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Venture Monitor

Q4 2023



J.P.Morgan

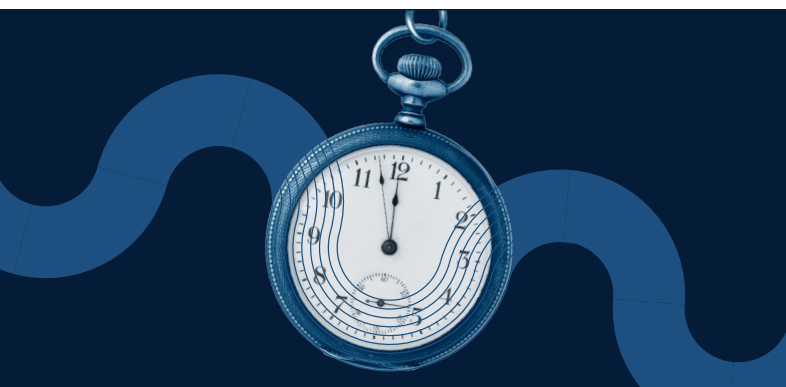
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The definitive review of the US venture capital ecosystem

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Executive summary

Q4 2023 had few surprises for the US venture capital market. Deal, fundraising, and exit activity were all down, and with few exceptions, deal values were down as well. While the continued drop in activity does not lend itself to optimism, it would be a mistake to declare the market in crisis. Rather, the market has changed. From interest rates to foreign conflict, the world looks very different than it did two years ago, and a new set of problems needs to be solved for.

The biggest change the VC industry has been dealing with since early 2022 is dramatically increased political risk, particularly abroad. VC exhibited tremendous strength over the COVID-19 pandemic, but Russia's invasion of Ukraine, an increasingly challenging business environment in China, and renewed conflict in the Middle East have forced dramatic reassessments of how investors make the most of their access to human, financial, and natural capital. While the United States has been insulated from the worst effects of many of these issues, there has been a broad recognition of the necessity to invest in both the capacity and the capability of the US public and private sectors. While this broad-based disruption presents a variety of opportunities for enterprising investors, the reality of high interest rates, vulnerable supply chains, and misguided regulation means that America's most dynamic sector has no shortage of challenges ahead.

The average federal funds rate from January 2009 to February 2022 was 0.51%, but by the end of 2023, rates had increased over tenfold to 5.33%.

Recent statements from Federal Reserve Board of Governors indicate that while rates are unlikely to increase more in the short term, cuts are also unlikely. Furthermore, they have also indicated that while rate cuts are probable, they are likely to be more in line with historical norms (4.6%) than the ultralow rates of the last few decades (1.4%).

Pre-2022 global supply chains were viewed as reliable and robust. The shortages of the COVID-19 pandemic sparked some interest in onshoring and diversification, but most of that activity was intended to support, rather than substitute existing supply chains. However, the loss of access to Russian natural gas was a major wake-up call to businesses all over the world. Now, investors are viewing proximity and friendly relations to major markets as an asset. Notably, Mexico has taken advantage of this and has displaced China as the United States' largest trading partner, with increased venture investment from American firms every year since 2021.

In the face of these challenges, the federal government has had a mixed response. Some actions, like the State Small Business Credit Initiative, CHIPS and Science Act, and the DEAL Act, could serve as the catalysts for an era of unprecedented innovation. Others, like the SEC's private funds rule and NIST's guidance regarding the Bayh-Dole Act march-in, could make sectors like artificial intelligence (AI) and life sciences, where America is the world leader, stumble when they should be picking up speed.

2023 ended with fewer deals and less capital invested than 2022; that is obvious. However, the industry is extremely well capitalized, and advances in AI, life sciences, and clean tech are all attracting significant levels of public and private investment. Furthermore, a tremendous need exists for new capacity in fields like manufacturing and materials processing to de-risk existing supply chains and power the green transition. The world has changed, and it is up to America's VC community to make sure those changes leave the world better off.



Bobby Franklin

President & CEO
NVCA

Bobby Franklin is the President & CEO of NVCA, the venture community's trade association focused on

empowering the next generation of transformative US-based companies. Based in Washington, DC, with an office in San Francisco, NVCA acts as the voice of the US VC and startup community by advocating for public policy that supports the US entrepreneurial ecosystem.

NVCA policy highlights

While congressional activity in the fourth quarter of 2023 was more limited in scope, federal agencies marched forward with a series of consequential rulemakings impacting the venture ecosystem. Below is an overview of NVCA's current policy priorities and their state of play.

NVCA joins coalition filing lawsuit against SEC

NVCA joined a coalition of trade associations in a lawsuit in the US Court of Appeals for the Fifth Circuit against the Securities and Exchange Commission (SEC) to prevent the adoption of the recently approved Private Fund Adviser rule. We are concerned these regulatory measures will stifle innovation and curtail the growth of the entrepreneurial ecosystem. The coalition believes this rule will result in increased fees and decreased choice for investors, thereby crippling the engine of economic growth and job creation that venture-backed companies represent. The lawsuit highlights fundamental flaws with the lack of congressional authority for the rule, the lack of cost-benefit analysis, and other deficiencies in its promulgation.

In November, the coalition filed an [opening brief](#) in the lawsuit. For further details, please read the [official complaint](#), [press release](#), [press kit](#), NVCA's [reaction](#) to the final rule, and [background information](#) about the original proposal in our April 26, 2022, response

March-In Rights Draft framework

In December 2023, the Biden administration [issued a draft framework](#) for Department of Commerce (DOC) to more broadly utilize "march-in rights," which reviews the factors that an agency may consider when exercising march-in rights on patents. Following the administration's announcement, the National Institute of Standards and Technology (NIST) issued a request for information (RFI) on the draft [interagency](#)

[guidance framework](#). Responses to the RFI are due on February 6, 2024.

This framework follows the US Department of Health and Human Services and DOC's announcement of a [whole-of-government plan](#) to review federal march-in authority under the Bayh-Doyle Act in 2023. If implemented, this will also be the first time that price can be a factor in determining that a drug or other taxpayer-funded invention is inaccessible to the public.

CHIPS and Science Act implementation

In October, the DOC announced a [funding opportunity](#) for smaller supply chain projects and businesses to access CHIPS for America funds. The new funding opportunity is open to projects with capital investment below \$300 million involving the construction, expansion, or modernization of commercial facilities in the United States for semiconductor materials and manufacturing equipment. The application process includes two phases:

- **Concept plan:** Applicants will be asked to submit a concept plan describing how their proposed project addresses core strategic objectives, including US economic and national security. Concept plans will be accepted between December 1, 2023, and February 1, 2024.
- **Full application:** Commerce will review submitted concept plans and invite the most promising applicants that demonstrate how they advance program priorities to submit a full application for CHIPS incentives. The full application submission dates will be communicated to applicants individually upon notifying them of their advancement.

Additionally, the US Department of Commerce's Economic Development Administration has [announced](#) the designation of 31 Regional Technology and Innovation Hubs and 29

Strategy Development Grants in urban and rural regions across 32 states and Puerto Rico. This announcement signifies phase 1 of the [Tech Hubs program](#), which is authorized by the bipartisan CHIPS and Science Act, and enables Tech Hub designees to apply for the [Tech Hubs Phase 2 Notice of Funding Opportunity](#), which will grant implementation funding to five to 10 designated Tech Hubs, each receiving between \$40 million to \$70 million across roughly three to eight projects.

The initiative is designed to drive regional innovation and job creation by strengthening a region's capacity to manufacture, commercialize, and deploy critical technologies. [Explore](#) phase 1 designees' regions, core technology areas, and lead agencies to find opportunities for involvement.

AI developments

Washington, DC, continued to set its sights on AI through the fourth quarter of 2023, with nascent regulatory efforts emerging from the White House and Capitol Hill. NVCA launched an AI resources [landing page](#) to serve as a centralized hub of information.

In November, President Biden issued an [executive order](#) on AI with the goal of promoting the "safe, secure, and trustworthy development and use of artificial intelligence."¹ The executive order tasks government agencies with examining the application of AI to their areas of responsibility and provides them discretion to issue guidance specific to each agency. NIST will be foundational in the development of guidelines and best practices under the executive order. Earlier this year, NIST released an [AI Risk Management Framework](#) to develop a baseline and prepare for additional guidance to be released from relevant agencies and regulatory bodies. In December 2023, NIST issued an [RFI](#) regarding its responsibilities set forth in the executive order.

1: "FACT SHEET: President Biden Issues Executive Order on Safe, Secure, and Trustworthy Artificial Intelligence," The White House, October 30, 2023.



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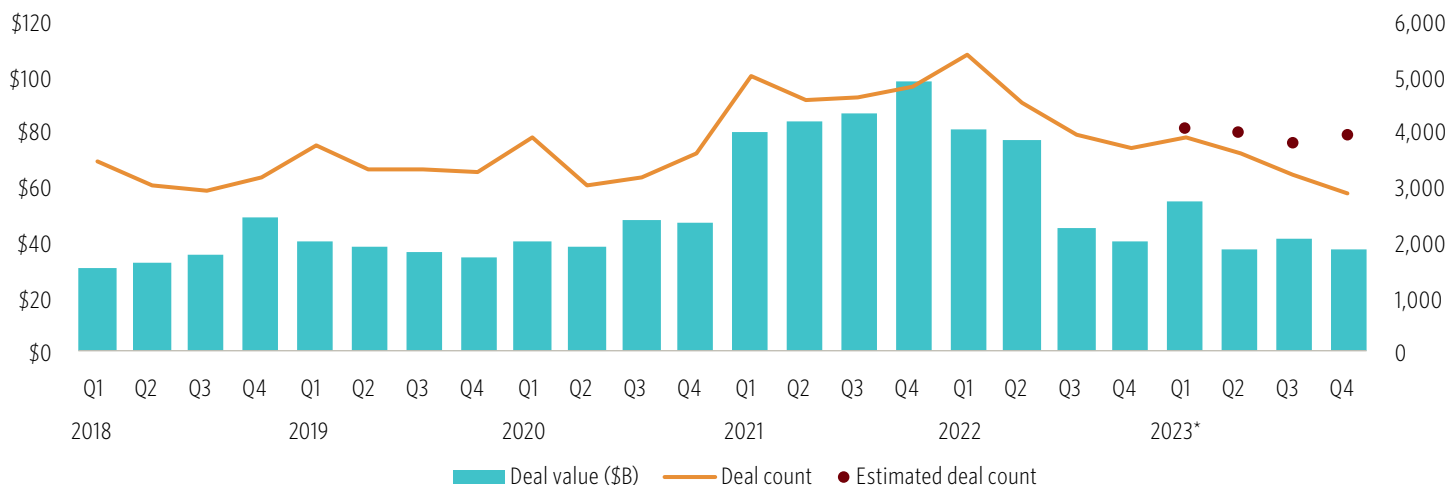
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Overview

2023 deal value nearly \$175B lower than 2021

US VC deal activity by quarter



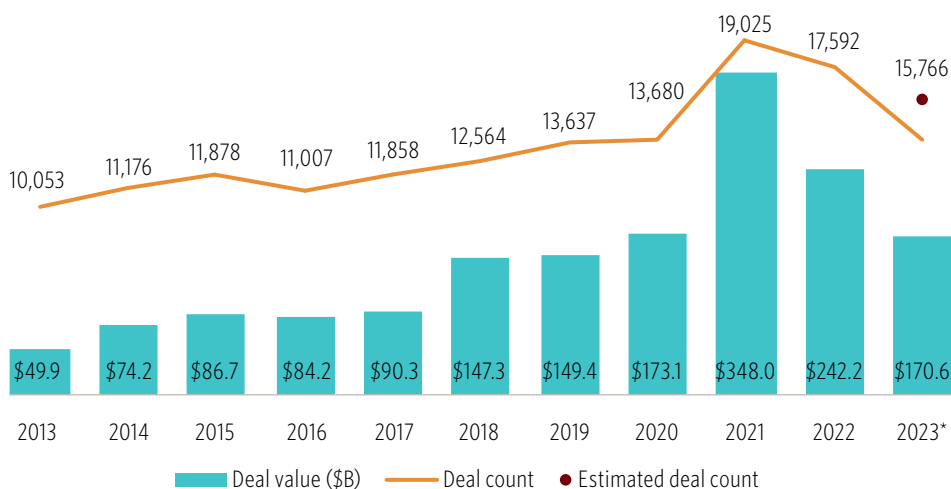
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Overall, 2023 was a rather slow year for activity. Deal activity for the fourth quarter came in at an estimated 3,934 deals completed, which, though nearly 28% off the high quarter in 2022, remained above any quarter before 2021, except for Q1 2020. It was a slight increase from Q3 as well. The context of that strength is the important piece of the statement. While deal counts were relatively high, deal value continued its descent from historic levels, with just \$170.6 billion invested across the year, a drop of \$71.6 billion from 2022 and \$177.4 billion from 2021. Even more dramatic is the fall when the nearly \$17 billion (10% of the annual deal value) invested into Anthropic and OpenAI is noted out of the total. The lack of capital availability continued to be highlighted by our demand-to-supply ratio model, which shows a void across all stages through outputs of between 1.4x and 2.0x.

The OpenAI and Anthropic deals do count within the annual total despite

Q4 deal value falls to lowest figure since Q4 2019

US VC deal activity



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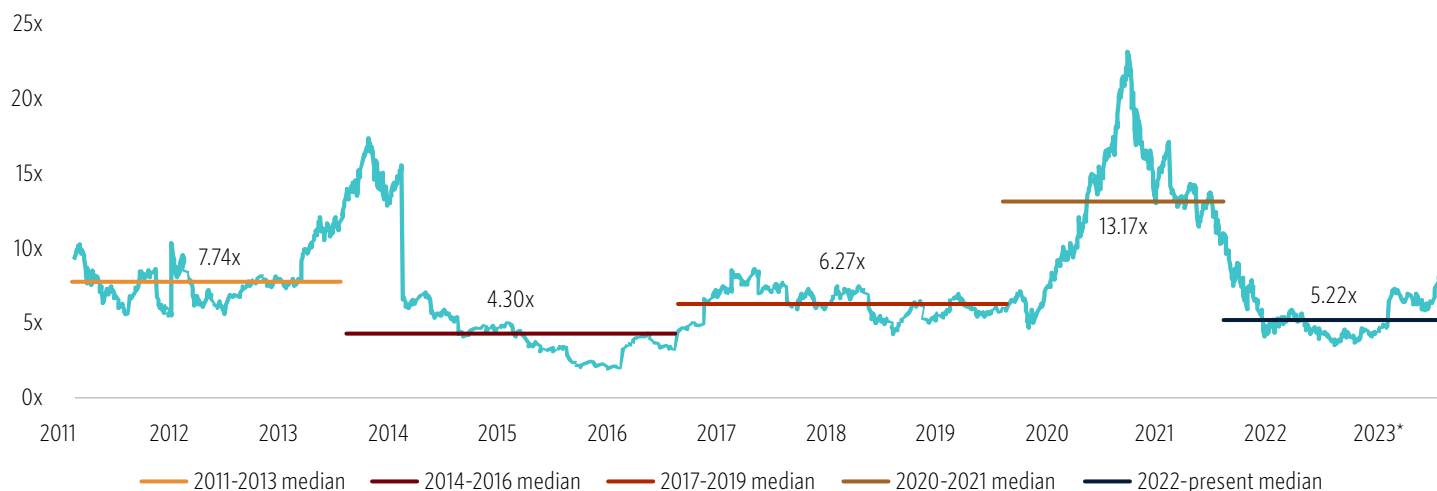
the uniqueness of the deals, of course, so removing those entirely would be disingenuous, as outlier deals have always pushed deal value trends. But the size of those deals and the energy they harnessed from the AI arms race underscores a major unbalance within the venture market. Capital availability

is extremely low for the market, and \$1 out of every \$3 invested went into AI companies during the year, which comprised roughly 20% of deals.

Near-term relief for the market should not be expected, either. Our company inventory continues to grow, showing

Public multiples begin to expand

TTM price-to-sales multiple for VC-Backed IPO Index



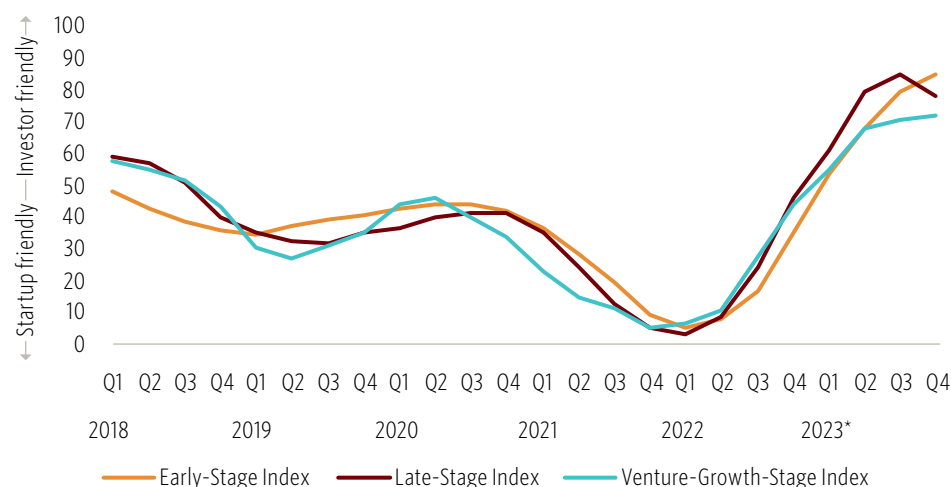
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that more than 54,000 companies are private and VC-backed in the US. While company shutdowns and bankruptcies may have increased during 2023, more than 4,000 companies raised their first VC investment during the year. So as investors pulled back from late-stage financing rounds, a bevy of companies continued to enter the venture lifecycle, adding to future pressure. Q4 did provide an increase in early-stage, late-stage, and venture-growth-stage financings over the quarter prior, which helped ease some of the short-term cash needs of individual companies, but, as mentioned, our [VC demand-to-supply model](#) still shows a wide gap between needs and available supply.

Public markets in the US finished positively for the year, which signals that the economic pressures on markets may be receding. Inflation has remained on the downward trend, and interest rates could be set for cuts in 2024. Though much of the performance has been delivered by megacap tech companies, the Russell 2000 jumped more than 26% over the final months

All VC stages became investor friendly in 2023

US VC Dealmaking Indicator



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of the quarter, before dropping some of those gains over the final week. That signals to VC-backed companies that investor interest in small-cap growth stocks may be returning. A single quarter jump may not predict a true resurgence, but a positive sign is much needed as returns from VC investments have been extremely low over the past two years. Until either price-to-

sales multiples expand or companies are amenable to discounted prices upon listing, lingering uncertainties will keep new public listings low. Our VC-backed IPO Index showed a positive performance during the final two months of 2023, but there is a long way for it to go before returning to previous highs.

IPO index showed positive performance in Q4

US VC IPO index



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The public listings that were able to be completed during 2023 were not coercive to the rest of the market. Just eight companies completed an initial public offering (IPO) in Q4, the largest generating just \$298.8 million in exit value. That size is not one to scoff at, but the 723 unicorns currently private in the US hold the vast majority of returns for the market, and those companies

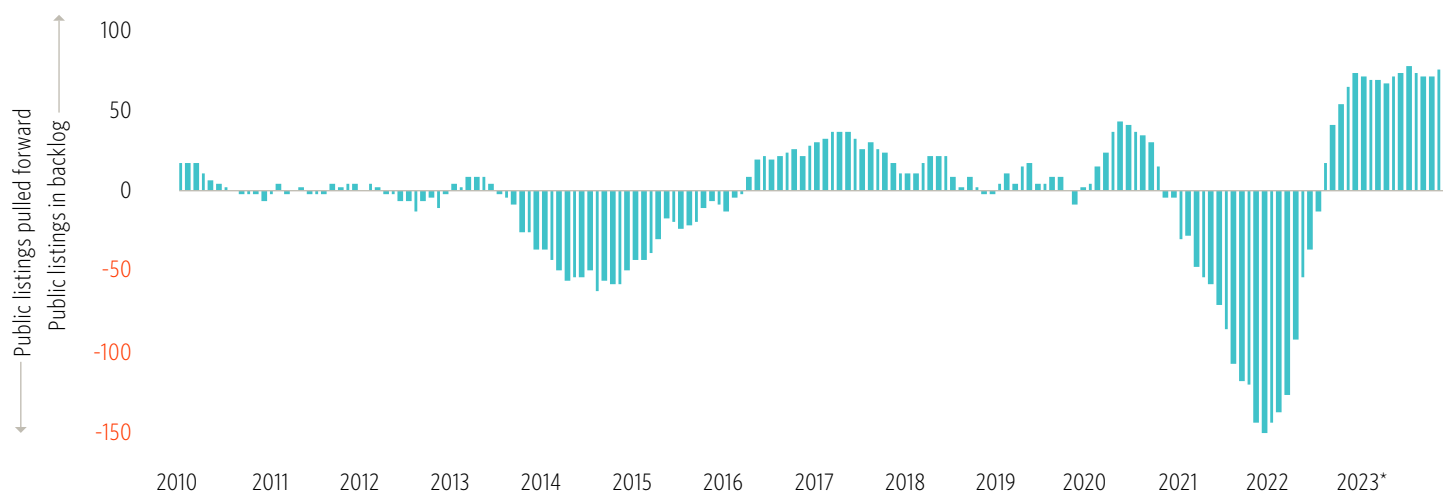
have balked at listing in the current environment. The backlog of IPOs continues to grow. Just three months since the beginning of 2022, 10 or more US VC-backed companies exited via a public offering or reverse merger with a SPAC.

The overall outlook for US VC in 2024 is for the market to remain relatively

subdued. A rebound in fundraising is unlikely, given the returns of the past couple years. However, the market remains full of dry powder, and companies with strong financial metrics will continue to get funded. Economic signals point to lessening of the uncertainty throughout the year, which should at least help venture find a balance for a new normal.

Backlog continues to grow

Monthly VC-backed public listing count versus estimated IPO count

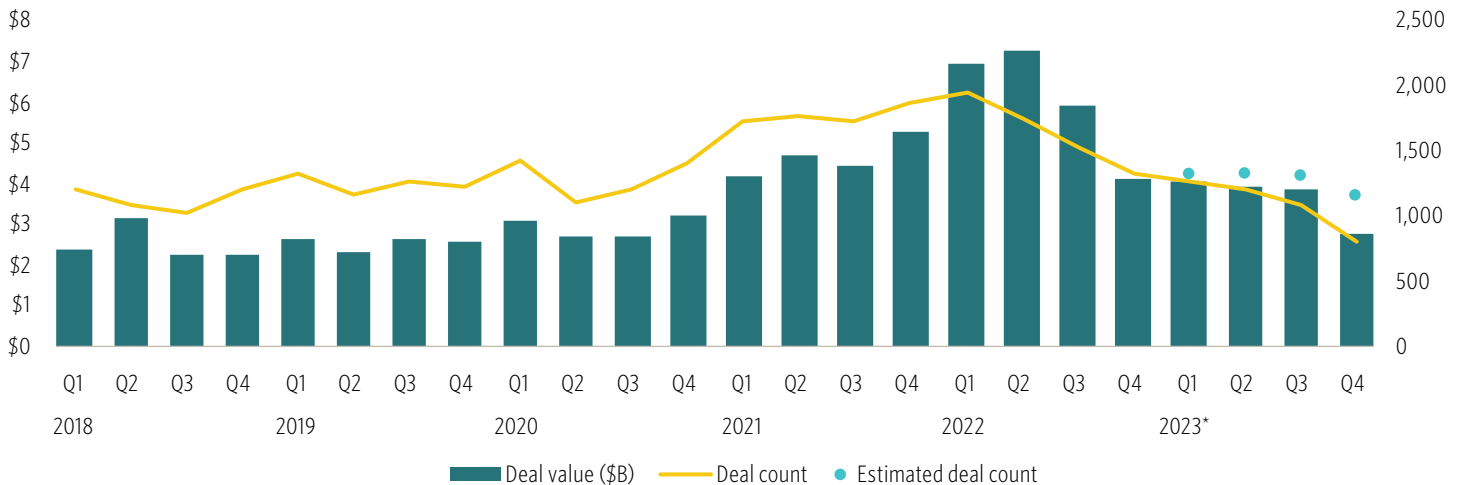


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Pre-seed and seed

Q4 pre-seed and seed deal value slumps to a 13-quarter low

US pre-seed and seed deal activity by quarter



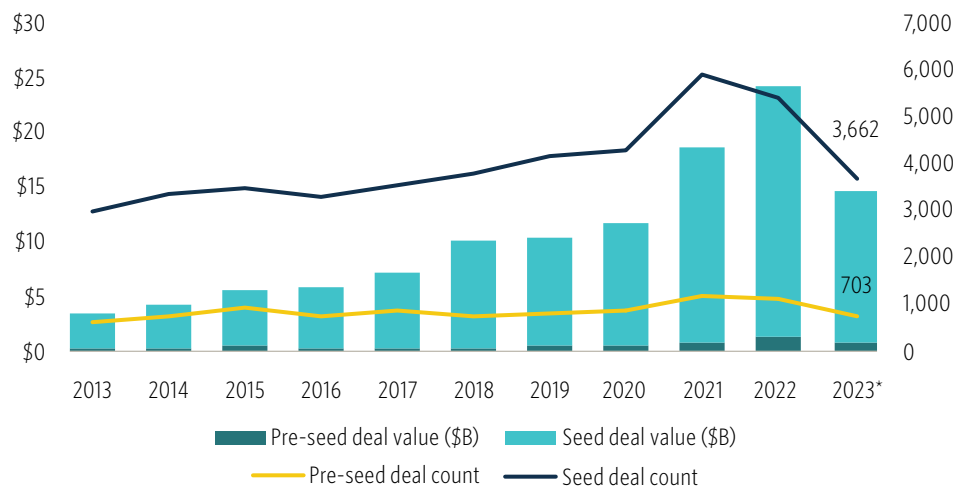
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Dealmaking metrics for the pre-seed and seed stages surfaced lethargy in Q4 2023. \$2.8 billion was deployed to those two stages across an estimated 1,176 deals during the quarter. Those figures indicate that Q4 was the least active of the year in terms of pre-seed/seed deal value and volume.

On an annual basis, the pre-seed and seed stages held up with relative strength. The vitality exemplified by the earliest stages of VC partially comes from investors looking to unlock outsized return potential by securing equity from startups at a lower price point. In addition, pre-seed and seed businesses are far from exiting, thereby leaving sufficient buffer time for the ongoing market downturn to play out. Many investors continue to express a bullish view on the pre-seed and seed stages because of an increase in founder quality. Running a business is particularly challenging amid a capital shortage and heightened market volatility, and investors have

Seed deal value experiences a sharp decline but exceeds pre-pandemic figures

US pre-seed and seed deal activity



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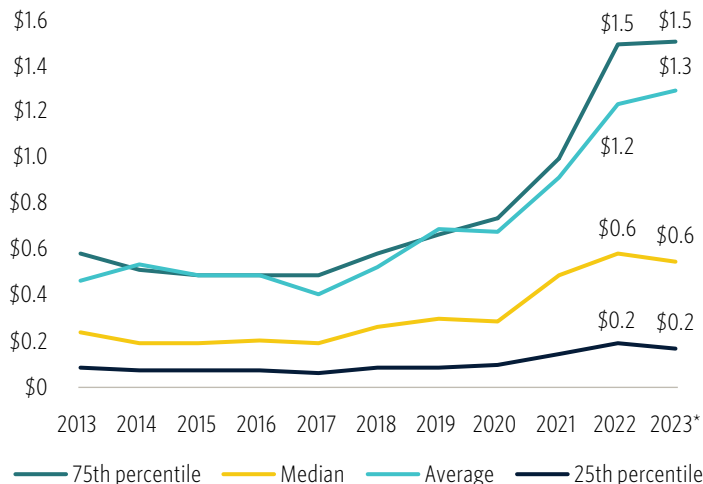
been looking to back and support entrepreneurs with a differentiated vision, strong team composition, and founder-market fit through the journey.

In 2023, the combined deal value of pre-seed and seed experienced a sharp

YoY decline, slipping from \$24.2 billion to \$14.6 billion. This phenomenon is partially attributable to a pullback of large investors from the seed stage as the market gradually adapts to “a new normal” following the 2021 capital

Median pre-seed deal size remains the same as 2022

Range of US pre-seed deal values (\$M)



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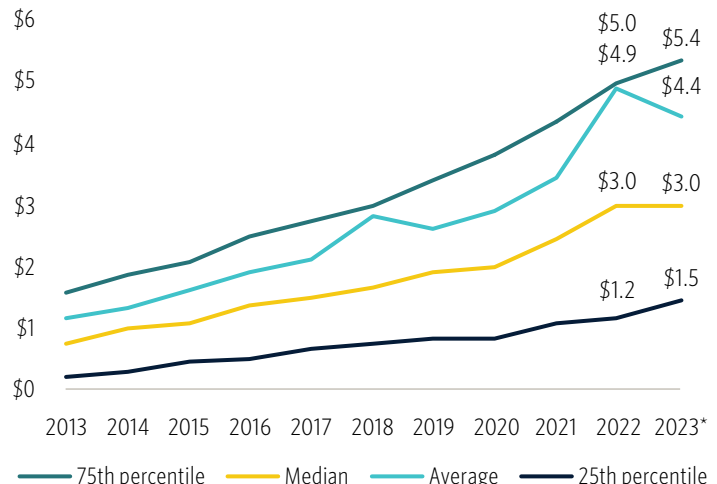
exuberance.² Although not all large investors pivoted away from their seed strategy, the departure or slowed activity of some firms dented 2023 annual deal value that flowed into pre-seed and seed.

Receiving seed funding from large investors has pros and cons. Data

shows that seed-stage startups tend to have a better chance of survival raising from a large investor, with 72.4% of companies raising a subsequent round, compared with 62.1% of their peers in the broader market. On the flip side, a startup getting a large check from a name-brand investor but unable to retain the same investor

Median seed deal size remains at record high level

Range of US seed deal values (\$M)

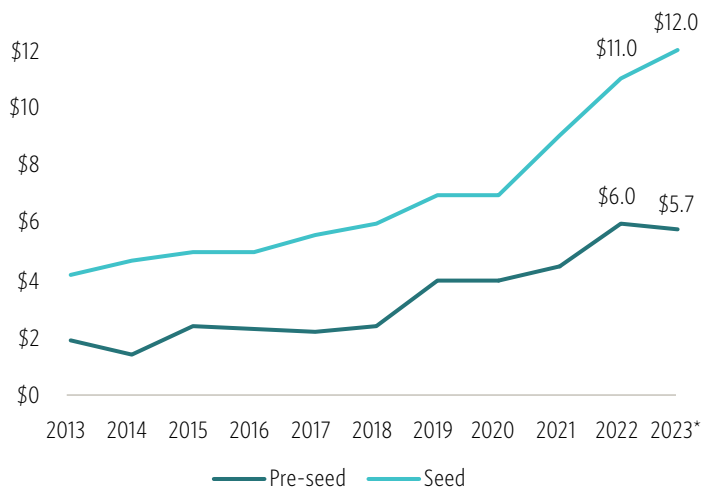


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for a follow-on round carries a signal risk to new investors. While name, prestige, and a strong network bring a host of benefits to startups, companies should be mindful that the individual partner at the firm that they are working with is an equally if not more important consideration.

Median seed valuations ascended to the highest level observed in a decade

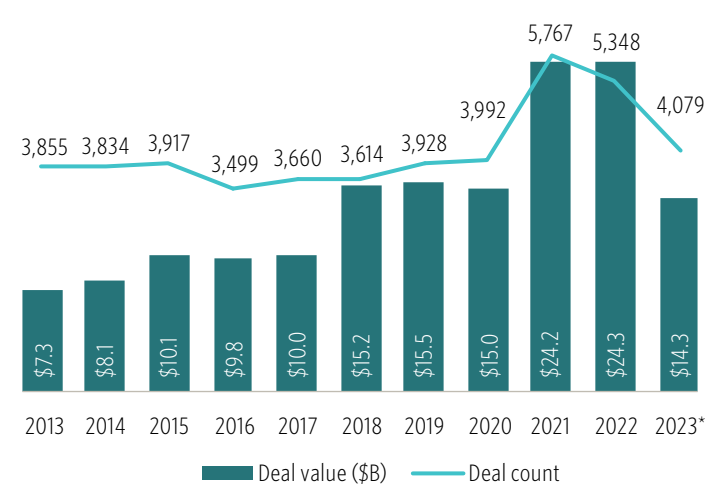
Median US pre-seed and seed pre-money valuations (\$M)



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First financing deal value on pace to set a six-year low, below \$15.0 million

US first-time financing VC deal activity



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2: Our Q4 2023 Analyst Note: [The Seed Blip](#) discusses the impact of large investors' flight to the US seed market—and their departure. We define large investors as US VC firms that have raised at least one fund with at least \$500.0 million in commitments, as well as a custom list of investor types, including asset managers, sovereign wealth funds, PE buyout, PE growth/expansion, other private equity, mutual funds, and hedge funds participating in the venture asset class.

A WORD FROM J.P. MORGAN

Our views on venture

We expect the venture market environment to remain challenged in 2024 as excesses of years past continue to work through the system. Whether this is a muddling through or more defined reset event could depend on whether the economy stays resilient and exit markets improve.

The venture ecosystem endured significant turbulence in 2023, including a challenging fundraising environment, the failure of Silicon Valley Bank, and limited exit market activity. Many startups navigated the choppy waters by extending runway via reduced cash burn, raising bridge rounds or other opportunistic financings. An uptick in down rounds from roughly 8% in 2022 to 20% in 2023 suggests valuations are resetting for late-stage companies, albeit on light deal volumes. Meanwhile, seed through Series A investment activity levels and valuations have been relatively stable.

Looking forward, we anticipate most venture-backed startups will need to raise capital in 2024. Unless there is a material shift in sentiment or IPO market activity—which we do not expect—many will face taking a significant down round to raise new equity, end up in M&A discussions, or worst of all, closing their doors. This trend is already picking up, with the number of startups winding down due to bankruptcy or liquidation doubling in 2023 from 2022.

Despite a healthy degree of innovation happening and significant dry powder with VCs, appetite to deploy incremental capital is limited as valuations continue to find their footing and market exposure is already high. For vintage

years 2013 to 2019, over 50% of the total value in venture funds relies on existing positions.

A potentially phased reopening of IPO markets in 2024 could set the stage for “normal” IPO markets by 2025.

Glimmers of optimism for an IPO market reopening post-Labor Day were fleeting as market volatility ticked up and the war in the Middle East dampened sentiment. While performance of recent IPOs has been better than the 2021 cohort, the profile of companies coming to market has also shifted. According to Eugene Sohn, Co-Head of Tech Equity Capital Markets at J.P. Morgan, IPO markets are demonstrating receptivity for companies of significant revenue scale, durable business models, and profitability. Although it is estimated there are over 1,000 private unicorns, few meet this profile. The next tech IPO cohort will likely need to exhibit meaningful scale at time of IPO along with growth and profitability. The Rule of 40 is a key barometer. An ideal candidate in the current market environment might have a 20% to 30% top-line growth rate and 15% to 20% EBITDA margins.

The first few months of the year could be an important moment when several mid- to large-cap companies that are durable, scalable, and turning the corner on profitability test the market. If the macroeconomic and market backdrop remain supportive, we could see smaller, higher-growth companies at earlier stages of profitability look to IPO by midyear. Importantly, the Federal Reserve’s (Fed’s) pivot to a more dovish tone at the December meeting could help pave the way for tech issuance



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as rate stabilization has been a key consideration for investors in that sector. Companies will likely want to steer clear of coming to market around the time of the presidential election in November—somewhat limiting the windows of opportunity in 2024.

Sohn also notes that as founders evaluate future exit strategies, it is important to consider the process of going public could take up to 24 months. Founders looking to IPO can prepare by establishing and executing on key performance indicators, while concurrently cultivating relationships with institutional investors. Preparing for the public markets is like training for a marathon. Founders need to be ready for standard practices such as quarterly earnings calls, engaging with sell-side analysts, and participating in nondeal roadshows.

All the while, private capital dialogue remains elevated. Olga Polunina, Head of Private Capital Markets Execution for Capital Connect, J.P. Morgan's digital solution to help raise and invest capital in the private markets, notes that venture and growth investors continue to put capital to work, albeit with lower velocity—and crossovers have become more active.

The outlook for M&A is mixed as valuation expectation gaps remain wide, geopolitical uncertainties high, and conviction elusive.

According to Haidee Lee, Global Co-Head of Strategic Investor Group M&A at J.P. Morgan, a lack of both conviction and visibility required to underwrite growth remain key challenges for M&A activity regaining momentum. Even though near-term recession risks have come down, mismatched valuation expectations between buyers and sellers, heightened geopolitical concerns, and higher interest rates continue to be headwinds. In the meantime, the deals getting done are taking longer, are involving more structure, and are relationship driven. Transactions getting to the finish line today have been nurtured over several quarters or longer and are oftentimes bilateral and bespoke.

The volatile equity markets in 2022 and 2023 still have some sellers anchored on 2021 highs, while buyers are looking to de-risk the current set of uncertainties in the transaction price. Increasing use of structure, such as earnouts and seller paper, has been effective in some cases to bridge the valuation gap. Minority stake sales and continuation funds are also increasingly active transactions, which allow GPs to deliver liquidity to their LPs. We are also seeing elevated control premiums and preference for

cash as acquisition currency given higher interest rates and reduced leverage tolerance in debt markets.

While there is never total clarity in forecasting the future, geopolitical uncertainties due to the ongoing land wars in Europe and the Middle East, coupled with a heavy 2024 election calendar in countries representing approximately 50% of global GDP, are unusually high hurdles for boards to overcome.

Additionally, the rapid rise in generative AI over the past year is yet another dynamic element of uncertainty. While there is a strong desire to be at the forefront of this emerging technology, there is still much to learn as to the value of its application and/or potential to disrupt business models or industries.

Among M&A constituents, the tone from strategic buyers remains cautious amid the challenging antitrust regulatory environment. Sponsors have potential for increased activity given record levels of dry powder (18 tech-focused PE funds with more than \$10 billion of dry powder), as well as increased private-to-private transactions given public market reratings and fewer IPO opportunities.

The lending landscape for venture continues to evolve in the wake of market disruption.

Amid ongoing challenging conditions for venture, Dave Reich, Head of Innovation Economy Debt Solutions at J.P. Morgan, has seen some evolution across the venture lending landscape in recent months. While many companies have adjusted burn rates over the past year amid the slowdown in venture fundings, startups that last raised over two years ago are nearing the end of their runways, prompting discussions

on all forms of capital raising. In today's market, startups need at least 12 months of runway to start discussions around venture debt from a lender, and 18 months is recommended to give time for diligence and to close prospective financings.

When contemplating debt as a part of a thoughtful capital structure, companies with predictable revenue and operational track records are best poised to access the market. Conversely, the use of debt to refinance other lenders to avoid amortization, bridge to an unknown future event, or finance a portfolio company due to a valuation overhang may ultimately lead to more difficult conversations down the road.

Clouding the outlook for venture lending are potential changes to the regulatory framework. The Office of the Comptroller of the Currency recently published Commercial Lending: Venture Loans to Companies in an Early, Expansion, or Late Stage of Corporate Development.³ This guidance to venture lending institutions could result in changes with respect to both access to and cost of capital.

It is important to consider that venture debt is only one part of the equation. Like equity raises, partnering with a lender or investor that provides strategic dialogue and advisory can be fruitful. Understanding the latest market trends, capital structures, and regulatory environment offers a competitive advantage and increases the likelihood of a successful outcome for both founders and VCs.

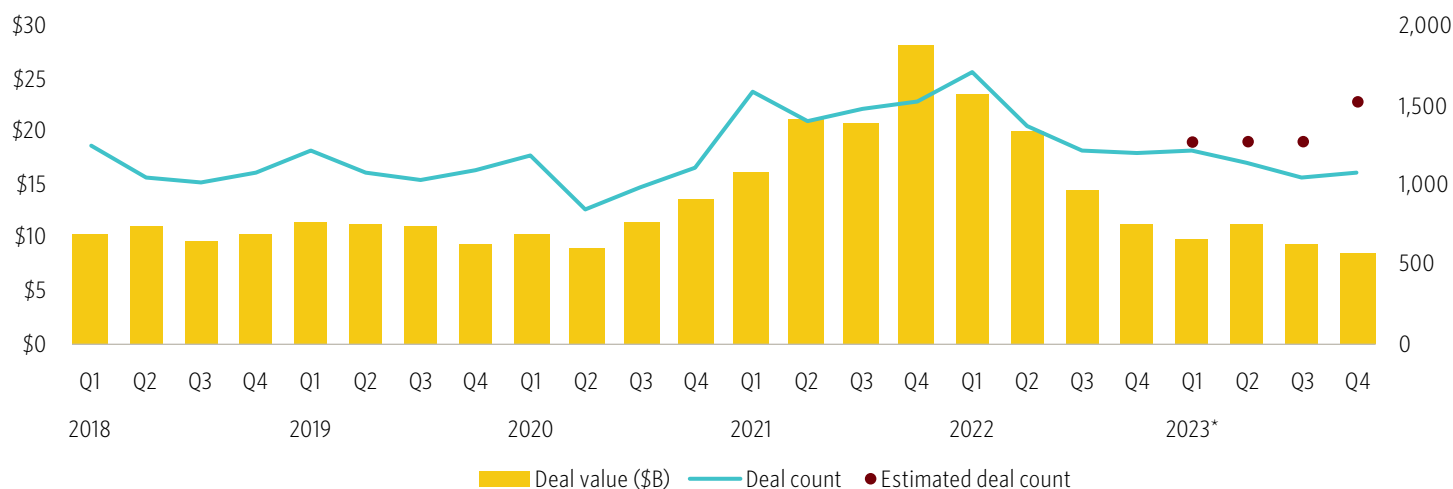
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3: "Commercial Lending: Venture Loans to Companies in an Early, Expansion, or Late Stage of Corporate Development," Office of the Comptroller of the Currency, November 1, 2023.

Early-stage VC

Early-stage quarterly deal value drops to lowest level since Q3 2017

US early-stage VC deal activity by quarter



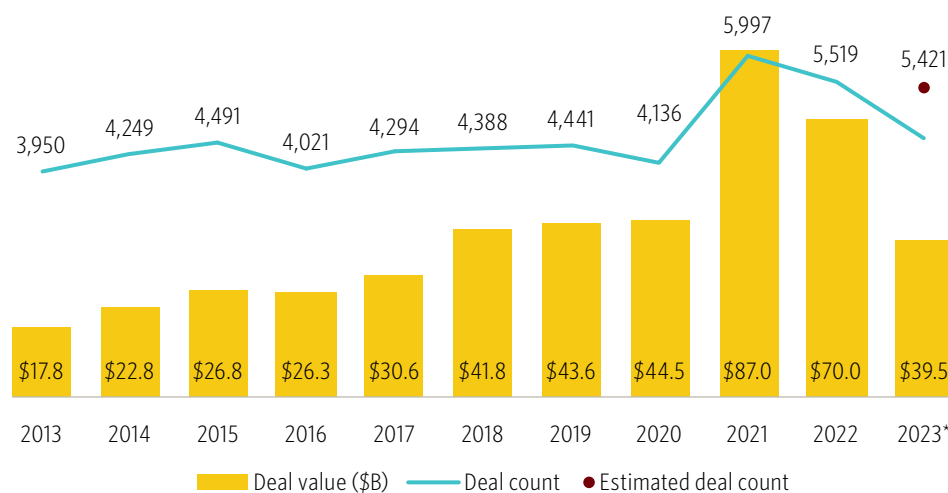
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Early-stage VC ended the year with quarterly deal value dipping to the lowest level since Q3 2017. The quarterly deal count, on the other hand, stayed robust and remained on par with 2022 numbers. Q4 was the most active quarter of the year by deal count. On an annual basis, early-stage deal value notched \$39.5 billion in 2023, surfacing a 43.5% decline from 2022 and falling below the 2018 level.

A handful of factors have contributed to a general slowdown in deal activity at Series A. When the market started to lean toward a correction in 2022, many early-stage startups shifted operations to reduced burn. Because many founders have been focused on getting to the next milestone before trying to raise, fewer companies have been in the market. Additionally, balancing growth with cost efficiency is a delicate task, and doing so could potentially slow an early-stage startup's growth rate. Early-stage investors specializing in Series A and Series B expect to see

Early-stage deal value drops below pre-pandemic level

US early-stage VC deal activity



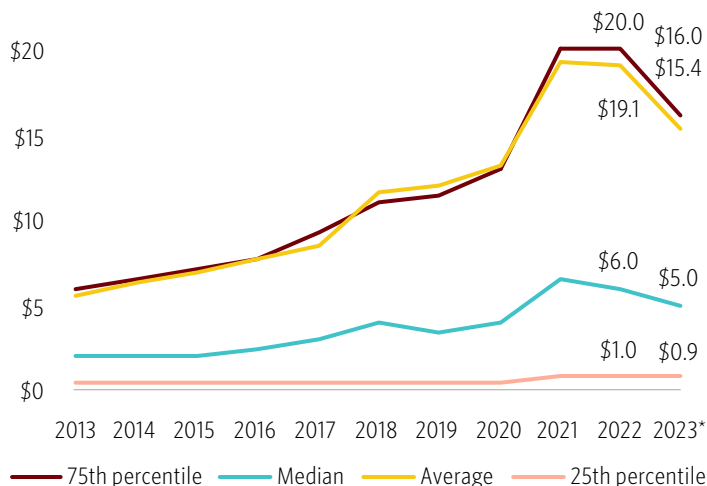
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clear signs of development, including a relatively developed product, product-market fit, annual recurring revenue, traction, and a customer base. The fact that companies may be taking longer to achieve that level of development may have further contributed to the dealmaking slowdown.

Breaking down early-stage deal activity by deal size reveals a decline in the share of outsized rounds on an annual basis. The share of early-stage rounds at or above \$10 million dropped from 42.0% in 2022 to 36.1% in 2023. This trend accompanies the overall observation that GPs prefer to

Median deal size observed YoY decline, but remains above pre-pandemic figures

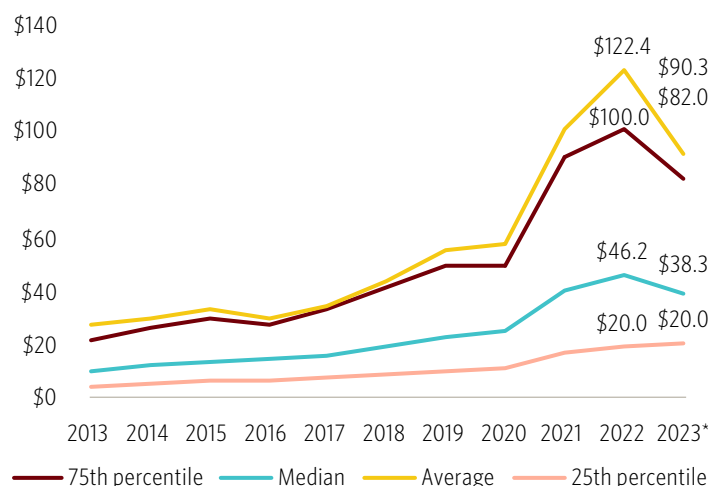
Range of US early-stage VC deal values (\$M)



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Median valuation drops slightly below 2021 figure

Range of US early-stage VC pre-money valuations (\$M)



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invest in companies with strong unit economics and have opted for cost-effective growth. It also aligns with the increasingly popular “raise less, build more” mentality.

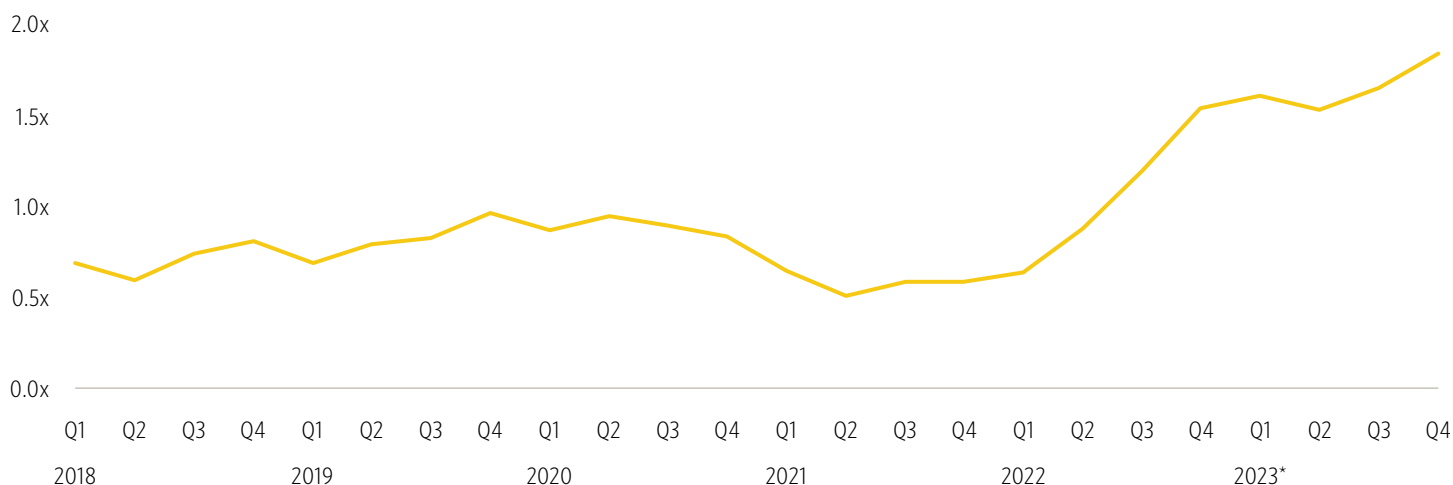
Going into 2024, we expect to see a larger number of early-stage companies returning to the market to fundraise.

To start, early-stage companies—with their small teams and one or a few product lines—have fewer triggers to pull than their late- and growth-stage counterparts in order to reduce costs and will likely need to return to the market in the next few quarters as their cash runs out. Companies that raised a seed round but have been

underperforming have likely begun to feel the pinch of cash burn. For those trying to become more cost-efficient but experiencing difficulty demonstrating traction or revenue growth, we will likely see a decrease in the graduation rate to Series A given that investors have raised the bar to securing financing.

Q4 early-stage capital availability falls to lowest point in a decade

Capital-demand-to-supply ratio in the US early-stage VC marketplace

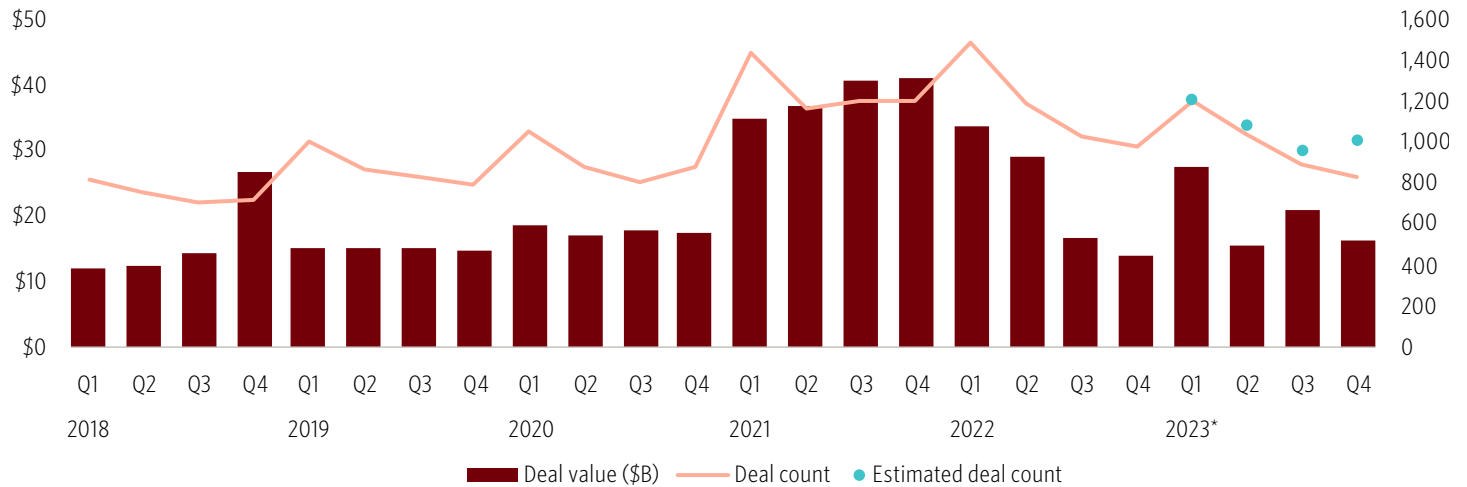


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Late-stage VC

Q4 deal value second-lowest of the year

US late-stage VC deal activity by quarter



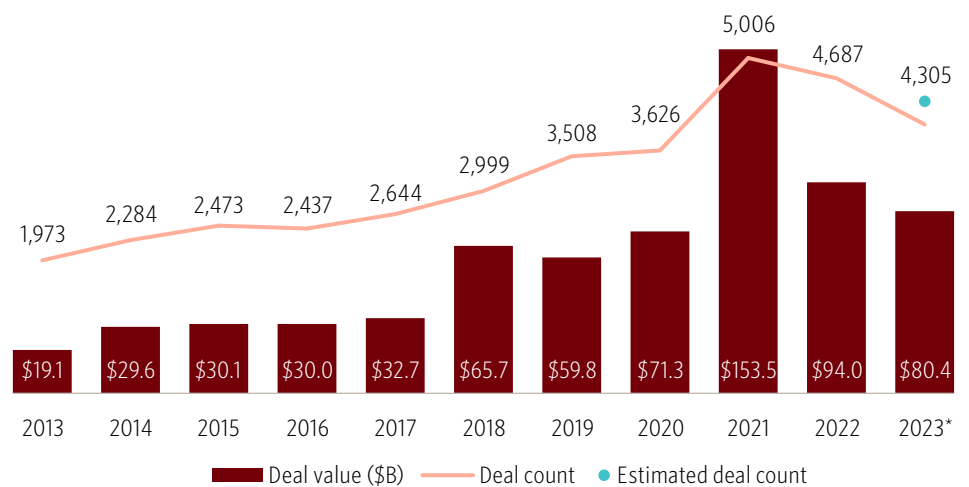
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As many in the VC ecosystem expected, late-stage deal activity continued to decline in Q4, tallying just \$16.4 billion in deal value across an estimated 1,019 deals. This brings the annual total to \$80.4 billion across 4,305 deals, a notable decrease compared with 2022, when \$94.0 billion was generated through 4,687 deals.

This decline was anticipated, as many of the factors contributing to a slowdown in deal activity—first observed in H1 2022—persisted or worsened through 2023. Sluggish exit activity was one of the many headwinds experienced by late-stage startups and their investors, trapping enormous amounts of returns in the ecosystem and negatively affecting performance data for recent venture vintages. We also witnessed an ongoing compression of valuation multiples brought about by a variety of reasons, one of which is the elevated interest rate environment, which substantially impacts the risk/reward profile of venture investing. The combination of

2023 deal value finishes above pre-pandemic levels

US late-stage VC deal activity



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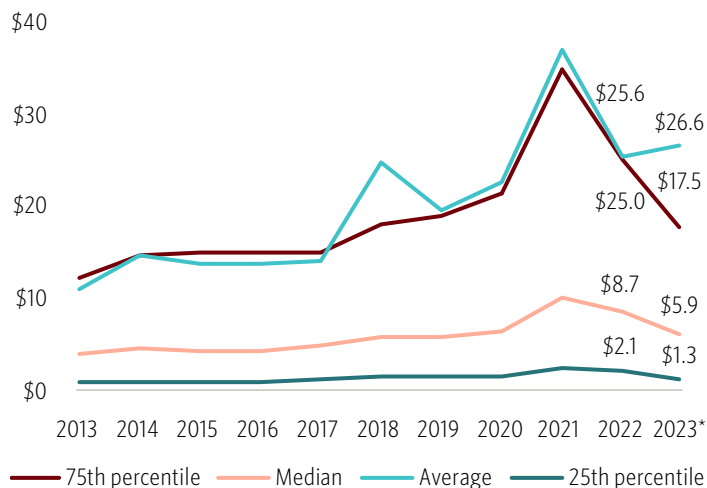
these two factors led many investors to slow their pace of venture investing, or step away from the VC ecosystem entirely, until conditions improve. For startups, this cautious approach from investors led to less capital availability in the venture ecosystem, and when combined with other headwinds such

as declining valuations and a frozen exit environment, many opted to extend cash runways for as long as possible in an effort to wait out formidable fundraising conditions.

Waiting out the current environment is easier said than done; startups need

2023 median deal size falls to six-year low

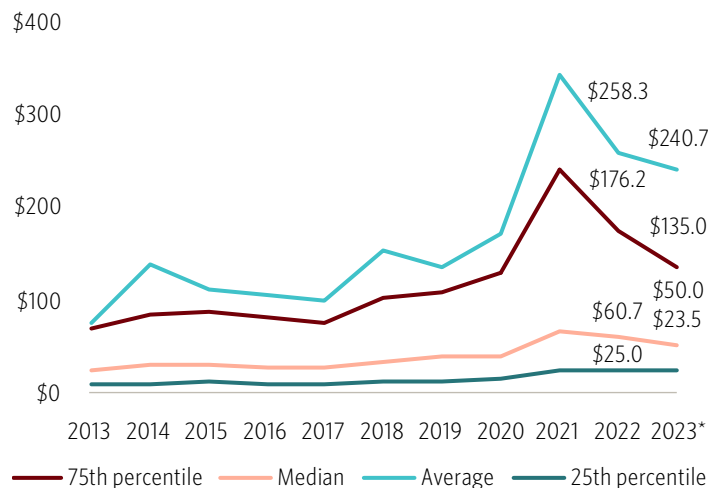
Range of US late-stage VC deal values (\$M)



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2023 median valuation is the third-highest annual valuation in past decade

Range of US late-stage VC pre-money valuations (\$M)



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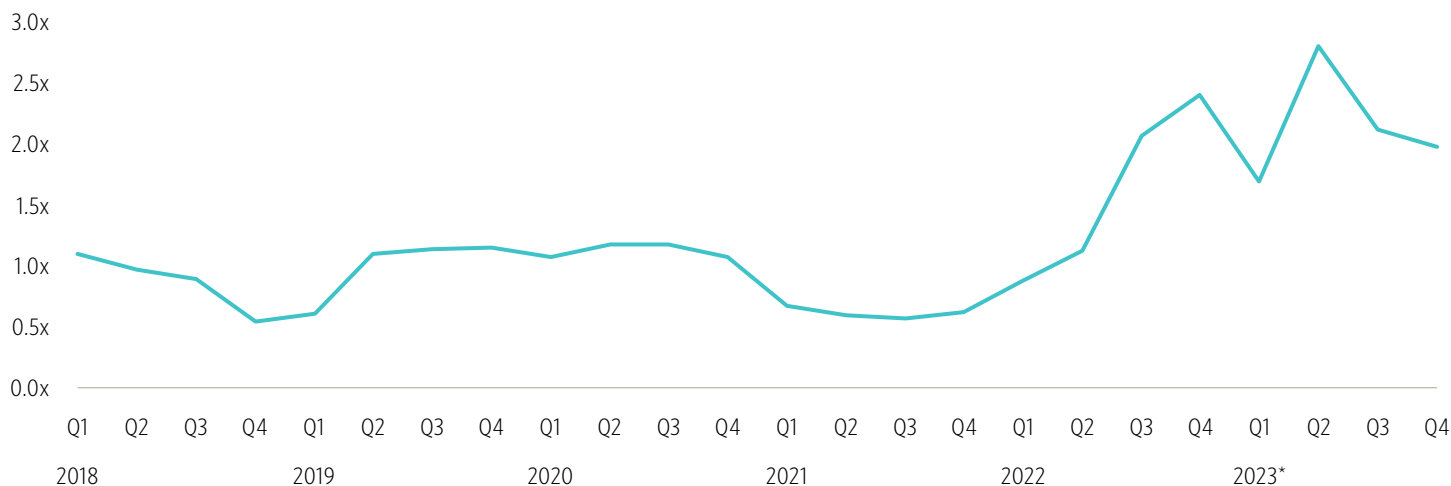
capital to survive, and even if raising said capital comes with a valuation haircut, that is almost always better than going out of business. One way to soften the blow of decreasing valuations and increasing dilution is to raise smaller tranches of capital. Doing so would allow startups to raise only what is necessary to continue operations and then raise more capital in the future, when conditions are more

startup friendly. Our data shows that the median deal size for late-stage startups in 2023 was \$5.9 million, notably lower than the \$10.0 million and the \$8.7 million observed in 2021 and 2022, respectively. Adding to this point, we observed a sharp decline in the number of late-stage mega-rounds (rounds exceeding \$100 million) in 2023 relative to prior years, with just 116 being completed compared with 241 in 2022.

While it is hard to imagine further declines within the venture ecosystem, we could witness a lackluster 2024 if current conditions persist or worsen. However, many look to recent positive economic signals, such as cooling inflation and paused interest rate hikes, as potential catalysts for increased VC activity in the new year.

Late-stage capital demand continues to outpace supply

Capital-demand-to-supply ratio in the US late-stage VC marketplace



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A top ranked boutique on
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Top 5 Q3 2023

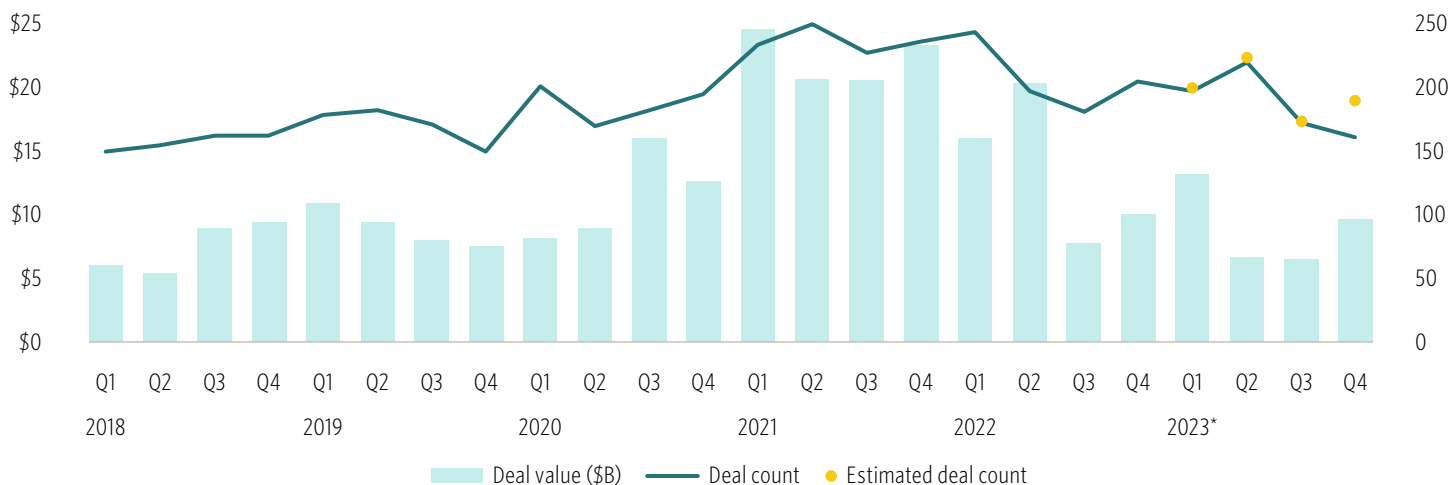
Venture**Beyond.**

dentons**venturebeyond.com**

Venture growth

Venture growth deal value spikes in Q4

US venture-growth deal activity by quarter



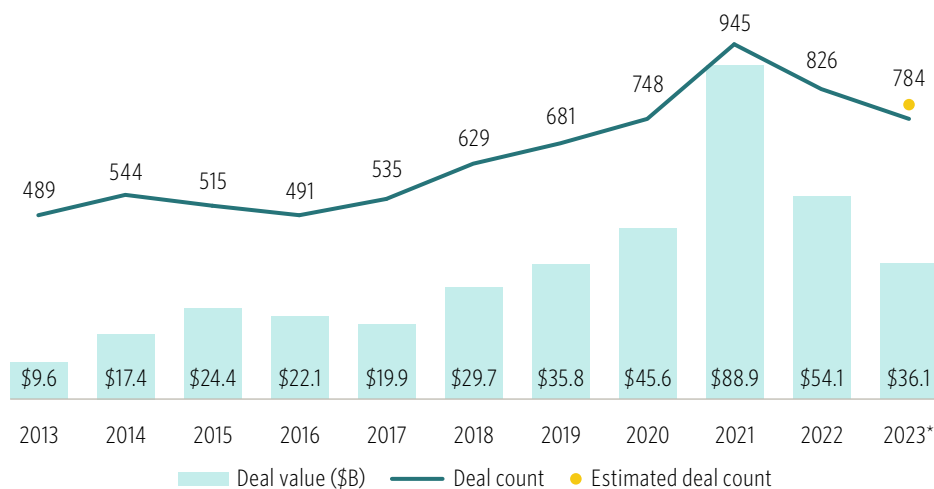
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In 2023, the venture-growth stage recorded \$36.1 billion in deal value across an estimated 784 deals, a significant decline from the \$54.1 billion in deal value generated across 826 deals in 2022. Despite Q4 deal value surging to \$9.7 billion, approximately 46.8% higher than each of the preceding two quarters, this increase was predominantly influenced by a small number of megadeals. In Q4, three deals exceeded \$1.0 billion, whereas only one such deal occurred during the first three quarters of 2023.

Of course, a small spike in megadeals is not representative of ongoing deal trends for venture-growth-stage companies. The median deal size for startups at this stage sat at \$12.8 million in 2023, which is the lowest annual median since 2016. Additionally, our data showed that there were just 76 venture-growth-stage mega-rounds in 2023, a 71.4% decline from the 266 mega-rounds that occurred in 2021. In the current environment, it makes

2023 deal value falls to pre-pandemic level

US venture-growth deal activity



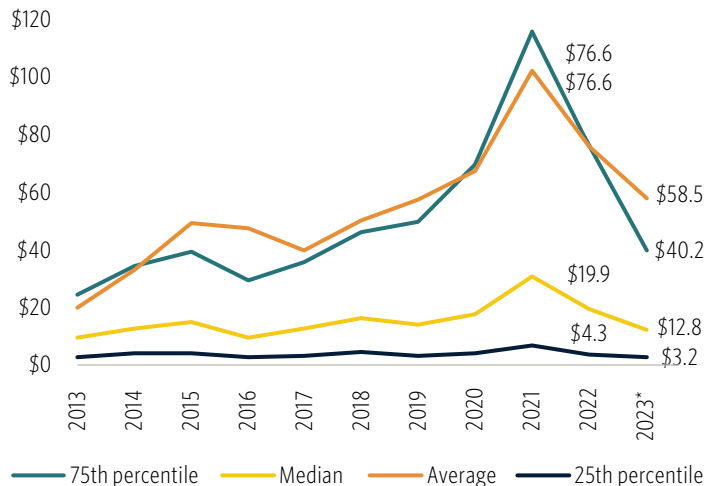
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sense that we are seeing smaller deal sizes and startups pursuing smaller checks. Facing such challenges as managing dilution amid diminishing valuations and the need to navigate a market with few exit opportunities, mature startups are strategically opting for smaller transactions. This approach

allows them to secure essential funding to continue core business operations, manage dilution to protect existing stakeholders, and position themselves for future fundraising or exit opportunities when the market eventually improves.

2023 median deal size falls to seven-year low

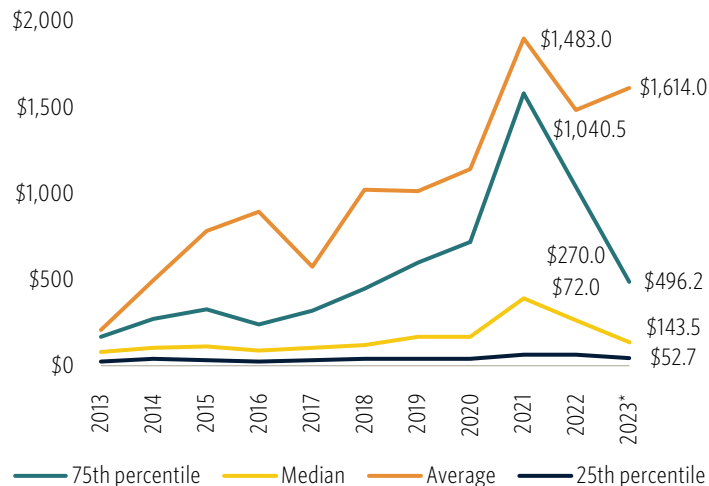
Range of US venture-growth deal values (\$M)



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2023 median pre-money valuation roughly half of 2022 figure

Range of venture-growth US pre-money valuations (\$M)



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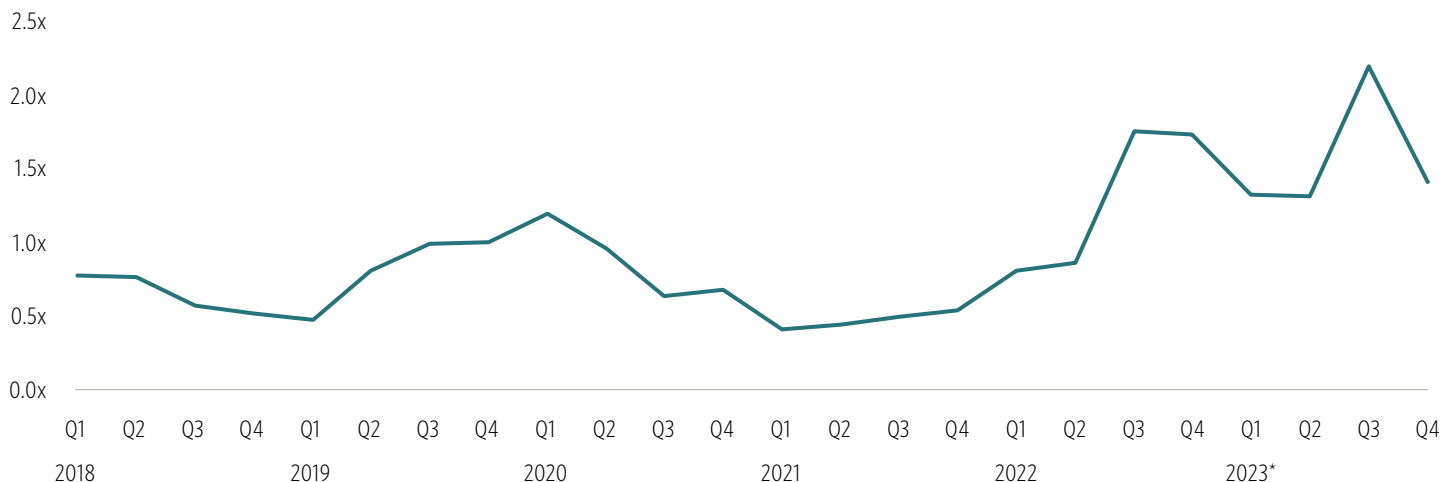
Conversely, many startups are nearing the end of their runway and likely will not be able to raise a new round of capital in the current environment. We have already observed several mature enterprises go out of business this year and will likely see more in 2024, barring a sudden turnaround in current market conditions. A lack of capital availability has plagued the venture-growth stage over the last 18 months; PitchBook's

capital demand/supply model reveals a ratio of 1.6x for venture-growth stage startups as of Q4, the sixth consecutive quarter that demand has outpaced supply. Moreover, the palpable lack of exits observed during the same period is increasingly trapping a growing cohort of mature startups with substantial capital needs in the private market. This, combined with significant declines in fundraising, intensifies

competition among these mature startups, which are all contending for a limited supply of capital. And while there is a significant amount of capital overhang in the market right now, it is important to note that this capital is reserved for what investors believe are the highest-quality startups with high return potential.

Demand-to-supply ratio for venture-growth stage remains near decade high

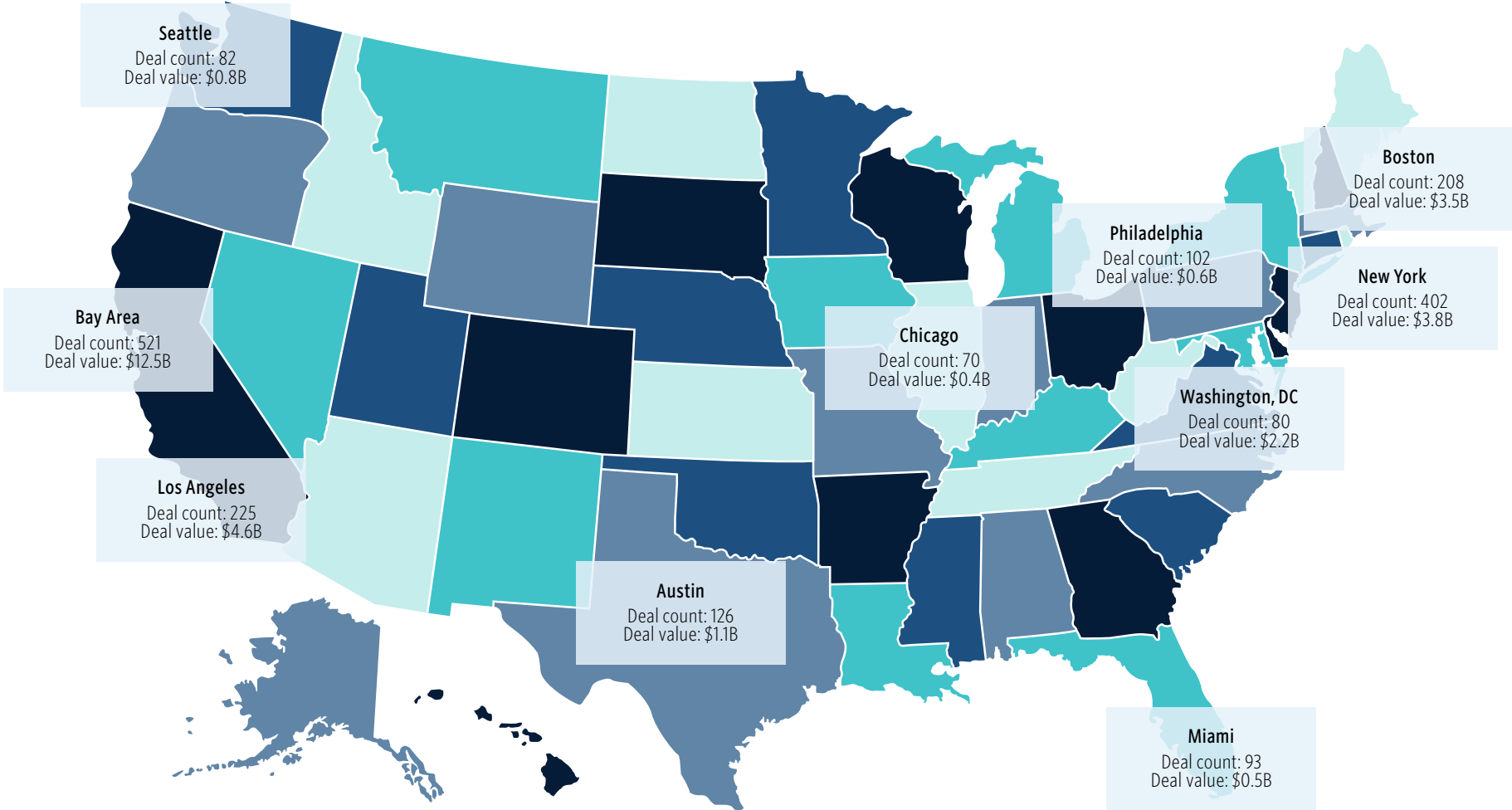
Capital-demand-to-supply ratio in US venture-growth VC marketplace



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Regional spotlight

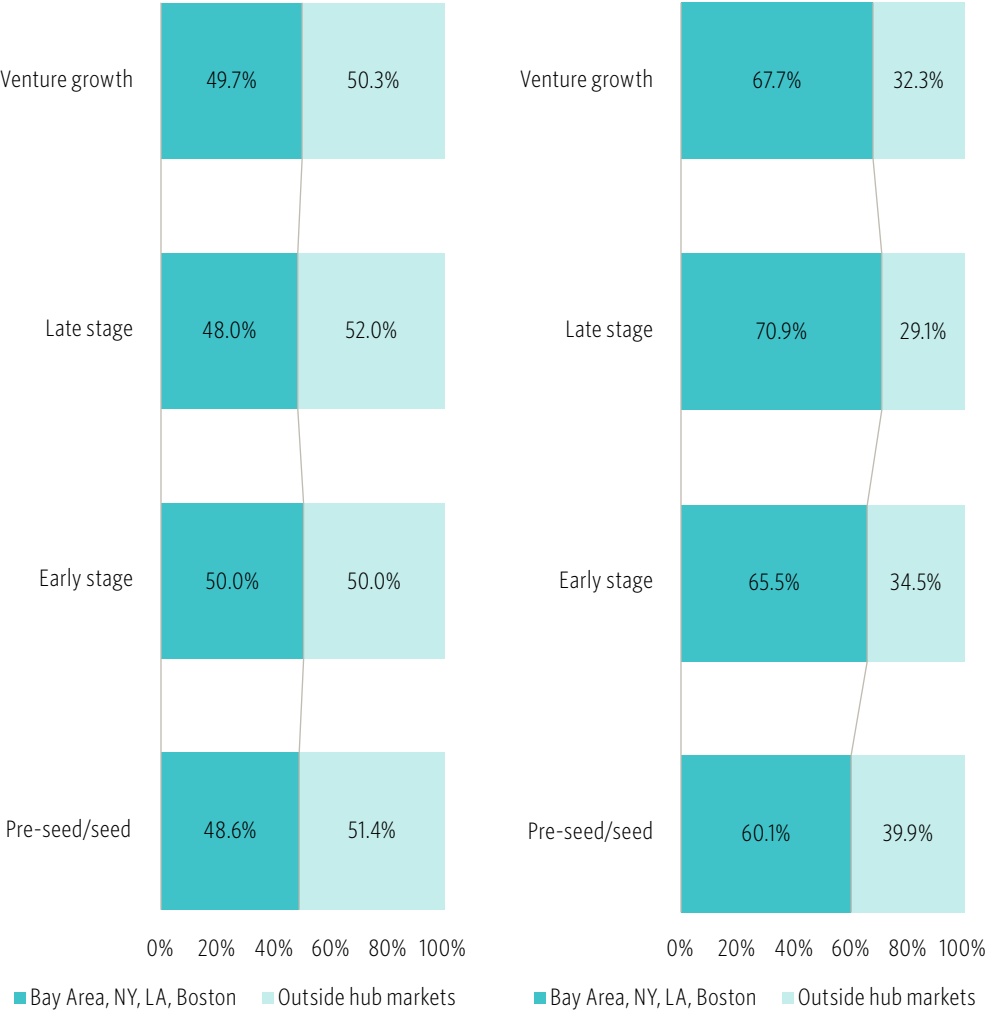
Bay Area only ecosystem to reach above \$4.0 billion in Q4 deal value
Q4 VC deal activity by ecosystem*



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Deal counts leaning outside hubs
Share of VC deal count by market breakout*

Deal value centered on major markets
Share of VC deal value by market breakout*



PitchBook-NVCA Venture Monitor
*As of December 31, 2023



Bay Area

Though New York gained ground on the Bay Area, the market still completed nearly 600 more deals than its runner up. Bay Area investors raised \$318.8 billion since the beginning of 2020, including more than \$63 billion in 2023—more than the next 10 markets combined.



New York

15.1% of VC deal count occurred in New York during 2023, the highest proportion the market has realized. The deal count total of 2,058 was also double the next-most-active ecosystem, creating full separation of the Bay Area and New York into a class of their own.



Philadelphia

Philadelphia quietly grew into the fifth-most-active market in the US in terms of deal count, more than doubling its annual deal counts in recent years. Though fundraising is relatively lower than larger ecosystems, the city’s proximity to large financial markets benefits its startup market.

A WORD FROM DENTONS GLOBAL VENTURE TECHNOLOGY GROUP

Key trends to watch in 2024

As we enter a new year, we want to take a moment to offer select observations on the US markets. We sit in a unique spot in the global innovation economy by working across the entire ecosystem, from startups to more mature tech businesses, and are uniquely positioned to discern trends in the boardroom and executive suite.

We are proud to have ascended to number five on the list of most active law firms in PitchBook's Q3 2023 Global League Tables, reflecting a unique combination of global heft and nimbleness in working with emerging growth companies and their investors. Our 25% year-over-year growth despite market headwinds is quite extraordinary.

Let's take a look at the world today as we see it. You should sense guarded optimism for 2024.

– **Victor Boyajian**, Partner and Global Chair of Dentons' Global Venture Technology and Emerging Growth Companies Group

M&A deal volume to rise

We expect M&A deal volume to pick up after several consecutive down quarters. Many who have been sitting on the sidelines could be drawn back into the markets given favorable valuations. Of course, the high-interest-rate environment is likely to be a drag on any full recovery. Within tech M&A, many hold the view that software will lead the rebound. "Many of our private-equity-backed portfolio companies are looking aggressively at accretive acquisitions and bolt-ons to accelerate growth and position for exit," observed Ilan Katz, Senior M&A Partner in Dentons' Meatpacking New York office. Angela Bernardi, Partner in Dentons' Silicon Valley office, expects sell-side activity to reflect the need for emerging growth companies and their venture backers to find liquidity or strategic heft through combination or otherwise. Profitability will be key.

Key sectors to watch

AI will continue to grab market attention—and investor dollars—with broad application across the economy even in the face of evolving ethical debates. Beyond AI, we remain bullish on the climate/cleantech sector—infrastructure and sustainability are important to watch, particularly given the significant investments by the federal government through the Inflation Reduction Act and other recent legislation. The industrial policy designs to secure supply sources and create redundancy and security are important propellants. Ongoing tensions with China are likely to accelerate this trend despite recent efforts by the Biden administration to put the relationship on a more healthy footing. The security, healthcare, and fintech sectors are likely to continue to attract attention. The vibrancy of the life sciences and medical device communities is expected to advance.

Venture firms and others in the ecosystem react

The challenging environment over the past couple of years has required many funds to exercise more patience and hold out longer than they would have hoped or expected. As noted Chris Errico, Partner in Dentons' Meatpacking New York office, "A good deal of dry powder will continue to be reserved for existing portfolio companies as opposed to new investments." To this end, venture firms have been advising their less-profitable portfolio companies to make sure they have enough cash in their businesses to survive the downturn given cash and funding constraints.



Victor H. Boyajian
Global Chair, Dentons
Global Venture
Technology and
Emerging Growth
Companies Group

Victor leads a global team focused on representing emerging growth technology companies, venture capital firms, corporate strategics, and private equity firms in a broad array of financings and strategic transactions from Silicon Valley to Boston and New York, and around the globe.

Chris Errico and Dan Goldberg are partners in Dentons' Meatpacking New York office, focusing on Venture Capital transactions. Ilan Katz, also a partner in the Meatpacking New York office, focuses on M&A.

Angela Bernardi and LiLing Poh, both partners in the Silicon Valley office, are focused on M&A and Venture Capital transactions, respectively.

Allison Jetton is a partner in the Firm's Washington, DC office, with a concentration in data privacy.

All are members of Dentons' Global Venture Technology and Emerging Growth Companies Group.

While overall investment activity is down across the board rather significantly, there are bright spots. Boyajian observed, "Walking the halls of recent gatherings of corporate venture investors in London and Munich, many managers indicated a sense that their level of investment activity would hold steady or increase. Many large, strategic buyers are eagerly waiting to take advantage of the numerous opportunities building in the marketplace." LiLing Poh, Partner in Dentons' Silicon Valley office, offered a similar assessment.

Some of these emerging growth companies, which are not yet profitable, may want to explore structured funds that might not be as concerned about valuation, provided they have some downside protection. “By reaching out to structured funds and existing investors and cutting their burn rate, these companies may be able to ride it out for another year and avoid the turbulence,” said Dan Goldberg, Partner in Dentons’ Meatpacking New York office.

And of course the fundraising environment for funds themselves can be challenging. “In these markets, market differentiation is critical. This is exactly why funds such as Drive Capital in Columbus, Ohio, under the leadership of Sequoia expat Chris Olsen, have been able to capture the imagination of limited investors. And if you are indeed successful in raising funds, it will be a fabulous vintage year,” observed Boyajian.

We continue to look for good opportunities off the coasts of the US—where ideas, talent, and markets abound—and our recent full-throttled expansion into Miami to leverage our huge Latin America presence is reflective of ongoing market trends and developments.

Tech IPOs due for a rebound

The Federal Reserve is likely done raising interest rates for the foreseeable future, which should set the scene for a gradual market recovery. In particular, this should result in a market that gains steam in the second half of the year. Some forecasters expect a rate reduction to around 5% in Q2 or Q3 2024 due to a cooling labor market.

This could trigger a flurry of activity as deals that have been backlogged come to market.

This year should usher in new tech arrivals on Wall Street. While we are unlikely to reach the historic heights of the 2021 IPO market, we do anticipate a major bounceback for tech IPOs, especially if market conditions are friendlier and the geopolitical climate stabilizes. Tech companies taking aim at an IPO—and those considering investing in them—will benefit from having an aggressive, innovative, and experienced venture technology law firm in their corner to drive their success.

Cybersecurity a priority for emerging tech companies

The Federal Reserve recently published a report on resiliency in which it named cybersecurity as the top current risk for emerging technologies. (It also highlighted crypto, AI, and quantum computing.) This is an issue that will be top of mind for boards at emerging tech companies. Last year we saw more regulation at both the federal and state levels, and at an accelerating pace. In 2024 and beyond, tech companies will want to emphasize navigating these new regulations, which will also serve to mitigate the risks these laws are designed to contain.

Keep an eye out for new burdens and challenges arising in connection with the implementation of the Securities and Exchange Commission’s cyber disclosure rules, which apply to any company that files after December 15, 2023.

“We’re also looking at federal banking regulators’ new regulation for suppliers on cybersecurity, which will impact all of the emerging growth companies that support banks. These dramatic changes to the regulatory landscape are going to be extremely significant for cybersecurity,” noted Allison Jetton, Partner in Dentons’ Washington, DC, office.

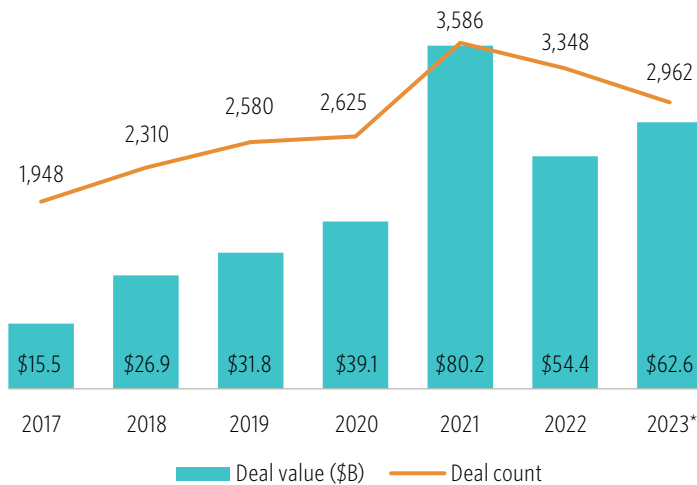
Dentons Venture Technology team ranks in PitchBook’s top 5 globally for all deals.

DEALS BY SECTOR

AI & ML

Corporate megadeals buoyed VC value

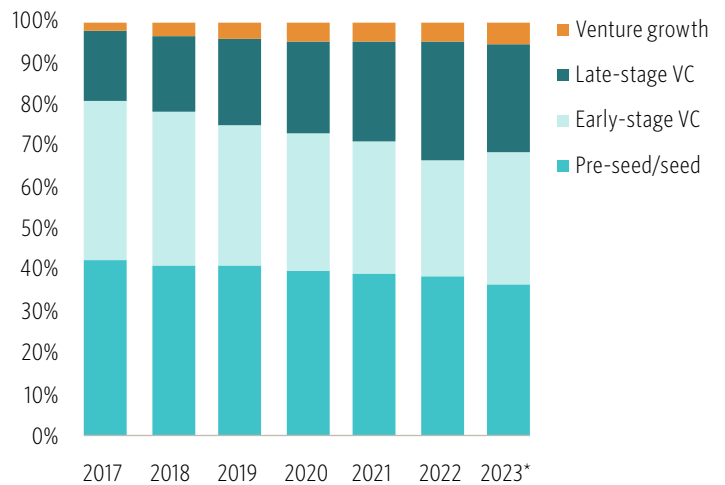
US AI & ML VC deal activity



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Early-stage startups captured market share

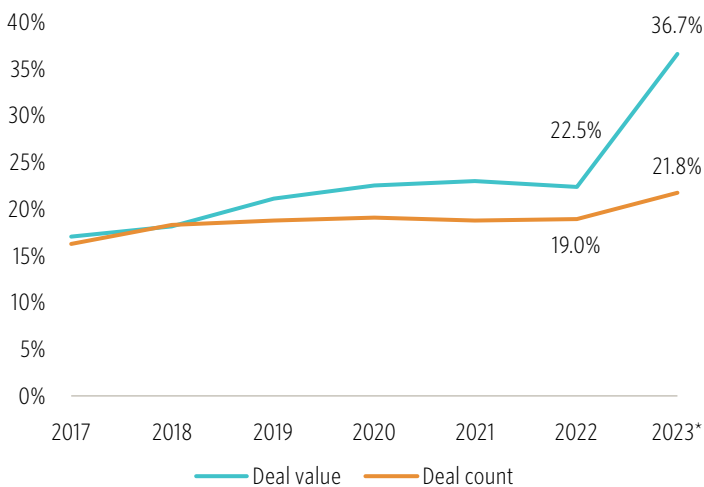
Share of US AI & ML VC deal count by stage



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AI focused investor attention in 2023

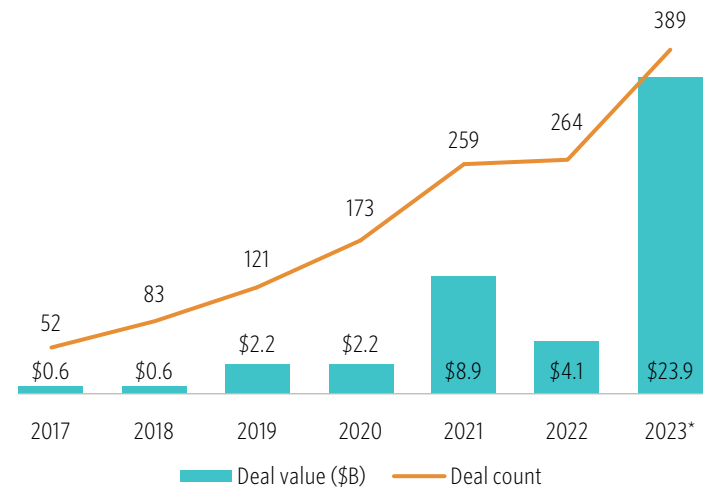
AI & ML VC deal activity as a share of all US VC deal activity



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Tech giants outsourced generative AI R&D

Generative AI VC deal activity

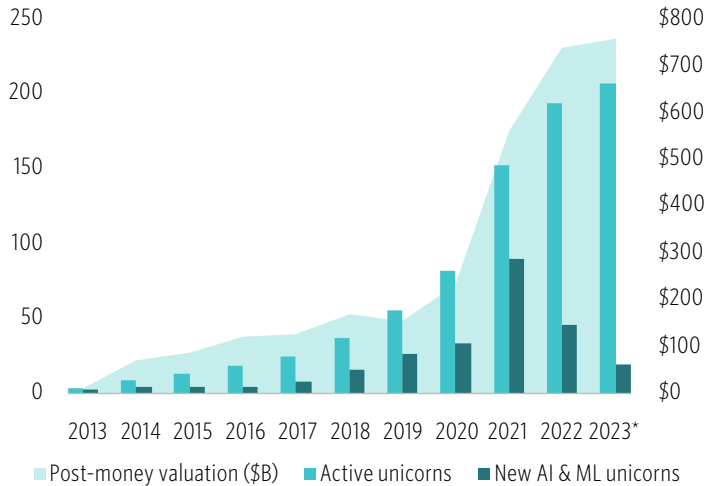


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Sector data is provided as part of our Emerging Tech Research coverage. The full AI & ML report can be accessed [here](#).

AI unicorn creation slowed...

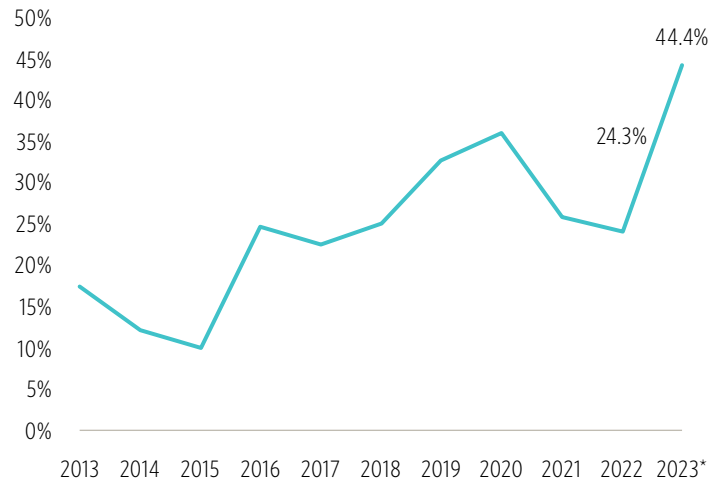
US AI & ML unicorn count and aggregate post-money valuation (\$B)



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...Yet reached a record share of all new unicorns

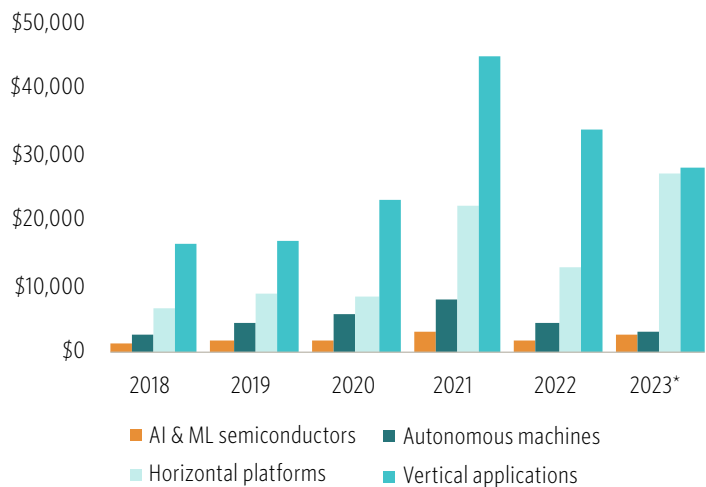
AI & ML unicorns as a share of all new US unicorns



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AI infrastructure caught up to applications

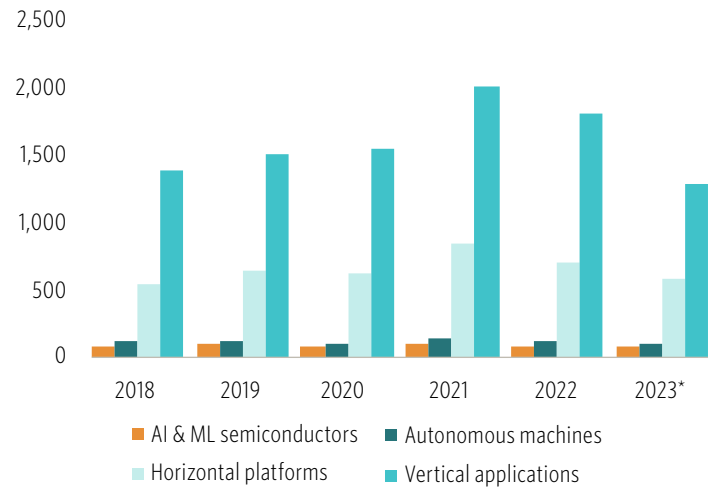
US AI & ML VC deal value (\$M) by segment



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All segments face declining deal counts

US AI & ML VC deal count by segment



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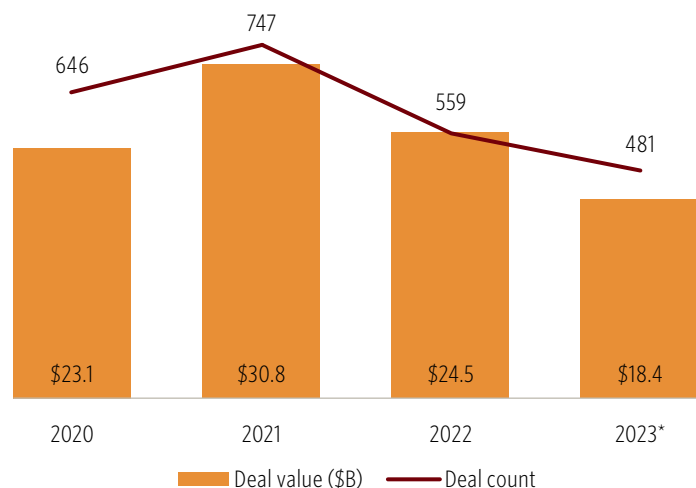
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DEALS BY SECTOR

Biopharma

Deal count dives as megadeals keep value strong

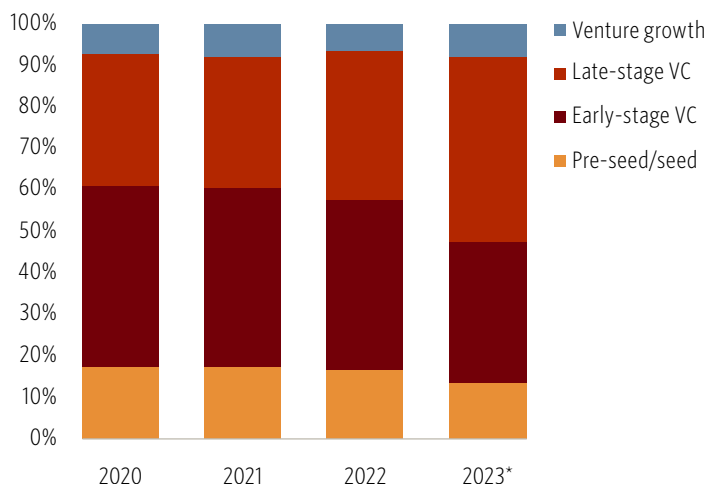
US biopharma VC deal activity



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Industry trending toward late-stage deals

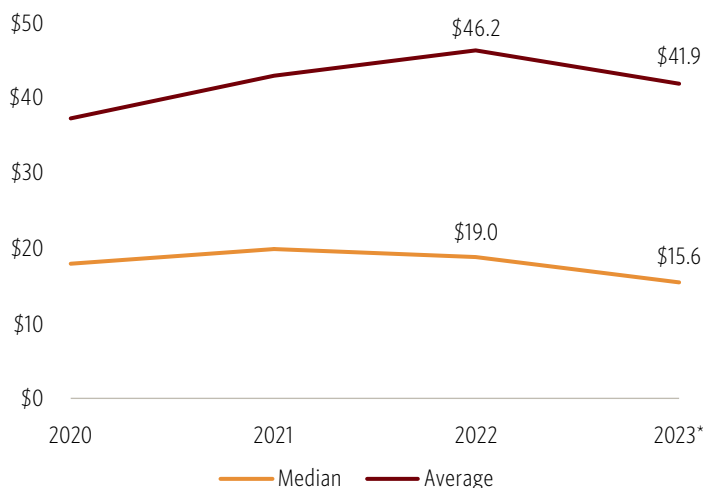
Share of US biopharma VC deal count by stage



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Megadeals keep average high

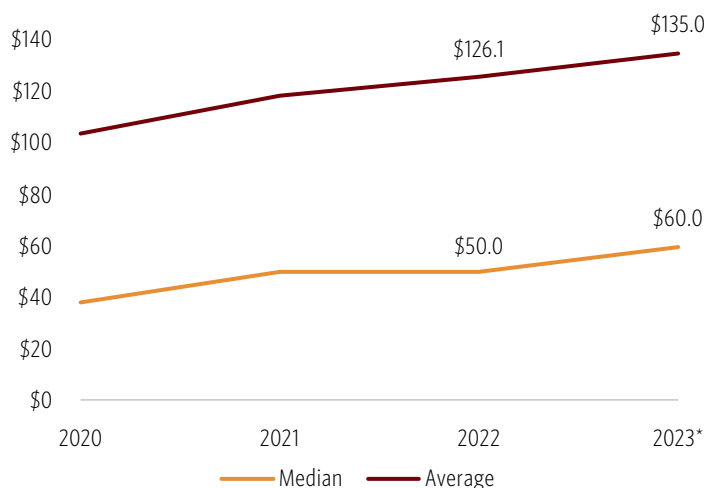
Median and average US biopharma VC deal values (\$M)



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Pre-money valuations hold steady

Median and average US biopharma VC pre-money valuations (\$M)

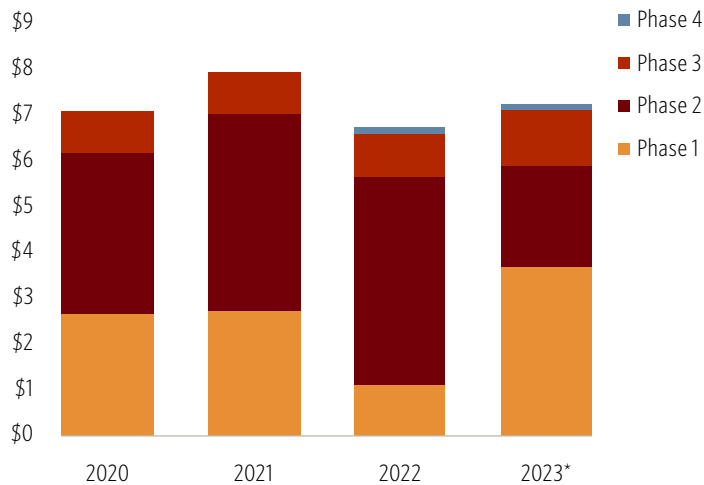


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Deal value shifts away from ongoing phase 2 trials

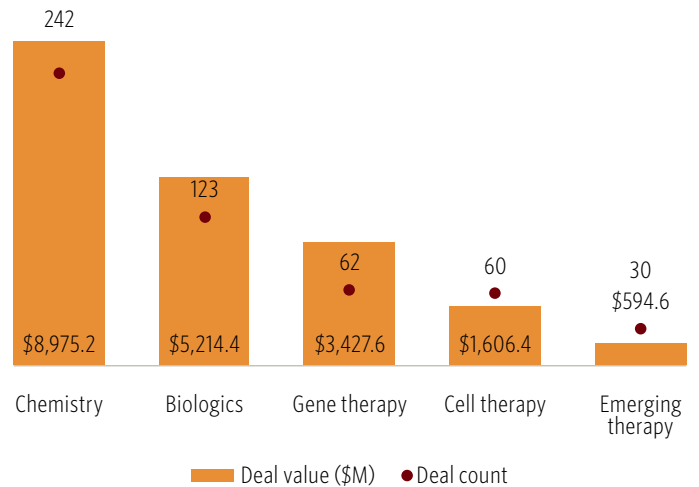
US biopharma VC deal value (\$B) by highest clinical trial phase reached



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Traditional chemistry-driven small molecules lead industry

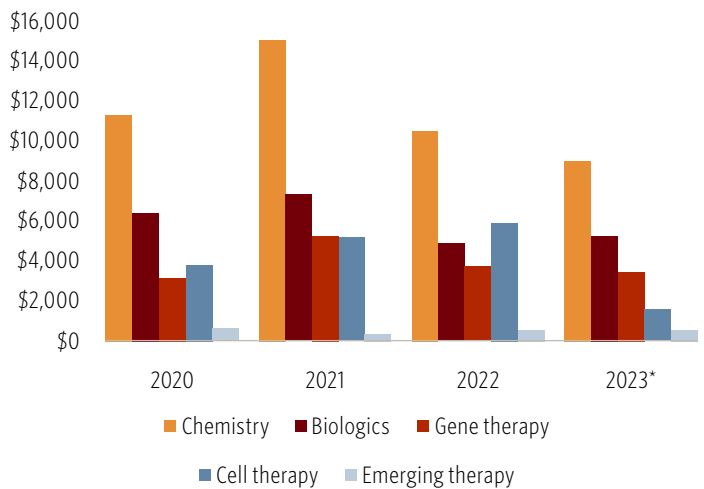
TTM US biopharma VC deal activity by segment*



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Cell therapy modalities behind many megadeals

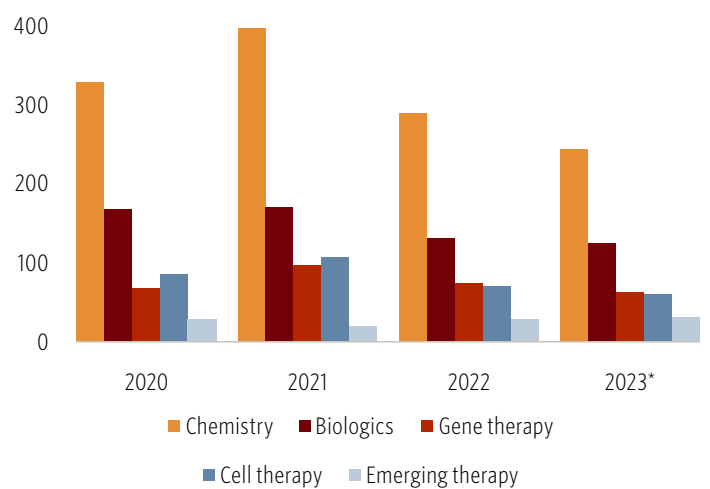
US biopharma VC deal value (\$M) by segment



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Deal volume dropped proportionally across all segments

US biopharma VC deal count by segment



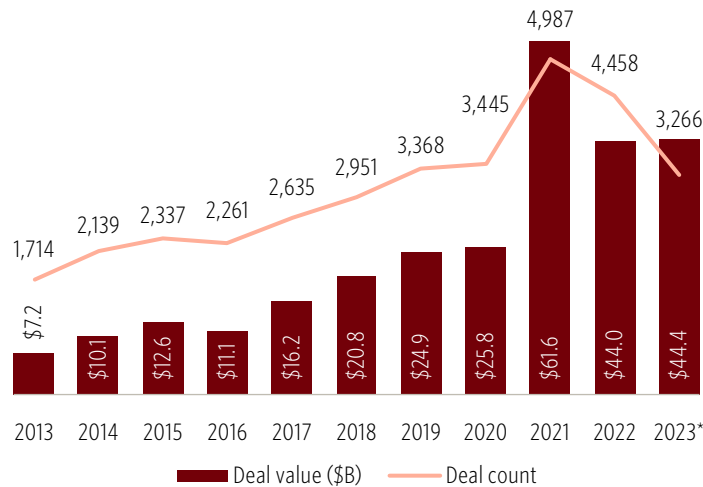
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Female founders

Investment in female founders largely unchanged

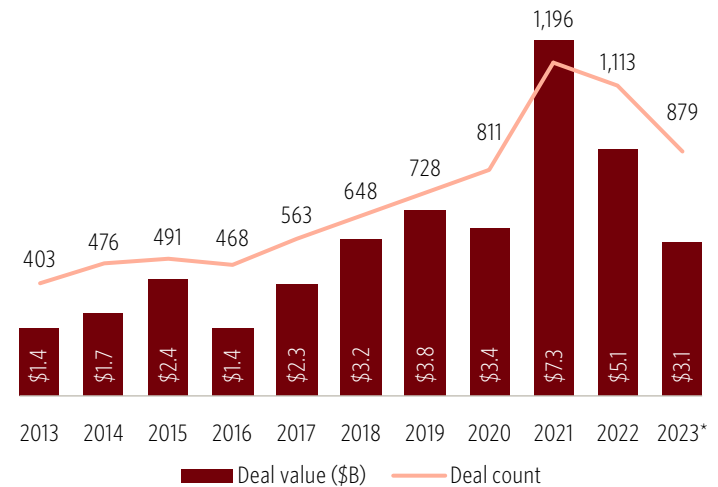
US VC deal activity in companies with at least one female founder



PitchBook-NVCA Venture Monitor • *As of December 31, 2023

All-female-founded companies raise just \$3.1B in 2023

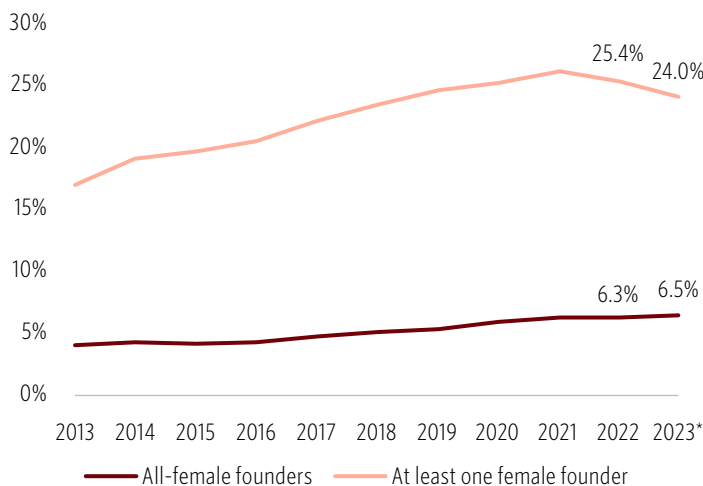
US VC deal activity in companies with all-female founding teams



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Less than 25% of deals are into female founders

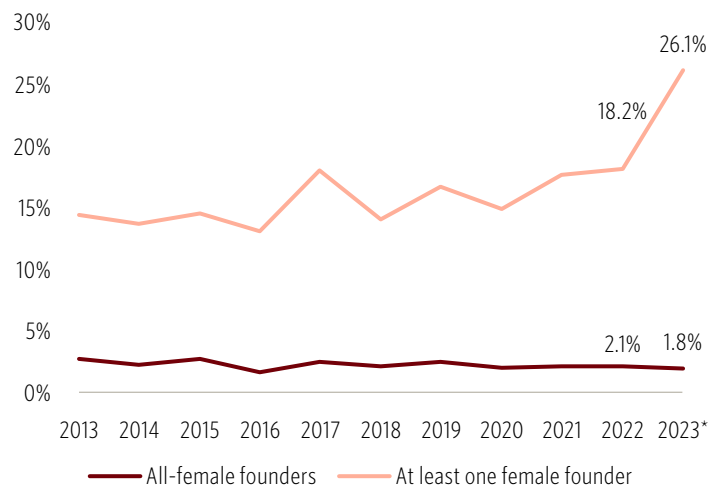
Female-founded company deal count as share of all US VC deal count



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Less than 2% of deal value into all-female founder teams

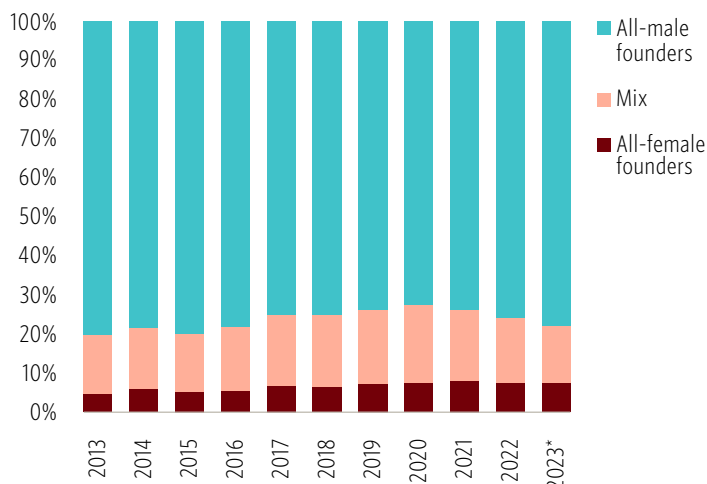
Female-founded company deal value as share of all US VC deal value



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First financings declined in 2023

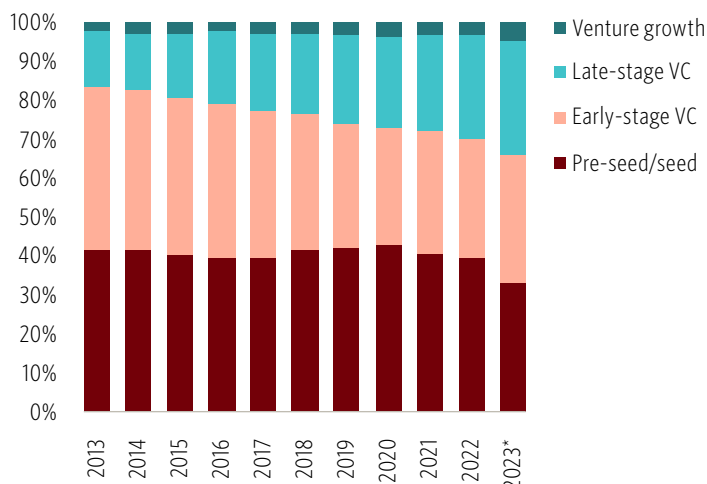
Share of US VC first-time financings by founder gender



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More female-founded companies reaching late stage

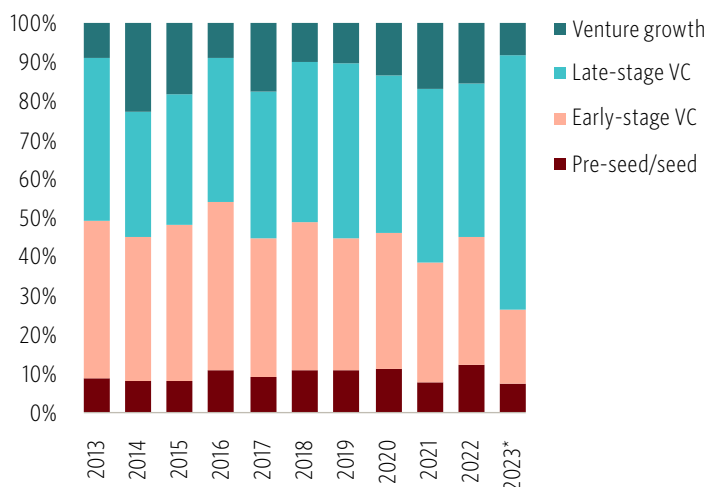
Share of US VC deal count for female-founded companies by stage



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Just \$8.5 billion invested in female founders at early stage

Share of US VC deal value for female-founded companies by stage



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New York remains on top

Top five US CSAs by deal count for companies with all-female founder teams in 2023*

Combined statistical area	Deal count
New York-Newark, NY-NJ-CT-PA	193
San Jose-San Francisco-Oakland, CA	122
Los Angeles-Long Beach, CA	90
Washington-Baltimore-Arlington, DC-MD-VA-WV-PA	37
Boston-Worcester-Providence, MA-RI-NH-CT	37

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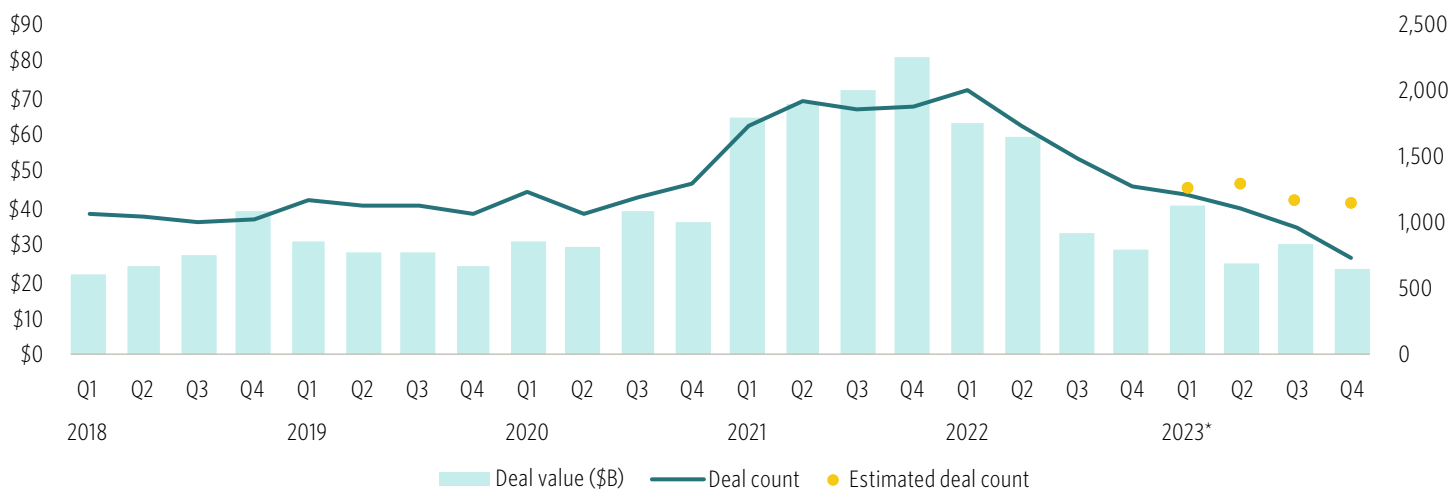
Note: San Diego MSA is excluded in Los Angeles-Long Beach CSA.

Austin MSA is included in rankings alongside CSAs.

Nontraditional investors

Q4 nontraditional investor deals fall to lowest quarterly deployment in six years

US VC deal activity with nontraditional investor participation by quarter



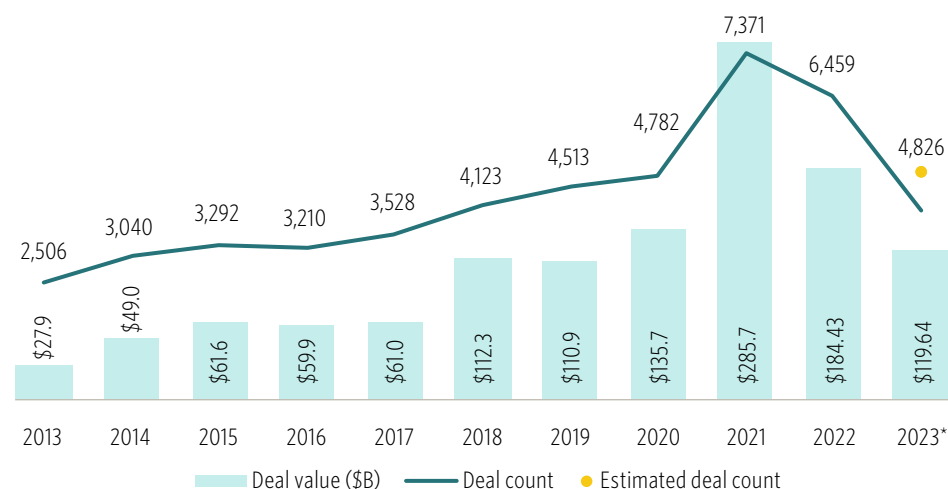
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Nontraditional investor participation declined to pre-pandemic levels of activity in 2023. The annual deal value for deals involving nontraditional investors totaled \$119.6 billion, compared with \$184.4 billion and \$285.7 billion in 2022 and 2021, respectively. Q4 was particularly low with just \$23.1 billion of deal value, the lowest quarterly total observed in nearly six years. We estimate that there were 4,823 VC deals involving a nontraditional investor in 2023, which is 1,633 fewer deals than in 2022.

Some nontraditional investor types have pulled back more than others given the current macroeconomic environment and the fact that venture investing often is not the primary strategy or focus for many of these investors. Crossover investors participated in just 1,046 rounds in 2023, a 50.0% decline from 2022. The current interest rate environment creates a less favorable financing landscape, raising the cost of capital

2023 nontraditional investor deployment to VC declines nearly \$65.0 billion YoY

US VC deal activity with nontraditional investor participation



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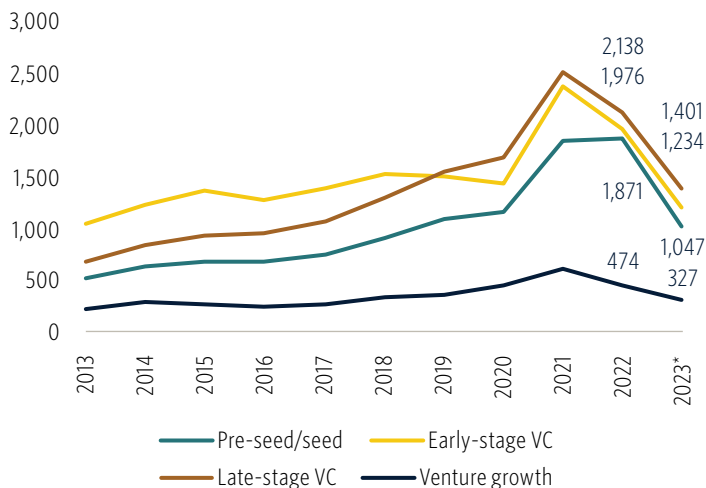
and prompting many crossover investors to reassess the risk associated with VC. The performance of the public markets has introduced a level of market volatility that may have left a lasting impact on investor sentiment. Moreover, the limited liquidity options

for startups pose challenges in realizing returns on investments, leading crossover investors to exercise restraint until more viable exit strategies emerge.

Corporate venture capitalists (CVCs) are also displaying a measured retreat

NTIs participate in just 1,401 late-stage deals in 2023

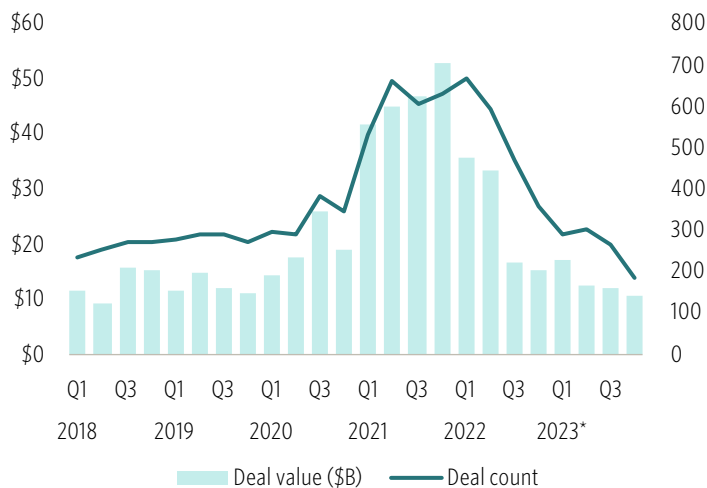
US VC deal activity with nontraditional investor participation



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Crossover participation deal count falls below 200 for first time since Q4 2017

US VC deal activity with crossover investor participation by quarter



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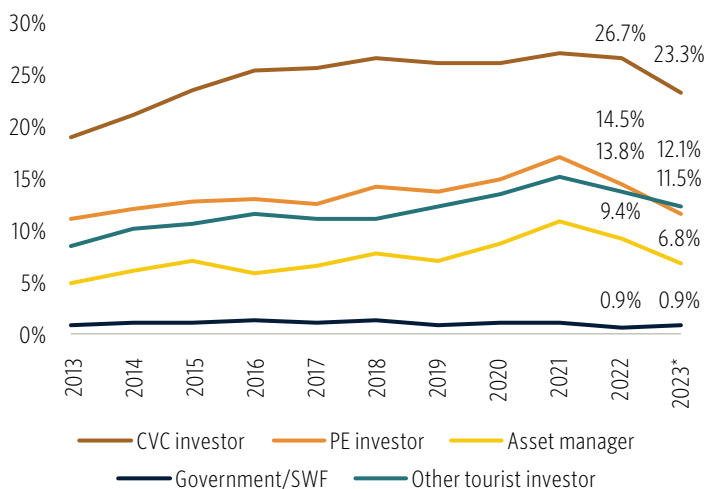
from investments. On an annual basis, CVCs participated in 23.3% of VC deals in 2023, which is the lowest level observed since 2014. This cautious approach likely reflects a deliberate risk mitigation strategy that prioritizes quality investments over quantity. Still, CVCs have a higher VC involvement relative to other nontraditional investor types, a reflection of the pivotal role that gaining access to innovative

startups plays in broader corporate strategies and growth initiatives. This access not only provides valuable insights into emerging technologies and markets but also establishes a vital connection for corporations to stay at the forefront of industry trends, potentially giving them a competitive edge in an ever-evolving business landscape.

Nontraditional investor participation in 2024 will hinge on several factors, including, but not limited to, the Fed's interest rate plans, public asset performance, and market valuations. We expect that many investors will continue their current pace and strategies for the first half of the year as they observe these factors and decide whether to act in the latter half of 2024.

CVC investors proportional deal count activity dips to nine-year low

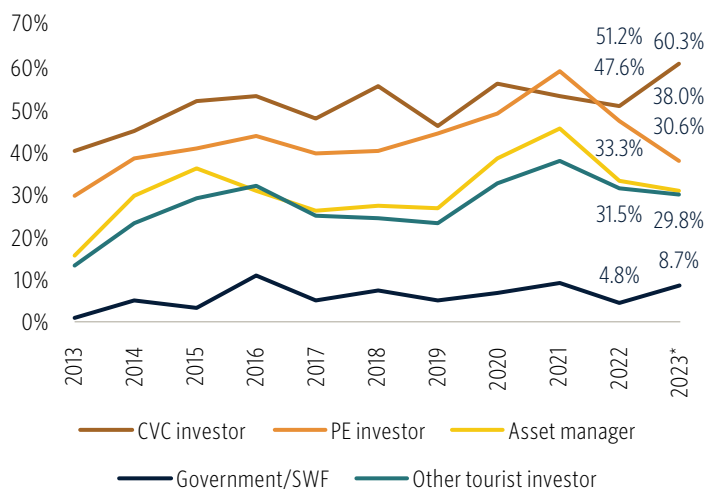
Share of US VC deal count by nontraditional investor type



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PE deal value participation declines to lowest in a decade

Share of US VC deal value by nontraditional investor type



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A WORD FROM DELOITTE

Is it Groundhog Day for capital markets—will the IPO see its shadow?

From boom to bust and today's market: The IPO recovery and how we can avoid history repeating itself

Ask anyone who was around in the heyday of the 1990s about the dot-com boom and their expression will simultaneously be one of both excitement and utter disappointment. It was the best of times; it was the worst of times. It's been said that, back then, all you needed to go public was an idea written on a napkin. Now, following the post-COVID-19 boom and bust, it appears the IPO market is once again beginning to thaw, albeit slowly, leading some to believe an IPO recovery may be on the horizon. Is AI the new catalyst for the next IPO gold rush? And if it is, how do we avoid history repeating itself?

To answer these questions and more, Heather Gates offers insight into the similarities and differences among the booms, busts, and recoveries of past IPO markets, the current IPO market—and, more importantly, how we can avoid making the same mistakes all over again.

Will AI be the spark that sets off the next IPO boom?

Recent IPOs suggest that the IPO market may remain in hiding for the foreseeable future. Even with the hope around AI as the second coming of the internet, we have yet to see any real influx of AI-inspired IPOs. Rather, we are seeing AI as simply a catalyst for established

companies to continue to build new momentum. Of course, it's early days, but by looking to the past, we can better prepare ourselves for the day when IPOs come back out into the light.

Comparing data from previous booms

The parallels between the 90s dot-com boom and the COVID-19-era IPO surge are intriguing. Both were viewed as unprecedented periods, and each were followed by steep declines.⁴ The scale of overvaluation in the 90s and the valuations of companies in 2021 and 2022 are similar: In both instances, a multitude of unicorn companies with valuations of more than a billion dollars entered the market.

According to Forbes, "There were 5,934 IPOs between 2000 and 2022. The lowest number of IPOs in a single year was in 2009, with a mere 62. Yet, interestingly during an overall decline, 2021 holds the all-time record for IPOs with 1,033, beating the previous record of 480 in 2020; however, there were only 181 IPOs on the US stock market in 2022."⁵ Based on historical data, one can deduce that such an unprecedented period was unsustainable and led to necessary corrections and market recalibrations.

What have we learned?

What lessons from past booms could help the world of finance sidestep another catastrophic bust? The cyclical nature of markets is not new

**Heather Gates**

*Audit & Assurance Private Growth Leader
Deloitte & Touche LLP*

With more than 30 years of financial services experience, Heather serves as the national

Private Growth Leader, with oversight of the Deloitte Private, Emerging Growth Company, and Private Equity businesses within Audit & Assurance.

to experienced observers. As I see it, a significant portion of companies raised staggering amounts of capital at incredible valuations in 2021 and 2022. Of these, probably one-third have experienced a down round, where they raised less capital than in their initial rounds. While others may have refrained from raising capital again, and still do, it appears others have yet to adjust their valuations to the "new norm" levels.

History teaches us no boom lasts indefinitely. Eventually, markets normalize, often with bouts of volatility and temporary slowdowns in IPO activity. Interest rates play a crucial role in shaping investor sentiment—higher rates mean a higher cost to borrow for companies, driving down future earnings—and, in turn, IPO activity, because the cost of debt increases as interest rates increase. Consider that from 1990 to 1999, interest rates fluctuated between 8.0% to 5.5%, respectively.⁶

4: "The Current IPO Market: Factors in Its Decline and Reversing the Trend," Forbes, Giri Devanur, February 1, 2023.

5: Ibid.

6: "Federal Funds Rate History 1990 to 2023," Forbes Advisor, Taylor Tepper, October 17, 2023.

The settling of interest rates at a predictable level could significantly impact market stability. The uncertainty stemming from fluctuations in the Federal Reserve's interest rate policies often reduce transaction volumes. Clarity and stability in this area are perceived as being crucial for sustaining the thawing IPO market.

Why this time could be different

Another observation is that in contrast to the recovery following the 90s, the present IPO market has rebounded more rapidly. In my opinion, the diversification of industries and sectors may play a pivotal role. As I see it, unlike the 90s, where the majority of IPOs centered on the internet, the current market showcases variety across various sectors. In this era, when one industry faces challenges, others often thrive. It could be argued that the fundamental dynamics of venture capital investment, with some repetition of valuation creep, have shifted toward a more diversified portfolio of investments. While AI on the surface appears to be a singular subject, its impact is being made across many industries.

In my view, we no longer categorize companies around their internet or technology capabilities as we did in the 90s. The proliferation of the internet, software, and other technologies across all business types enables us to look at them as tech-enabled rather than strictly internet-based. Outside of "core" technology companies, the recategorization reflects the underlying nature of the business, thus enabling it to align with the appropriate regulatory standards—think of fintech as an example. I believe there are also fewer

look-alike companies versus during the dot-com boom when there might be several IPOs offering the same product or service. Today's companies, though alike in their use of tech tools, are innovating in visibly different ways.

Current trends can also impact success or failure. While some of the trends are beyond the control of companies looking to go public, not all of them are. A firm grasp of changes in access to capital, as well as investors' appetite for IPOs, evolving regulations, and in-house capabilities when it comes to handling financial and regulatory matters, can all contribute to the success of any company undertaking an IPO.

Steps to consider for IPO success

Sustaining success in this evolving IPO landscape requires at least a few key elements, not the least of which are profitability or a clear strategy for getting there, and an understanding of what is expected of a public company from a reporting standpoint. To see a more complete list, we recommend taking a look at last quarter's article, [Venture Capital Chronicles of 2023](#).

It's vital to plan ahead and engage financial service specialists early in the process. Drawing lessons from the past and anticipating market dynamics can help guide companies on their path to an IPO. Deloitte's IPO services are designed to advise companies around the world as they navigate the IPO process. The critical period begins six to 18 months prior to listing and lasts until the six months post-IPO and beyond. My team of Deloitte specialists can provide advice and recommendations before, during, and after the IPO, with services

ranging from an audit, rounding out gaps identified via [an IPO readiness assessment](#), and project management office services, to technical accounting and SEC reporting services.

As the IPO market continues to evolve, embracing change, diversifying investments, and adhering to regulatory standards will be pivotal. The potential for another opening of the IPO window looms, and with prudent preparation, the market can aim for sustainable growth, free from the shadows of its past.

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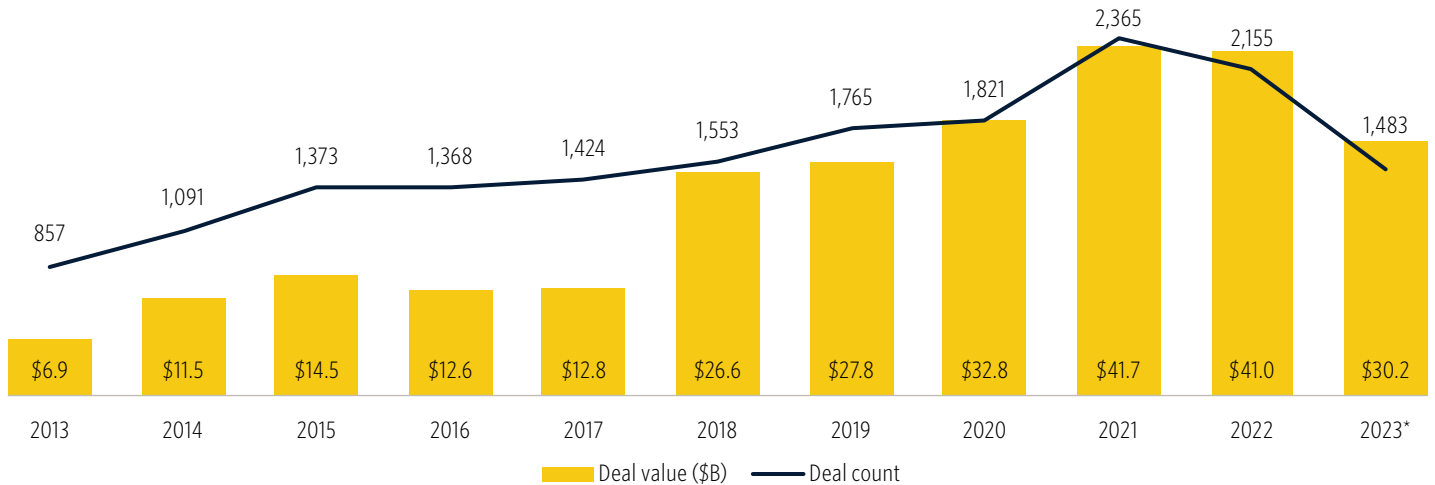
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Venture debt

Venture debt completes slowest lending year since 2017

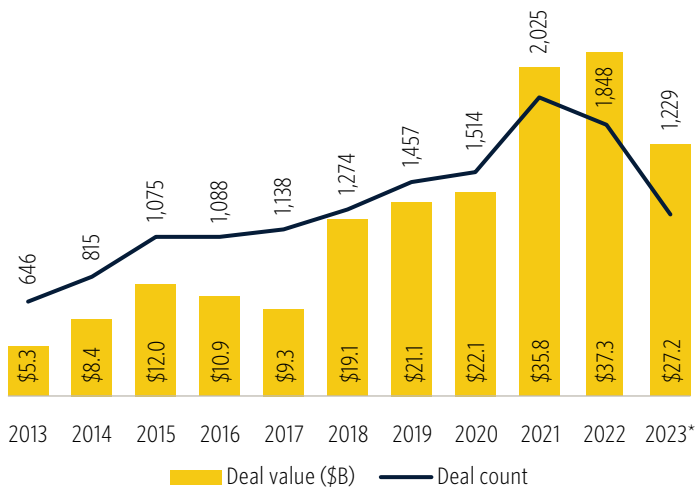
US venture debt VC deal activity



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Tech loan value falls below \$30 billion

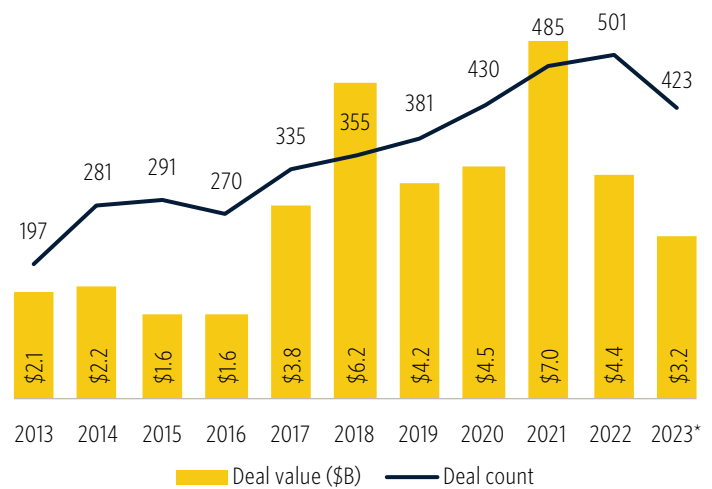
US tech venture debt VC deal activity



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Healthcare loan value lowest since 2016

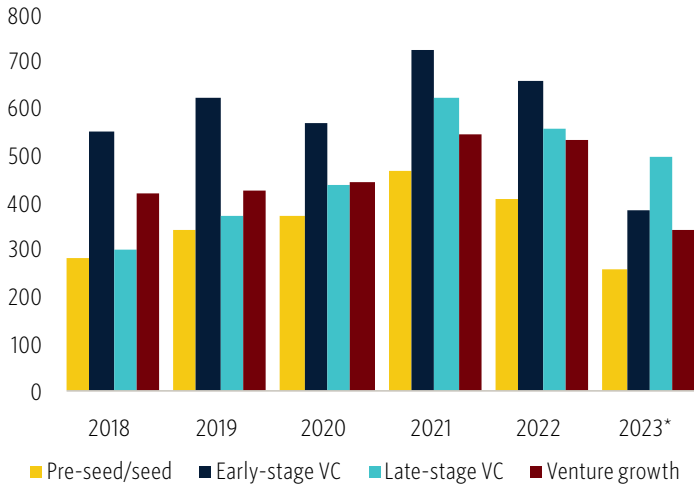
US healthcare venture debt VC deal activity



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Venture-growth lending surpasses \$30 billion for fourth year

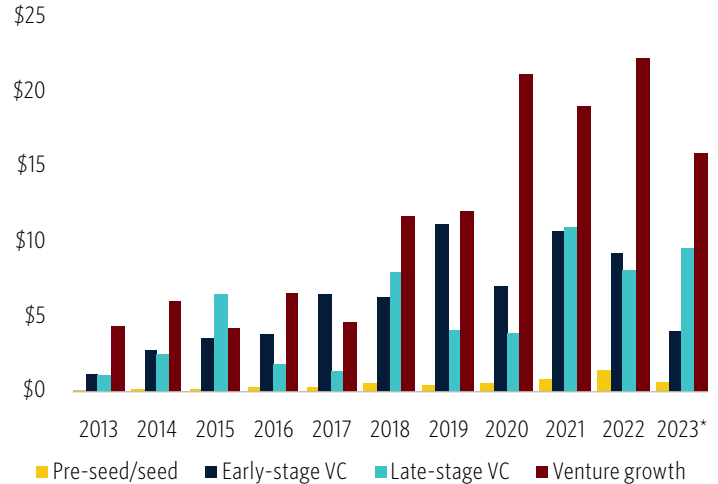
US venture debt VC deal count by stage



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Late stage sees highest loan count as early-stage lenders pull back

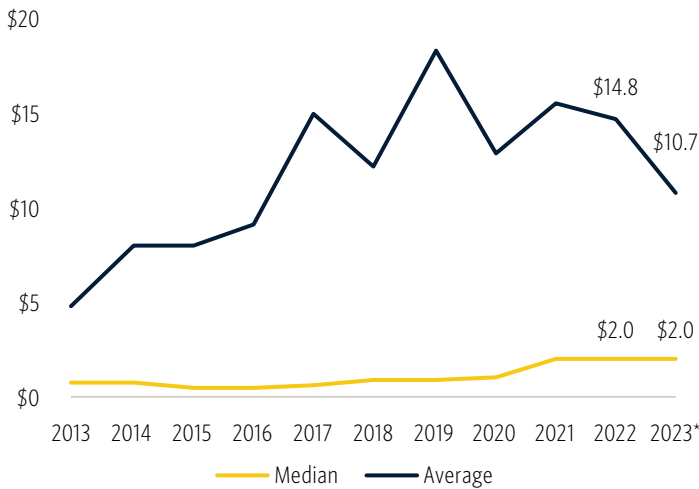
US venture debt VC deal value (\$B) by stage



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Pullback because of risk sees loan sizes decline at early stage

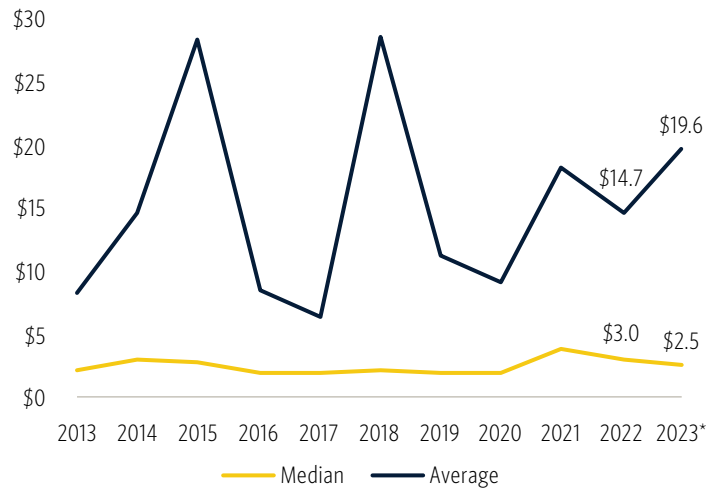
Median and average US early-stage venture debt VC deal value (\$B)



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Average late-stage loan size hits five-year high

Median and average US late-stage venture debt VC deal value (\$B)

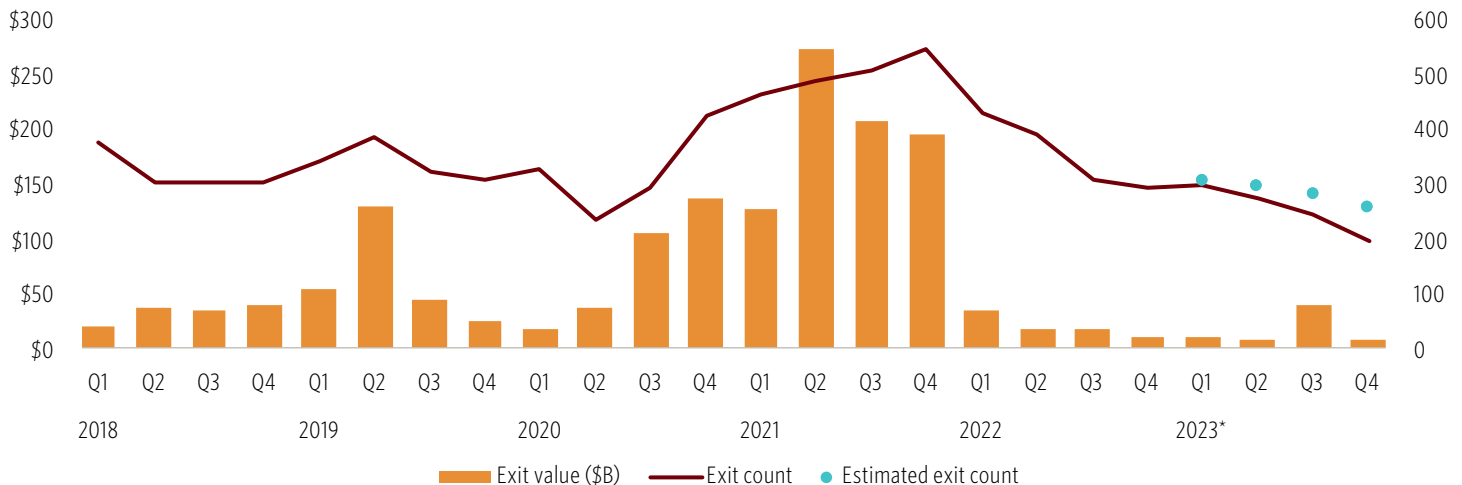


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Exits

Q4 exit value and count come in as the lowest for the year

US VC exit activity by quarter



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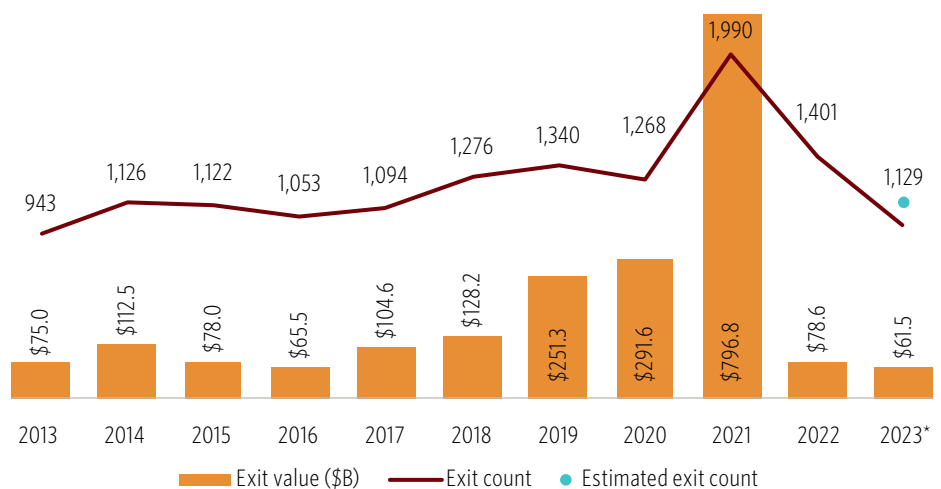
Dismal exit activity was a major narrative throughout 2023, and we see little reason to expect a quick pivot in the new year. The dearth of annual exit activity, culminating in just \$61.5 billion across an estimated 1,129 exit events in 2023, has been a sobering reality for startups and their investors.

The IPO market was incredibly subdued, and the lackluster post listing performance of Instacart and Klaviyo did little to coax an increase in activity, resulting in Q4 2023 public listings generating just \$1.0 billion in exit value from 19 events. The discrepancy between public and private valuations continued to dissuade startups from entering public markets. Startups considering an IPO in the coming year will need to demonstrate strong financial performance to retain value, but they may still need to compromise on price.

125 acquisitions totaling \$4.9 billion occurred in Q4, representing a 24.7% decline in count and a 52.1%

2023 exit activity hits a decade low

US VC exit activity



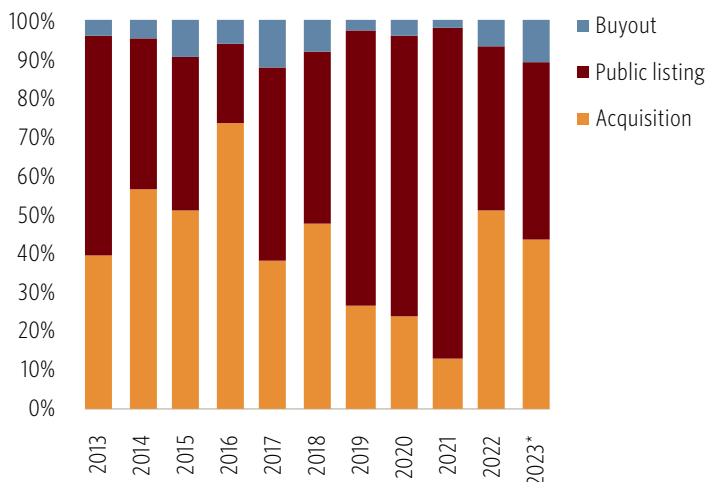
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drop in value from Q3. The Federal Trade Commission and nondomestic regulatory bodies have increasingly filed to block acquisitions. Such is the case with Sanofi's planned acquisition of Maze Therapeutics, leading Sanofi to scrap together a licensing deal to bypass the headache of acquisition,

as well as with Adobe's dragged-out and eventually abandoned acquisition of Figma. Corporates must now factor in potential litigation costs when considering acquisitions, likely widening the bid-ask spread on larger transactions and preventing the completion of more acquisitions.

For the second consecutive year, more than 40% of the annual exit value came from acquisitions

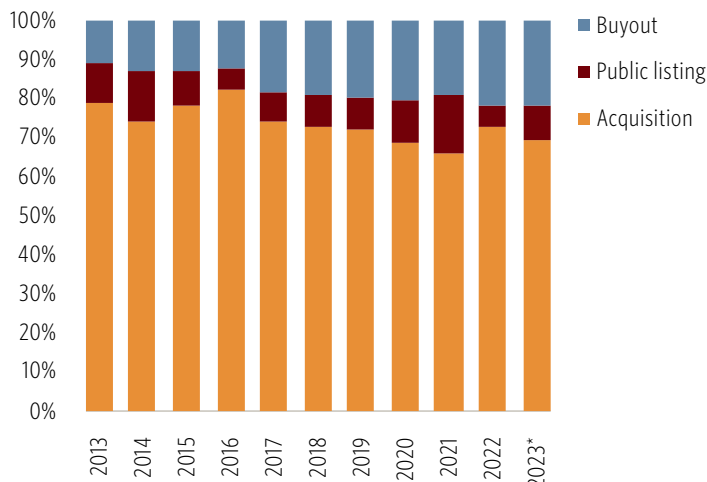
Share of US VC exit value by type



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Elevated regulatory scrutiny contributed to a decline in share of exits via acquisition

Share of US VC exit count by type



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Buyouts saw similarly stunted activity in Q4, with \$800.0 million in value generated across 48 exits. The high cost of capital due to high interest rates has made it more expensive for firms to secure debt financing, leading to the 14-quarter low in the number of buyouts. Should the Fed start cutting interest

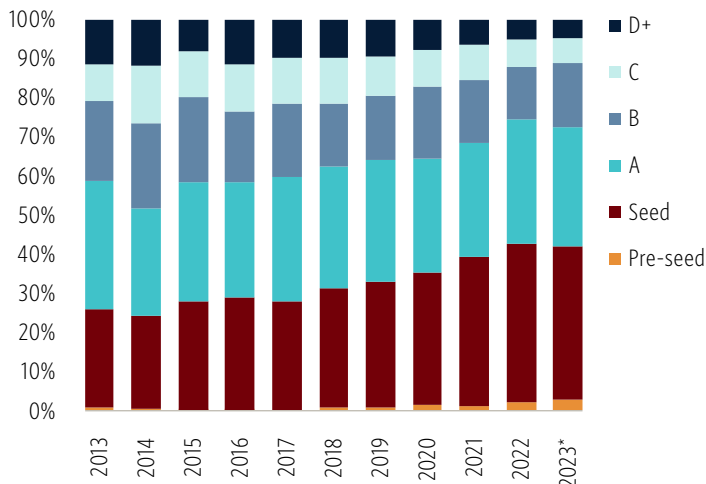
rates in 2024, we would expect to see these transactions increase in frequency.

The prospect of an improved IPO environment in 2024, as covered in our 2024 US VC Outlook, will certainly aid in the recycling of capital into VC, but it is unlikely that the public markets

will absorb a large portion of the 720 active unicorns. While acquisitions and buyouts will offer liquidity to those incapable of listing publicly, there will undoubtedly be those that fail to secure sufficient financing to remain private and fail to reach a successful exit event.

Seed startups account for nearly 40% of exits via acquisition

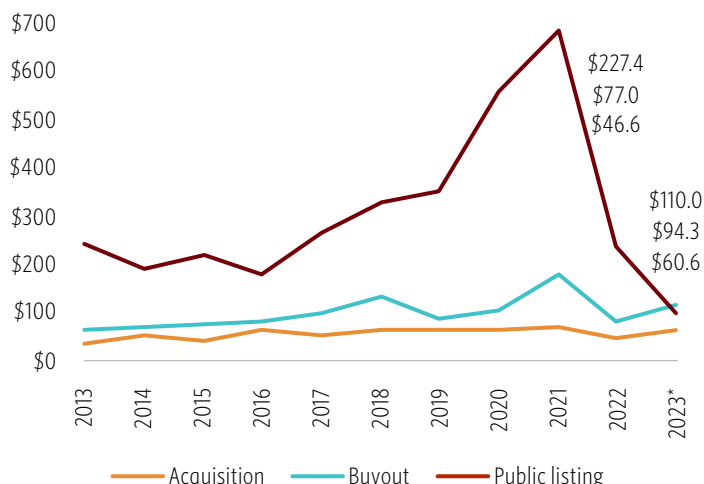
Share of US VC round count by series where next round is an exit via acquisition



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Median exit sizes for public listings have fallen to a decade low

Median US VC exit value (\$M) by type

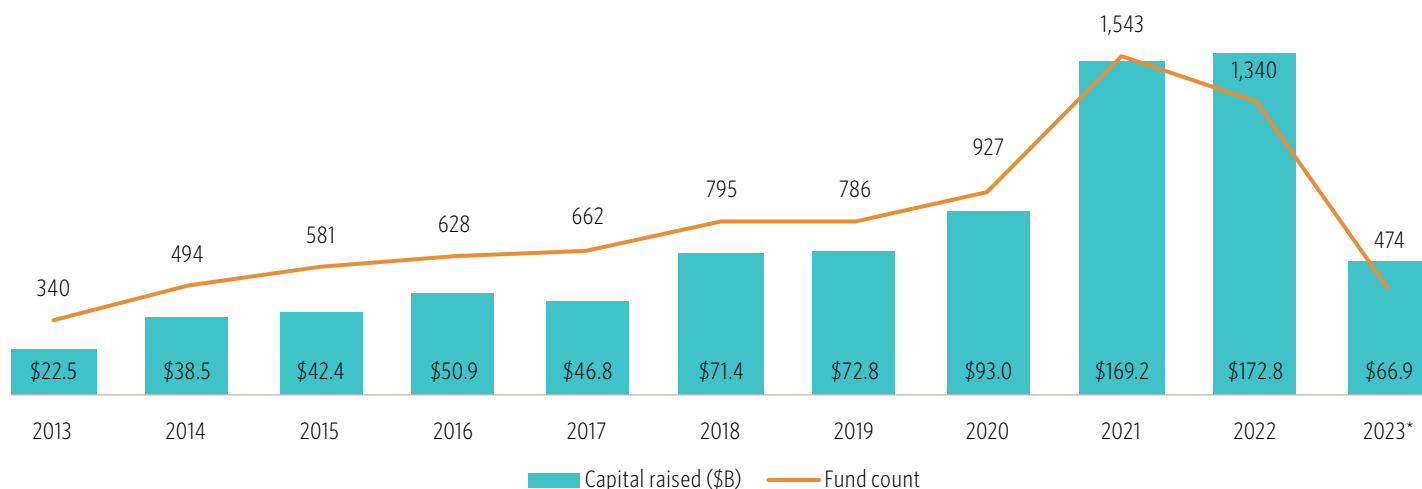


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Fundraising

Capital raised has dipped to a six-year low

US VC fundraising activity



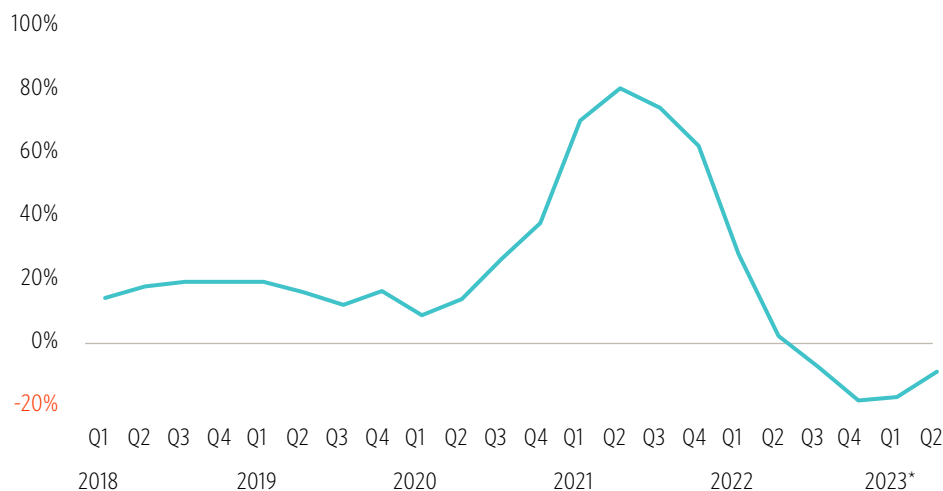
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VC fundraising activity slowed to pre-pandemic levels, with the 2023 full-year figure landing at \$66.9 billion across 474 funds. The continued liquidity drought led LPs to retreat to established managers, which captured 75.3% of the total capital raised in 2023—the second year in a row that established managers have secured more than 70% of closed commitments.

Established managers have not escaped this downward pressure unscathed. They, too, struggled to hit their fundraising targets and generate interest to close on larger funds. Through Q4, just 12 billion-dollar funds closed, representing a 60.0% decline from 2022. There remain 13 VC firms that closed billion-dollar funds in 2021 and have yet to raise another. Although these firms retain the potential to raise larger funds, the surplus of dry powder, slower pace of capital deployment, and attentive LPs watching the performance of prior funds are likely to delay a

Rolling one-year IRRs remain negative for the third consecutive quarter

US VC rolling one-year IRRs



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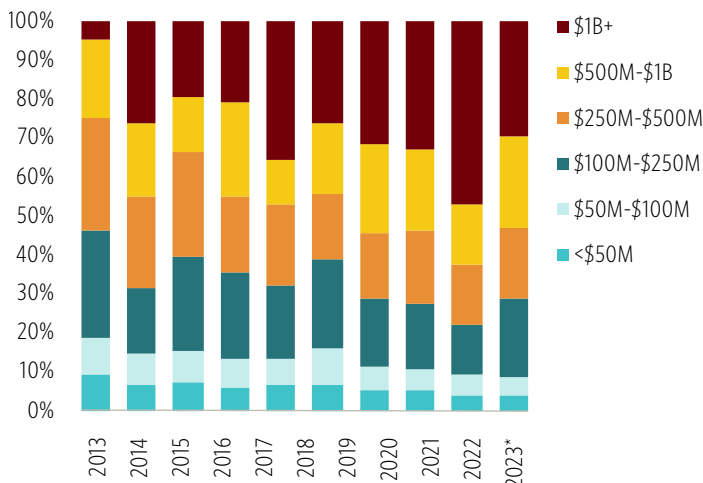
near-term push to close new billion-dollar funds.

While VC dry powder is at a record high of \$302.8 billion, 57.5% of the total sits in funds with commitments of \$500.0 million or more, and 68.6%

resides in 2021 and 2022 vintage funds. The concentration of decision-making power and capital among established managers and recent fund vintages increased the competition among startups to secure the fewer number of new investments made by these

29.4% of capital committed to funds with \$1B AUM or larger

Share of US VC capital raised by size bucket



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firms. Some firms are even shoring up near-term fundraising plans. Earlier in 2023, Founders Fund split its eighth venture fund with commitments totaling roughly \$1.8 billion into two, with the capital allocated to the second fund expected to be deployed after the eighth fund is fully committed. This clear decision to slow the pace of capital deployment into 2024 and

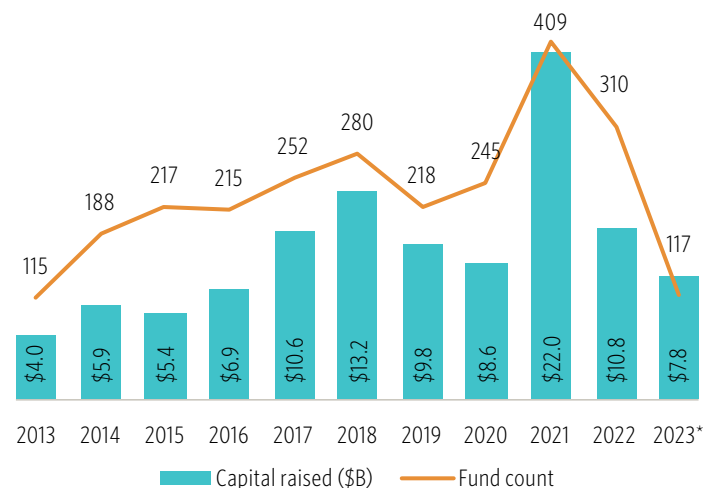
further poses a serious funding threat for the more than 54,000 active startups in the VC ecosystem.

Looking at distribution of cash flows to LPs, 2024 is likely to remain another slow year for fundraising. Our model shows an output of \$65.0 billion in commitments is likely for the four quarters from Q4 2023 through Q3

2024. This relatively flat view of fundraising will continue to pressure the market, both by keeping capital availability low and by pushing a number of investors out of the market. Barring a resurgence of the IPO market that will assuredly drive the recycling of LP capital into VC, we anticipate seeing longer fundraising cycles and muted interest in generalist investment theses.

Capital raised by first-time funds falls to a seven-year low

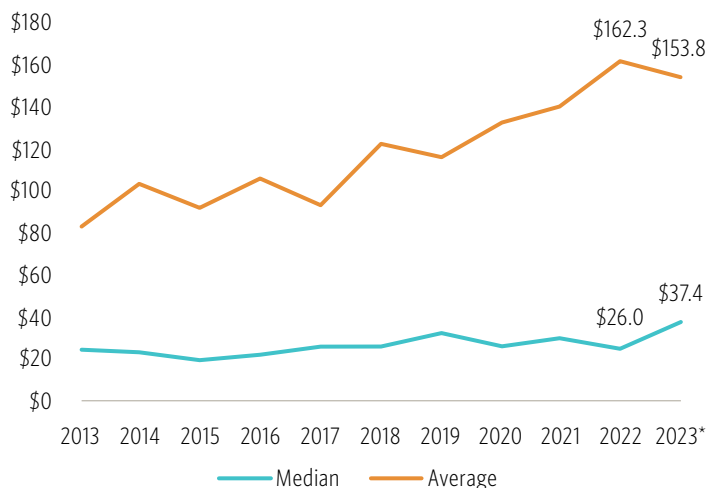
US VC first-time fundraising activity



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2023 median fund size experiences 43.8% increase over prior year

Median and average US VC capital raised (\$M)



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Methodology

Deals

We include equity investments into startup companies from an outside source. Investment does not necessarily have to be taken from an institutional investor. This can include investment from individual angel investors, angel groups, seed funds, VC firms, corporate venture firms, corporate investors, and institutions, among others. Investments received as part of an accelerator program are not included; however, if the accelerator continues to invest in follow-on rounds, those further financings are included. All financings are of companies headquartered in the US, with any reference to “ecosystem” defined as the combined statistical area (CSA). We include deals that include partial debt and equity.

Pre-seed/seed: When the investors and/or press release state that a round is a pre-seed or seed financing, it is tagged as such. If the company is under two years old and the round is the first institutional investment in the company, the deal will be tagged as pre-seed unless otherwise stated. Regulatory filings under \$10 million for deals where investors are unknown are classified as seed unless pre-seed parameters are met.

Early stage: Rounds are generally classified as Series A or B (which we typically aggregate together as early stage) either by the series of stock issued in the financing or, if that information is unavailable, by a series of factors, including the age of the company, prior financing history, company status, participating investors, and more.

Late stage: Rounds are generally classified as Series C or D (which we typically aggregate together as late stage) either by the series of stock issued in the financing or, if that information is unavailable, by a series of factors, including the age of the company, prior financing history, company status, participating investors, and more.

Venture growth: Rounds are generally classified as Series E or later (which we typically aggregate together as venture growth) either by the series of stock issued in the financing or, if that information is unavailable, by a series of factors, including the age of the company, number of VC rounds, company status, participating investors, and more.

Nontraditional investors: “CVC” includes rounds executed by established CVC arms as well as direct equity investments by corporations into VC-backed companies. “PE” includes VC deals by investors whose primary classification is PE/buyout, growth, mezzanine, or other private equity. “Crossover” investors are a subset of nontraditional investors—specifically asset managers, hedge funds, mutual funds, and sovereign wealth funds—that have been active in VC investment across any stage. They are referred to as crossover because these investors are likely to be participating at the late stages directly prior to an exit.

Venture debt: The venture debt dataset is inclusive of all types of debt products raised by VC-backed companies, regardless of the stage of company. In mixed equity and debt transactions, equity is excluded when the amount is of known value. Financings that are solely debt are included in this dataset, though not incorporated into the deal activity dataset used throughout the report. Mixed equity and debt transactions will be included in both datasets.

Exits

We include the first majority liquidity event for holders of equity securities of venture-backed companies. This includes events where there is a public market for the shares (IPO) or the acquisition of majority of the equity by another entity (corporate or financial acquisition). This

does not include secondary sales, further sales after the initial liquidity event, or bankruptcies. M&A value is based on reported or disclosed figures, with no estimation used to assess the value of transactions for which the actual deal size is unknown. IPO value is based on the pre-money valuation of the company at its IPO price. One slight methodology update is the categorical change from “IPO” to “public listings” to accommodate the different ways we track VC-backed companies’ transitions to the public markets. To give readers a fuller picture of the companies that go public, this updated grouping includes IPOs, direct listings, and reverse mergers via SPACs.

Fundraising

We define VC funds as pools of capital raised for the purpose of investing in the equity of startup companies. In addition to funds raised by traditional VC firms, PitchBook also includes funds raised by any institution with the primary intent stated above. Funds identifying as growth stage vehicles are classified as PE funds and are not included in this report. A fund’s location is determined by the country in which the fund’s investment team is based; if that information is not explicitly known, the HQ country of the fund’s general partner is used. Only funds based in the United States that have held their final close are included in the fundraising numbers. The entirety of a fund’s committed capital is attributed to the year of the final close of the fund. Interim close amounts are not recorded in the year of the interim close.

A perfect partnership: PitchBook and the National Venture Capital Association

Why we teamed up

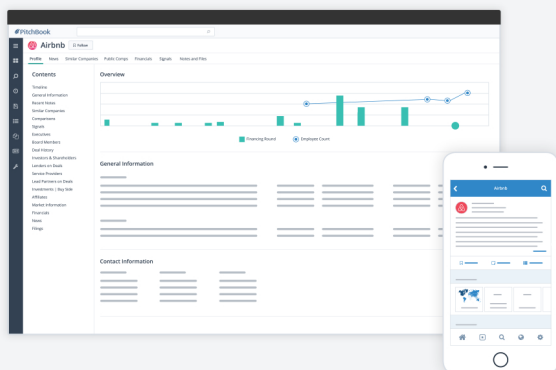
NVCA is recognized as the go-to organization for venture capital advocacy, and the statistics we release are the industry standard. PitchBook is the leading data software provider for professionals in venture capital, serving more than 4,000 customers across the private markets. Our partnership with PitchBook empowers us to unlock more insights on the VC ecosystem and better advocate for our evolving industry.

The PitchBook-NVCA Venture Monitor

Informed by PitchBook data, our quarterly Venture Monitors dive deep into venture capital activity and deliver insights to inform your investment strategy. PitchBook data also bolsters our annual year-in-review publication.



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