



PE Breakdown



Sponsored by



Contents

Executive summary: Of rates and races	4
A word from Weaver	6
Deals	8
A word from Ramp	18
Deal valuation metrics	21
Deal financing metrics	22
Deals by size, backing type, and sector	23
Spotlight: LBO loan update: Leverage creeps up, high demand signals dealmaking potential	24
Exits	27
Fundraising	37
Performance	41

Methodology change update: In connection with our previously communicated enhanced process for modeling the size of undisclosed deals and exits, we will use that same model to ascribe value to our estimated count of late-reporting deals and exits. Because these estimated counts appear only in the most recent four-quarter period, there will be no impact to earlier quarters or years. This change will apply to this report and all future PE- and M&A-related reports. For more details on our methodologies for deal and exit count estimation and deal and exit value, please click [here](#).

PitchBook Data, Inc.

Nizar Tarhuni Executive Vice President of Research and Market Intelligence

Dylan Cox, CFA Head of Private Markets Research

Institutional Research Group

Analysis



Tim Clarke
Lead Analyst, Private Equity
tim.clarke@pitchbook.com



Garrett Hinds
Senior Analyst, Private Equity
garrett.hinds@pitchbook.com



Jinny Choi
Senior Analyst, Private Equity
jinny.choi@pitchbook.com



Kyle Walters
Associate Analyst, Private Equity
kyle.walters@pitchbook.com



Kazi Helal, Ph.D.
Senior Analyst, Healthcare
kazi.helal@pitchbook.com



Jim Corridore
Senior Analyst, Industrials
jim.corridore@pitchbook.com

Data

Nick Zambrano
Data Analyst

pbinstitutionalresearch@pitchbook.com

Publishing

Report designed by **Drew Sanders**, **Chloe Ladwig**, and **Julia Midkiff**

Published on October 8, 2024

Maximizing Transaction Value

Assessing and managing risk in a transaction can preserve, and even create, value — **if done right.**

Whether you are buying, selling or merging, Weaver has been there before, helping our private equity clients make informed decisions and navigate transaction complexities with skill and tenacity.



Explore our services at
weaver.com

EXECUTIVE SUMMARY

Of rates and races

Two things tend to happen every four years: a change in the course of the economy and interest rate policy, and a US presidential election. It is unusual for the two to occur in the same year, but this year is the exception.

We would be remiss without examining the historic impact that each of these quadrennial events has on private equity. Any reflection on PE history is limited to what transpired after the year 2000. Prior to then, the industry was still in its infancy, and there was not much data available nor many active firms.

In PE's short life, there have been three prior episodes when the Federal Reserve (the Fed) cut rates: 2001, 2007, and 2020. Each involved an emergency element to either contain an asset collapse or avert an economic collapse. The most analogous of these to the present was the 2001 cycle. Interest rates were coming down from a similar level, 6.5% then versus 5.5% now, and they came in the wake of another speculative blow-off in financial assets. That is where the comparisons end, however. While not perfect, we decided to take a look anyways. In the 2001 cycle, PE buying made the turn first, rising by 59.1% in deal value and 38.1% in deal count in 2003. It took another year before selling turned upward by 102.3% and 60.3% in value and count, respectively.

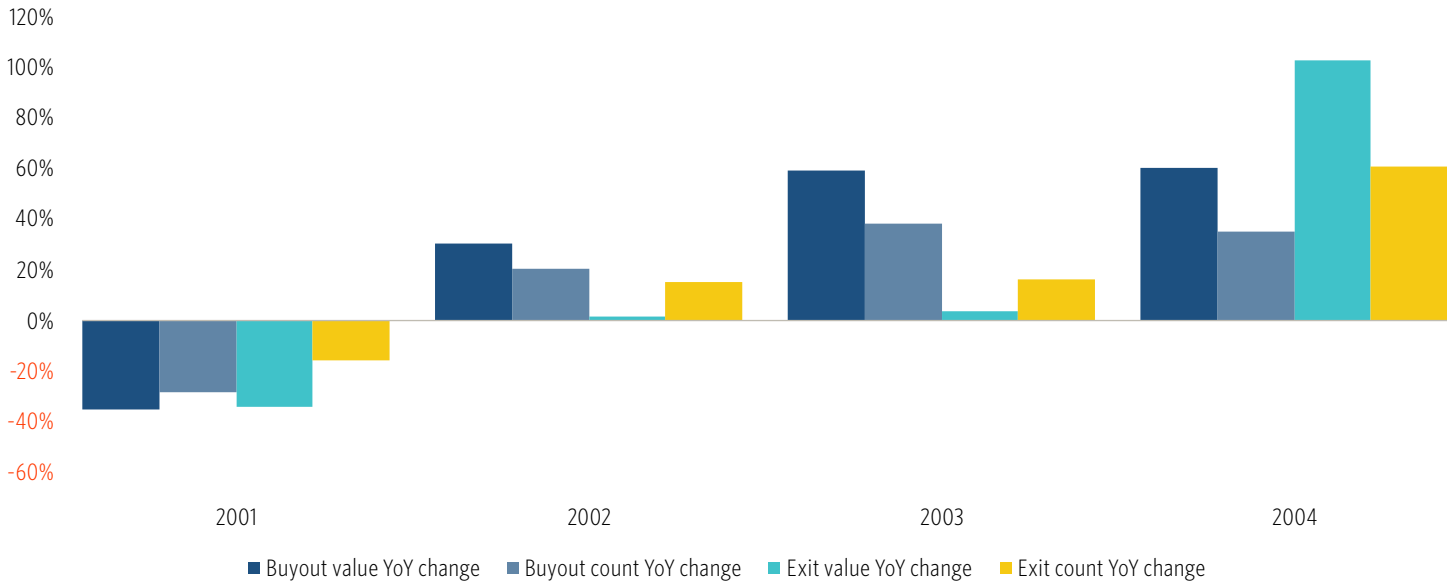
This supports what many GPs have telegraphed about the current easing cycle: They intend to use lower rates to buy first and sell later. We heard this consistently on recent earnings calls hosted by the publicly traded PE firms, and it comports with what we have seen following the "stealth" rate cuts that were administered by the leveraged finance markets over the past year—where yields and spreads have declined by a full point or more. Year to date, exits have rebounded

significantly in value but have flatlined in count. Meanwhile, buy-side activity has lifted by nearly 24% in value and 12% in count. We believe some of that reflects front-running by dealmakers ahead of expected Fed cuts, but a good portion can be attributed to lower rates already delivered by the markets they borrow from. Because of all this pump priming, we do not expect much, if any, lag in the time it takes Fed rate cuts to translate into higher exit volumes.

As for the presidential election, we looked back on the past three cycles of 2020, 2016, and 2012. We excluded 2008 because that was when the global financial crisis was at its worst, with the LIBOR/Treasury bill spread spiking to its highest level ever in October of that year. Based on the past three elections at least, we found that M&A does not shut down in the weeks preceding or following or even during the first Tuesday of November, unlike the IPO market. The number of US deal closings per week was fairly consistent at a low of 400 and a high of 1,000, and there was no discernible drop-off or acceleration during the same 11-week span. There is more evidence to suggest that any move to sidestep election risk was made months earlier. Looking at election years versus non-election years, we can see M&A closings falling short in election years in August and September, evening up in October and November, and surging in December, likely as a result of postponed deals.

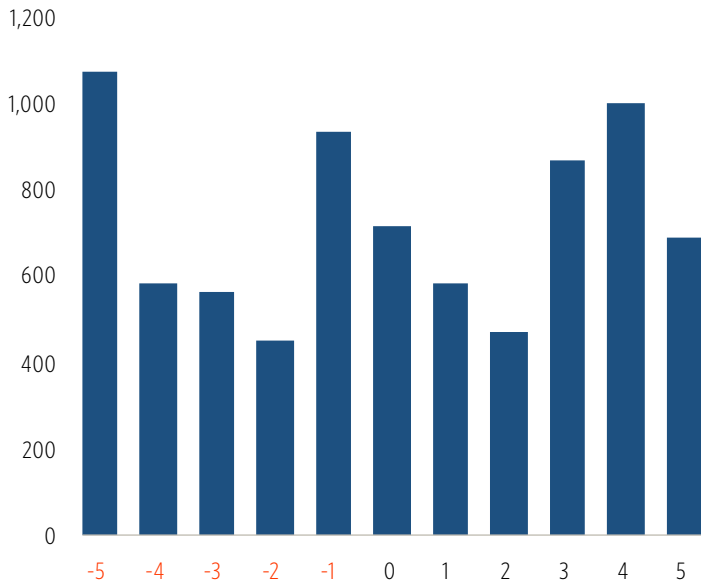
Should the same script play out in 2024, we can look forward to a post-election bump in December supplemented by what is expected to be a third interest rate cut at the final Federal Open Market Committee meeting of the year. Things are definitely looking up for PE dealmakers in Q4 2024.

PE buyout and exit activity changes from first interest rate cut (2001-2004)



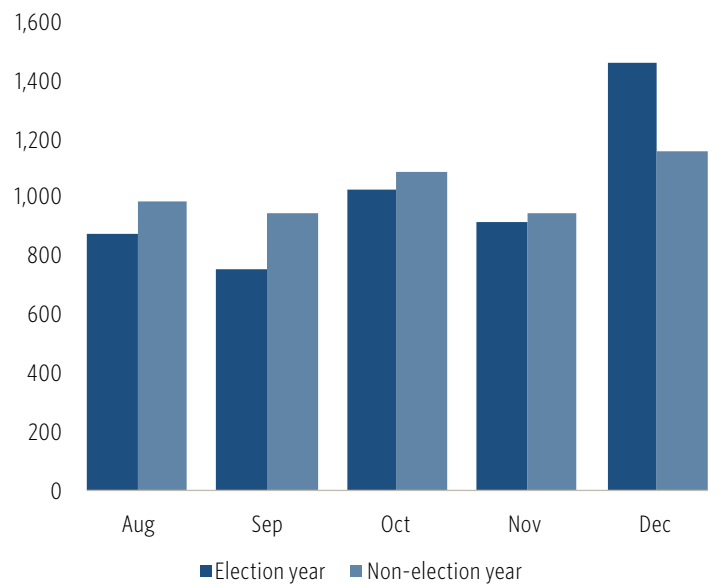
Source: PitchBook • Geography: US • As of September 30, 2024
 Note: The first rate cut occurred on January 3, 2001.

Cumulative M&A closed in weeks before and after election week (2012-2020)



Source: PitchBook • Geography: US • As of September 10, 2024

Average M&A closed in months before and after election month (2012-2020)



Source: PitchBook • Geography: US • As of September 10, 2024

A WORD FROM WEAVER

The digital transformation of private equity

Private equity has traditionally relied on personal networks, hard data, and analytical models. How is this landscape changing with the advent of AI and the resulting digital transformation?

Sourcing deals through relationships and networks will always be a difficult space for AI to enter beyond the role of a personal assistant. However, once that prospect is identified, we have seen over the past decade a fundamental shift in how businesses operate, which provides digital opportunities. That shift has led to the majority of operations moving into a digital ecosystem, creating valuable opportunities to accelerate the identification, evaluation, and pursuit of prospect portfolio companies by leveraging new technologies and AI. For example, it has historically been necessary to manually pull and transcribe bank statements, trial balances, and tax statements into models for each prospect evaluation.

Today, however, many of those activities can be automated using technology to extract the transactional data. AI can then be deployed to enhance the process—from evaluating the quality of the accounting functionality and flagging anomalous data to highlighting potential issues that may impact valuation or deal suitability.

Deal sourcing requires tremendous effort to determine the precise information relevant to the deal. Are you seeing opportunities for large language models (LLMs) and AI tools to aid with due diligence and development of operational processes?

An LLM allows you to rapidly translate data to information with a good (but not perfect) degree of confidence. LLMs show their greatest value in two primary areas:

- Extracting information from unstructured data sources (PDFs, for example)
- Allowing usable information to be generated quickly out of large datasets

One broad category where large-dataset LLMs are particularly effective is accounting and finance, as it is highly structured and has strong consistency across companies, allowing for the deployment of a common model for multiple deals.



Morgan Page, CIA

Partner, Consulting Services

Morgan directs Weaver's digital transformation journey at all levels by defining and delivering results that are sustainable, scalable, and aligned with the needs of the organization.



Melvin F. "Trey" Hunt III, CPA

Partner, Audit Services

Trey focuses on international coordination, hedge accounting, revenue recognition, stock-based compensation rules, and SEC filings.

Using LLMs in the deal process with accounting and finance data helps in deciding where resources should be applied, but they should not be considered the final authority. For example, in a meeting reviewing a prospective acquisition, the analyst workbook may spark the question, "Are there specific product lines that show a less than 5% margin for more than three of the past 12 months?" Such a question would often be left unresolved in the meeting as the analyst would have to go back to their desk to conduct the analysis over the course of the next few hours before any meaningful conclusions could be made.

However, that query could be issued to an LLM connected to the data, which would return an immediate answer that there are three product lines that meet the criteria. This would allow the analyst to leave the meeting with the action item to evaluate the feasibility of continuing those product lines.

Due diligence is such a critical part of the overall PE process. How are AI and digital tools enhancing this stage to help PE firms determine the best transactional candidates?

The biggest benefit AI and technology tools are providing is the ability to quickly review transactions over multiple reporting periods. Want to know if all the physical invoices sent to clients match the GL? A thousand invoices can be reviewed in minutes.

These tools also provide new opportunities by transitioning the experience of higher-level resources into the analysis model because they are able to contextualize very large sets of data with insights. These statistical insights could then be used to determine which businesses to pursue that are likely to yield a positive and successful outcome.

With new technologies, that expertise can be baked into an AI solution, artificially replicating that SME's intelligence to reduce the data requirements into some basic parameters. One of our clients applied this very concept to their operations and was able to return more than \$12 million to their bottom line.

Once an investment is made, managing the portfolio is key to driving value. How is AI impacting portfolio management strategies? Can you discuss how clients may be using data-driven insights from these tools to optimize operations and drive growth?

This hits on three of our favorite technology areas: data aggregation/management, performance indicators, and AI. What we are seeing in today's market is investment in more mature technologies to allow for the implementation of next-generation capabilities. For example, if you are monitoring 10 portfolio companies, you likely have several analysts making flash workbooks on a regular basis to highlight where operations are outside of expectations.

This is a great example of a low-value activity with a high-value result. We are seeing technology play into scenarios like this in using a mature and robust technology such as an enterprise service bus to directly pull data from the portfolio companies and transform it into a consistent reporting format.

This would allow for descriptive and predictive analytics to be generated from a homogeneous dataset. AI would then be able to generate insights into the results of the individual companies, highlighting where we may need to take proactive steps to address common risks across the portfolio.

Creating value in portfolio companies is often where PE firms differentiate themselves. What role does AI play in formulating value-creation strategies? Are there particular sectors or industries where your clients have seen the most impact?

AI can create huge value opportunities both from an operational optimization perspective as well as from a

transformational perspective. What do we mean by the difference between optimization and transformation? Optimization is a targeted focus to get the most out of your pursuits today, while transformation is about expanding into adjacent pursuit spaces.

E-commerce is a great segment with an intense focus on optimization of the customer journey to maximize revenue. Leveraging AI, you can analyze all of your customer journeys through your website. AI can categorize those journeys as well as compare them to generated sales to identify where you are most successful and where there is opportunity for additional value.

Similarly, on the operational transformation side of the equation, AI is the connective tissue that lets your product enter a digital ecosystem of value creation. This is heavily used in the manufacturing industry where there is a value chain of getting a product to market. AI gives you the capability to expand your revenue on a per-transaction basis by creating partnerships across companies.

When it comes to planning an exit strategy, how can AI tools help speed up traditionally analog/manual sections of the process while simultaneously reducing or eliminating human error?

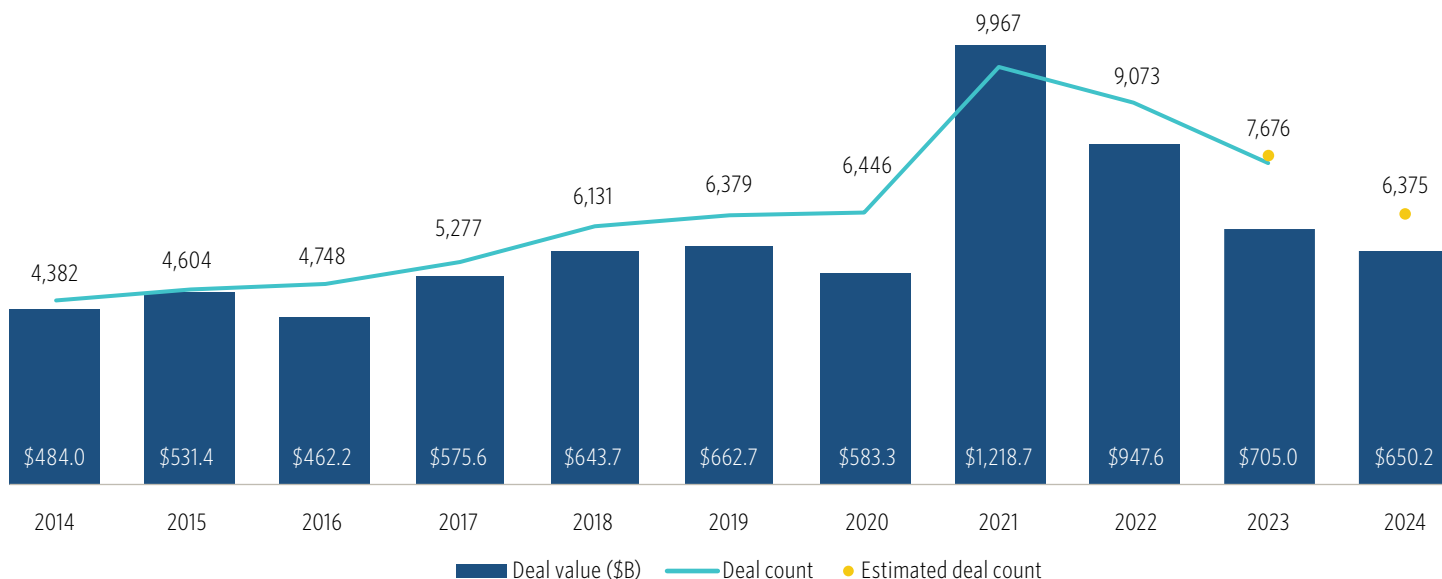
Depending on your strategy, from IPO to recapitalization or sale, AI can play many different helpful roles. In every exit scenario, speed in assembling data is paramount. A common challenge is how to provide timely data in support of an exit, including periodically updating the information without overly distracting management from the critical tasks of running the business.

Looking ahead, what future trends do you see in the integration of AI and digital transformation in PE, and how can firms best prepare to stay ahead in this rapidly evolving landscape?

We think AI's biggest impact on private equity over the course of the next decade will be on the operations of portfolio companies. This can take the forms of supporting the creation of optimization strategies to identifying deviations from the expected metrics so that portfolio company management will have actionable strategies to get back on the optimized path. PE firms that successfully deploy this functionality will see material increases in returns.

Deals

PE deal activity



Source: PitchBook • Geography: US • As of September 30, 2024

Overview

Q3 2024 marked another quarter of solid recovery for US PE dealmaking. Year to date, deal value has increased by 23.1% YoY on a 12.9% bounce in deal count. The industry is on a run rate of \$864.3 billion in deal value for the full year, which would represent the third-highest total ever. It would also bring an end to a two-year dealmaking slump that saw deal value decline by 42.5% from peak to trough. Looking at the major deal types, platform LBOs have awakened from their slumber after getting hammered down by 49.4% in value at their worst in 2023. In 2024, the category has rebounded by 28.4% YoY with one more quarter to go. We define platform LBOs as all buyouts excluding add-ons. As for add-ons, which account for three out of every four buyouts, the YTD value is up 14.3% YoY. The star of the show continues to be PE growth equity/expansion deals, which have rocketed up in value by 32.7% for the YTD period. Growth equity deals, which we define as minority capital that flows to a company’s balance sheet, outnumbered platform LBOs for the first time in 2023, and the gap widened further in 2024.

Banks are slowly making their way back to lending to LBO deals. As of Q3 2024, the YTD syndicated LBO loan value has nearly doubled to \$50.8 billion off of a very low base of \$28.6 billion over the same span in 2023. Assuming that this

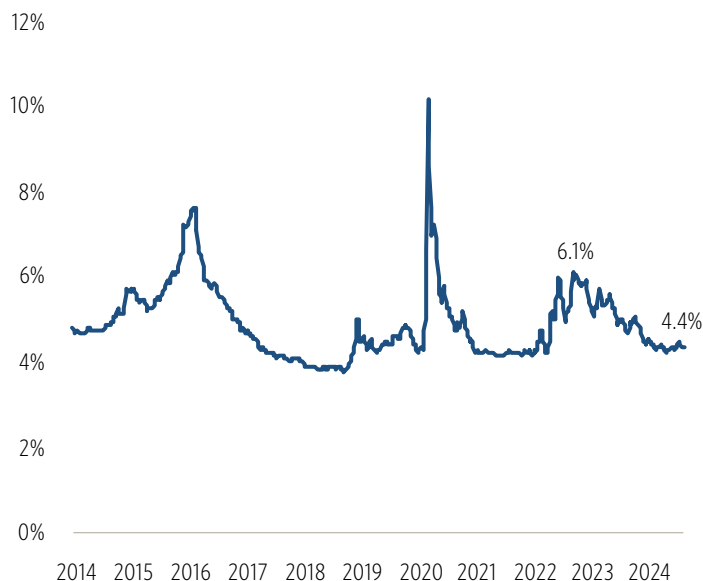
PE deal activity by quarter



Source: PitchBook • Geography: US • As of September 30, 2024

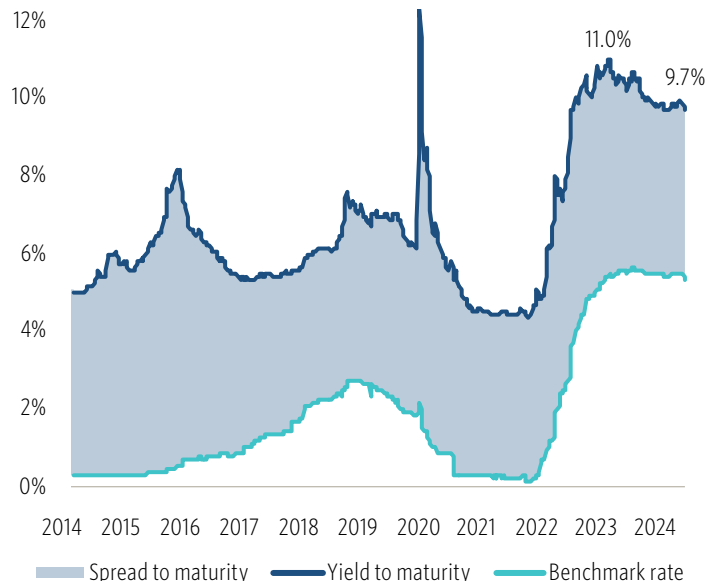
momentum carries into the final quarter, 2024 volume will still come in at roughly 53.6% below the 2021 peak and 33.2% below the “old normal” represented by the three-year annual average prior to the COVID-19 pandemic.

Spread to maturity for B-rated leveraged loans



Source: PitchBook | LCD • Geography: US • As of September 13, 2024

Yield to maturity for B-rated leveraged loans



Source: PitchBook | LCD • Geography: US • As of September 13, 2024

While banks have returned to the broadly syndicated loan (BSL) funding market and are competing head-to-head with private credit lenders, the majority of new-issue activity has been refinancing related. Refinancing volumes soared by more than twofold in 2023 and have nearly doubled again to \$207.1 billion through Q3 2024. The BSL market is well on its way to smashing its prior all-time high of \$213.1 billion in 2013. Historically, refinancings have represented just one-third of BSL new-issue volume, but YTD, their share expanded to nearly two-thirds.

Take-privates

In Q3 2024, take-private deal activity plummeted from the two-year high recorded in Q2. Deal count declined from 29 to 13, and deal value plunged from \$71.6 billion to \$18.2 billion. We attribute at least some of this pullback to buyers and sellers pulling in their horns ahead of the presidential election as well as to the sharp sell-off in the first week of August, which upended the leveraged finance new-issue market for several weeks and caused a 5.8% pullback in the S&P 500 index. In Q3, a total of five boomerangs occurred, involving companies that became public as recently as 2020 only to go private again. A notable example was Instructure’s July take-private by KKR. This was actually the company’s second round trip from private to public and back to private again in four years. In 2020, then-public Instructure was taken private by Thoma Bravo for \$2.1 billion. A year later, Instructure returned to public markets in an IPO that valued the company at \$2.8 billion. After executing a value creation plan that

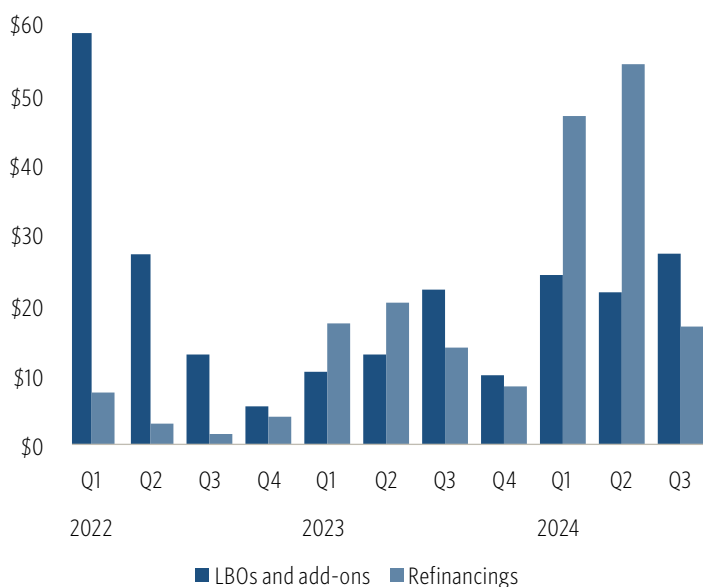
saw its top line grow by 47.1% and EBITDA by 72.5%, Instructure was taken private again, this time by KKR, for \$4.8 billion.

The largest take-private of the third quarter belonged to Blackstone and Vista Equity Partners’ acquisition of work management software company Smartsheet for \$8.4 billion. Smartsheet received around \$3.2 billion in private credit financing to support the transaction, with Blue Owl Capital acting as the lead agent. The deal is expected to close in the fourth quarter and includes a 45-day “go-shop” period that will expire on November 8. During this period, Smartsheet and its advisors will be permitted to actively solicit alternative acquisition proposals from certain third parties.¹

Looking at how these large take-privates are being financed, the mix has shifted in the past year and reflects the gradual return of bank lenders to a market that they used to dominate but now share with private credit lenders. Roughly 85% of all loan opportunities in 2023 were won by private credit lenders. In 2024, the share has been more evenly split between banks and private credit. As noted in our [H1 2024 Global Private Debt Report](#), of the 45 public-to-private deals of \$100 million or more announced in H1 2024, 23 have also announced their debt backing, with 13 selecting banks and 10 selecting private credit lenders. When comparing the two loan books (bank and private credit) on these 23 deals, we see that they are very similar, with an average loan size of approximately \$800 million and loan/value ratios in the 40% to 50% range.

¹: “Smartsheet to Be Acquired by Blackstone and Vista Equity Partners for \$8.4 Billion,” Smartsheet, September 24, 2024.

Quarterly BSL-funded loan value (\$B) to PE borrowers by type



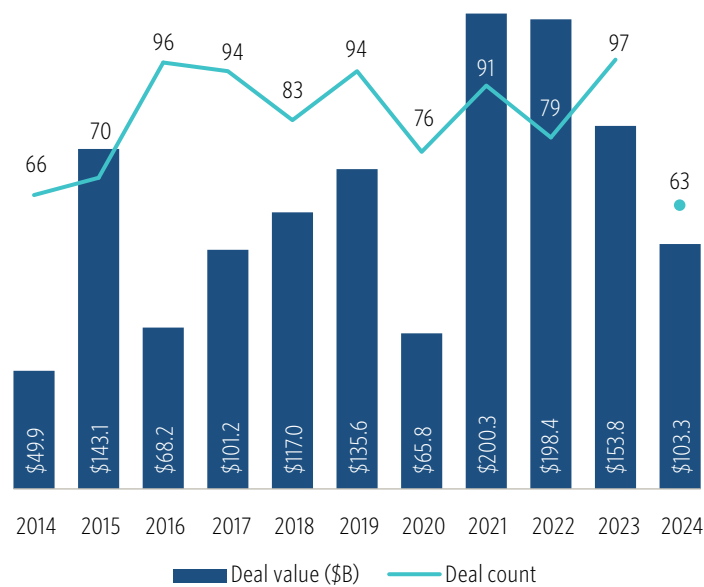
Source: PitchBook | LCD • Geography: US • As of September 30, 2024
 Note: This chart includes institutional capital only. Pro rata tranches are excluded.

Notable take-privates in 2024 include Permira’s \$6.9 billion take-private of Squarespace, which involved a \$2.7 billion loan from private lenders Blackstone Credit & Insurance, Blue Owl Capital, and Ares Capital Corporation. Another noteworthy take-private was of Hargreaves Lansdown for \$6.9 billion, led by a consortium comprising Nordic Capital, CVC Capital Partners, and the Abu Dhabi Investment Authority. The consortium financed the deal with a \$2.2 billion debt package from private lenders KKR, Apollo Global Management, HPS Investment Partners, and Blackstone.

Growth equity

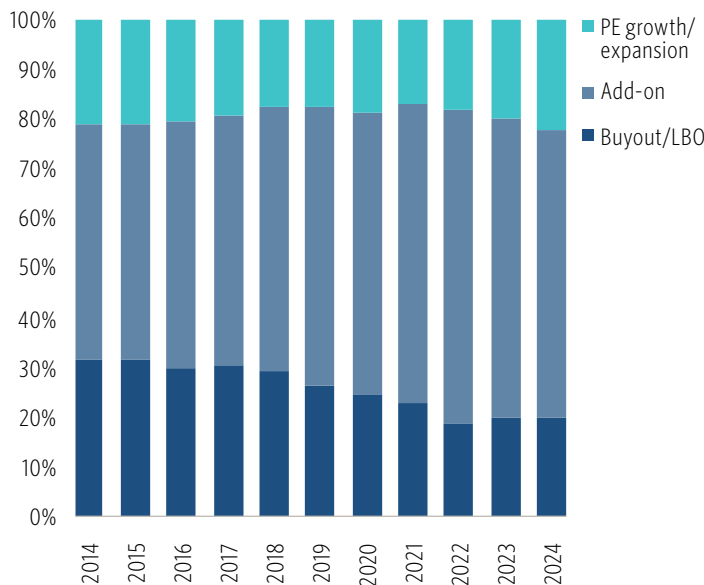
Growth equity continues to represent an outsized share of deals. The strategy made up 22.7% of all PE deals in Q3, well above the five-year average of 18.9% and surpassing the recent high of 22.2% in Q2 2024. But because growth equity check sizes are much smaller than buyout check sizes, growth equity’s share of overall PE deal value is always lower. In Q3, the share was 12.3%, 100 basis points above the five-

PE take-private deal activity



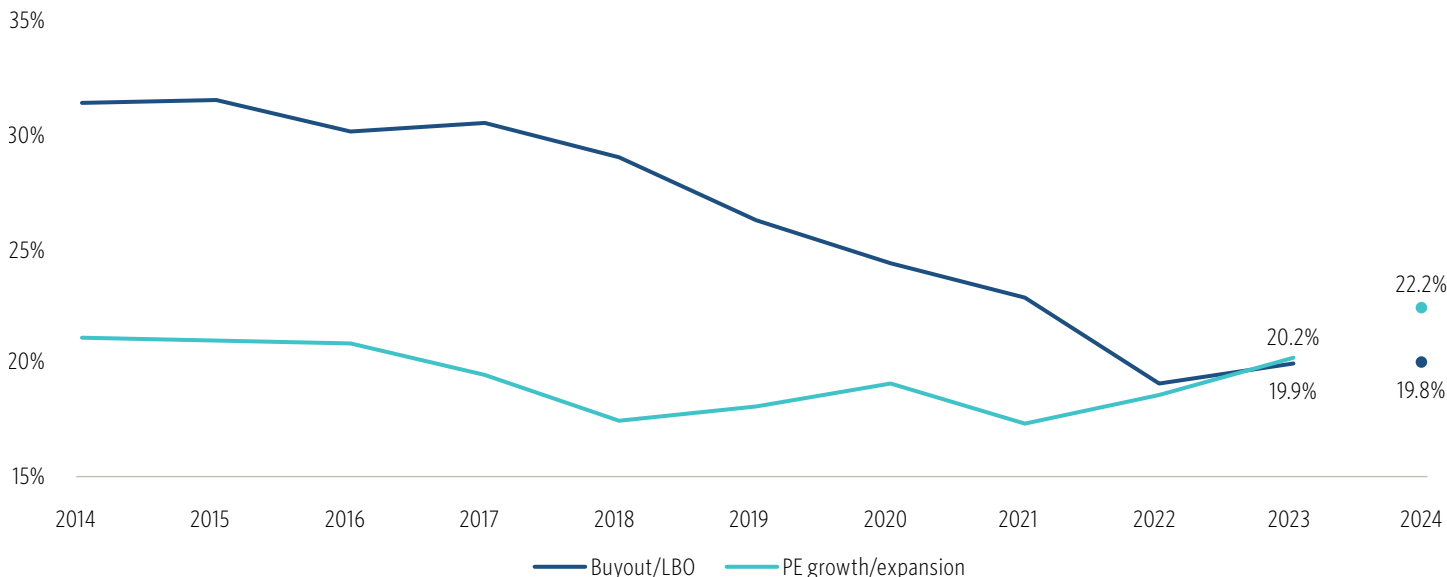
Source: PitchBook | LCD • Geography: North America and Europe
 As of September 30, 2024

Share of PE deal count by type



Source: PitchBook • Geography: US • As of September 30, 2024

Platform LBO and growth equity deals as a share of all PE deals



Source: PitchBook • Geography: US • As of September 30, 2024

year average of 11.3% yet below the recent high of 15.9% set in Q1 2024. In Q1 2023, growth equity deal count overtook platform LBO deal count for the first time ever, and that trend has persisted since. Still, we see the potential for stronger buyout deal activity in upcoming quarters, as financing costs are moderating, which is likely to create a crowding-out effect.

The distinct strategy of growth equity, avoiding the burden of costly debt by typically opting for all-equity deal structures, aligns well with its focus on rapidly expanding companies. By providing capital for expansion, growth equity aims to accelerate and scale growth, thereby enhancing unit economics through operational rather than financial leverage. This approach is particularly potent in the current economic

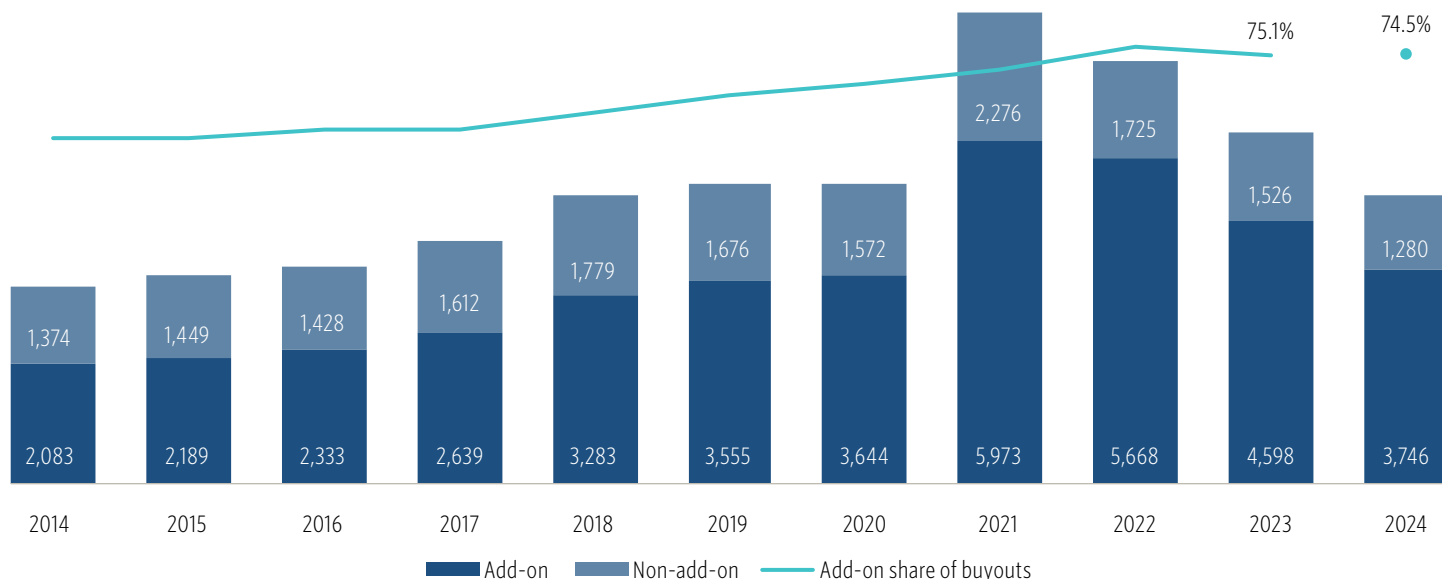
climate, where value creation is realized by maximizing EBITDA margins and growth.

Among the more notable deals in Q3 2024, auction house Sotheby's received a reported \$1.0 billion of development capital from Abu Dhabi wealth fund ADQ and majority owner Patrick Drahi in August.² The additional capital will enable the firm to accelerate its strategic initiatives and expand its commitment to art markets globally. Also in August, Tallgrass Energy—an energy infrastructure company with more than 10,000 miles of pipeline assets across 14 states in the US—received an investment from Canada Pension Plan Investment Board (CPP Investments) of \$843 million.³ The investment will support continued growth in its energy infrastructure portfolio along with decarbonization projects.

²: "Abu Dhabi's ADQ, Sotheby's Majority Owner Drahi to Invest \$1 Bln in Auction House," Reuters, Nayera Abdallah and Shakeel Ahmed, August 9, 2024.

³: "CPP Investments Acquires Stake in U.S. Energy Infrastructure Company Tallgrass Energy," CPP Investments, August 13, 2024.

Add-ons as a share of all PE buyouts



Source: PitchBook • Geography: US • As of September 30, 2024

Add-ons

In Q3 2024, add-on transactions represented 76% of all PE buyouts, a 93-basis-point increase over the 2023 average. This underscores GPs’ continued focus on consolidation and operational synergies. However, our analysis suggests this trend is nearing stabilization, with limited room for further growth as a more accommodative financial environment, characterized by lower interest rates, takes hold. As lower rates are likely to trigger an uptick in overall deal activity, we anticipate a crowding-out effect, which may reduce the relative share of add-on transactions.

Since the onset of rate hikes in 2022, add-on acquisitions have been critical in sustaining momentum within the PE sector amid tight credit conditions and increased market volatility. These transactions, often involving smaller capital outlays, have enabled PE sponsors to continue deploying capital through smaller, more manageable deals. We anticipate this strategy will gradually decline as an improved rate environment supports a rebound in LBO activity.

Two prominent add-on deals in the quarter were announced in the healthcare sector. Revance—a biotechnology company focused on aesthetic and therapeutic offerings—agreed to be acquired by Crown Laboratories in a \$924 million

LBO.⁴ Crown’s financial sponsors, including Hildred Capital Management, Revelation Partners, and Montreux Growth Partners, are supporting the deal. Revance holders will receive \$6.66 per share in cash, representing an 89% premium over the share price three days prior to the announcement. Upon transaction close, Crown expects to be one of the leading global aesthetics and skincare companies, benefiting from scale and leveraging Revance’s product innovation, regulatory approvals, and provider network. Invetx—developer of a biotechnology innovation platform designed to build protein-based therapeutics for animal health—agreed to be acquired by Dechra Pharmaceuticals in a \$520 million LBO announced in July.⁵ Dechra’s financial sponsors, EQT and Abu Dhabi Investment Authority, are supporting the deal. Dechra will benefit from Invetx’s proprietary half-life extension platform, which extends the duration of drug activity and enables longer intervals between treatments to increase convenience and compliance for veterinarians, owners, and pets.

Carveouts

In 2024, carveouts’ share of buyout activity has continued to rise as larger corporations strategically streamline their operations by shifting their organizational focus and shedding off any business units deemed noncore or nonessential. Furthermore, these large-scale companies may look to cut

4: "Crown Laboratories and Revance Announce Entry Into Merger Agreement," Revance, August 12, 2024.

5: "Invetx Announces Upcoming Acquisition by Dechra Pharmaceuticals, Global Leader in Animal Health," Invetx, July 18, 2024.

costs, pay down debt, or seek to improve shareholder value, and divesting these business units offers these corporations the chance to check one or more of these boxes.

On the buy side, GPs find carveout opportunities appealing for numerous reasons. Amid the more challenging dealmaking environment where fewer sellers are coming to market, carveouts represent these few, and GPs are eager to bid on these transactions. Additionally, because these assets are deemed noncore, they have the potential to be acquired at a discount as corporations look to move on from assets that never really integrated as hoped or simply did not fit their vision. Moreover, these business units are often well established and have ample financial history, potentially easing the due diligence required. These newly acquired businesses frequently serve as platforms for new growth or integrate synergistically with existing operations, enhancing scale and efficiency.

Carveouts accounted for 11.7% of all US PE buyouts in Q3 2024, a rebound from the decline to 9.1% in Q2. Q1 and Q3 of this year have seen carveouts represent their largest share of buyouts in the US since the end of 2016 and surpass the 10-year quarterly average of 10.1%. As carveouts have become a more prominent source of buyout deal activity in recent quarters, it remains to be seen if a resurgence in traditional buyout activities led by a lowering cost of capital and an easing of other headwinds will result in carveouts seeing a diminished share of US buyout activity.

Q3 saw several notable carveout transactions in the healthcare and IT sectors. Baxter International reached an agreement to sell its kidney care business, to be named Vantive, to The Carlyle Group for \$3.8 billion. Baxter divested the unit to maximize shareholder value and better position itself for long-term success, with enhanced flexibility to deploy capital toward opportunities that can accelerate its growth objectives.⁶ In August, NCR Voyix agreed to sell its digital banking business to Veritas Capital for \$2.45 billion. The sale allows NCR to better focus on its core restaurant and retail customers. Additionally, NCR expects to use the proceeds to pay down debt and enable greater strategic investment in the company's core businesses.⁷

Carveouts/divestitures as a share of all PE buyouts by quarter



Source: PitchBook • Geography: US • As of September 30, 2024

Technology

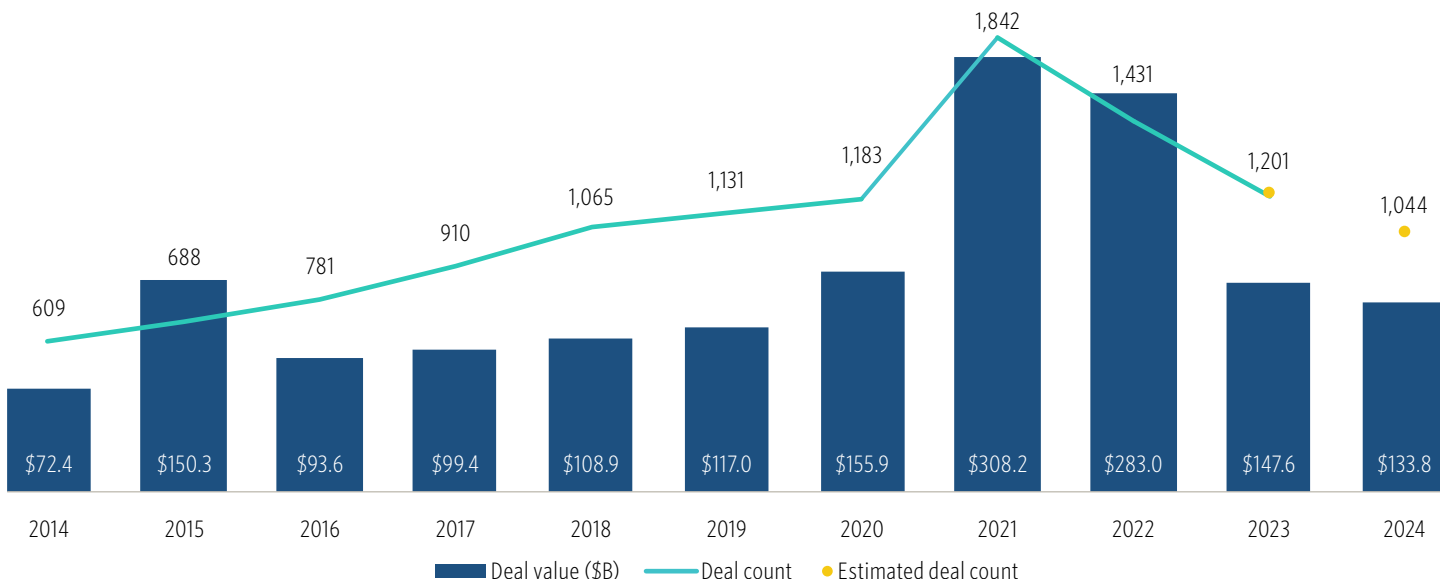
In Q3, the technology PE deal landscape indicated a strong rebound in deal activity is afoot. The sector's YTD deal value totals \$133.8 billion and is tracking ahead by 28.0% YoY. Deal volume metrics also indicated strong growth. An estimated total of 1,044 technology PE deals have been recorded YTD, marking an increase of approximately 17% compared with the same period last year. These figures indicate that PE firms are putting capital to work in anticipation of a better interest rate environment in the next 12 months.

The software segment is driving the broader tech sector's rebound in deal activity. In the first three quarters of 2024, software PE deal value reached \$90.4 billion and a total of 694 deals were announced. Annualizing this pace for the full year, we find value figures are trending up by a robust 33% YoY. Volume metrics also reflect strong growth, up 27% YoY. While technology deal activity can be lumpy, we view the volume growth as encouraging and see a favorable setup for a strong finish in the final quarter of 2024.

6: "Baxter Announces Definitive Agreement to Divest Its Vantive Kidney Care Segment to Carlyle for \$3.8 Billion," Baxter International, August 13, 2024.

7: "NCR Voyix Enters Definitive Agreement to Sell Digital Banking to Veritas Capital for \$2.45 Billion Purchase Price," NCR Voyix, August 6, 2024.

Technology PE deal activity



Source: PitchBook • Geography: US • As of September 30, 2024

There were several IT megadeals in the quarter. Smartsheet—a collaborative work management software platform—agreed to be taken private by Blackstone and Vista Equity Partners for \$8.4 billion. The all-cash transaction will yield Smartsheet holders \$56.50 per share, approximately a 41% premium to the volume-weighted average closing price 90 days prior to media reports about a possible transaction.⁸ Instructure—an educational technology software vendor—agreed to be taken private by KKR, with participation from Dragoneer Investment Group, for an enterprise value of approximately \$4.8 billion.⁹ Instructure shareholders will receive \$23.60 per share in cash, 16% over the unaffected share price prior to media reports about a possible transaction. Instructure’s CEO will remain at the helm, and KKR will support continued investment in new product development. Investnet—provider of software and solutions supporting wealth management and financial planning—agreed to be taken private by Bain Capital, with participation from Reverence Capital Partners, for \$4.5 billion.¹⁰ Existing shareholders will receive \$63.15 per share in cash, a premium of 11.7% to the share price prior to media reports of a potential transaction on April 15, 2024.¹¹

Healthcare

Healthcare private equity activity in Q3 2024 showed a slight decline from the previous quarter, reflecting ongoing challenges in the sector. YTD, healthcare has accounted for 11.1% of total PE deal value, down from 12.7% in 2023, and 13.0% of total deal count, a decrease from 15.3% in the prior year. These figures remain below the five-year quarterly average, indicating a continued slowdown in healthcare PE activity. The reduced activity can be attributed to several factors, including valuation gaps between buyers and sellers, particularly in large deals. High valuations in sectors such as pharma services have made deal flow more expensive than in prior years, contributing to a slower pace of large acquisitions.

Despite the overall slowdown, Q3 2024 saw several key deals that shaped healthcare PE activity. In the pharma services sector, FairJourney Biologics was acquired by Partners Group for €926 million (\$995.1 million), highlighting interest in antibody biopharma services. Revance—a biotechnology company focused on aesthetic and therapeutic offerings—

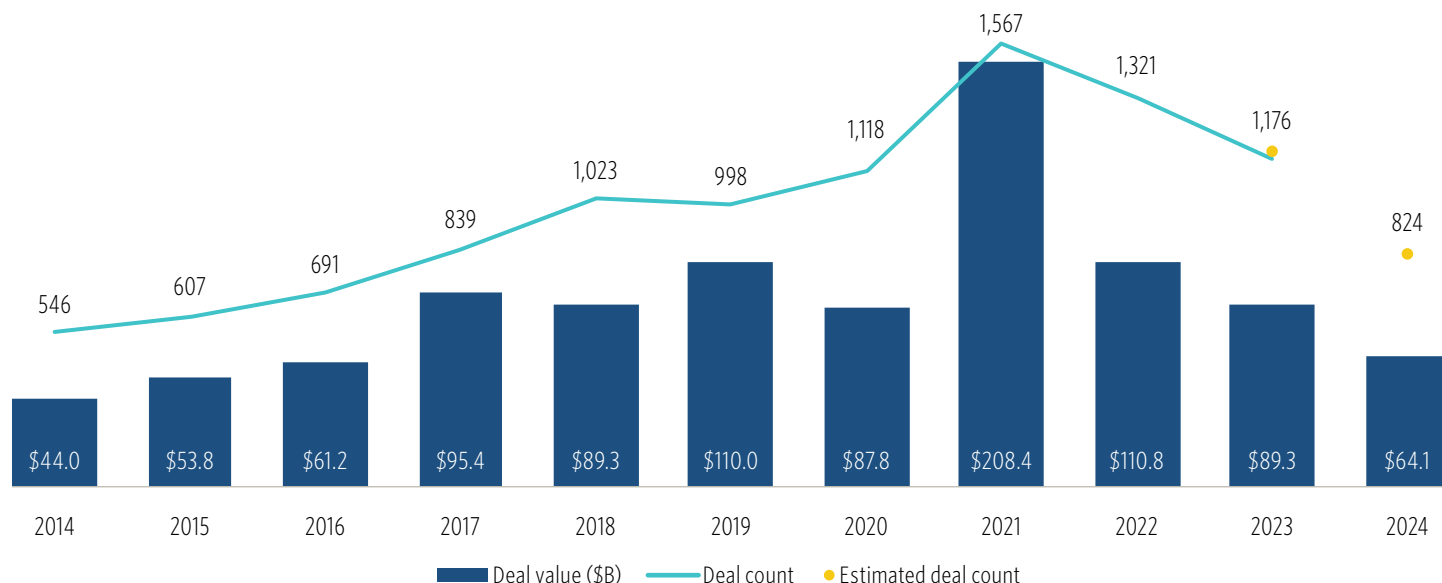
8: "Smartsheet to Be Acquired by Blackstone and Vista Equity Partners for \$8.4 Billion," Smartsheet, September 24, 2024.

9: "Instructure to Be Acquired by KKR," Instructure, July 25, 2024.

10: "Investnet, Leading Wealth Technology Platform, Announces \$4.5 Billion Take-Private Transaction With Bain Capital," Investnet, July 11, 2024.

11: "Investnet: Private Equity Firm Bain Capital Agrees to Acquire Investnet," Morningstar, Rajiv Bhatia, July 11, 2024.

Healthcare PE deal activity



Source: PitchBook • Geography: US • As of September 30, 2024

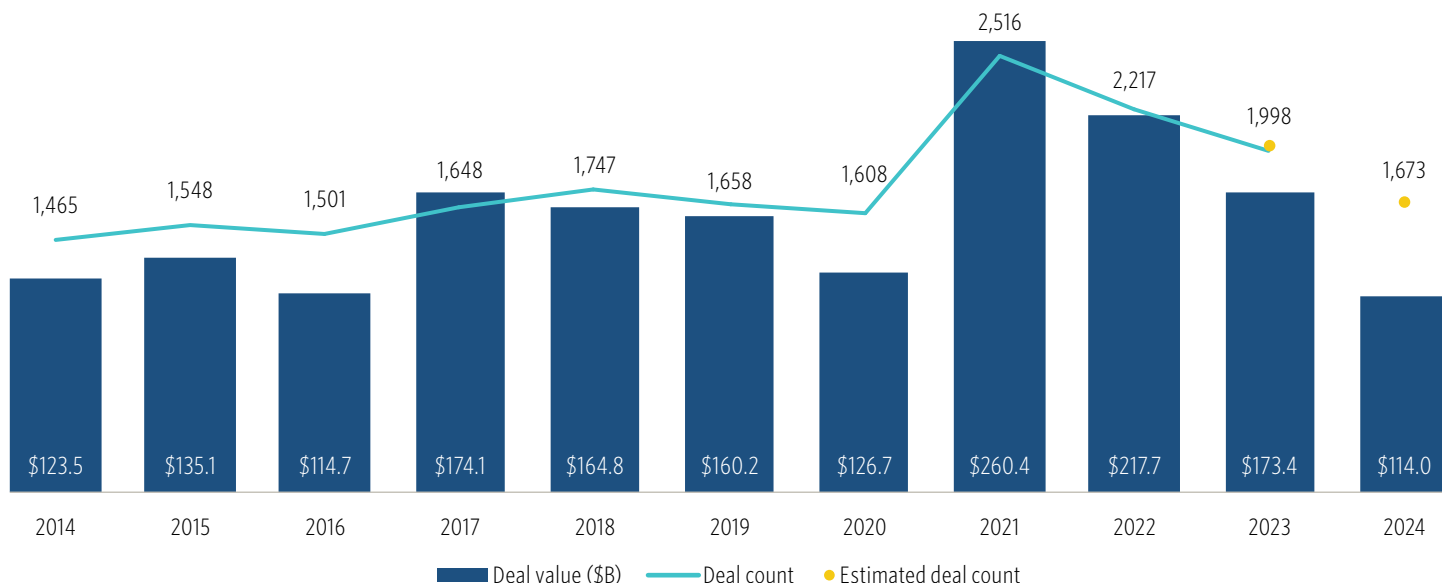
agreed to be acquired by Crown Laboratories and its PE sponsors in a \$924 million LBO, as discussed above. The medtech space also saw notable activity with ARCHIMED acquiring Irrisept, a wound care products developer, for £227.8 million (\$294.0 million) and Bansk Group acquiring Foundation Wellness, an orthotic systems manufacturer, for \$353.4 million. These transactions reflect continued interest in innovative medical devices and pharmaceutical services despite the challenging environment for M&A. The sector's resilience and innovation continue to attract PE sponsors, even amid valuation challenges. The growing demand for contract research and drug manufacturing services in peptides, especially considering the ongoing need for GLP-1-related drugs such as Wegovy and Zepbound, is expected to drive further M&A activity in the coming quarters.

Ongoing scrutiny over healthcare services has pushed private equity investments into less regulated sectors such as pharma services and medtech. California's Assembly Bill

3129, which targets private equity consolidation in healthcare, has added pressure on roll-up strategies and increased caution in healthcare services investments. A recent example of this pressure, although not a PE deal, was when Novant Health backed out of the \$320 million buyout of Lake Norman Regional Medical Center and Davis Regional Medical Center from Community Health Systems. On the pharma services end, the BIOSECURE Act could drive pharmaceutical outsourcing away from China, positioning PE activity for growth there.

Interest rates and overall economic conditions in Q3 2024 have continued to affect healthcare PE activity. While recent interest rate cuts could improve capital conditions for deals, lingering regulatory uncertainties, particularly with the upcoming presidential election and its potential impact on healthcare policy, have contributed to a cautious deal environment. Firms are likely to remain selective in their investments, focusing on strategic acquisitions in growing sectors with fewer regulatory risks.

Industrials PE deal activity



Source: PitchBook • Geography: US • As of September 30, 2024

Industrials

Industrials PE deal activity was relatively strong in the first nine months of 2024, seeing an estimated 1,673 deals and accounting for 26.2% of total PE deal count during the period, compared with an average of 25% of total PE deal activity over the past five years. Industrials deal count in 2024 is tracking 11.6% higher than in 2023 and is trending 10% above its five-year historical average. Among the biggest deals this year, ArchKey Solutions, an electrical and technology construction firm based in St. Louis, agreed to be bought out in an LBO by 26North Partners at a valuation of \$1.0 billion, with One Rock Capital Partners a partial exiter; and [Héroux-Devtek](#), a maker of landing gear and actuation systems, was acquired in an LBO by Platinum Equity for \$986 million, a valuation of 12.5x EBITDA and 2x revenue. Caisse de dépôt et placement du Québec and Fonds de solidarité FTQ were sellers.

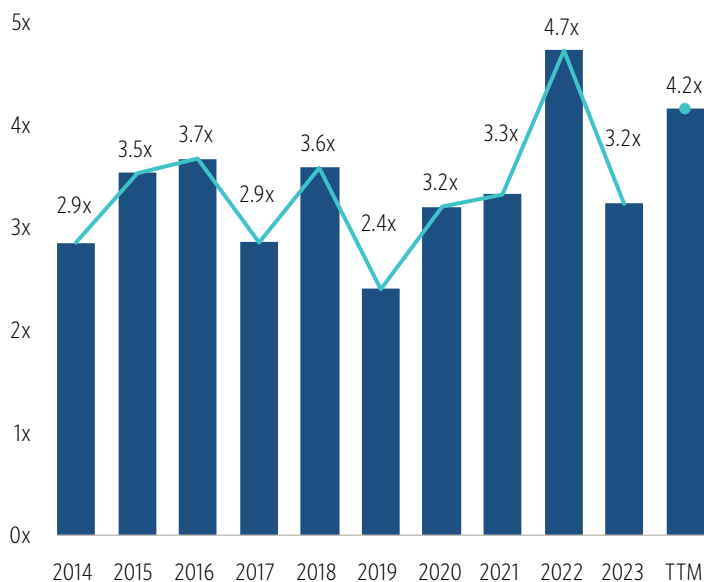
Distributors/wholesale has made up the largest portion of industrials deal activity thus far in 2024, accounting for 43% of capital raised, followed by environmental services at 16%, aerospace and defense at 8%, and building products at 7.8%. The vast majority of the deals taking place are LBOs, but

there is also a sizable amount of corporate divestitures, with 124 taking place in the first nine months of 2024, including the cable business of nVent Electric, which has agreed to be spun out in a \$1.7 billion transaction with Brookfield Asset Management as the buyer; and WORLD PAC, a maker of original equipment and aftermarket auto parts, which entered into an agreement on August 22 to be divested by The International Group in a \$1.5 billion transaction with The Carlyle Group as the purchaser.

Two areas of focus within the aerospace and defense segment have been aerospace parts and maintenance, repair, and overhaul (MRO). These spaces are in demand partly due to the maintenance overhang from the pandemic, which created a large backlog of maintenance events that are still being worked through. More maintenance also drives demand for parts. In addition, Boeing’s lowered production rates have kept older planes in service for longer, which has led to more maintenance. Strong MRO demand has made it desirable to roll up MRO firms for scale with airlines and parts makers. One such example, Aero Turbine, was bought out in an LBO on August 23 by StandardAero and The Carlyle Group for an undisclosed amount with Gallant Capital as the seller.¹²

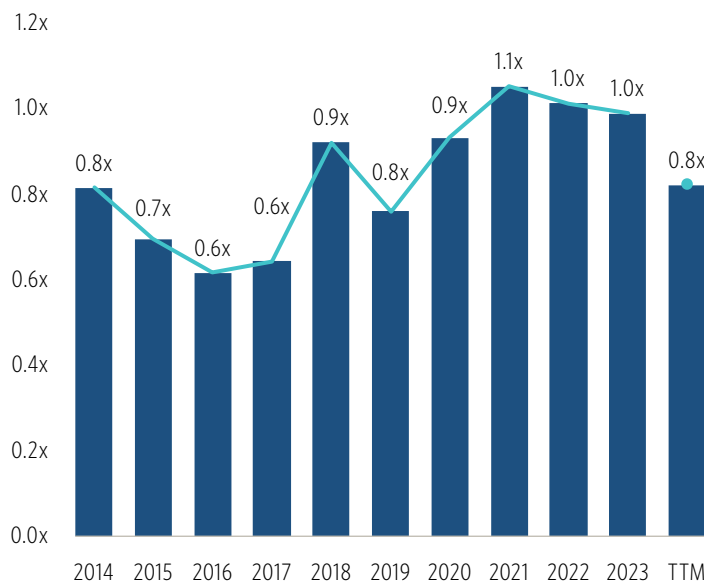
¹²: “Carlyle-Backed StandardAero Scoops Up Military Engines MRO Services Provider Aero Turbine,” PE Hub, Iris Dorian, August 26, 2024.

Median enterprise value (EV)/revenue multiples on PE deals of \$2.5 billion or more



Source: PitchBook • Geography: North America and Europe
As of September 30, 2024

Median EV/revenue multiples on PE deals below \$25 million



Source: PitchBook • Geography: North America and Europe
As of September 30, 2024

Valuations

PE valuations reached their apex in 2021 and slumped by 25.0% to 40.6% in the two years that followed, depending on the yardstick used (EV/EBITDA or EV/revenue). In contrast with the broader M&A market, which saw multiples reset sharply in 2022 and begin to bounce back in 2023, PE deal multiples have struggled to find a bottom until recently. After shedding three full turns, from 13.3x in 2021 to 11.0x in 2023, EV/EBITDA multiples are on the move in 2024, rising to 12.8x on a trailing 12-month (TTM) basis and recouping more than half of their peak-to-trough losses. The same cannot be said of revenue multiples, however, which continue to move sideways at best with US multiples inching up to 2.0x from 1.7x but European multiples continuing to slide. We look at the two regions on a combined basis for better sample size and remove the bias toward large take-privates that the US-only data can have (Europe has better disclosure requirements for private companies above a certain size). Still, despite this mixed picture, the evidence is clear: Valuations are slowly

on the mend, which stands to reason given the full recovery of public equities to their all-time high and, more recently, a catch-up rally in the small-cap sector of the market.

While we do not believe the much-feared valuation reset is in the cards, we do believe the uptrend in EBITDA multiples will be disrupted as deal volumes expand, especially among PE owners selling to other PE firms. While PE exit volumes have stopped declining, they are still only marginally above the “old normal” levels that preceded the pandemic from 2017 to 2019. Meanwhile, there are more than 11,567 US companies owned by PE firms, 36% of which have been held for five years or more. We believe that as deal activity broadens, it will inevitably include lesser-quality companies. Our sense is that revenue multiples are still low, and EBITDA multiples are rising due to sellers bringing more attractive assets to the market. They may have lower margins but faster EBITDA growth rates. As higher-margin companies are brought to the market with slower EBITDA growth rates, we believe multiples will be held in check.

A WORD FROM RAMP

Finance ops automation: The importance of leveraging finance automation to support private equity value creation strategies

The private equity market has faced significant pressure in recent years due to high interest rates and limited exit opportunities. While deal activity has picked up and the Fed's recent rate cut has sparked renewed optimism, PE firms remain focused on driving real value creation through their operating teams.

Ramp's Head of Private Equity Partnerships, Sam Buck, and Ramp's PE advisor, Guy Cartwright share their thoughts on why finance automation tools like Ramp should form a part of a private-equity-backed portfolio's tech stack and support their value creation strategies.

Ramp now has more than 30,000 companies using its corporate credit card and spend management platform, handling billions of dollars in transaction data each month.

What are some key spending trends and insights that you are seeing across the small-to-medium-sized businesses (SMBs) and middle market companies?

At Ramp, we are dedicated to helping America's small and medium-sized businesses run more efficiently. Our all-in-one finance automation platform is designed to streamline operations and drive better financial management for companies across various industries—from financial services and healthcare to technology, professional services, and non-profits. This gives us a front-row seat to observe spending patterns and where businesses are tightening their belts.

Recently, we have noticed small SMBs leading the way in percentage increases in spending, while mid-market companies are showing the largest dollar growth. However, toward the end of the quarter, we started to see a bit of caution. For instance, advertising budgets dropped by about 5%, and there was a decrease in recurring spend across several categories.

One trend that is hard to miss? Companies are putting more money into AI. OpenAI and Anthropic have emerged as new vendors on our platform. On top of that, freelance platforms such as Upwork have seen more activity as businesses lean into flexible labor over hiring full time. Cloud computing and AI-driven solutions are major priorities as businesses

**Sam Buck**

Head of Financial Partnerships

Sam leads the PE practice at Ramp and oversees all financial partnerships. Previously, Sam was the Chief of Staff to Ramp CEO/Co-Founder Eric Glyman. He scaled Ramp's go-to-market function as the company has grown annual revenue 100x. Sam began his career in

investment banking at Goldman Sachs in New York, covering TMT and industrials sectors. [Meet with Sam to learn more.](#)

**Guy Cartwright**

PE Advisor

Guy is a senior executive, board member, and former PE operating partner, currently advising Ramp. In his career he has focused on growth, transformations, and turnarounds at global companies, with notable operations leadership roles at West Monroe, Ingram

Micro, Asurion, TowerBrook Capital Partners, and as CFO at Juul Labs. [Meet with Guy to learn more.](#)

aim to boost productivity and efficiency without expanding their workforce. We are also seeing a shift in the types of investments companies are making—prepaid services and larger AI contracts are on the rise. It is no longer about experimenting with AI; it is now a core part of their operations.

While businesses are cautious due to economic uncertainties, they are still strategically investing in technologies to streamline operations. We are seeing this across the board, including with our PE partners and their portfolio companies.

How has the macroeconomic environment impacted PE firms to lean into investing in technology to help support value creation?

Private equity firms have faced their share of challenges in recent years: rising interest rates, inflation, slower deal activity, and fewer exit opportunities. On top of that, supply chain issues and geopolitical tensions have made it difficult

to plan for exits, whether through IPOs or strategic sales. But with the Federal Reserve (Fed) cutting interest rates by 50 basis points and signaling the potential for further rate cuts for the rest of 2024, there's renewed optimism in the market. Still, PE firms are taking lessons from these tougher years, and the main takeaway has been the importance of real value creation.

As a result, PE firms are focusing heavily on operational improvements. PE operating teams have become essential for navigating uncertain exit opportunities, helping drive sustainable growth as conditions improve. We are seeing strategies such as buy-and-build and roll-ups continue to be effective for consolidation and expansion. PE firms are also doubling down on automation tools and generative AI to boost efficiency and decision-making, not just for themselves but across their portfolio companies. This focus on tech and automation is helping them enhance operations and support growth.

How can PE firms leverage automation tools to manage costs more effectively across their portfolio companies and support their CFOs and finance leaders?

For CFOs, having access to accurate, timely, and reliable data is everything. It drives better decision-making across all areas of the business. That is why investing in automation technology has become crucial for private equity firms and their portfolio companies. By automating financial operations, firms can cut down on human error and allow finance teams to focus on higher-value tasks. Processes such as transaction matching, reimbursements, reporting, and compliance can all be streamlined with automation, which means greater efficiency and, ultimately, long-term growth.

Finance automation tools that integrate into portfolio company tech stacks can also leverage machine learning to offer deeper insights into financials and capital allocation. This allows teams to quickly spot cost-cutting opportunities and create savings, speeding up value creation. For private-equity-backed CFOs, automated workflows have become almost a necessity for faster, more accurate financial reporting, which, in turn, gives PE owners more time to focus on strategic projects such as add-ons, spin-offs, and growth initiatives.

How is Ramp uniquely positioned to partner with PE firms? What are the most pressing challenges that Ramp helps them solve?

Ramp's strength lies in its all-in-one platform, combining corporate credit cards, accounting automation, expense and travel management, accounts payable, and procurement.

This gives portfolio finance leaders deep visibility into spend across their portfolios while providing powerful expense policy controls and automated workflows. Ramp's real-time spending insights, savings recommendations, and multi-entity support directly help portfolio companies cut costs and boost profitability. The average Ramp customer closes its books eight times faster and saves 5% on card spend.

We have also developed a tailored PE console, offering PE operators a comprehensive view of their entire portfolio's spending across categories, merchants, and individual companies. This console helps firms spot opportunities for vendor consolidation, contract renegotiation, and savings by using transaction data and Ramp's price intelligence tool. With insights from more than 30,000 companies on Ramp, we provide an unmatched perspective on how portfolios compare to broader SMBs and mid-market spending patterns.

Could you share some examples of successful Ramp partnerships with PE firms?

Many of our private equity partners have seen some pretty amazing results by switching to Ramp. For instance, one firm was able to cut more than \$1 million in annual costs by consolidating three different spend management vendors into one platform with us. Another group streamlined everything from approval workflows to credit control and onboarding for their portfolio companies, which saved their finance teams a ton of time and made managing expenses much easier.

Our accounts payable product has also been a game-changer for several partners. Our PE partners have saved up to \$300,000 a year, and they have sped up their bookkeeping by using automated receipt tagging, which means fewer errors and faster reconciliation.

We have firms managing 50 of their portfolio companies on Ramp, and our platform makes it easy to give each portfolio company custom credit limits, centralize financial processes, and simplify things such as onboarding and offboarding companies during acquisitions or exits. It is all about making their lives easier and more efficient.

These are just a few examples of how PE firms are using Ramp to save money, improve financial control, and streamline operations across their portfolios. We are proud to be a trusted partner in helping them create real value.

[You can learn more about Ramp's PE partnerships here.](#)

Automate finance operations for your portfolio companies.

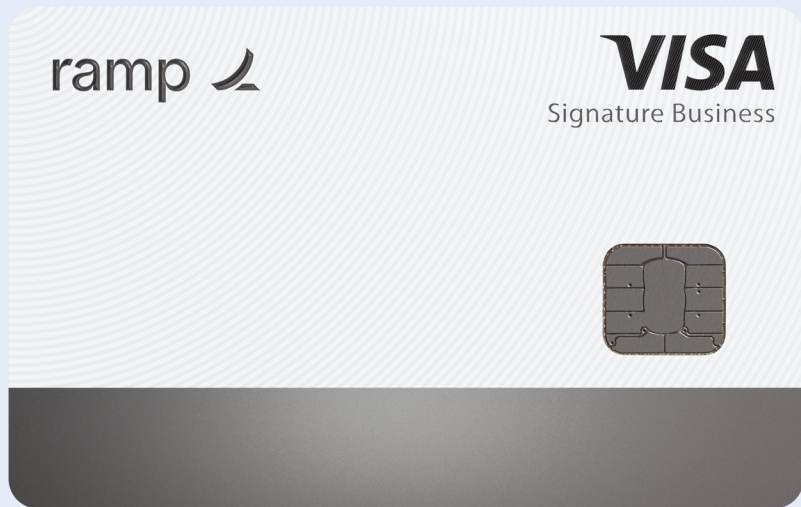


Reduce operating expenses and drive efficiencies with real-time spend visibility and AI-powered insights. Automate all finance operations, all in one platform.

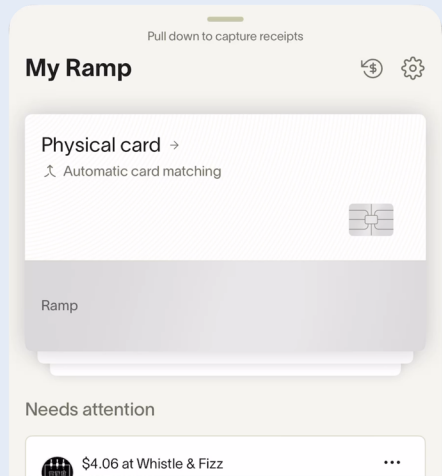
Save time and money with Ramp.

ramp.com/pe-partnerships

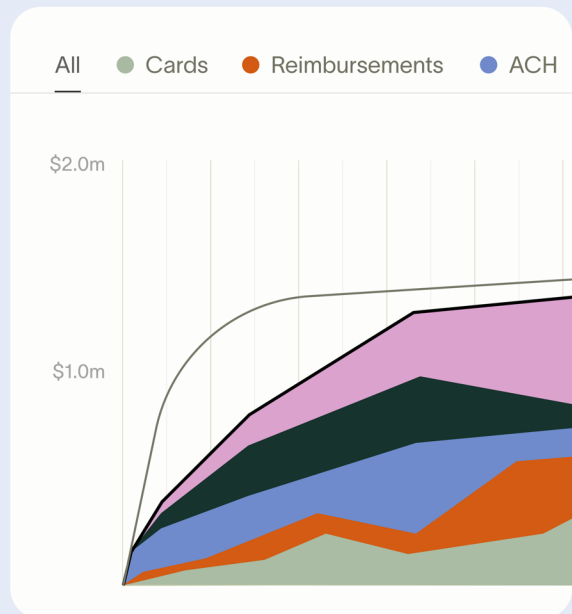
- Corporate Cards
- Expense Management
- Travel Management
- Accounts Payable
- Procurement



\$63.23
↓
¥8,973



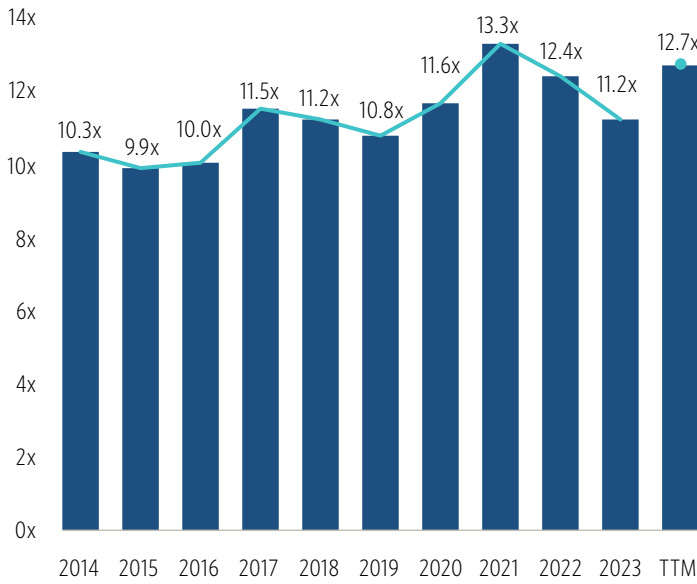
UPS \$331
Auto-coding...



Leah Reimbursed

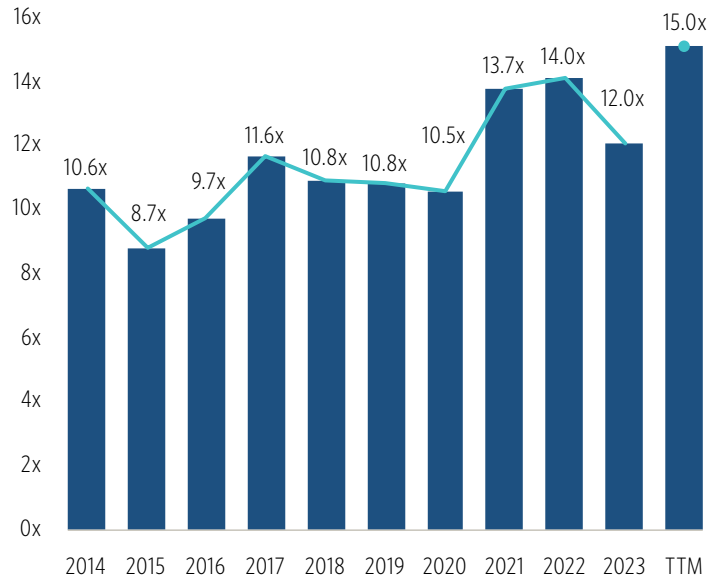
Deal valuation metrics

Global PE EV/EBITDA multiples



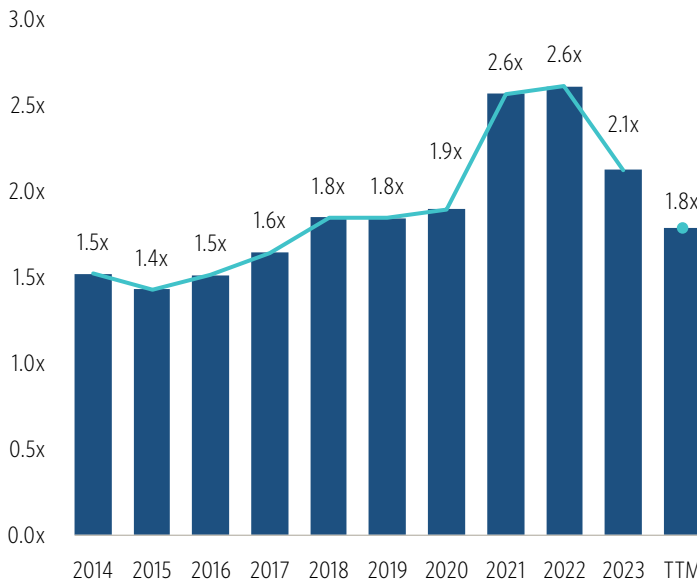
Source: PitchBook • Geography: North America and Europe
As of September 30, 2024

US PE EV/EBITDA multiples



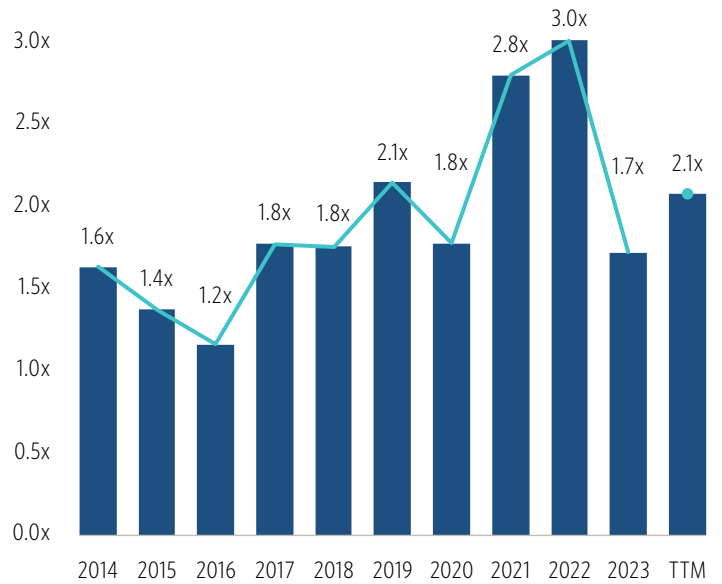
Source: PitchBook • Geography: US • As of September 30, 2024

Global PE EV/revenue multiples



Source: PitchBook • Geography: North America and Europe
As of September 30, 2024

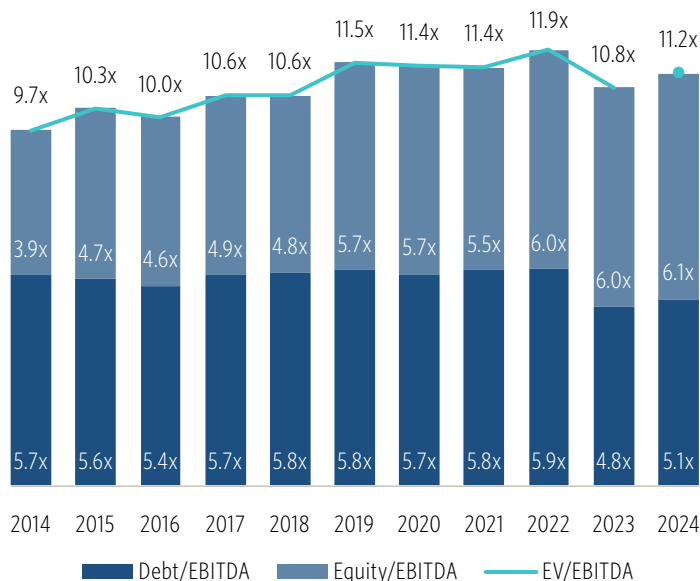
US PE EV/revenue multiples



Source: PitchBook • Geography: US • As of September 30, 2024

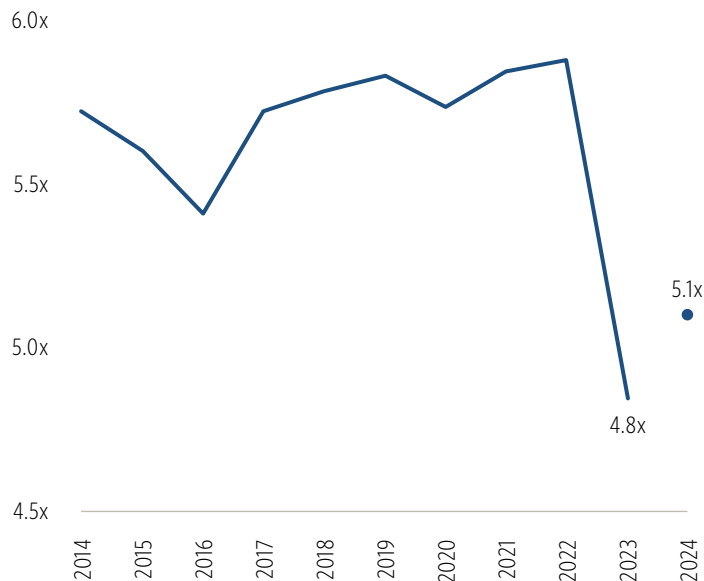
Deal financing metrics

Multiples on BSL-funded deals



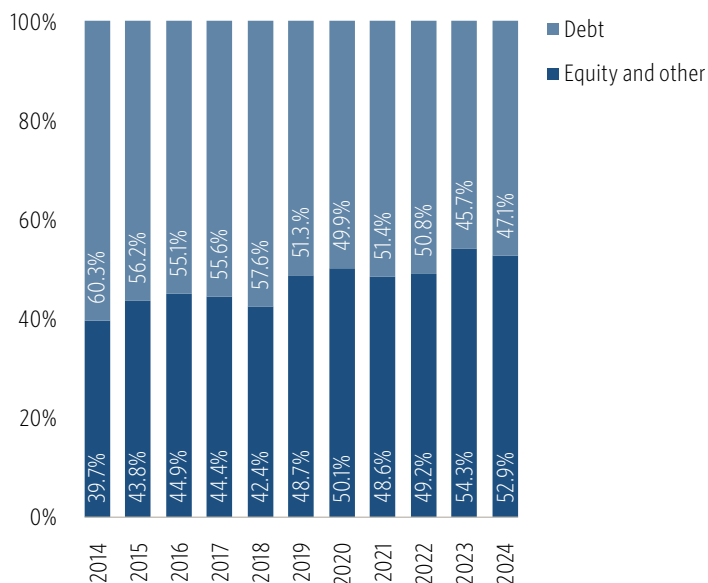
Source: PitchBook | LCD • Geography: US • As of September 30, 2024

Debt/EBITDA multiple on BSL-funded deals



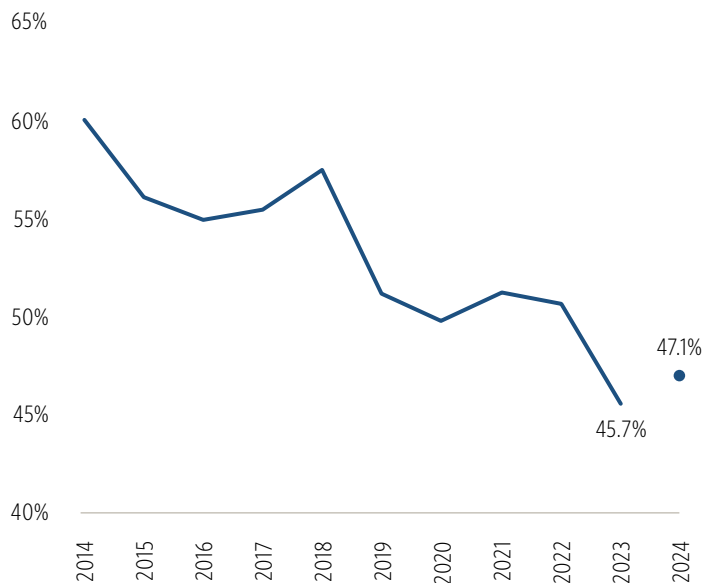
Source: PitchBook | LCD • Geography: US • As of September 30, 2024

Share of BSL-funded deal value by source



Source: PitchBook | LCD • Geography: US • As of September 30, 2024

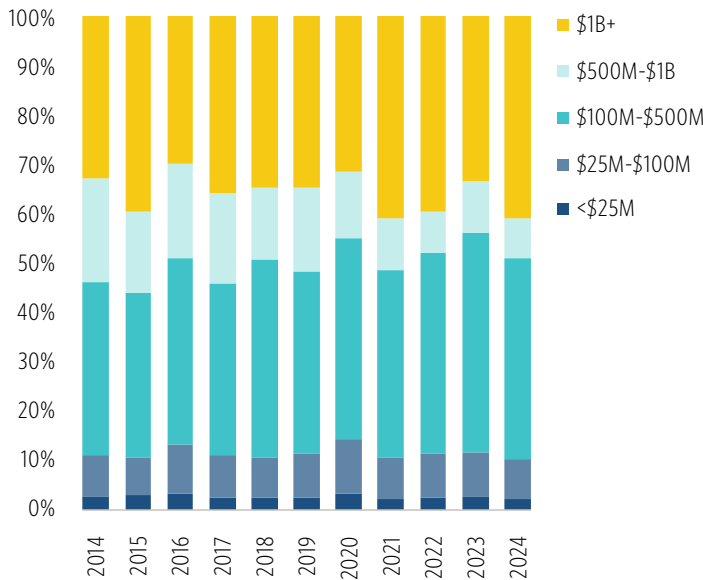
Debt/EV ratio on BSL-funded deals



Source: PitchBook | LCD • Geography: US • As of September 30, 2024

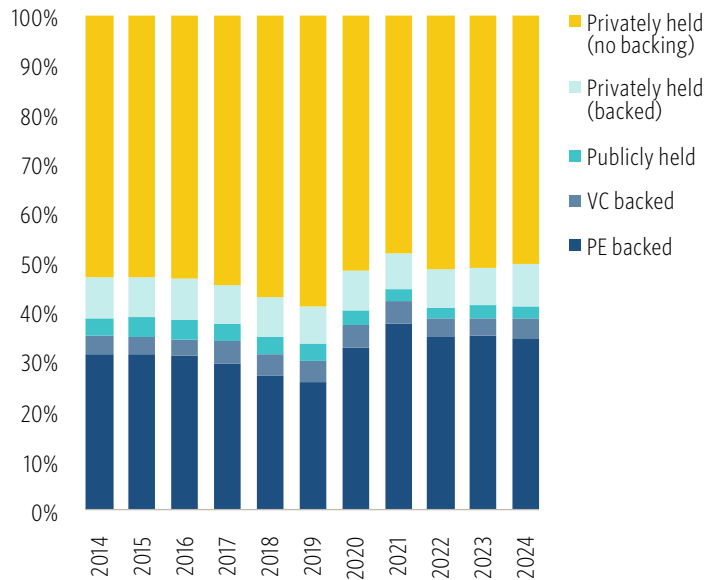
Deals by size, backing type, and sector

Share of PE deal value by size bucket



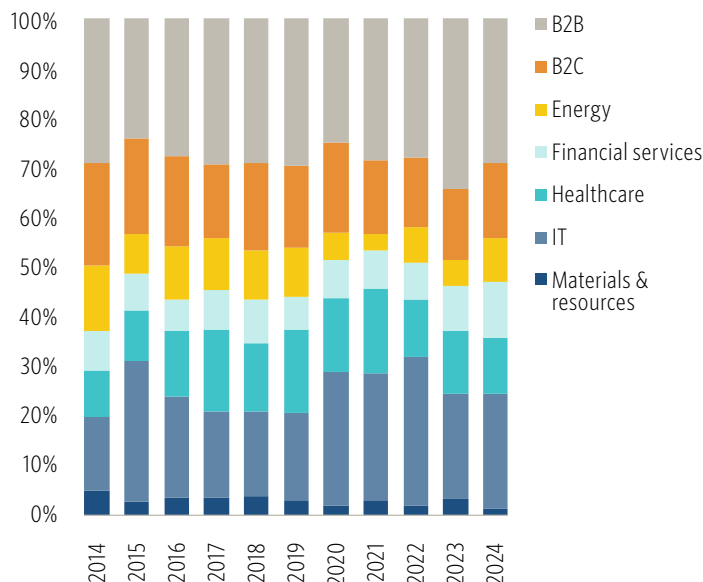
Source: PitchBook • Geography: US • As of September 30, 2024

Share of PE deal count by backing type



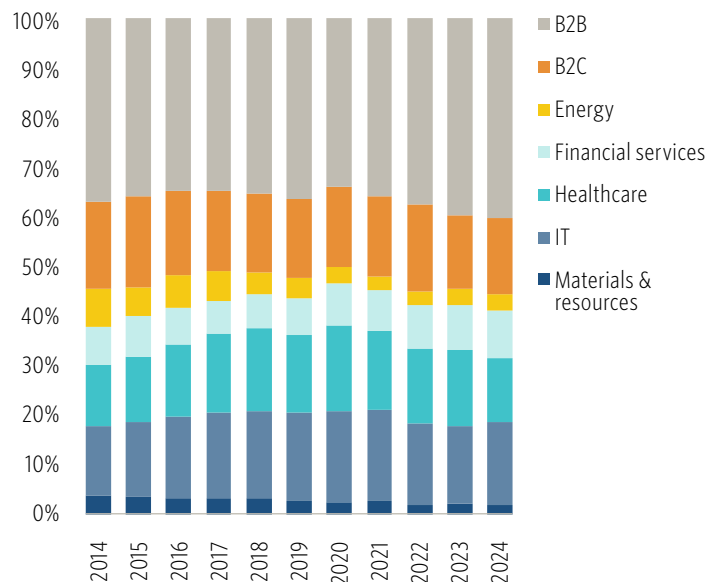
Source: PitchBook • Geography: US • As of September 30, 2024

Share of PE deal value by sector



Source: PitchBook • Geography: US • As of September 30, 2024

Share of PE deal count by sector



Source: PitchBook • Geography: US • As of September 30, 2024

SPOTLIGHT

LBO loan update: Leverage creeps up, high demand signals dealmaking potential

LBO transaction activity by quarter



Source: PitchBook | LCD • Geography: US • As of June 30, 2024

Note: This spotlight is abridged from our LCD credit news article [LBO update: Leverage creeps up, high demand signals dealmaking potential](#). Please read the full article for additional analysis on the leveraged buyout market.

Momentum for a recovery in LBO loan activity slowed in the second quarter as higher entry multiples coupled with a historically high cost of debt funding limited the playbook for private equity value creation.

While the standoff in exit activity continues to slow the redeployment of capital, [sentiment indicators](#) and [record levels of demand](#) from investors point to a favorable backdrop for the return of dealmaking.

At the year's halfway mark, the key highlights of LCD's analysis of the credit stats of LBO deals clearing the BSL market are as follows: (1) yields on new LBO loans fell from 2023 highs; (2)

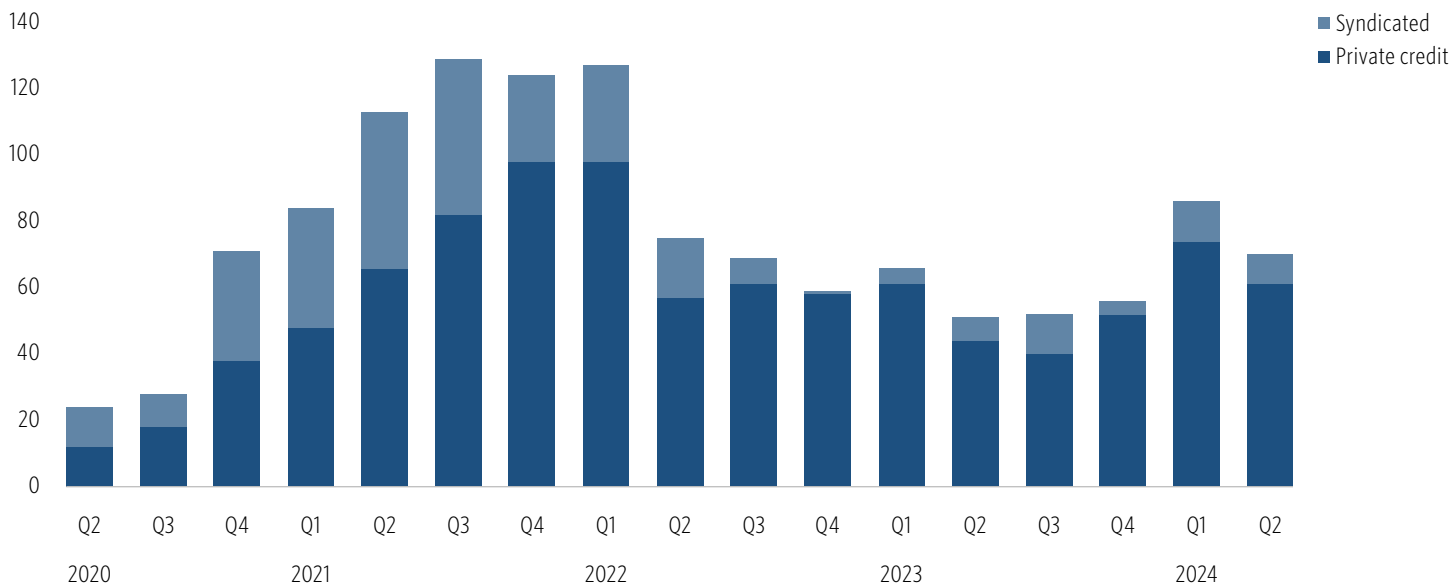
loan issuance funded sponsor dividends at a record pace; and (3) amid higher rates, interest coverage remained below 3x.

Private equity sponsors tapped \$36 billion of funding for LBO transactions in the syndicated loan market during the second quarter, down from roughly \$45 billion in the previous quarter and 31% lower than in Q2 2023. On a year-over-year comparison, H1 2024 volume was \$81 billion, up from \$76 billion in H1 2023.

Activity to finance LBO deals fell well short of the \$98 billion in Q1 2022, before rate hikes kicked in. For reference, the average LBO transaction value per quarter stood at \$50 billion in the 10 years through 2021, including an average of \$64 billion per quarter between 2017 and 2021.

Demonstrating the depth of demand for sponsors willing to tap debt markets in the higher-rate environment, UK-based

Count of LBOs financed in BSL and private credit markets



Source: PitchBook | LCD • Geography: US • As of June 30, 2024

[Darktrace](#) (B-/B3/B) helped bolster the LBO figures for July with its \$1.7 billion first-lien and \$410 million second-lien term loans. The loans back Thoma Bravo’s take-private buyout of the cybersecurity firm for roughly \$5.3 billion.

In the shifting sands between broad syndication and private credit, nearly 90% of Q2 transactions funded in the latter market, maintaining the dominance of private credit financing when measured by deal count.

With the expansion of direct lending that historically has focused on smaller deals, LCD data shows a clear reduction in smaller LBO transactions within broadly syndicated markets.

In 2019, 62% of all BSL deals supporting buyouts funded transactions of at least \$1 billion, based on total debt and equity, up from 49% in 2018. By 2023, this share had risen to a record 84%, and it swelled again in H1 2024 to 86%.

Flipping that analysis, nearly 40% of BSL-funded buyouts in 2019 were for less than \$1 billion, and so far this year, less than 15% are for transaction sizes of less than \$1 billion.

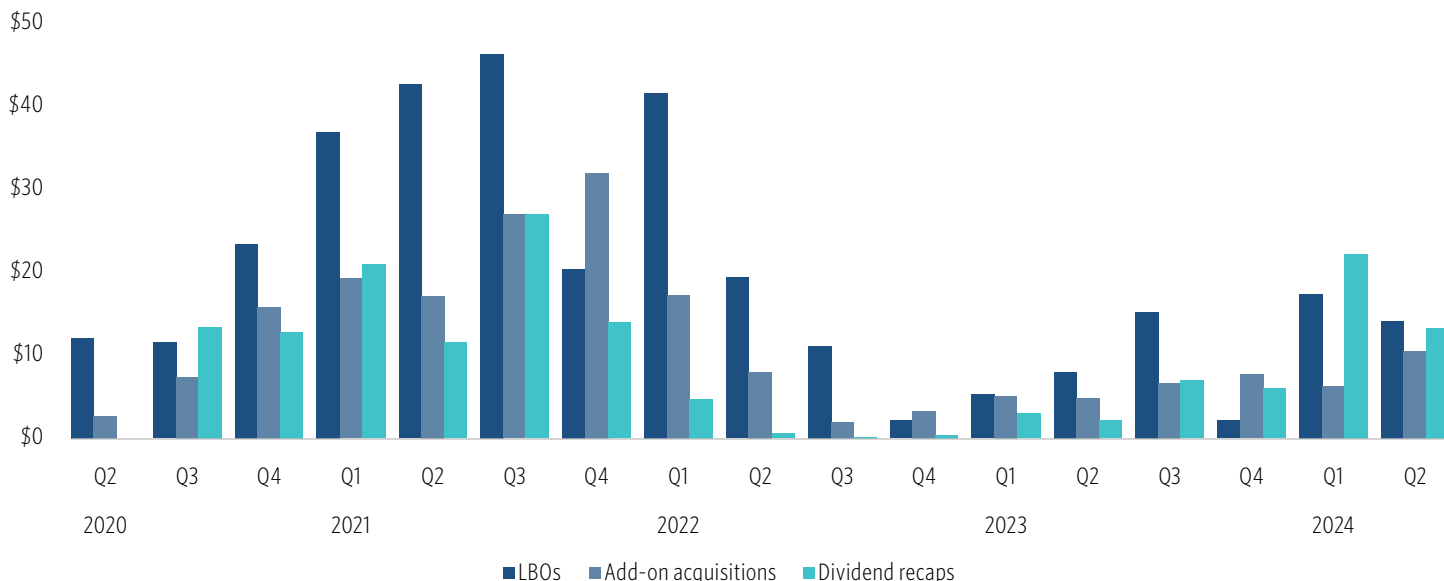
Given the challenging exit environment limiting the ability of private equity firms to realize profits from portfolio sales, sponsors have looked to extract dividends instead.

The first half of 2024 brought a heady pace of loan issuance to fund dividends. A total of \$35 billion of institutional loan issuance funded dividend recapitalizations in the first half of the year, outpacing the same period in 2021, a record-setting year for dividend issuance.

With the uptick in higher-quality credits clearing the market and a persistent net supply shortage, the average new LBO loan offered a spread of S+364 last quarter, the lowest quarterly reading since 2007 and down from S+388 in the first quarter. The cost of funding over the base rate has fallen 170 basis points from Q3 2022, when it reached a 10-year high of 534 basis points.

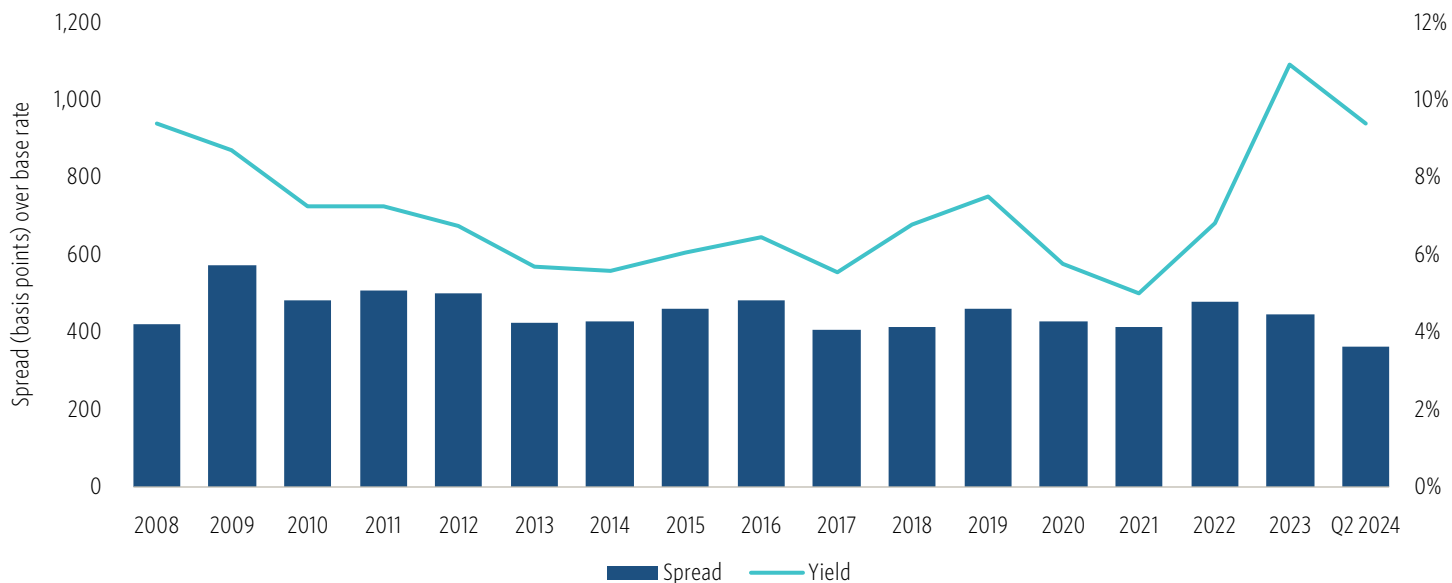
Furthermore, the original issue discount (OID) offered to par improved slightly in the borrower’s favor to 99.4 from 99.2 in the first quarter, demonstrating a normalization of markets versus OIDs in the 96% area in 2023 and 2022.

Institutional loan value (\$B) for PE-backed borrowers by type



Source: PitchBook | LCD • Geography: US • As of June 30, 2024

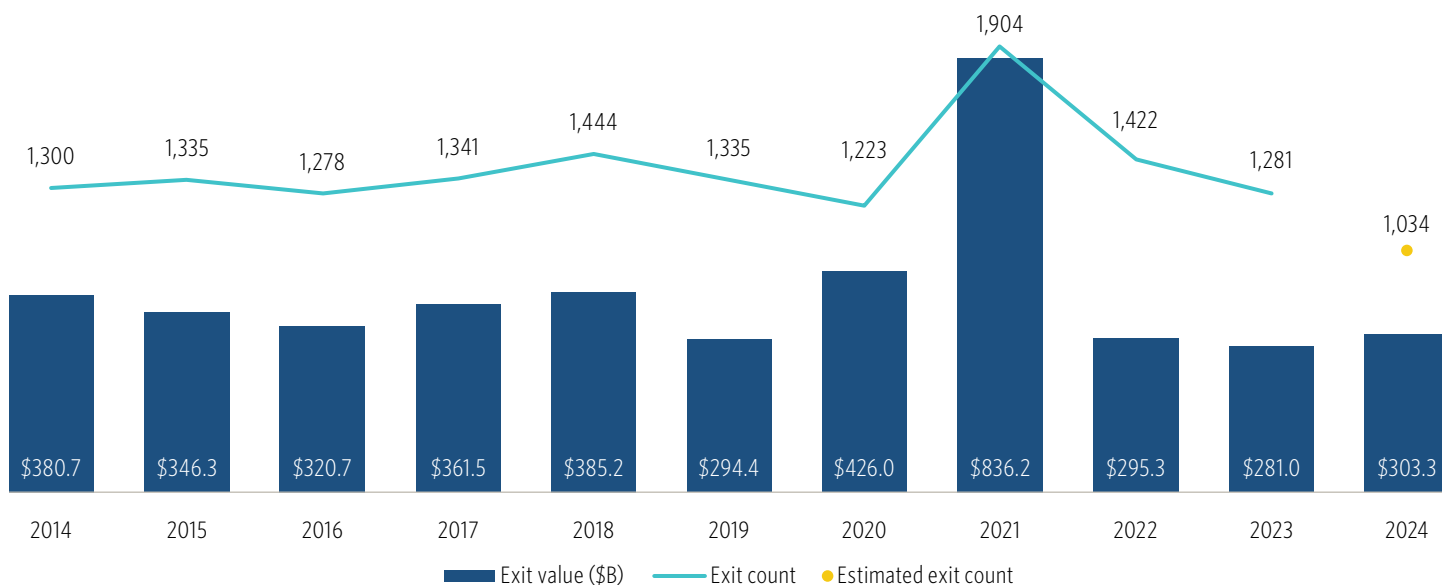
LBO institutional spread and yield to maturity



Source: PitchBook | LCD • Geography: US • As of June 30, 2024

Exits

PE exit activity



Source: PitchBook • Geography: US • As of September 30, 2024

Overview

After exit activity was cut by two-thirds since the peak in 2021, the decline appears to be washed-out at this point. Through Q3 2024, exit value has rebounded by 50.5% YoY. Still, exit count remains uncomfortably thin and flat compared with the prior year on an annualized basis. Exits have been chunkier this year, owing to larger M&A exits to corporate buyers and 11 IPO exits, such as the public listing of Viking River Cruises, which valued the company at \$10.1 billion. Excluding the boom years of 2020 and 2021, which we view as more of an aberration, exit value is headed for its highest total since 2018, or \$396 billion, but with 66 fewer deals. This reflects the trend we have observed of PE sellers bringing their highest-quality assets to market to secure favorable exits while holding off on the rest of their portfolios during a strained market period. At the same time, US PE inventory has swelled by 2,432 companies since 2018 to 11,567 total by Q2 2024. This translates to an eight-year inventory at the currently observed pace of 1,378 exits per year. This shows that while the rebound in exit value is encouraging, significant acceleration is needed to make up for lost time.

With an estimated 394 exits for an aggregate of \$107.1 billion in Q3, exit activity appears to be on an upward curve into recovery. Both exit count and exit value saw QoQ growth and much greater improvement on a YoY basis. While this is a positive sign for exit recovery, the continued imbalance between exits and dealmaking shows that the PE industry is not out of the woods yet. The exit/investment ratio has yet to improve as deal activity marches ahead relative to exit activity thanks to an uptick in LBO transactions. The median exit value continues to push upward, but this is largely driven by the impressive but few IPOs that occurred this year. Nearly \$300 billion of an exit gap remains for the PE industry to try to fill.

Exits to public markets

The “Completed PE-backed IPOs in 2024” table highlights PE-backed IPOs on major US exchanges this year, showcasing a resurgence in market activity. After a subdued 2023, which saw just \$8.7 billion in IPO exits—significantly lower than the 2021 peak of \$295.8 billion and the pre-pandemic average of \$45.1 billion—2024 is shaping up to be markedly better. To date,

PE exit activity by quarter



Source: PitchBook • Geography: US • As of September 30, 2024

there has been \$25.6 billion in IPO exits, raising \$5.7 billion in capital. The third quarter saw five exits via IPO. Notable IPOs include that of Ardent Health, brought to market by Equity Group Investments and detailed in the healthcare exits section that follows. Other PE-backed public listings included KKR-backed financial software maker OneStream, raising \$490 million and valuing the company at \$4.6 billion in its July listing, and Oaktree Capital Management-backed BKV Corporation, which raised \$270 million at a \$1.5 billion valuation in its September listing.

Share price performance for 2024 has also been robust, with median returns of 43.9% and mean returns of 29.7%. Strong public markets and improved macroeconomic stability in 2024 have supported relative valuation analyses, and we anticipate better activity in the coming quarters with a tailwind from lower interest rates.

Sponsor-to-sponsor exits

Sponsor-to-sponsor exits were the only exit type that experienced QoQ growth in exit value, creating a rare break from the trend we have been seeing of exits to corporates leading PE exit activity. With 133 exits for an aggregate of \$42 billion during the quarter, sponsor-to-sponsor exits accounted for 51.1% of Q3 PE exit value when excluding public listings compared with 47.4% in Q2, flipping the balance between sponsor-led and corporate-led exits for the first time since Q3 2023. They also accounted for 55.6% of Q3 exit count when excluding public listings. PE firms have struggled to pass their assets to other GPs in the past two years, but Q3 showed encouraging progress, with exit value surpassing the pre-pandemic average for the first time in nine quarters. Although we can surmise the uptick in platform LBO activity helped

Notable continuation-fund-related exits YTD

Announcement date	Exited companies	Exiting funds	Deal value (\$M)
September 17	Medix Biochemica	DevCo Partners	\$685.0
August 29	Fast Lean Smart	MBO+	\$143.0
August 13	Tacala	Altamont Capital Partners	\$512.5
August 6	Saferoad Group, Nordio	FSN Capital	\$639.3
July 25	SPATCO Energy Solutions	Kian Capital	\$230.0
July 22	Horsburgh & Scott	ONCAP	\$100.0
June 10	Aspenleaf Energy	Equip Capital	\$73.2
May 24	Cloud Software Group	Vista Equity Partners	\$2,000.0
May 20	SummitIG	SDC Digital Infrastructure Opportunity Fund II	\$650.0
May 10	CFS Brands, Gulfstream Services, Odyssey Logistics & Technology, Vantage Specialty Chemicals, Young Innovations	The Jordan Company Resolute Funds	\$1,500.0
April 16	Academia Gruppe, Certania	Greenpeak Fund II	\$350.0
March 25	Crown Laboratories, Hyland's Naturals	Hildred Capital Management	\$750.0
March 25	World 50	Morgan Stanley Capital Partners	\$700.0
March 18	Barentz	Cinven Fund VII	\$919.6
March 11	HG Energy	Quantum Energy Partners VI	\$1,600.0
February 20	Presto Brandsäkerhet, HVD Group	Adelis Equity Partners Fund II	\$430.0
February 14	Circana	Vestar Funds VII	\$1,200.0
February 5	Normec	Astorg Fund VII	\$1,000.0
January 29	Alterra Mountain Company	KSL Partners II	\$3,000.0
January 25	Zvoove, OneQrew	LEA Fund I	\$703.3

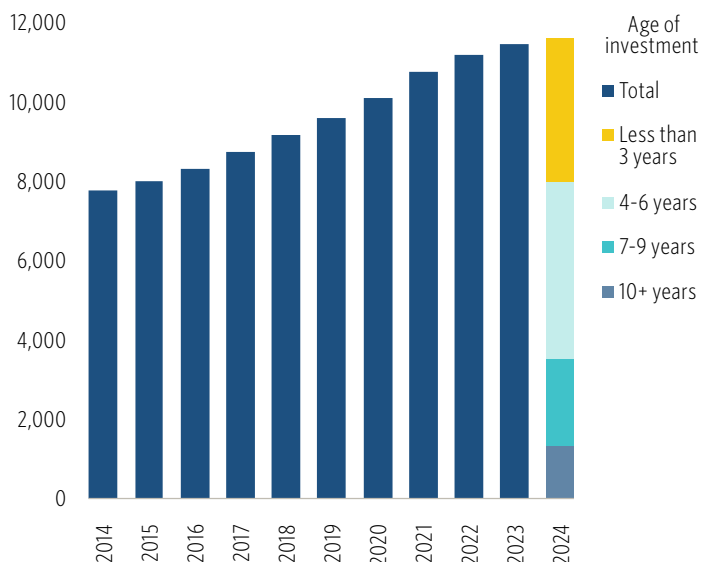
Source: PitchBook • Geography: North America and Europe • As of September 30, 2024

boost sale prices to other sponsors, it is too early to detect meaningful recovery in sponsor-to-sponsor exits, as quarterly exit count still remains 17.4% below pre-pandemic levels and as PE firms are still bogged down by their own aging portfolios.

Sponsor-to-sponsor exits made up three of the top five exits during the quarter and together totaled \$11.8 billion in exit

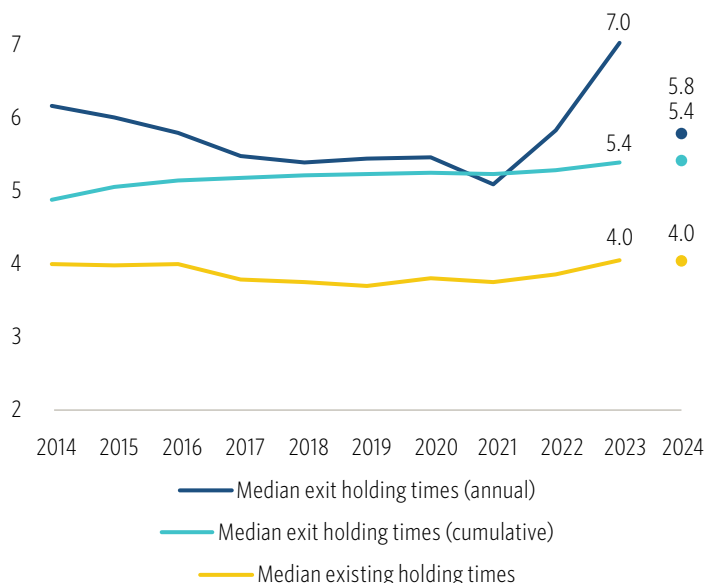
value. There were nine mega-exits during Q3 compared with just three in Q2, which drove the jump in exit value QoQ. The largest transaction was Bain Capital and Charlesbank Capital Partners' sale of Varsity Brands to KKR for \$4.8 billion. Varsity Brands is a team sports platform providing athletic programs, apparel, yearbooks, and more, and KKR plans to support the company's growth strategy in new markets and

PE-backed company inventory by deal year



Source: PitchBook • Geography: US • As of September 30, 2024

Median PE company holding times (years)



Source: PitchBook • Geography: Global • As of September 30, 2024

categories.¹³ Other mega-exits were primarily IT companies, which we discuss in the technology section that follows, and the rest were spread between energy, B2C, and B2B companies. Cogentrix Energy, for example, was announced to be sold by Carlyle to Quantum Capital Group for \$3 billion in August. Cogentrix Energy is an independent power producer that was first acquired by Carlyle in 2012 and has developed decarbonization objectives and expanded its platform since then.¹⁴ In what was stated as a “win-win transaction,” Cogentrix Energy will begin its next stage of growth with Quantum in a rapidly evolving US power market.¹⁵

Exits to corporates

Looking at the relative strength of the different exit types, exits to corporates had taken the lead in PE exit activity over the past several quarters but fell behind exits to sponsors in their share of both PE exit count and value for the first time since Q4 2021.

When excluding public listings, exits to corporates accounted for 44.4% of exit count and 48.9% of exit value in Q3. Even so, exits to corporates have shown faster recovery since the slowdown in exit activity. The average quarterly corporate-led exit value of the past 12 months surpassed the quarterly averages observed before the pandemic, while the average quarterly sponsor-led exit value seen in the past 12 months still sits around 17% below its pre-pandemic average.

The energy sector accounted for 10.4% of Q3 exit value, with the majority of sizable deals being exits to corporates. The largest was Global Infrastructure Partners’ \$2.6 billion exit of Medallion Midstream to ONEOK. The transaction helps ONEOK establish a fully integrated platform in the Permian Basin and reflects a larger trend toward consolidation in the oil & gas space. Similarly, Black Bay Energy Capital announced its sale of Piñon Midstream to Enterprise Products for \$950 million. The acquisition accelerates Enterprise’s entry into the

¹³: “KKR Completes Acquisition of Varsity Brands From Bain Capital and Charlesbank,” KKR, August 26, 2024.
¹⁴: “Quantum Capital Group to Acquire Cogentrix From Carlyle for \$3 Billion,” The Carlyle Group, August 5, 2024.
¹⁵: Ibid.

Completed PE-backed IPOs in 2024

Company	Lead PE backers	Deal date	Initial valuation (\$M)	Percentage change from IPO
Guardian Pharmacy Services	Bindley Capital Partners, Cardinal Equity Partners	September 26	\$869.3	20.0%
BKV Corporation	Oaktree Capital Management	September 26	\$1,514.3	1.6%
MBX Biosciences	Frazier Healthcare Partners, OrbiMed	September 13	\$534.1	62.4%
Innovex International	Amberjack Capital Partners	September 6	\$396.0	-4.6%
OneStream	Alkeon Capital Management, D1 Capital Partners, Goldman Sachs Growth Equity, KKR, Partners Fund Capital, Tidemark, Tiger Global Management	July 24	\$4,614.3	69.5%
Ardent Health	Equity Group Investments, Pure Health, Ventas	July 18	\$2,255.4	14.9%
Waystar Health	Bain Capital, CPP Investments, EQT, Ergo Partners, Francisco Partners	June 7	\$3,305.1	29.7%
Bowhead Specialty	American Family Insurance, Gallatin Point Capital	May 23	\$497.4	64.8%
Viking River Cruises	AustralianSuper, Capital A, CPP Investments, TPG, Viking Capital	May 1	\$9,657.0	45.4%
Loar Group	Abrams Capital Management	April 25	\$2,293.5	166.4%
BrightSpring Health Services	KKR, Walgreens Boots Alliance	January 26	\$2,225.5	12.9%

Source: PitchBook • Geography: US • As of September 30, 2024

Delaware Basin while complementing its existing midstream energy system.¹⁶ Also in Q3, Apollo exited Total Operations and Production Services, a gas compression system provider, to Archrock for \$983 million. Archrock is an energy infrastructure company focused on midstream natural gas compression and gains increased compression capacity and horsepower in the Permian Basin through the acquisition.¹⁷

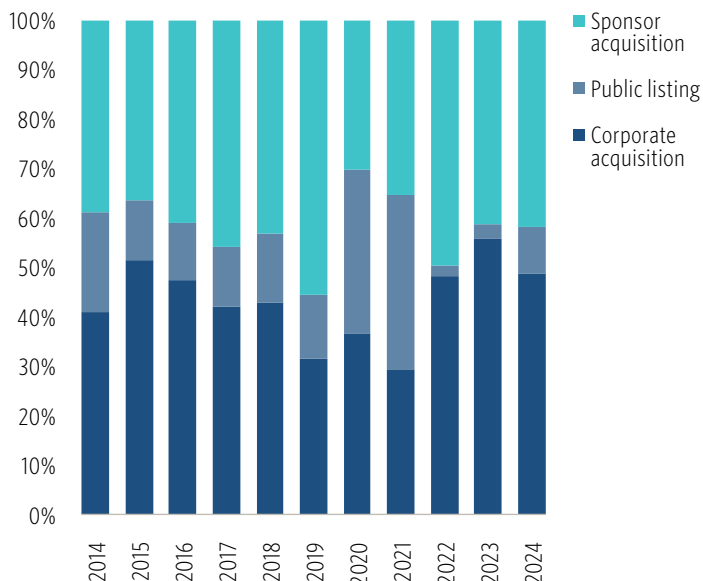
Exits to continuation funds

Exit activity is seemingly on the mend, but its slower recovery continues to pave the way for GPs to provide liquidity solutions by way of continuation funds, which allow GPs to extend exit timelines of maturing companies or to return capital to LPs without force-selling assets in a less favorable exit environment.

¹⁶: "Enterprise to Acquire Piñon Midstream," Enterprise Products, August 21, 2024.

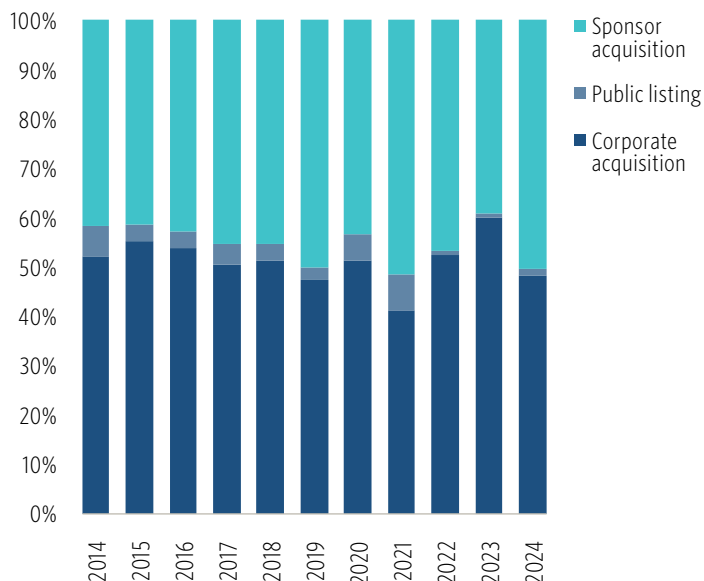
¹⁷: "Archrock to Acquire Total Operations and Production Services, LLC," Archrock, July 22, 2024.

Share of PE exit value by type



Source: PitchBook • Geography: US • As of September 30, 2024

Share of PE exit count by type



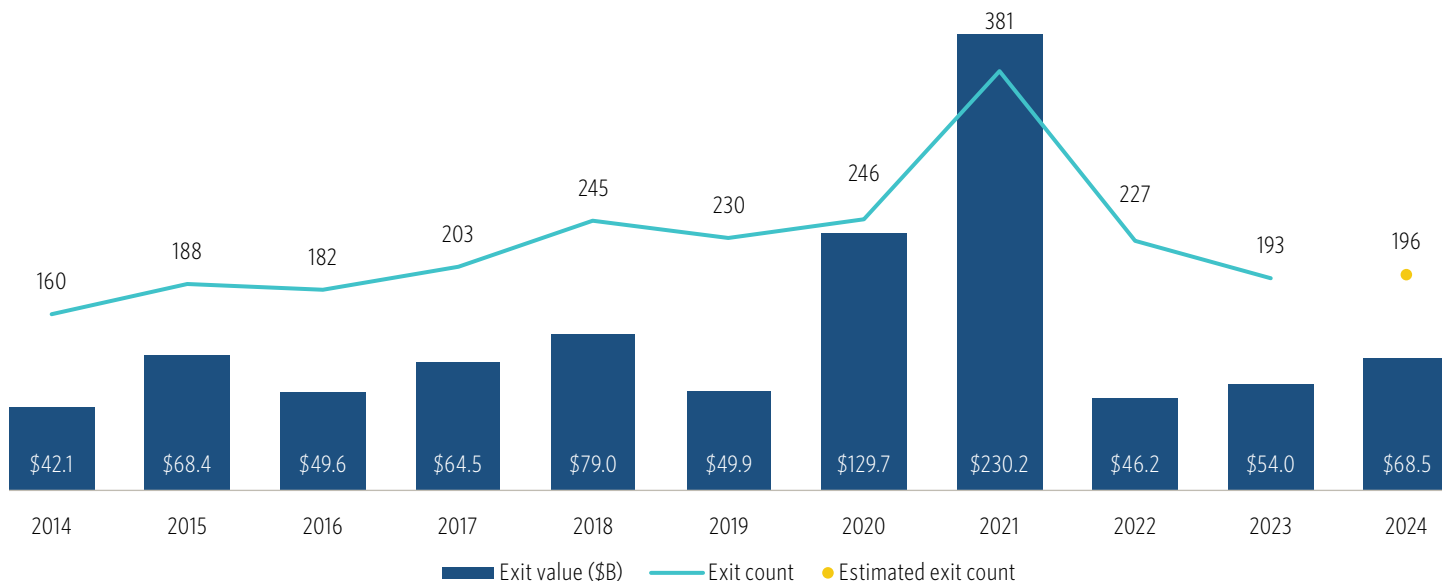
Source: PitchBook • Geography: US • As of September 30, 2024

PitchBook has tracked 82 exits through continuation funds in 2023, and 2024 is pacing to surpass that total and set a new record. Buoying this trend is the \$97.0 billion raised in global secondaries strategies through the first half of 2024, up 66.4% YoY.¹⁸ Through the first nine months of 2024, we have tracked 69 exits into continuation funds, well ahead of the 51 exits in the first nine months of 2023. During the third quarter, six deals were fully disclosed for an aggregate value of \$1.8 billion, and two

deals reported only the total capital raised for their respective multiasset continuation fund. It is also unknown how much of the reported capital represents new money contributions by secondary investors as opposed to existing investors rolling over and receiving new fund interests. The largest continuation-fund-related exit in Q3 belonged to a single-asset continuation vehicle by DevCo Partners for Medix Biochemica for \$685 million.

18: For more secondaries analysis, please refer to our [Q2 2024 Global Private Market Fundraising Report](#).

Technology PE exit activity



Source: PitchBook • Geography: US • As of September 30, 2024

Technology

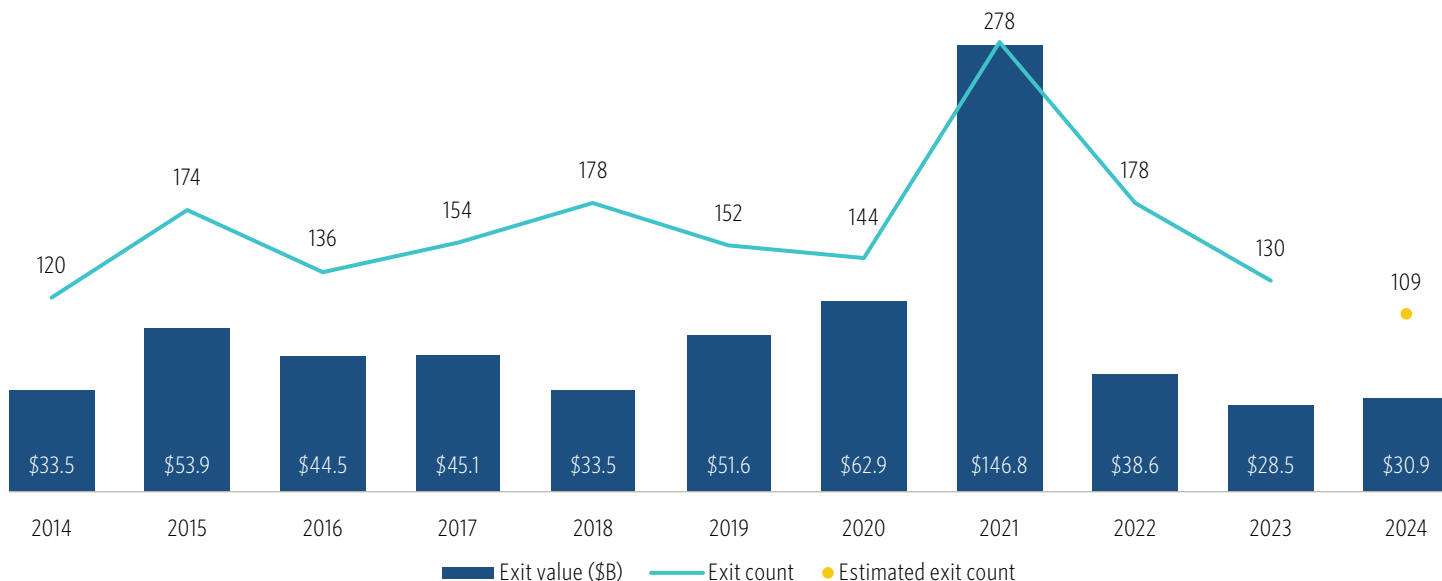
PE exit activity in the technology sector demonstrated exceptional strength, outpacing other sectors. In 2024 YTD there have been 196 exits generating a total of \$68.5 billion. Q3 drove the strength and accounted for 38.2% of the total PE exit count. This performance was notably strong, surpassing the five-year quarterly average share of PE exit count by 1,700 basis points. Moreover, exit value has increased in the sector for four consecutive quarters, with the two most recent quarters outpacing the pre-pandemic quarterly average of \$16.1 billion. YTD, the technology sector has accounted for 25% of all PE exit value, well above the average of 17.4% seen over the past two years and more in line with the five-year average of 22%. The technology industry seems to be recovering faster than the broader PE universe, which we see as an encouraging sign for the sector in the quarters ahead.

PE buyers were well represented among the buyers list, supporting our view that a better dealmaking environment is afoot. In July, Indiana-based Metronet—a provider of fiber-optic telecommunications services across 17 states—agreed to sell to a joint venture led by KKR and T-Mobile for \$4.9 billion.¹⁹ In August, Epicor Software—a developer of software for a range of business planning and management functions—announced that CVC agreed to acquire a significant ownership position for \$4 billion. Also in August, JAGGAER—offering a procurement and supply chain management software platform—agreed to be acquired by Vista Equity Partners for an estimated \$3 billion, supported by an estimated \$1.2 billion of debt financing.²⁰

¹⁹: "Oak Hill and Cinelli Family to Sell Metronet to KKR and T-Mobile Joint Venture," Metronet, July 24, 2024.

²⁰: "Vista Equity Partners Acquires JAGGAER," Business Wire, Vista Equity Partners, August 13, 2024.

Healthcare PE exit activity



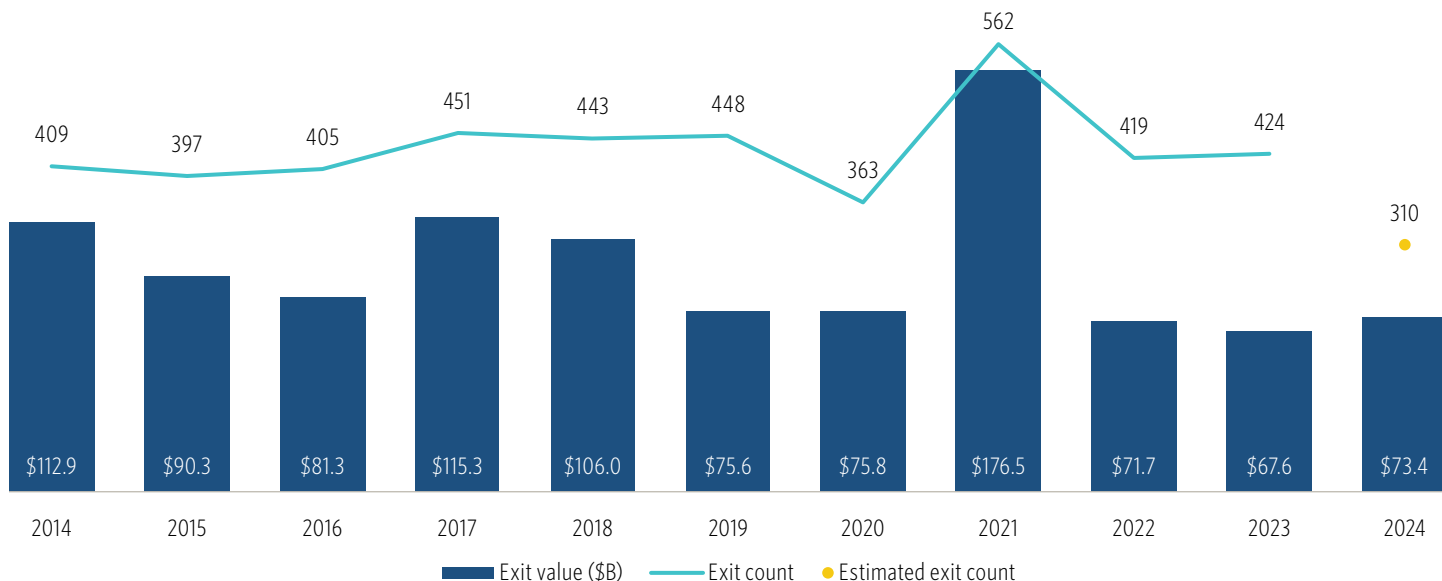
Source: PitchBook • Geography: US • As of September 30, 2024

Healthcare

Healthcare exits saw significant improvement in Q3, with an 148.0% increase in exit value and a 144.5% increase in exit count QoQ on an estimated basis. Healthcare’s share of the quarter’s total PE exit count experienced meaningful recovery in Q3, representing 13.8% compared with 8% in Q2 and surpassing its five-year quarterly average by a little under 200 basis points. The sector’s share of total PE exit value improved 7.8% QoQ but fell short of the five-year average, reflecting the drag caused by PE sellers having faced limited exit opportunities for larger assets.

There were three exits via public listings for the healthcare sector in Q3, with the largest being PE-backed Ardent Health. Valued at \$2.1 billion, Ardent Health was the fourth-largest private for-profit healthcare provider and is majority owned by Equity Group Investments. Other notable healthcare exits during the quarter include the sale of Rotech Healthcare to Owens & Minor for \$1.4 billion. The home medical equipment company had initially planned on a public listing in 2021 but abandoned the plan in 2022. The acquisition by Owens & Minor aligns with its plans to use inorganic growth strategies to achieve its sales goal and expand into adjacent products and services.

Industrials PE exit activity



Source: PitchBook • Geography: US • As of September 30, 2024

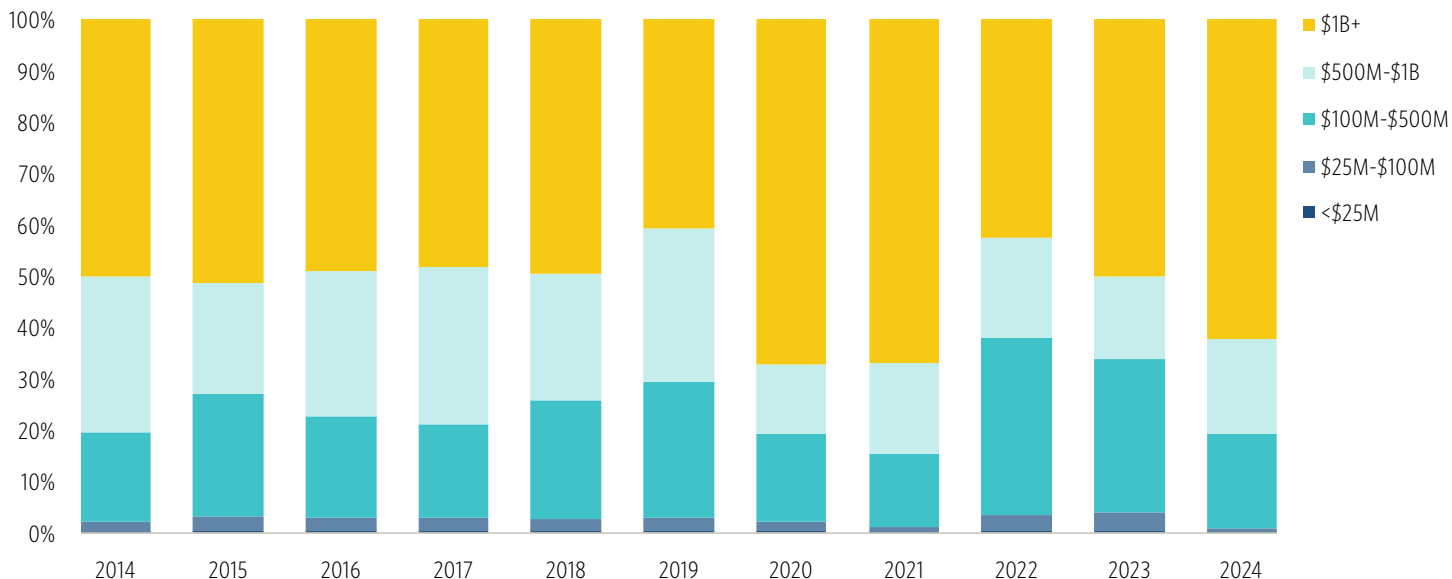
Industrials

Industrials PE exit count is tracking lower in the first nine months of 2024 compared with prior years, while exit value is tracking above the past couple of years, indicating that the value of exits is rising. Thus far, the sector has seen an estimated 310 exits for a cumulative exit value of \$73.4 billion, compared with 424 exits for a cumulative exit value of \$67.6 billion for all of 2023. As a percentage of total PE exits, industrials exit value was at 24.2% in the first nine months of the year, up from the five-year average of 22.6%, another sign that exit values on recent transactions have risen. We expect exit values to continue to rise over time as industrials-focused PE firms look at bigger, higher-quality deals and are likely to benefit from better financing availability for larger-scale deals. The rising size of deals also points to strong investor appetite in the industrials sector, which is benefiting from a strong pool of candidates with stable cash flows, the ability to add tech or AI to improve margin profiles, and good opportunities for roll-ups and carveouts.

Among some of the larger recent exits, we highlight [StandardAero, which filed for an IPO on September 6](#) in an offering expected to raise \$1.0 billion with The Carlyle Group as the exiter; Medallion Midstream’s \$2.6 billion deal to be acquired by ONEOK on August 28 with Global Infrastructure Partners as the exiter; Total Operations and Production Services’ \$983 million acquisition by Archrock on August 30 with Apollo Global Management as the seller; and Loc Performance’s \$950 million acquisition by Rheinmetall on August 13 with The Carlyle Group as the seller.

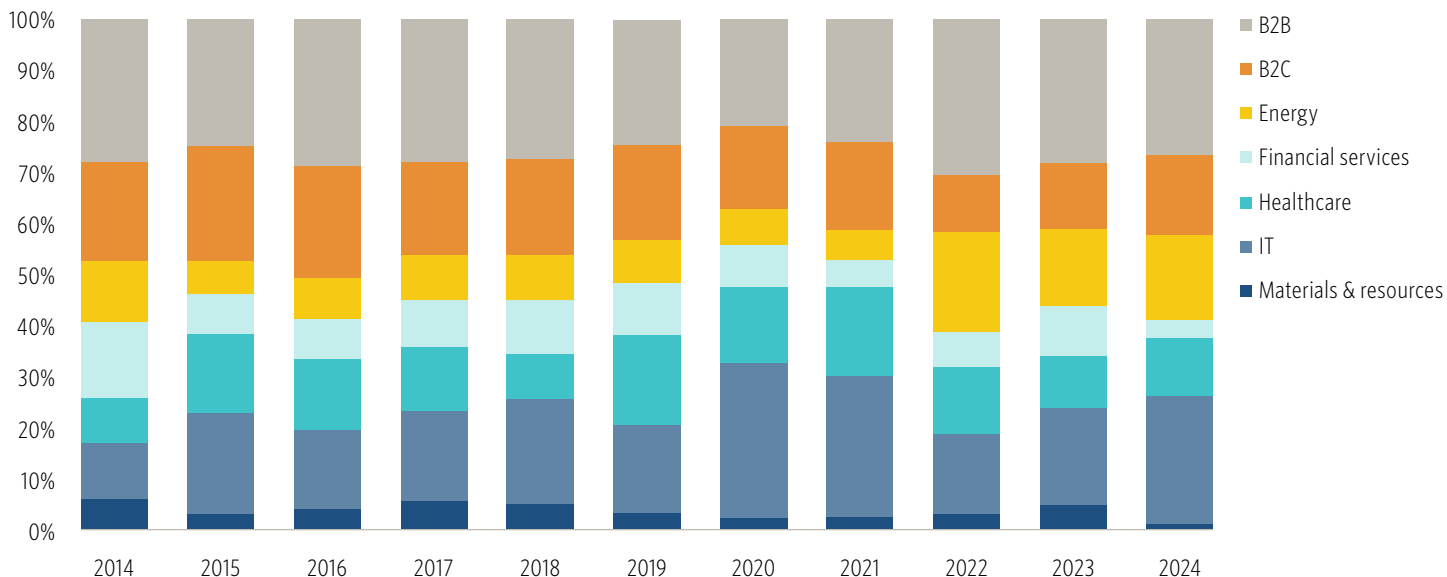
The upcoming presidential election has thrown uncertainty into some parts of the industrials sector, as aerospace and defense demand might be impacted by the candidates’ differing views on funding the war in Ukraine, and industrials costs could be impacted by a proposed increase in tariffs by former President Donald Trump. Some investors are likely awaiting more clarity on these items along with the potential for higher corporate tax rates under a Kamala Harris administration before committing capital. We expect the combination of falling interest rates and more clarity on election results to help spur increased industrials exit activity in 2025.

Share of PE exit value by size bucket



Source: PitchBook • Geography: US • As of September 30, 2024

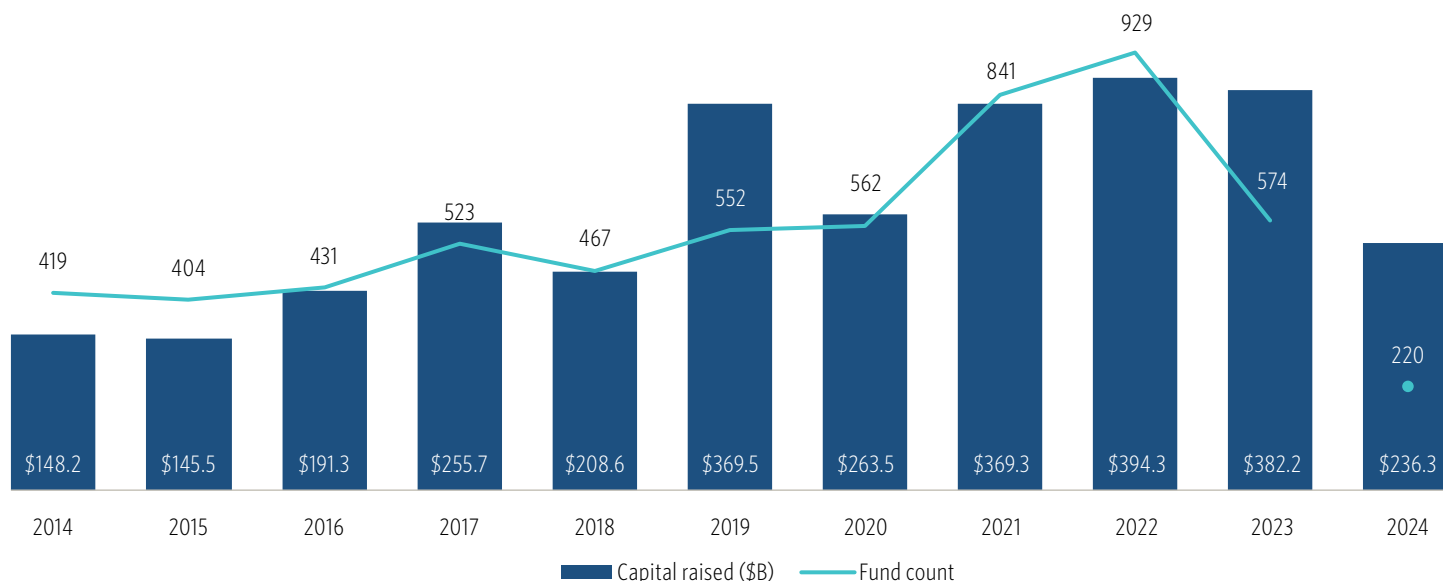
Share of PE exit value by sector



Source: PitchBook • Geography: US • As of September 30, 2024

Fundraising

PE fundraising activity



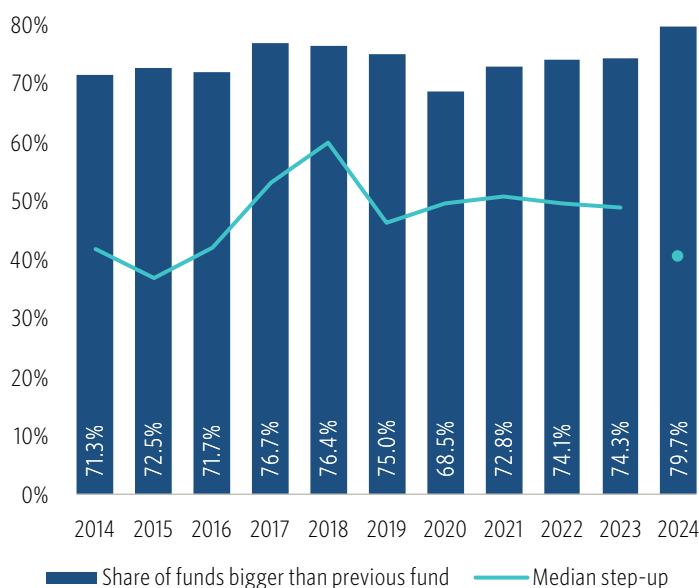
Source: PitchBook • Geography: US • As of September 30, 2024

Overview

After adjusting for the expected lag in data from late-reporting funds, which typically adds approximately 20% in total value, private equity fundraising this year is in line with 2023, which recorded \$382.2 billion raised for the full year. However, PE fundraising has seemingly hit an air pocket, with quarterly fundraising activity starting to slow compared with the robust quarterly activity seen over the past three years. We expected fundraising to slow by now as a result of lean exits producing little in the way of recycled capital for new funds. After some modeling they did at the beginning of the year based on how exits were trending, our Quantitative Research team believed that downshift could be as much as 30%. That is still our view. That being said, PE fundraising is still pacing ahead of the pre-pandemic (2017 to 2019) average of \$278.1 billion per annum, showing that the asset class is still raising capital at a rate above historical norms. Through September, the asset class has raised \$236.3 billion across 220 funds.

This slower pace of fundraising has led to a continuation of the trends seen through the first two quarters of 2024, where funds are taking longer to raise. The median time to close has stretched to 16.8 months through the end of September, up from 14.0 months in 2023 and 11.2 months in 2022. Although fundraising is taking longer, that has not affected the rate at

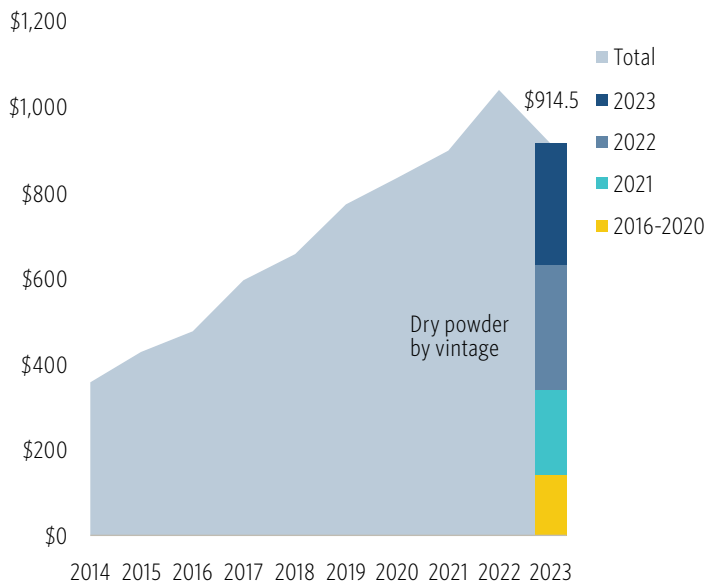
Median step-up from previous PE fund in fund family



Source: PitchBook • Geography: US • As of September 30, 2024

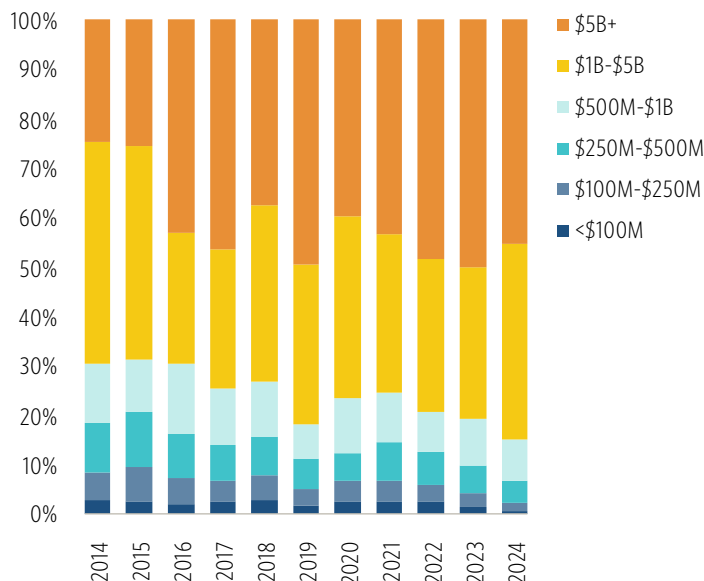
which GPs return to market with successor funds. The median time between funds has fallen to 3.0 years YTD, below the 3.5 years seen in 2023 and below the five-year average of 3.2 years.

PE dry powder (\$B)



Source: PitchBook • Geography: US • As of December 31, 2023

Share of PE capital raised by size bucket



Source: PitchBook • Geography: US • As of September 30, 2024

While fundraising activity has seemingly moderated, established managers continue to see their funds receive step-ups at record levels. Through Q3, 79.7% of PE funds closed at a larger size than their predecessor fund, the highest rate seen for the asset class, surpassing the five-year average of 72.9%. Despite the record, the median step-up of 40.5% is the lowest since 2015 and remains well below the five-year average of 48.9%. This could be more of an indictment of the more challenging fundraising environment than anything else. LPs remain capital constrained due to the lack of exits and distributions back to them. This limits the amount they can recycle into the next vintage of funds, and therefore they cannot commit the level of capital seen in years past. As a result, GPs may be seeing their step-ups capped.

By strategy, fundraising continues to be dominated by buyout funds, accounting for \$203.6 billion, or 86.1% of total capital raised three-quarters of the way through the year, the strategy's highest share since 2012. The buyout strategy has taken share from growth equity throughout the year, with growth equity fundraising totaling \$30.8 billion, or 13.1% of capital raised, well below the \$44.3 billion raised by growth equity funds through the first three quarters of 2023. This exemplifies the trend where investors are shifting away from growth equity funds and the growth-at-all-costs mindset amid the more challenging environment, where the growth-at-a-reasonable-cost approach is taking share. Conversely, buy-side activity continues to see growth equity deal activity increase as the equity-only aspect of the deal type remains attractive to GPs amid the persistent higher cost of capital impacting other deal types, such as buyouts.

AUM and dry powder

US PE assets under management (AUM) pushed higher in 2023 to reach \$3.3 trillion, marking the 15th straight year of AUM growth for the industry. However, growth slowed in 2023 to 3.2% YoY and fell well short of its 10-year compound annual growth rate (CAGR) of 11.9%. AUM comprises both invested assets and uncalled capital, also known as dry powder. Based on our aggregation of net asset values (NAVs), invested assets appreciated 10.5% in value in 2023, leaving dry powder as the main factor behind the slowdown in AUM growth.

After pushing through the \$1 trillion mark in 2022, dry powder declined by 11.9%, or \$123.7 billion, in 2023, its biggest decline ever. Even after adjusting for the law of large numbers, the decline was still significant. Dry powder's share of total AUM has sunk to 27.9%, its lowest reading ever. The negative swing of 4.8 percentage points from the prior-year share of AUM was the second-largest decline ever. Ironically, the largest ever occurred in 2021 when dry powder's share of AUM dropped by 7.1 percentage points to 30.9% from 38.1% in 2020. However, that was due to a 47.1% surge in NAV, which far outstripped positive growth in dry powder.

Presently, the opposite is true. Dry powder is shrinking, not growing, and asset appreciation is roughly equal to the distribution rate, leaving new commitments as the likely culprit. As noted previously, total capital announced at the time of a fund's final closing can be a lagging indicator, whereas AUM methodology is based more on the timing of

Notable open PE megafunds

Fund	Fund type	Open date	Fund target (\$M)	Raised amount (\$M)
Blackstone Capital Partners IX	Buyout	June 21, 2022	\$20,000.0	\$20,063.3
KKR North America Fund XIV	Buyout	June 24, 2024	\$20,000.0	\$0.0
Thoma Bravo Fund XVI	Buyout	April 5, 2024	\$20,000.0	\$0.0
Clearlake Capital Partners VIII	Buyout	June 20, 2023	\$15,000.0	\$7,500.0
Veritas Capital Fund IX	Buyout	May 13, 2024	\$13,300.0	\$320.0
Insight Partners XIII	Buyout	July 8, 2022	\$12,500.0	\$10,000.0
Trident X Fund	Buyout	May 6, 2024	\$9,000.0	\$300.0
Thoma Bravo Discover Fund V	Buyout	April 5, 2024	\$7,000.0	\$0.0
Providence Strategic Growth VI	PE growth/expansion	August 10, 2023	\$6,500.0	\$5,059.4
L Catterton X	Buyout	December 7, 2021	\$6,500.0	\$5,000.6

Source: PitchBook • Geography: US • As of September 30, 2024

Notable closed PE funds YTD

Fund	Fund type	Close date	Fund target (\$M)	Raised amount (\$M)
Silver Lake Partners VII	Buyout	May 8	\$20,000.0	\$20,500.0
Vista Equity Partners Fund VIII	Buyout	April 18	\$20,000.0	\$20,000.0
New Mountain Partners VII	Buyout	July 1	\$12,000.0	\$15,425.3
BDT Capital Partners Fund 4	Buyout	January 12	\$13,000.0	\$14,000.0
Platinum Equity Capital Partners VI	Buyout	September 3	\$12,000.0	\$12,600.0
TPG Partners IX	Buyout	February 13	\$15,000.0	\$12,014.0
The Resolute Fund VI	Buyout	January 29	\$6,850.0	\$6,850.0
ICONIQ Strategic Partners VII	PE growth/expansion	July 22	N/A	\$5,750.0
KKR Ascendant Fund	Buyout	September 23	\$4,600.0	\$4,600.0
Kohlberg NY Investors X	Buyout	September 13	N/A	\$4,300.0

Source: PitchBook • Geography: US • As of September 30, 2024

cash inflows and outflows on a quarterly basis. The runoff in dry powder is the clearest indicator yet that fundraising has in fact slowed, possibly to the tune of \$100 billion.

Megafunds

Megafunds—funds that raise \$5 billion or more—continue to support PE fundraising, accounting for 45.3% of all capital raised three-quarters of the way through the year while representing

a mere 3.8% of fund count. Like the second quarter, Q3 saw two megafunds hold final closes. The two funds belong to New Mountain Capital and Platinum Equity, raising \$15.4 billion and \$12.2 billion, respectively. YTD, PE has seen eight megafunds close for a total value of \$107.1 billion, falling short of the 13 megafunds that closed at \$155.8 billion through the first three quarters of 2023. As more of these megafunds close, fewer and fewer new megafunds are coming to market to help maintain the robust levels of fundraising seen over the past three years.

As a result, these larger megafunds burn off and our reported fundraising totals will inevitably downshift on a lagging basis.

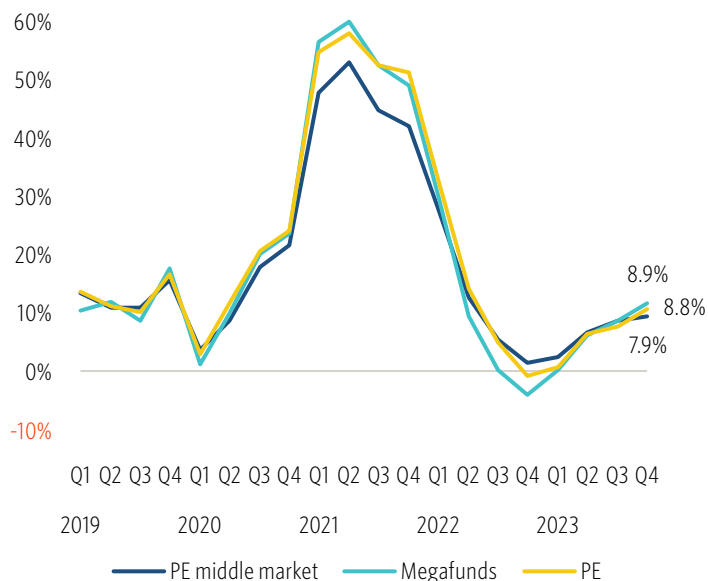
The list of funds that have currently raised more than \$5 billion or are targeting \$5 billion or more continues to shrink. To date, there are 10 such funds open and raising, though only five funds have raised substantial capital, having already amassed \$47.6 billion, headlined by Blackstone Capital Partners IX, which has raised \$20.1 billion. Other notable open megafunds include those by Insight Partners and Clearlake Capital Partners, having raised \$10 billion and \$7.5 billion to date, respectively. Furthermore, the number of \$10 billion-plus funds is dwindling with just five remaining. This compares to nine \$10 billion-plus funds at the same point in time last year. As these gargantuan funds close, they are being replaced by smaller funds, and as a result, PE fundraising has started to level out in terms of capital raised. Recently, two funds targeting \$20 billion have launched. One of those funds belongs to KKR, having recently launched its 14th vintage of its North American flagship buyout fund. The other belongs to Thoma Bravo, which is raising its 16th flagship buyout fund. Both funds opened in Q2 of this year but will not help buoy fundraising activity through the remainder of the year.

Middle-market funds

Middle-market funds, like the broader market, are seeing fundraising levels slow from the vigorous pace seen in recent years. Middle-market funds are those that raise between \$100 million and \$5 billion. Through September, middle-market managers held final closes on 127 funds worth an aggregate value of \$127.8 billion. In turn, capital raised by middle-market managers represents 54.1% of all capital raised in 2024. In recent quarters, middle-market fundraising had benefited from the more challenging macroeconomic landscape as investors gravitated toward smaller funds that focus on smaller deals. Smaller deals have been more manageable, and financing is more accessible. Additionally, the lower end of the market offers more favorable valuations, offsetting higher borrowing costs. However, there has been more market stabilization recently with the Fed cutting rates by 50 basis points. With the rate-cut cycle underway, these market headwinds that favored middle-market vehicles may start to fade, making fundraising efforts more challenging for middle-market managers. It remains to be seen if these factors will further dampen middle-market fundraising in 2024 or if they will be more apparent in 2025 fundraising efforts.

Performance

Quarterly rolling one-year PE fund performance by size



Source: PitchBook • Geography: US • As of December 31, 2023

Zooming out on PE’s performance over the past three decades, it useful to reflect on that history and consider where we are today. Since the year 2000, one can see three long waves that persisted for different reasons. The first lasted from 2000 to 2009 and was characterized by highly unstable asset prices and was bracketed by the dot-com collapse of 2000 and the housing meltdown of 2007. PE was still a nascent industry, and it did everything in its power to sidestep the minefield. Still, there were nearly as many down quarters as up. One-year horizon returns during that 36-quarter span averaged 7.8%, and 14 of the quarters were negative.

PE’s second performance wave commenced in 2010 and lasted just over 12 years, or 50 quarters. For 49 of those 50 quarters, not only were one-year returns positive, but they also exceeded 10% each and every quarter. The sole exception, of course, was the negative return recorded in Q1 2020 due to the COVID-19 pandemic. This nearly perfect period of consistently producing double-digit returns marked PE’s golden age and coincided with null short-term rates for eight of 12 years. During that 50-quarter span, one-year returns averaged an incredible 19.1%.

We are now seven quarters into PE’s third wave, which commenced in mid-2022, courtesy of the Federal Reserve’s

PE funds IRR by quarter

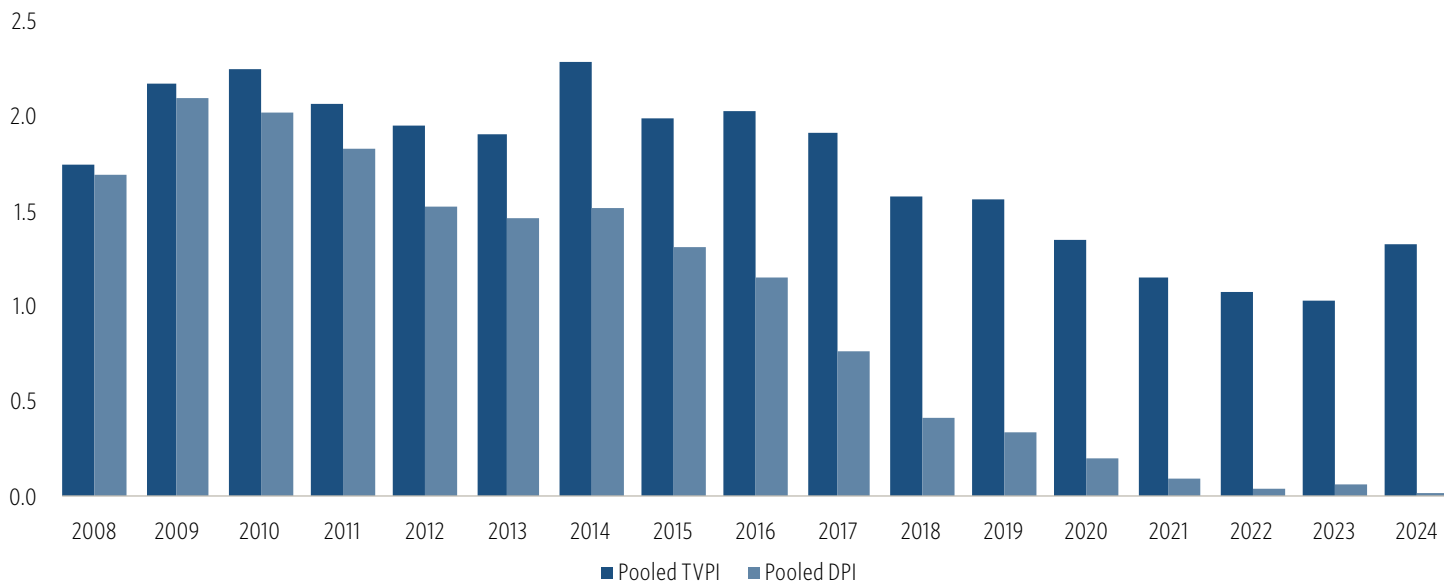


Source: PitchBook • Geography: US • As of March 31, 2024
Note: Q1 2024 data is preliminary.

historic interest rate hikes. Over those seven quarters, one-year returns have averaged just under 6% and have recently struggled to stay above 10%, a level that was taken for granted in years past. Our preliminary estimate of one-year returns as of Q1 2024 is 9.5%. This is a setback from our final estimate of 10.6% for the one-year period ending Q4 2023. This compares to a one-year return of nearly 30% for the S&P 500 and nearly 20% for the Russell 2000. On a two-year basis, PE pulls ahead of the Russell, a more comparable benchmark, although IRRs are different from the time-weighted returns of an index, and readers are encouraged to refer to public market equivalent comparisons as presented in our quarterly [PitchBook Benchmark reports](#).

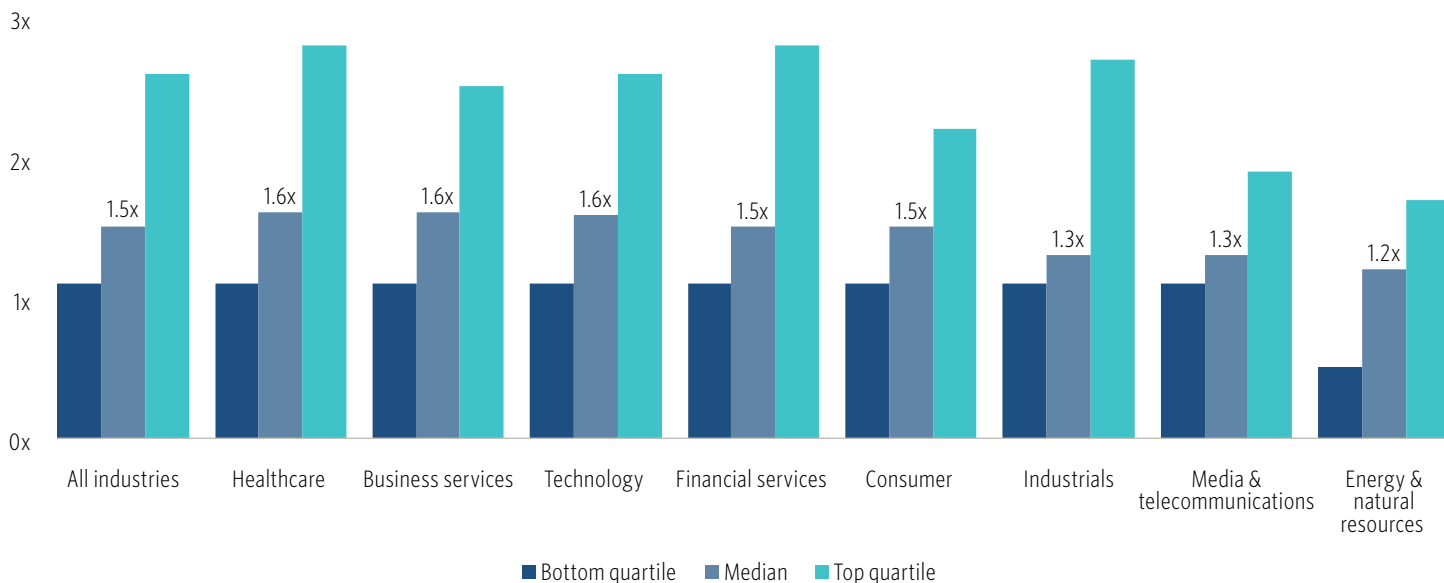
By size, fund performance had favored middle-market buyout funds for nearly a year and a half. However, that changed in Q3 2023 when megafund performance surpassed that of middle-market managers, and that trend continued in Q4 2023 at a wider margin of outperformance. These cycles of outperformance between megafunds and middle-market managers tend to run their course after one to three years before reversing again, with this latest cycle reversing after five consecutive quarters of middle-market outperformance. The gap narrowed in recent quarters as the sharp rebound in large-cap equities resulted in positive marks to portfolio values.

Total value to paid-in (TVPI) and distributions to paid-in (DPI) capital returns by fund vintage



Source: PitchBook • Geography: US • As of March 31, 2024

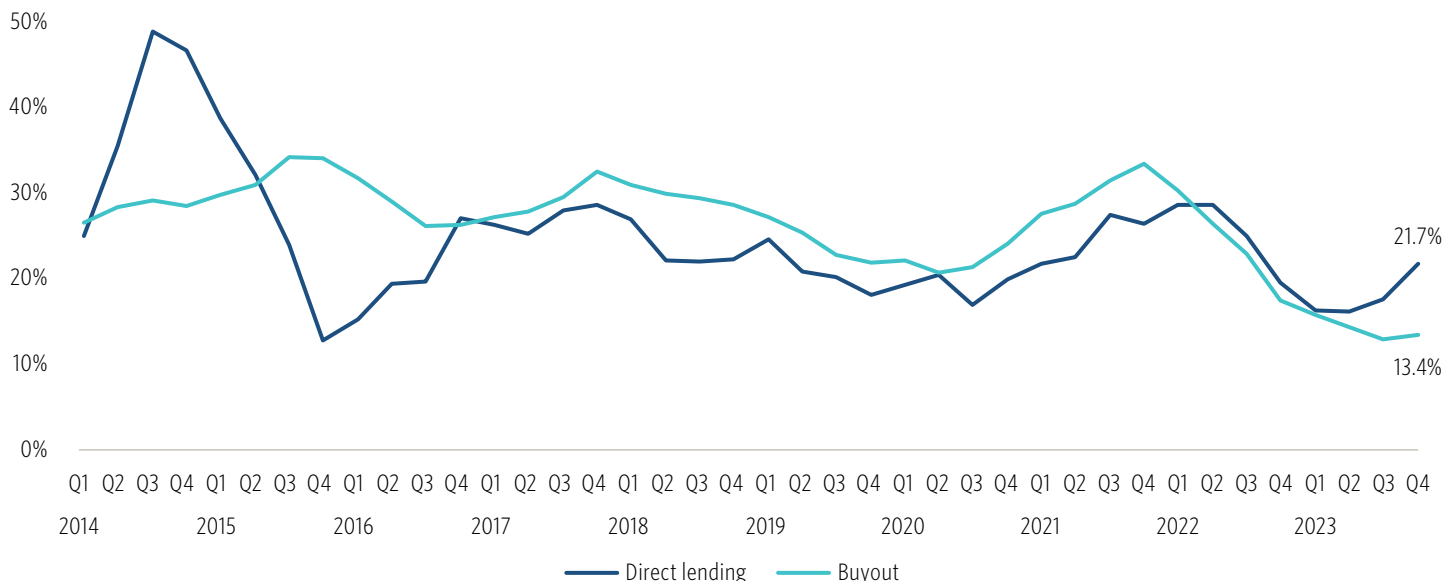
Multiple on invested capital returned by sector (2018-2024)



Source: DealEdge • Geography: US • As of September 30, 2024

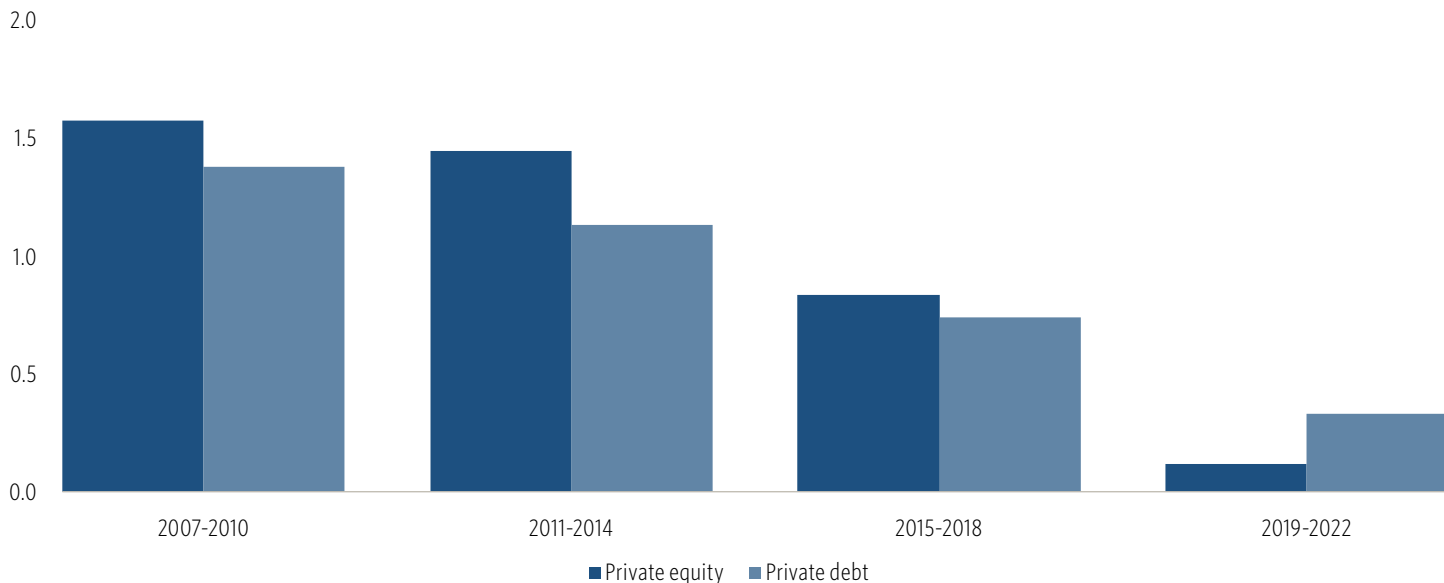
Note: This chart includes buyout and growth deals with initial investments from 2018 to 2023. It includes fully and partially realized deals. Usage of DealEdge data outside this context, especially further publication or reprint, requires the permission of Bain & Company.

Direct lending versus buyout fund distribution yields as a share of beginning NAV



Source: PitchBook • Geography: US • As of December 31, 2023

Private equity and private debt DPI by vintage bucket



Source: PitchBook • Geography: US • As of December 31, 2023

Additional research

Private markets



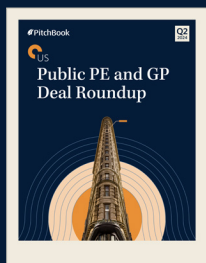
H1 2024 Global Private Debt Report

Download the report [here](#)



Q2 2024 US PE Middle Market Report

Download the report [here](#)



Q2 2024 US Public PE and GP Deal Roundup

Download the report [here](#)



Q2 2024 Global M&A Report

Download the report [here](#)



Q2 2024 European PE Breakdown

Download the report [here](#)



Q2 2024 Global Private Market Fundraising Report

Download the report [here](#)

More research available at pitchbook.com/news/reports

COPYRIGHT © 2024 by PitchBook Data, Inc. All rights reserved. No part of this publication may be reproduced in any form or by any means—graphic, electronic, or mechanical, including photocopying, recording, taping, and information storage and retrieval systems—without the express written permission of PitchBook Data, Inc. Contents are based on information from sources believed to be reliable, but accuracy and completeness cannot be guaranteed. Nothing herein should be construed as any past, current or future recommendation to buy or sell any security or an offer to sell, or a solicitation of an offer to buy any security. This material does not purport to contain all of the information that a prospective investor may wish to consider and is not to be relied upon as such or used in substitution for the exercise of independent judgment.