dealmaking. In the US, tech as a proportion of overall PE deal count surpassed 18% in 2018 and has nearly approached 20% as of Q3 2019. Many industry stalwarts and generalists list TMT as a preferred industry in fund documents, but a breed of tech-focused specialists account for a mounting proportion of PE investments in and total capital raised for the sector. North America- and Europe-based tech-focused PE firms have raised $68.3 billion across 34 funds as of December 16, 2019, capturing the most capital ever raised for the strategy on an annual basis.

Although there are dozens of GPs that specialize in tech buyouts—including Providence, Insight Partners, Veritas and Francisco Partners—and a swelling cohort of generalist managers raising tech-focused funds, there are three firms that stand out as the biggest fish in the proverbial sea: Silver Lake Management, Thoma Bravo and Vista Equity Partners. These three have raised a combined $43.6 billion in their most recent fund offerings and have accounted for nearly half of all tech-focused PE capital raised since 2016. Thoma Bravo's $12.6 billion fund and Vista's $16.0 billion vehicle are the primary reasons for 2019's standout totals.

Select tech-focused PE managers*

Investor name	Closed funds	Capital raised ($B)	Open or upcoming funds	Country
Vista Equity partners	11	$44.2	4	USA
Silver Lake	7	$42.8	1	USA
Thoma Bravo	11	$35.2	2	USA
Providence Equity	12	$32.2	2	USA
Insight Partners	7	$16.5	1	USA
Veritas Capital	7	$13.8	0	USA
Francisco Partners	6	$14.3	0	USA
Siris Capital	6	$7.0	0	USA
Marlin Equity Partners	8	$6.8	0	USA
Accel-KKR	9	$6.1	1	USA
Carlyle Europe Technology Partners	4	$3.3	0	UK

Source: PitchBook | **Geography:** North America & Europe
*As of December 16, 2019
Note: Capital raised is for tech-focused PE strategies only. It does not include debt.

LPs have been driven to the space due to tech's distinctive position in the global economy and tech-focused GPs' unique strategies within the space. With the ability to grow quickly, have a profound impact on non-tech businesses and produce enormous returns, tech companies will continue eating market share in PE. Investors seeking access to this specialized segment of the market often choose to invest with specialists, which can range from $10 billion+ mega-funds to funds of just a couple hundred million dollars. These newer players—and the more established GPs in the space—have found success in tech investments by rethinking the PE playbook. The strategy has evolved because tech companies are different from non-tech companies in several ways. They are often asset-light businesses, requiring little capital to scale, and can achieve rapid growth for prolonged periods of time. Additionally, tech companies with the SaaS business model, for example, produce highly consistent recurring revenue with products that are very sticky.

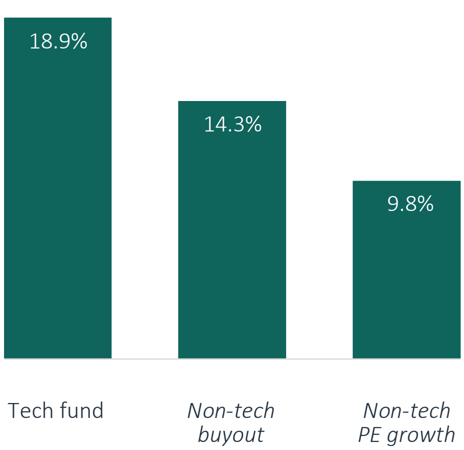
PE is infamous for its use of leverage and cost cutting; however, when investing in tech companies, PE firms often use less leverage, around two to three turns compared to six to seven turns in non-tech buyouts. Instead, PE firms must continually reinvest in the company and try to grow the top line in order to achieve superior investment returns, because companies in the space are often valued based on revenue multiples. And while growth certainly plays a part in traditional buyouts, the focus is far more explicit in tech investing. As PE firms have adapted to this new investment opportunity, they have become a more enticing buyer option to tech founders and VC firms.

The strategy, while unique in the PE arena, delivers on the most important thing to LPs: performance. These vehicles, by concentrating their investments in quickly growing tech companies, have delivered substantial outperformance. Tech-focused funds create more value and do so in a timelier manner. The 18.9% 10-year horizon IRR figure is nearly five percentage points higher than that for non-tech PE buyouts and almost double that for non-tech growth funds. As expected, PMEs and Direct Alphas also show the most outperformance by tech funds. Not only does the strategy of investing in high-growth, scalable companies produce high rates of return, but it appears to happen more quickly in private markets. These results clearly show tech-focused PE funds compounding capital faster over a prolonged timeframe than public market alternatives.

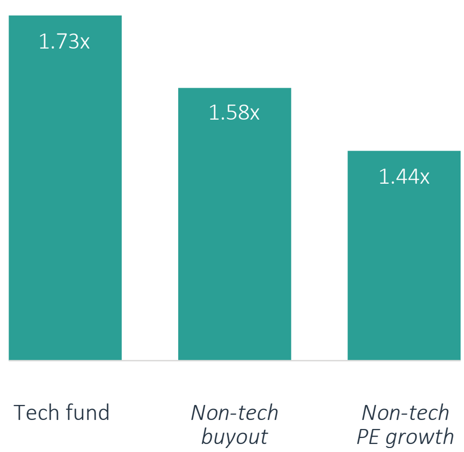
Going forward, we expect to see tech-focused PE fundraising further proliferate. Additional growth in the number of VC-backed companies will only expand the pool of investments for tech-focused GPs. It seems clear that LPs want a private market investment option that lets them tap into the growth of the digital economy led by proven managers that can create value and outperformance.

Note: This spotlight was abridged from an analyst note on tech-focused PE funds. For a more detailed analysis of the subject, please read our Overview of Tech-Focused PE Funds.

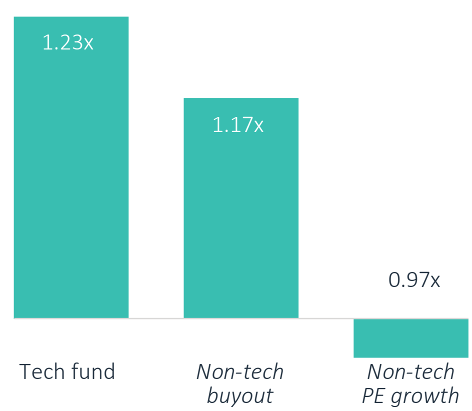
Equal-weighted 10-year horizon IRRs for PE funds by strategy*



Equal-weighted TVPI for PE funds by strategy*



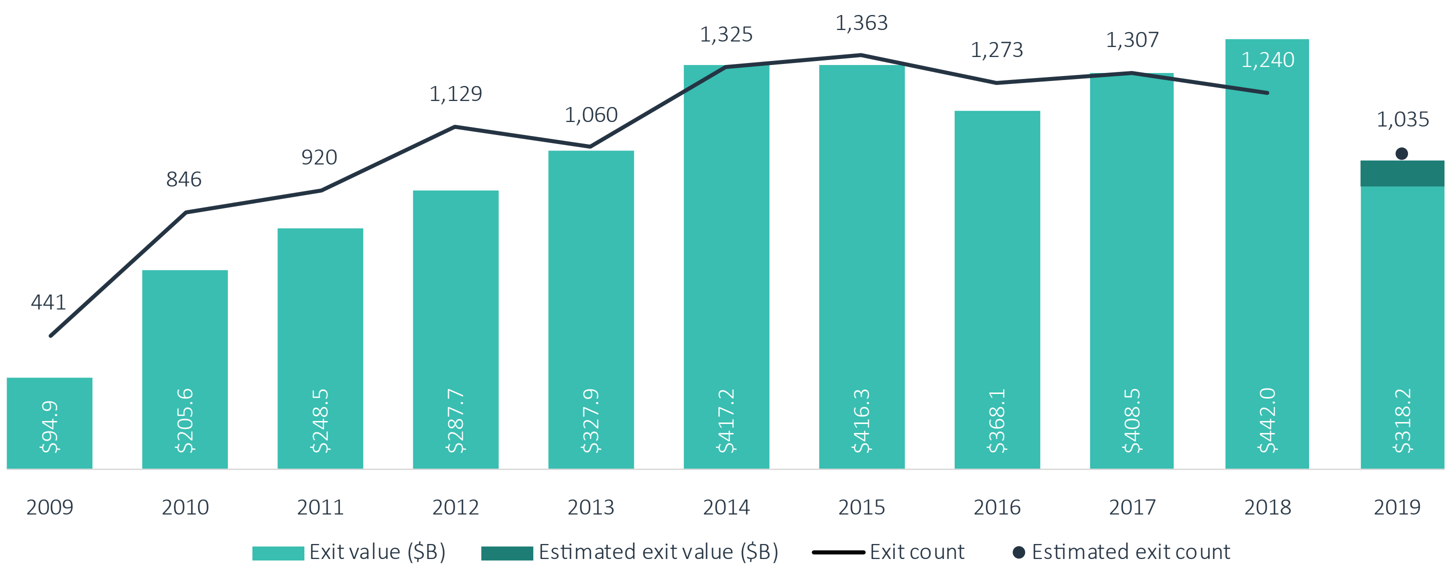
Equal-weighted PME for PE funds by strategy*



Source: PitchBook | **Geography**: North America & Europe
Exclusively North America | *As of March 31, 2019
Note: The S&P 500 was used as the comparable public market index.

Exits

PE exit activity



Source: PitchBook | **Geography**: US

PE exit activity also fell YoY in 2019, finishing with one of the lowest totals in the last six years. The 1,035 exits valued at $318.2 billion represented 16.5% and 28.0% YoY declines, respectively. Activity remained weak throughout the year across all transaction sizes. GPs recorded just 53 exits above $1 billion on the year, a steep drop from the 95 recorded in 2018. $1 billion+ exits accounted for just 42.7% of exit value in 2019, the lowest since 2012.

This mediocre showing is surprising given PE firms' vocalization of recession concerns. On the deal side, many GPs are building in downside protections, such as factoring in an exit at a lower multiple or planning on less capital expenditure, and projecting a recessionary environment during the holding period. However, on the exit side, GPs do not seem to be in a rush to sell. We saw interest rates fall while stock indices hit all-time highs, perhaps signifying this expansion still has legs. If GPs begin to believe a recession is approaching in the next 12 to 18 months, we are likely to see them try to sell current positions, subsequently boosting exit activity.

Q4 2019 mirrored the rest of the year's tepid exit figures as GPs appeared happy to continue holding portfolio companies. Although the numbers came in on the low side, we did see several noteworthy exits, including Apax Partners, CPPIB and PSP Investments' sale of Acelity to 3M. The trio of Canadian GPs sold the medical products manufacturer for $6.7 billion, earning Apax a return of over three times its investment.[12] The sale itself serves as a case study for the broader PE environment in 2019. The sellers included two public pensions, the holding period stretched just beyond the eight-year mark and Acelity underwent several recaps. Lastly, the GPs planned on taking Acelity public in 2019, before pulling the offering and eventually selling to a strategic.

While Acelity was one of the more high-profile companies to see a failed IPO in 2019, it was hardly alone. The feeble IPO market for nearly all of 2019 provides one reason for the decline in exit value and the dearth of $1 billion+ exits. The start of the year exhibited the aftereffects of the government shutdown in 2018 with a backlog of PE-backed public listings. Then the WeWork fiasco spooked public investors into second-guessing IPOs that once seemed certain. Silver Lake-backed talent agency Endeavor pulled its $400 million IPO the day before it was slated to go public. However, some IPOs were successful, including Vista's listing of PING Identity, the GP's first-ever exit via IPO.

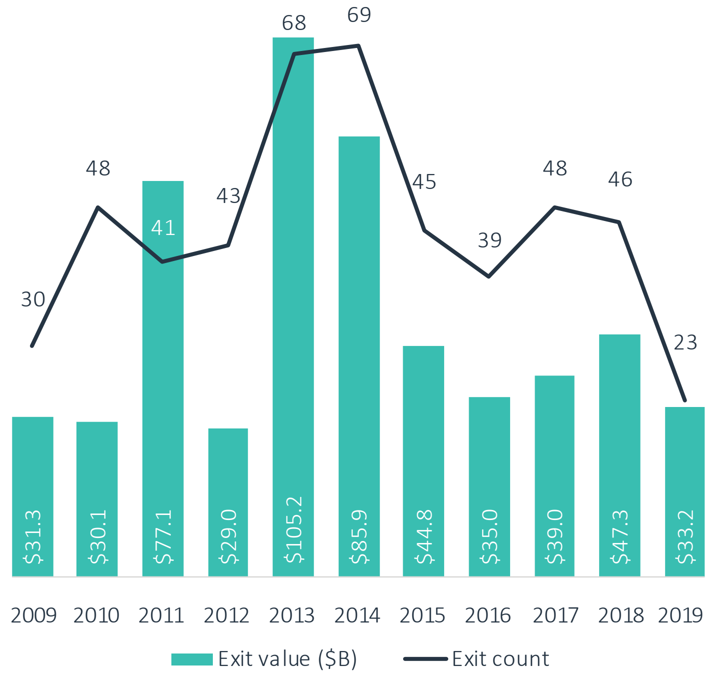
Despite the anemic showing, we expect PE-backed IPOs to put up higher numbers in 2020 as a swelling backlog

12: "3M Expands Medical-Products Unit in Record $4.4 Billion Deal," Bloomberg, Rick Clough and Kiel Porter, May 2, 2019.

of companies looks to go public, including McAfee and Madewell.[13] Furthermore, public markets rose more quickly than earnings in 2019, with the S&P 500 surging 29%, its second-best performance this decade. The EV/EBITDA multiple on the index leapt to 15.4x compared to the median buyout at 10.9x. This pricing gap highlights the potential pricing arbitrage between public and private markets if the public reaction is amenable. However, IPOs typically only make sense for $1 billion+ exits due to the costs involved, which limits the potential pool. The 29% bump in stock prices also shows the potential upside for GPs that choose to list their company and either retain a stake or slowly sell it down. However, lockups typically subject GPs to some level of public market fluctuations regardless of a full or partial exit.

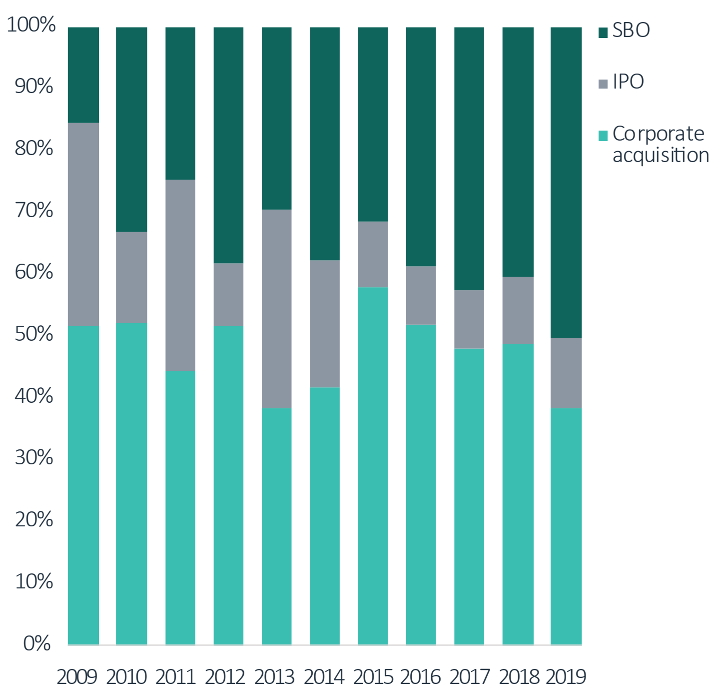
BC Partners-backed Chewy, which made its public debut in 2019, was one such listing where the GP held shares after listing them, though the stock has not performed well since then. The listing raised just north of $1 billion, making it one of the largest PE-backed IPOs in 2019, and allowed BC Partners to profit from the growth in

PE-backed IPO activity



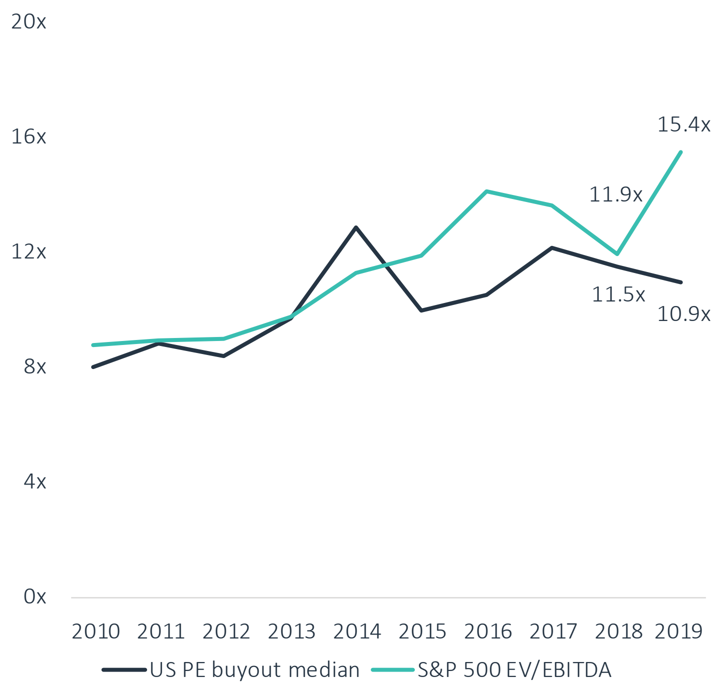
Source: PitchBook | Geography: US

Exit value ($) by type



Source: PitchBook | Geography: US

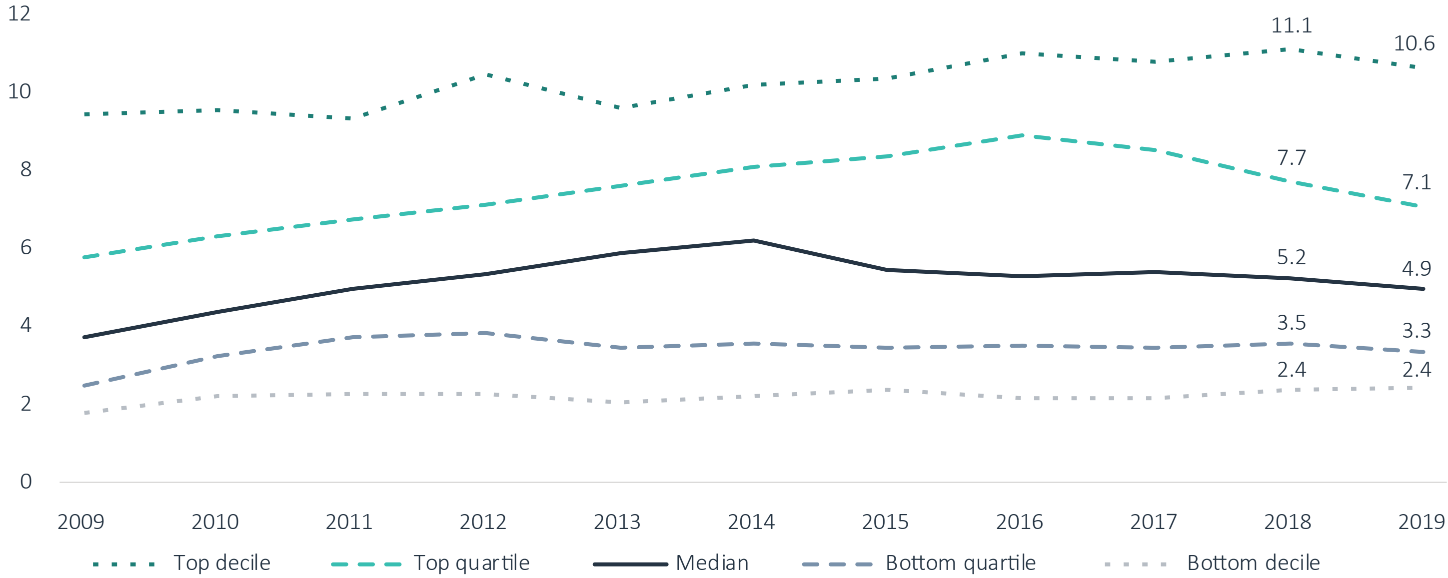
PE and public market EV/EBITDA multiples



Source: PitchBook | Geography: US

13: "Swelling US IPO Backlog Points to Crowded 2020 Field," Reuters, Joshua Franklin and Anirban Sen, December 9, 2019.

Top-quartile and top-decile PE holding times (years)

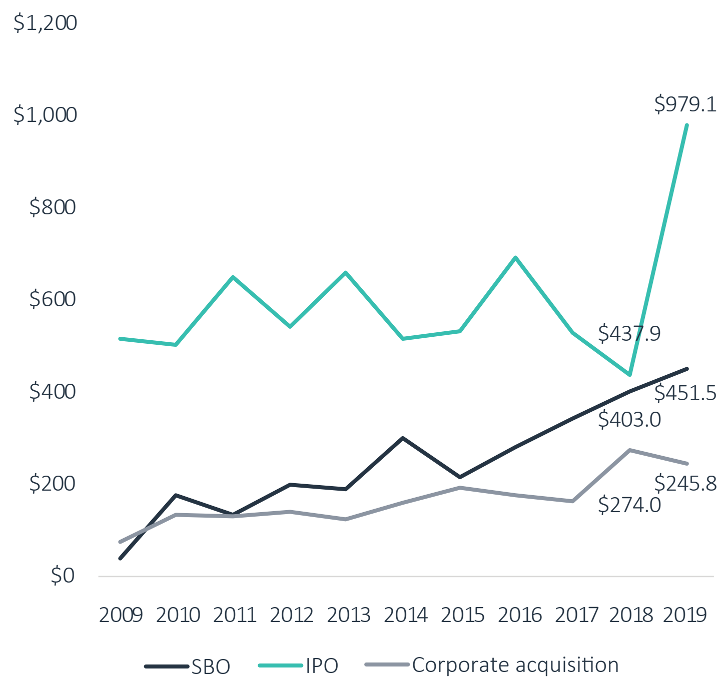


Source: PitchBook | **Geography**: US

Chewy while retaining control over the investment. A partial sale was a technique we saw several times during 2019 because it allows GPs to derisk investments while retaining upside potential.

Partial sales are just one technique we are seeing GPs undertake as top-decile holding times (in terms of length, not performance) eclipse a decade—the duration most funds are set up to last—and GPs desire to hold portfolio companies with enduring upside promise. We are also witnessing a dramatic uptick in the GP-led secondaries market. Many industry prognosticators now expect the GP-led side of the market to overtake the LP-led portion in coming years. Overall, we expect holding periods are likely to slowly tick up over the long term, which will necessitate more activity in the GP-led secondaries market, partial sales and more. The proliferation of long-dated funds and nontraditional investors, including SWFs, public pensions and family offices, is changing the PE market. These institutional investors often have a longer time horizon than PE firms or the traditional fund structure and some are willing to hold investments indefinitely. The culmination of partial sales, along with the continued rise of long-dated funds, is likely to affect the exit market for years to come, with exits lagging deals to a greater extent. Furthermore, a rise in nontraditional investors buying assets with an indefinite holding period could cause a rise in deals that never appear as exits.

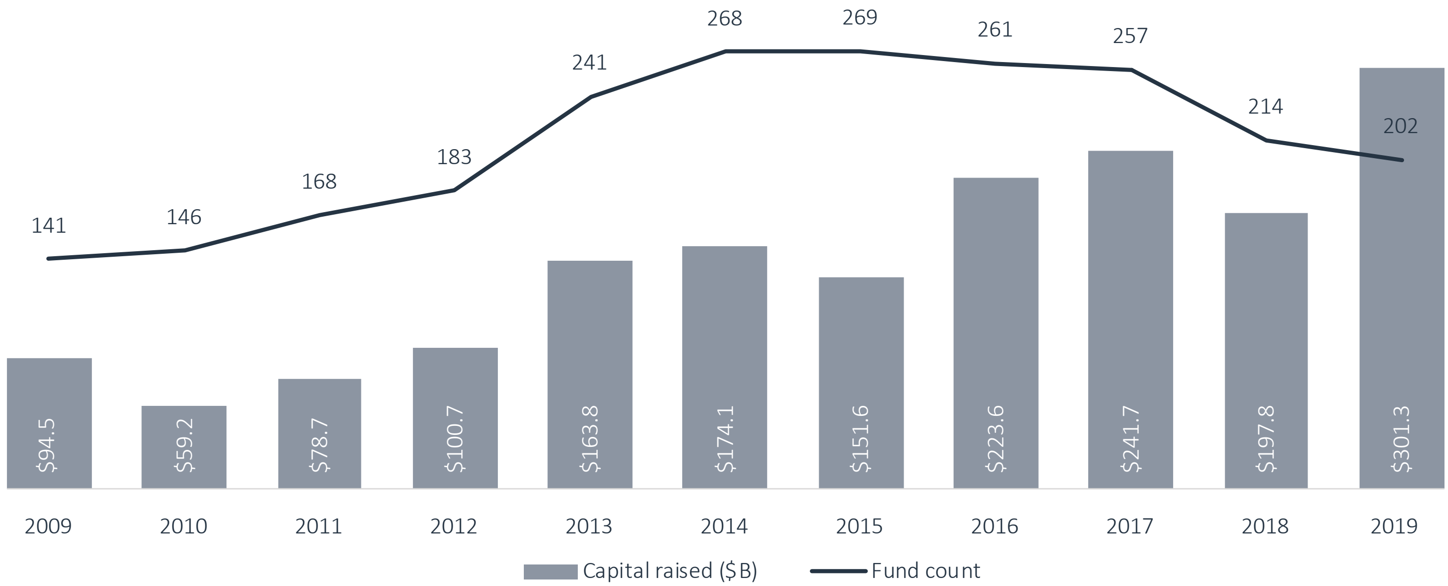
Median exit size ($M) by type



Source: PitchBook | **Geography**: US

Fundraising

PE fundraising activity



Source: PitchBook | **Geography**: US

US PE fundraising hit an all-time high in 2019, surpassing $300 billion for the first time ever. Despite fewer funds closing in 2019 than in 2013, the total capital raised was nearly twice as high. The $301.3 billion raised across 202 funds represents a YoY 52.3% rise and a 5.6% fall, respectively. A plethora of PE mega-funds drove 2019's fundraising total, including the record-breaking $26 billion Blackstone Capital Partners (BCP) VIII and Vista Equity's $16 billion Partners Fund VII. Q4 continued apace, with PE mega-funds from TPG Capital, Leonard Green and Veritas holding a final close, to name a few.

2019 also marked another year in which institutional investors sought to raise allocations to alternatives—specifically to PE. LPs often boosted their PE allocations by trimming their hedge fund exposure. It seems that just as PE firms are beginning to prepare for a potential recession, LPs are jumping out of an asset class that tends to outperform in times of market dislocation (hedge funds) in favor of one more correlated with public markets (PE). Hedge funds are not simply accepting the regime change, though; many are also engaging in the lucrative closed-end fund structure by starting PE arms.

In the past, Elliott Management has completed buyouts with their subsidiary Evergreen Coast Capital, including a deal in which the firm teamed up with Veritas for the $5.5 billion take-private of Athenahealth. Now, Elliott has raised $2.0 billion for buyouts, continuing its push into alternative asset classes.[14] Whereas PE seems to fit with the activist ownership mindset, some hedge funds from other backgrounds are also getting in on the action. Two Sigma, one of the largest quant hedge funds, raised $1.2 billion for its new PE unit, Sightway Capital. It appears that there is little expertise overlap between the two strategies and the optics paint this move as a plan for additional capital rather than a natural evolution of the firm's strategy, though Sightway plans on taking advantage of Two Sigma's data expertise and heavily investing in the fund, aligning interests. Additionally, Two Sigma has had a private capital strategy for over a decade and likely attracted the money because of past success. We will be watching closely to see if any other quant firms enter the PE space and if/how their offerings differ from traditional buyout firms.

Looking back at the overall fundraising totals in 2019, our numbers may be painting a rosier picture due to PitchBook's methodology. We count the entirety of a fund's capital as raised in the year in which it holds a final close, but many funds, including Thoma Bravo's $12.6 billion fund that closed in January 2019, were largely raised in 2018 and possibly even before. By chance, many of the biggest GPs closed on their largest funds in 2019. For this reason, we believe fundraising in 2020 will likely experience a moderate dip.

14: "Elliot Raises $2 Billion for Buyouts, Preps $4 Billion Hedge-Fund Push," Wall Street Journal, Will Louch, November 4, 2019.

Top 10 US PE fund closes in 2019

Investor name	Fund name	Fund type	Close date	Fund size ($B)	Fund city
The Blackstone Group	Blackstone Capital Partners VIII	Buyout	September 17, 2019	$26.0	New York
Advent International	Advent Global Private Equity IX	Buyout	June 6, 2019	$17.5	Boston
Vista Equity Partners	Vista Equity Partners Fund VII	Buyout	September 6, 2019	$16.0	San Francisco
Thoma Bravo	Thoma Bravo Fund XIII	Buyout	January 29, 2019	$12.6	Chicago
Leonard Green & Partners	Green Equity Investors VIII	Buyout	December 9, 2019	$12.0	Los Angeles
TPG Capital	TPG Partners VIII	Buyout	October 15, 2019	$11.5	Fort Worth
Brookfield Capital Partners	Brookfield Capital Partners V	Restructuring/ turnaround	November 4, 2019	$9.0	New York
Dyal Capital Partners	Dyal Capital Partners IV	PE growth-expansion	December 2, 2019	$9.0	New York
TA Associates Management	TA XIII	PE growth-expansion	May 7, 2019	$8.5	Boston
Lone Star Funds	Lone Star Fund XI	Buyout	February 14, 2019	$8.2	Dallas

Source: PitchBook | **Geography**: US

Despite predicting lower fundraising in 2020, total capital raised will likely reach the $200 billion mark and some niche spots will likely see expansion. Growth equity is one area we expect to see punch above its weight class. Insight Venture Partners is gearing up for another flagship growth equity fund, targeting $7.25 billion, after closing on a $6.3 billion predecessor fund in 2018. Additionally, Blackstone, which claims its competitive advantage is scale, is entering the growth equity game. The firm is targeting $3 billion to $4 billion for its first fund and has already begun investing from the vehicle. In a slight twist, the fund retains the right to complete majority transactions in addition to the more traditional minority investments. Furthermore, GP stakes, which we consider growth equity because the strategy makes minority investments typically used for expansion, is likely to see several high-profile firms close funds in 2020. Dyal, the leader in GP stakes, closed on the strategy's largest-ever fund at $9 billion in Q4 2019. With the fund already over 60% invested, Dyal is expected to begin fundraising for its next vehicle in 2020. The firm also exhibits a penchant for pushing the strategy forward and is seeking to raise a credit fund. Beyond the major players, Aberdeen Standard Investments, Goodhart Partners and Stonyrock Capital Partners are all currently fundraising for GP stakes funds.

Another bright spot we see is the long-dated fund. As discussed in the exits section, top-decile holding periods already extend past the duration of a typical fund. Furthermore, a fund with longer holding times and a lower fee load opens up an entirely new group of companies to PE ownership. LPs have already demonstrated a willingness to invest in longer-duration PE funds with GP stakes funds, which are set up with an indefinite holding period. With so much attention on the long-hold space, some GPs are already pursuing unique strategies. TA Associates Management is seeking to raise $1 billion for its initial Select Opportunities Fund, a strategy that would buy minority stakes in certain companies that the flagship fund exits. While it is not set up as a traditional long-hold fund, an LP in both the flagship fund and this fund could see their holding time for certain portfolio companies stretch to two decades or more.

We are also seeing several GPs target more traditional long-dated funds, though none are as ambitious as BlackRock's. The world's largest asset manager is seeking to raise $10 billion to $12 billion for their first long-hold PE fund, but things have gone poorly to date. The firm has raised just a fraction of the overall target since initiating fundraising in early 2018 and a high-level personnel departure pumped the brakes on fundraising and investing for now. However, even this high-profile stumble will not nip this budding strategy. Vista is now seeking to raise $3 billion for its initial long-dated fund, dubbed the Vista Equity Partners Perennial Fund. The firm has expanded far beyond its flagship funds and now runs multiple buyout strategies and credit funds. In fact, numerous firms beyond Vista are also returning to the middle market with smaller buyout funds, taking advantage of an already built out team of experts. Some of the returning GPs include Advent International, Thoma Bravo and Leonard Green & Partners. However, the flagship fund—for Vista and others on the list—still accounts for the bulk of AUM and capital raised, and in 2019 Vista closed on its largest-ever fund at $16 billion.

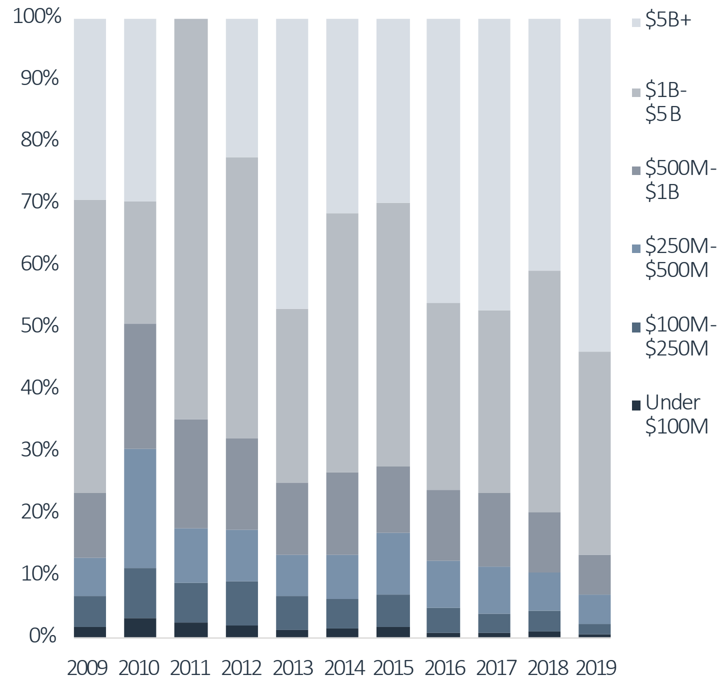
In general, PE mega-funds ($5 billion+) look to be taking the next step toward dominating PE fundraising. In 2019, 15 mega-funds closed on a total of $162.2 billion, which accounted for 53.8% of total capital raised—the first year since 2007 in which $5 billion+ vehicles accounted for the bulk of capital raised. With rampant LP demand for access to PE funds, several GPs raised first-time mega-funds, including Genstar Capital. It should come as no surprise that fund sizes leapt higher in 2019, too. Average and median fund sizes hit record highs in the year. The median buyout fund size swelled more than 50% to $450.0 million while the average saw a similarly stratospheric climb to $1.6 billion.

In a setting where just a few PE mega-funds accounted for most of the capital raised, we saw funds of all sizes swell. In fact, 2019 saw 95.5% of funds raised come in larger than their predecessor funds, the highest of any year with at least 50 fund closes. This is just the second time in which over 90% of funds raised were larger than their predecessor fund. Going forward, we expect a similar proportion of funds to see step-ups between funds as LP demand continues to put the power in GPs' hands. However, we may see fewer funds achieve step-ups in the future as some pension plans, family offices and SWFs pursue more direct control over PE investments. A recession—or even a serious threat of one—could also cause the current GP-friendly fundraising environment to end, as it did after the global financial crisis.

Two of the most significant indicators for future fundraising figures are also pointing to a continuation of the current GP-friendly environment—cash distributions to LPs and performance. Funds raised over the past decade, and even earlier, have steadily returned cash to LPs. US-based funds notched the highest-ever level of distributions to LPs in 2018 and early indications show that 2019 is likely to see a similar number.

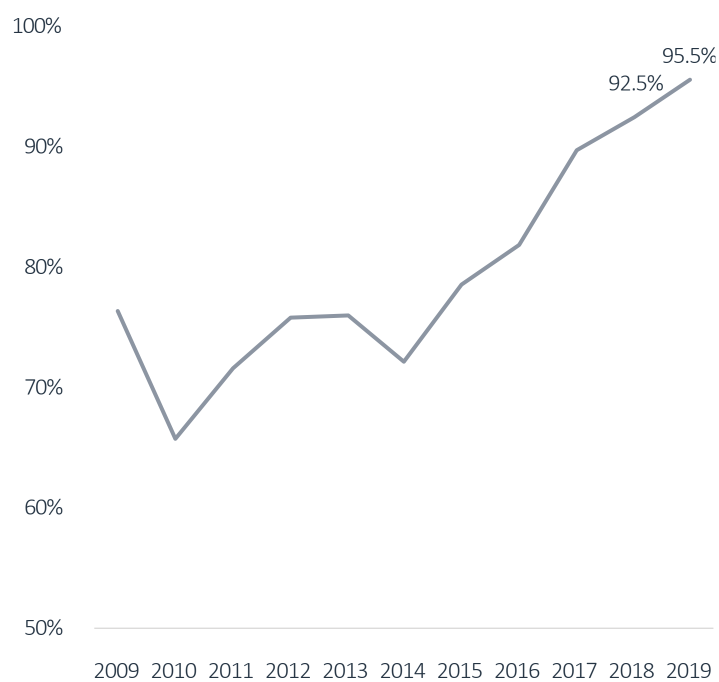
What is tricky and unique about allocating to private markets is the way in which fund structures are set up. LPs (hopefully) receive their capital back with appreciation and must reinvest these proceeds just to maintain their allocation. With so much cash coming back to LPs, many have had difficulty maintaining their target allocation. CalPERS, for example, contributed $6.7 billion in its 2018-2019 fiscal period but still fell short of maintaining its 8% target.[15] The pension system needs to invest over $10 billion per year and has responded

PE fundraising ($) by size



Source: PitchBook | Geography: US

Proportion of funds that were larger than their predecessors

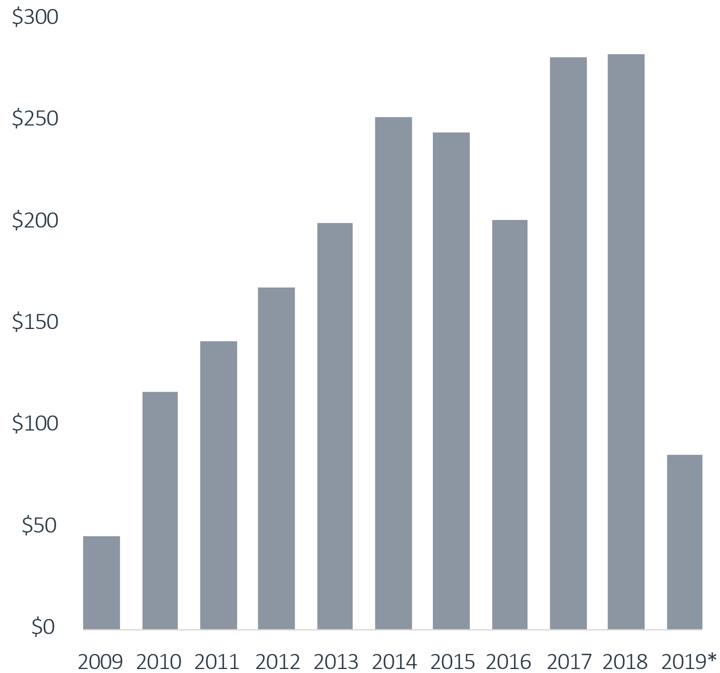


Source: PitchBook | Geography: US

by writing gargantuan checks such as the $750 million it allocated to Blackstone Capital Partners VIII, an amount larger than most funds raised in 2019. Continued lofty distributions will challenge many LPs and buoy fundraising in the coming years.

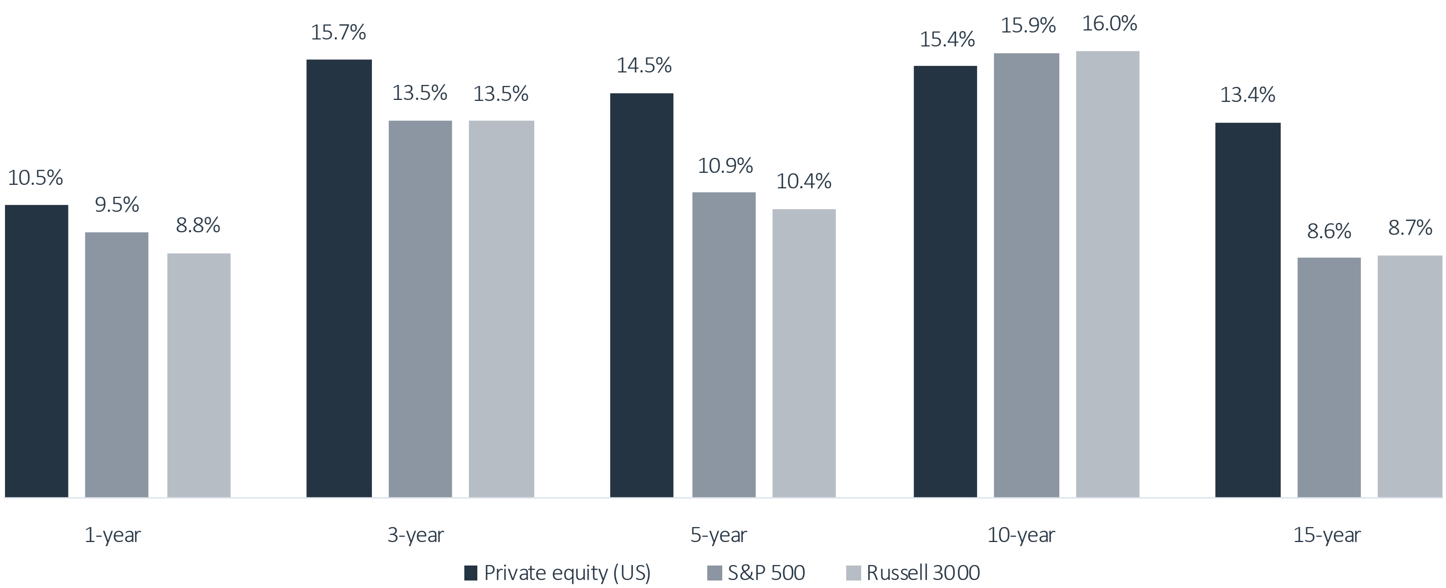
Performance has also been a driving factor in recent fundraising success. LPs allocate to private markets in the hopes of outperforming public markets and diversifying the portfolio. They target top-quartile managers, not the median. Our performance figures give credence to the decision to target PE, with the strategy outperforming or approximating public indices in recent and long-term time periods. Additionally, recent research indicates that investing in PE tends to improve overall returns and a portfolio's Sharpe ratio.[16] Beyond performance, the illiquidity may also be a boon for PE. AQR Capital Management and others have demonstrated that a levered small-cap portfolio offers a similar return profile to PE, though "many investors couldn't stomach having to wait out the volatility in bad times" according to Cliff Asness, the firm's co-founder and CIO. AQR believes some investors are now paying an "illiquidity premium"—a phrase that would make finance academics shutter—which forces LPs to hold long term. Overall, the current levels of distributions and performance ought to further propel PE fundraising heading into 2020.

GP distributions to LPs ($B)



Source: PitchBook | Geography: US
*As of March 31, 2019

Performance by asset class*



Source: PitchBook | Geography: US
*As of March 31, 2019

15: "CalPERS Falling Short of Private Equity Goals," Chief Investment Officer, November 8, 2019.
16: "Why Defined Contribution Plans Need Private Investments," Defined Contribution Alternatives Association and Institute for Private Capital, Gregory Brown, Wendy Hu and Bert-Klemens Kuhn, October 2019.