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Executive summary

The lingering impacts of the COVID-19 pandemic, rising interest rates at home, and conflicts abroad have defined the fourth quarter of 2022 for the VC industry. These factors have upended the assumptions on which the modern economy was built. Today's businesses can no longer depend on brittle just-in-time supply chains, seemingly endless credit, or cheap energy controlled by governments that are not driven by broadly held notions of market efficiency and social welfare. To stay competitive, the United States' public- and private-sector leaders need to make investments in advanced manufacturing, energy innovation, artificial intelligence, and workforce training to enable those industries and drive them into the future.

The ample credit and uncertainty that characterized the peak of the pandemic represented a brief but fruitful period for the VC industry. Deal counts and dollar amounts hit all-time highs, and there was a tremendous appetite for experimentation with a variety of business models in sectors ranging from finance to transportation to healthcare. While some of these investments were more successful than others, decision-makers in the public and private sectors spent 2022 allocating resources to meet the challenges of the postpandemic world. At face value, the short-term impact of this has been a reduction in market activity. However, the impacts of government actions to incentivize technology commercialization and workforce development have yet to fully materialize.

The inflation that drove the federal-funds rate to multidecade highs has also impacted the venture industry. For the past several years, VC has been an attractive asset class for major allocators. While the United States' VC funds have returned impressive values to their LPs, one factor driving the growth of investment in alternative assets such as VC has been low interest rates, which made it difficult to generate returns in more traditional asset classes. As interest rates rise, allocators are diversifying, and this is likely to involve moving some assets away from VC. While 2022 marks an all-time high for VC fundraising and record amounts of dry powder, the rise of insider rounds and a plethora of established managers raising follow-on funds early in their current funds' lifecycles suggest there is anxiety in the market, and current players are reinforcing their positions against the possibility of a tighter monetary environment.

The Russian invasion of Ukraine changed the economic imperatives of financial markets in a way that had not been seen for decades. For the past 40 years, globalization has resulted in widespread prosperity. This arrangement was so lucrative for all parties, and upending it seemed unthinkable. However, when faced with a new set of challenges, Western economies innovated. While this has led to some short-term challenges for the industry, the VC community will continue to be a crucial part of this process, leading the way in strengthening and diversifying the value and supply chains that the modern world depends upon.

In raw numbers, 2022 was a great year for the VC industry, with most indicators of market activity at or near record highs. When graded against any year other than the stratospheric 2021, industry activity was extremely strong. However, it is important to look at the quarterly trend, where activity dropped off steeply between the first and last quarters of 2022. The question is, was the decrease in activity during 2022 just the afterparty effect of 2021 wearing off? Or is the VC industry just taking a moment to regroup?

NVCA policy highlights

Q4 2022 saw a midterm election result in a narrowly divided government in Washington. Below are key policy initiatives for NVCA, their state of play, and expected activity around them in the 118th Congress.

CHIPS and Science Act funding and implementation

NVCA's CHIPS and Science Act implementation strategy involves closely engaging with the various agencies and rolling out a series of events, collateral, and a more in-depth analysis of the bill's provisions to educate the NVCA membership on partnership opportunities.

The science and technology commercialization sections must be funded through the annual appropriations process. NVCA sent a <u>letter</u> to appropriators requesting that they prioritize robust and predictable funding for the technology commercialization programs passed as part of the CHIPS and Science Act.

Inflation Reduction Act implementation

NVCA is also engaged with the implementation of the Inflation Reduction Act, another massive package passed in 2022. The Treasury and IRS are writing regulations for the climate tax credit programs, which are the cornerstone of the Biden administration's climate agenda.

NVCA submitted <u>comments</u> in response to the request for information (RFI) from the Treasury and IRS on implementation of the direct pay and transferability mechanisms that allow startups to monetize their credits. NVCA also submitted <u>comments</u> in response to the <u>RFI</u> on implementation of the prevailing wage, apprenticeship, domestic content, and energy communities provisions that will increase the value of credits by five times for compliant projects.

SEC regulatory update

NVCA has continued engagement with Securities and Exchange Commission (SEC) Chair Gary Gensler's

disruptive regulatory agenda. In December, the SEC voted on the final rule regarding changes to 10b5-1 plans. NVCA weighed in on the proposal earlier this year. Key takeaways of the final rule include:

- A 90-day cooling-off period for directors and officers following plan adoption or modification.
- New conditions for directors and officers to include representations certifying that they are unaware of material nonpublic information about the issuer or its securities.
- Restricting the use of multiple overlapping 10b5-1 plans only to issuers.
- New quarterly disclosures and an annual disclosure of a registrant's insider trading policies.

NVCA is continuing outreach to SEC officials, legislators, and the Biden administration to discuss the harmful impact the Gensler proposals will have on the venture ecosystem.

SSBCI: 39 states and counting

The Treasury has approved 39 state applications for the State Small Business Credit Initiative (SSBCI) so far. SSBCI provides states with \$10 billion in funding to run small business debt and equity investment programs. Please take a look at NVCA and Venture Forward's <u>SSBCI resource center</u> for more information on approved state plans, including a list of equity programs and points of contact.

SBIR reauthorization

After months of negotiations leading up to the September 30 expiration date, Congress passed the <u>SBIR and STTR Extension Act of 2022</u> to reauthorize the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs for three years.

Two positive reforms are included in the final package:

• The creation of a program on innovation open topics at the Department of Defense. Open topics



Bobby Franklin President & CEO of the National Venture Capital Association (NVCA)

allows applicants flexibility to propose their own technology solutions rather than adhere to a highly specific solicitation.

 Increased performance standards for companies that have received numerous awards and a requirement for a study on multiple award winners.

NVCA is continuing work on additional solutions that would make it easier for VC-backed companies to access the programs across all agencies.

Blockchain regulation

NVCA's Blockchain Working Group continues to engage with a range of policymakers on a statutory regulatory regime for the technology. The recent tumult in the crypto markets and the SEC's failure to act in any meaningful way has increased the pressure on Congress and the White House to act, and we expect significant activity around the creation of a blockchain regulatory regime in the new Congress.

Antitrust: Meta acquisition battle

NVCA is closely following the most recent lawsuit against Meta by the Federal Trade Commission (FTC). The FTC first filed to block Meta's acquisition of the virtual reality (VR) company Within Unlimited <u>in</u> <u>July</u>. NVCA is particularly concerned about the FTC's aggressive legal theory proposing that the mere acquisition of Within Unlimited by Meta without first trying to build a solution in-house is anticompetitive behavior that would reduce future competition in the nascent VR market.

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Overview

Q4 deal count lowest of 2022

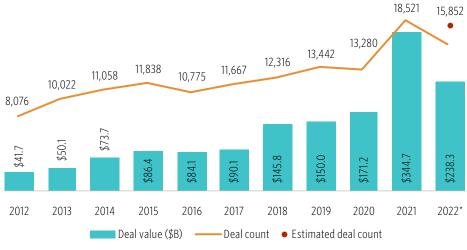


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On an annual basis, deal activity in the angel and seed stages remained relatively resilient in 2022, with \$21.0 billion invested across an estimated 7.261 deals. However, the four consecutive quarters of declining deal counts could foreshadow a continued slide in 2023. Seed-stage deal sizes and pre-money valuations demonstrated notable growth over the 2021 figures due in part to a large number of actively investing microfunds as well as the participation of nontraditional and crossover investors. Should the economic downturn continue, we expect this stage to start to feel pressure due to declining deal activity and investor demand in the early and late stages.

Nontraditional investors are slowing their capital deployment to VC amid less attractive risk/return profiles. Relative to 2021, the upside potential for the VC asset class declined significantly in 2022, which turned many investors away from the space. As such, just \$24.1 billion in deal value involved

2022 estimated deal count approaches 2021 figure US VC deal activity



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nontraditional investors in Q4—the lowest quarterly value in three years. Not only are we seeing lower deal value, but we are also observing fewer nontraditional participants within the venture ecosystem. 2022 saw 5,407 nontraditional investors participate in VC deals, down from 6,802 in 2021—this is the first YoY decline we have observed since 2016.

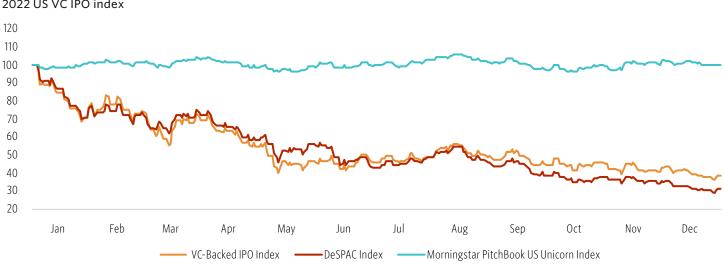
Exit activity continued its steep descent in 2022, with just \$71.4 billion in total exit value generated—the first time

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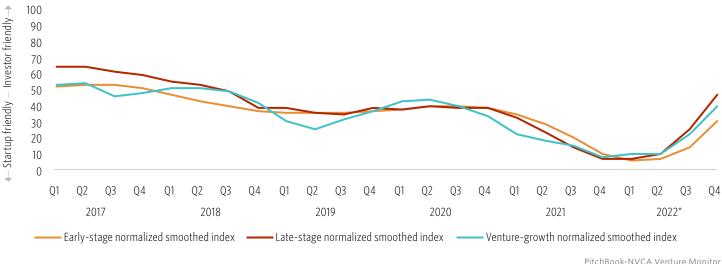
Unicorn index yet to see decline as up rounds continued in 2022 2022 US VC IPO index

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this figure has dipped below \$100 billion since 2016. Public exits of VC-backed companies have slowed to almost nonexistent levels, with just 14 public listings occurring in Q4, demonstrating how drastically institutional-investor appetite has been affected by rising interest rates and volatile macroeconomic factors. Acquisition activity has also declined significantly; Q4 posted roughly \$763 million in total acquisition deal value, the first time we have seen this quarterly total fall below \$1 billion in more than a decade. We expect this downward trend to continue well into 2023 as persistent volatility keeps alive the fears of a global recession.

2022 saw \$162.6 billion closed across 769 funds, setting an annual record for capital raised and the second consecutive year exceeding \$150 billion. The year saw an increasing amount of capital concentrated in larger-sized funds led by experienced managers within the Bay Area and New York VC ecosystems. Despite this capital concentration, capital raised by emerging managers led to the second-largest annual figure on record, and several middle-market ecosystems sustained or increased their fundraising activity compared with the prior year.





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Angel and seed

Q4 angel and seed activity slumps



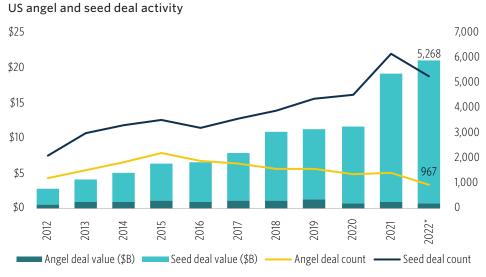


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Deal activity in the angel and seed stages remained relatively resilient in 2022, with \$21.0 billion invested across an estimated 7,261 deals. Deal count dipped below the 2021 level and displayed increasing volatility on a quarterly basis, with the Q4 estimated deal count of 1,515 falling 26.3% from Q1, potentially foreshadowing a continued slide in 2023. Converselv, 2022 deal value set a new annual record that was 8.9% above the 2021 figure. We attribute the sustained strength of deal value to the increasing robustness of the pre-seed market, expansion of seed-stage investor participation, and the prolonged time between startup foundings and seed rounds giving rise to more mature startups.

2022 culminated with a median seed deal size of \$2.7 million, a 19.4% increase over the prior year's annual high. Q4 saw the median increase further to \$3.0 million, suggesting there is a positive outlook for further expansion. One explanation for this growth is that the macroeconomic backdrop has caused startups to consider

Seed deal value sets record annual high despite falling deal count

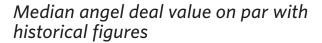


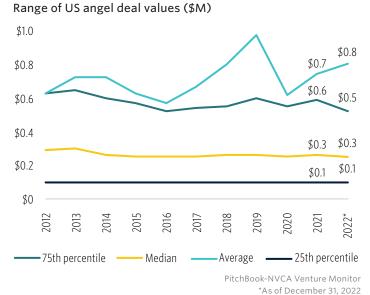
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raising more capital to increase runway and avoid raising in a harsher environment later and to retain talent by offering employees competitive compensation in the face of record inflation levels. The 2022 median seed pre-money valuation was \$10.5 million and the Q4 figure was \$11.0 million, demonstrating strong growth over the 2021 median of \$9.0 million. At this stage, valuation is often a formula involving how much

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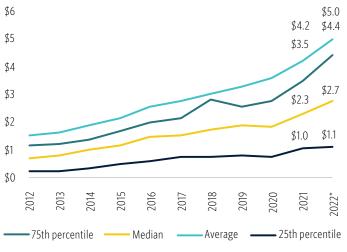






Median seed deal value surpasses prior vear's value

Range of US seed deal values (\$M)

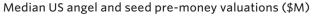


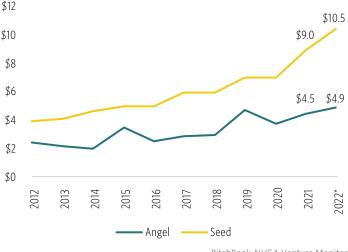
capital a startup requires and how much equity investors require. Hence, we expect to see the median pre-money valuation increase in response to an increase in the median deal size.

Deal value has prospered as the result of capital concentrating within larger-sized rounds. In 2022, \$13.9 billion, or 66.2%, of angel- and seed-stage investment dollars ended up in financing rounds with deal sizes of \$5 million or more, compared with just \$10.4 billion, or 53.9% of the total investment dollars, making its way into rounds of the same size last year. As other asset class returns become more lucrative for nontraditional investors amid the economic downturn, we expect their reduced participation in 2023 to decrease the concentration of capital in the largest deal sizes. PitchBook-NVCA Venture Monitor *As of December 31, 2022

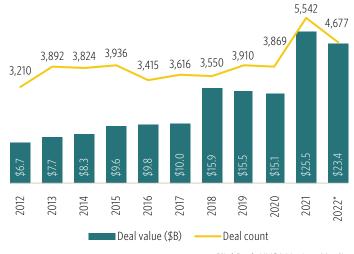
Seed deal activity may be adversely affected if the economic downturn extends well into the coming year. The \$16.9 billion committed to more than 1,300 micro-funds since the start of 2020, along with larger VC firms making seed investments, could reduce or temporarily stall commitments to this stage in response to limited opportunities for seed-stage startups to garner funding through the rest of the VC lifecycle.

Seed valuations exceed 2021 figures





Second-largest year for first financings US first-financing deal activity



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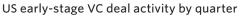
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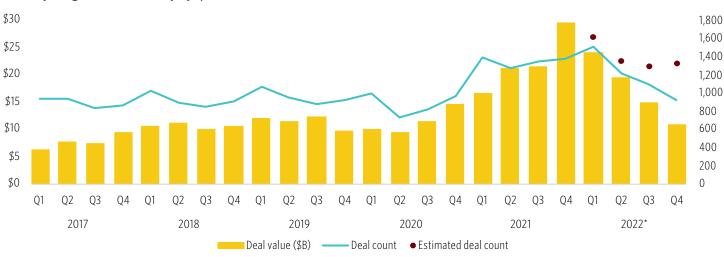
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Early-stage VC

Early-stage deal activity slides further in Q4



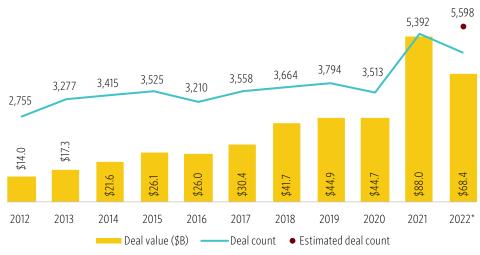


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By the end of 2022, the prolonged economic downturn had more firmly materialized in the data, showing increasing pressure on early-stage deal activity. 2022 boasted a full-year deal value of \$68.4 billion, well ahead of the 2020 figure and nearing that of 2021. However, there is cause for concern in looking at the quarterly deal activity. Q4 saw just \$10.7 billion invested across an estimated 1,330 deals, dramatically falling from the 2022 quarterly deal value high of \$23.8 billion in Q1. 2022 deal activity was bolstered by the first two quarters, which accounted for 63.1% of the year's deal value. Extrapolating the four-quarter consecutive decline suggests the 2023 deal value will fall more in line with the 2020 figure.

The 2022 median deal size was \$9.6 million, a negligible increase of 1.1% from the 2021 full-year figure of \$9.5 million, suggesting that the median may have plateaued in response to investors looking to curtail the startup mentality of "growth at all costs." That being said, the

Nearly 64% of early-stage deal value occurred in H1, bolstering annual figure US early-stage VC deal activity



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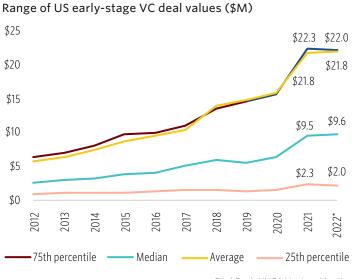
harshened VC dealmaking environment has made it essential to keep cash on the balance sheet to avoid raising in worse conditions.

2021 set a precedent of early-stage capital concentrating in rounds with

deal sizes greater than \$25 million. In 2022, early-stage investments followed that trend, with 73.1% of the capital invested, or \$50.0 billion, finding its way into rounds with deal sizes greater than \$25 million. Examples of this quarter's outsize capital raises include Treeline



Median deal value narrowly eclipses 2021 figure

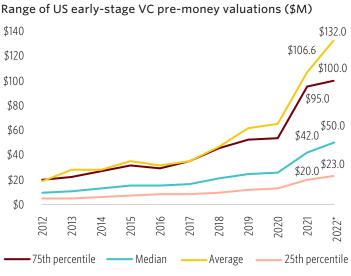


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*As of December 31, 2022

Early-stage valuations continue to exhibit growth



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Biosciences' \$261.3 million Series A1 and Island's \$175.0 million Series B. The earlystage startups that raised rounds greater than \$25 million this year returned to market a median of two months sooner than startups raising rounds less than \$25 million. These startups may have needed to return to market because they had larger burn rates and were unsure about their runway sustaining them through a prolonged downturn.

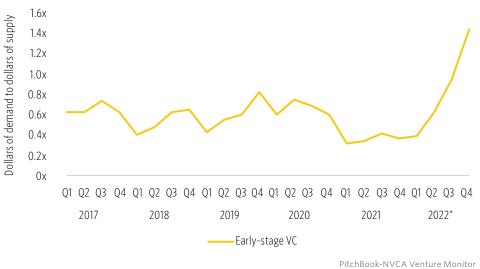
In contrast to plateauing deal sizes, the 2022 median early-stage pre-money valuation was \$50.0 million, representing a moderate YoY increase of 19.0%. However, the quarterly valuation figures consecutively declined to a Q4 low of \$42.0 million, in line with the 2021 median. This negative trend reinforces the notion of the mounting pressure on early-stage deal activity. The departure of late-stage crossover and nontraditional participants and capital that have supported the outsize fundings of early-stage startups has caused investors at this stage to be more wary of allowing startup valuations to balloon to unsustainable levels. Without sufficient

investor willingness and demand to fund these deals at the later stage, the upside potential for early-stage investment could be compromised if startups are forced to raise subsequent rounds at slightly higher or flat valuations.

Should the downturn harshen in 2023, we believe that early-stage activity will contract further, with median deal sizes and pre-money valuations falling below 2021 figures. As more early-stage startups deplete their runway and need to return to market, we expect that existing investors with dry powder will be forced to decide between making new investments for diversification's sake or supplementing their portfolio companies' capital investment needs that would otherwise come from new investors.

Early-stage capital availability falling

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



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*Source: Gallup's 2020 Employee Engagement Meta-Analysis





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Late-stage VC

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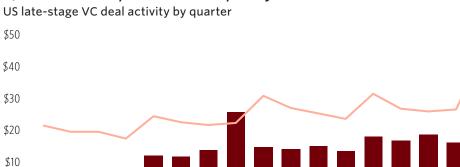
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2018

Q4 deal value plummets to four-year low



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Deal value (\$B)

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2019

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2020

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2021 2022* Deal count
Estimated deal count PitchBook-NVCA Venture Monitor

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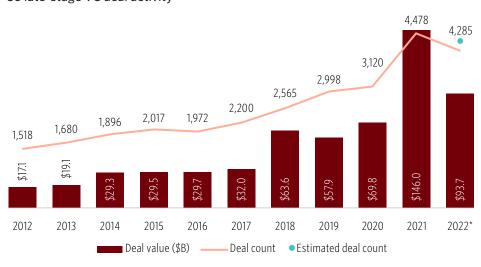
*As of December 31, 2022

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Late-stage VC deal activity continued its descent through 2022, having been acutely affected by frozen avenues for startup liquidity as well as rising interest rates, which dragged down earnings forecasts and thus valuations. In Q4, an estimated 936 deals closed for a total of \$13.5 billion, the lowest quarterly deal value we have seen for late-stage VC since Q2 2018. This comes as no surprise given the fact that late-stage startups, unlike earlier stages of VC, tend to be less insulated from volatile economic conditions and declining public-market comparables. Unable to justify the sky-high valuations seen in 2021 and retreating from the growth-at-all-costs mindset seen in recent years, many investors are pulling away from the space until things return to a more palatable normal. In 2022, nontraditional investors participated in a cumulative \$73.9 billion in late-stage VC deal value, a far cry from 2021's total of \$123.1 billion.

We are also seeing a compression in the size of late-stage VC rounds. In Q4, we

2022 late-stage deal value declines but remains historically high US late-stage VC deal activity



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observed just 68 US late-stage VC rounds priced above \$50 million—a three-year low-bringing the 2022 total to 483 rounds, a 35.7% decrease from 2021. Similarly, mega-rounds, or rounds priced above \$100 million, dropped by 26.8%

to just 30 deals in Q4, representing a 12-quarter low. This tepid rate of larger late-stage VC rounds is undoubtedly driven by the inability of many latestage startups to exit through public markets. Aware that private markets

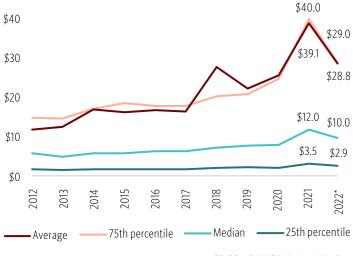
full-year figure

2022 median valuation surpasses 2020

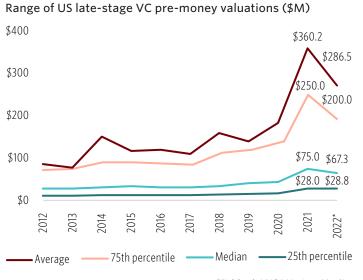


2022 median and average deal values fall below 2021 values

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



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are moving toward lengthier, more traditional exit timelines, many investors, such as hedge funds and mutual funds, are readjusting their portfolios to accommodate fluctuating risk/return profiles. Given late-stage VC's proximity to public markets, we expect this decline to continue as dull exit conditions persist in 2023.

The macroeconomic climate has also lowered valuations for late-stage deals as investors take a more measured approach to prospective deals. The 2022 median late-stage pre-money valuation fell to \$67.3 million, a 10.3% decrease from 2021's median of \$75.0 million. This decline is to be expected, as public markdowns affect the valuations of private companies in similar sectors and with similar business models. Furthermore, normalizing valuation multiples give investors more power to negotiate favorable pricing and deal terms, a stark contrast from 2021, when much of this power was possessed by founders. This dynamic creates a drastic

funding gap, as many investors are looking to purchase equity stakes at a discount while many startups are trying to raise capital at the elevated valuations seen in prior years. While many of these founders will try to extend runway for as long as possible to outlast unfavorable deal terms, we expect a plethora of down rounds to occur in 2023 as the lack of liquidity options for many late-stage startups persists, thereby forcing these businesses to return to equity financing for fresh capital.

Late-stage capital demand and supply gap continues to widen

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





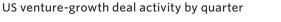
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Venture growth

Venture-growth deal value slides further in Q4



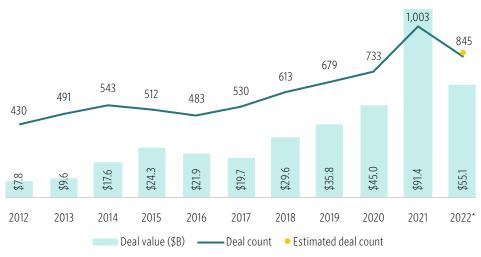


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In Q4, we launched a methodology

that created a venture-growth stage of VC to embody structural changes that have occurred in venture, particularly in the late stage. In recent years, a small number of companies has generated a huge growth in deal value—the 25 largest VC deals of 2022 raised more capital than the entire VC industry in 2009. We have also seen tremendous growth in the range of valuations at the late stage, which creates challenges in analyzing the market and in generating investment strategies using the latestage tag in our dataset. A Series C company with a valuation of \$30.0 million fell into the same category as SpaceX, which is undeniably a much more developed company carrying different risks for investment. The venture-growth stage groups companies with more comparable risk profiles and allows for a more insightful examination of VC. Just 4.6% of the estimated number of closed deals in 2022 fell into the venture-growth stage,

2022 ends with \$55 billion invested in venture-growth deals US venture-growth deal activity



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yet 23.1% of the total deal value was generated by these investments.

As a stage, venture growth has been hit hardest within the VC industry because it is the most connected to public markets and macro volatility. Nontraditional investors have been instrumental in the activity within VC, participating in an average of 50.1% of annual deal count and 89.5% of annual deal value over the past five years.

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2022 median deal value falls below 2020 value

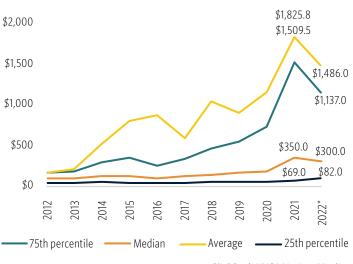
Range of US venture-growth deal values (\$M)

\$120 \$110.1 \$100 \$76.1 \$99.8 \$80 \$75.0 \$60 \$40 \$30.6 \$18.6 \$20 \$8.0 \$4.5 \$0 2018 2015 2016 2012 2014 2017 2019 2020 2022* 2013 2021 •75th percentile Median Average 25th percentile PitchBook-NVCA Venture Monitor

*As of December 31, 2022

Average valuation falls below \$1.5 billion in 2022

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



PitchBook-NVCA Venture Monitor *As of December 31, 2022

With many of these investors using venture as an opportunistic strategy over the past few years, a pullback on investment can be an easy decision. Venture-growth deals have increased in size significantly, and the risks associated with the stage have also increased as the exit markets have cooled. This shift has left venturegrowth companies with a dearth of capital availability at a time when they may be most in need. With liquidity paths generally closed for the largest companies, venture-growth companies raising new capital are likely finding a less hospitable equity market than the one from their previous equity round. The decline of available capital for venture growth is likely to translate into more down rounds in 2023.

An estimated 845 venture-growth deals were completed in 2022, roughly 14.9% lower than 2021 yet unsurprisingly higher than any year prior. Of the changes within venture over the past decade, the rise in deal amounts in this top shelf of VC has been a significant driver. 2022 marked the second consecutive year of venture growth surpassing \$50 billion in deal value. However, this severely discounts the massive decline in venture-growth deal value from 2021 to 2022. The \$36.3 billion difference is indicative of the challenges the top of the venture market has dealt with during a year of economic headwinds. The industry's shift away from "growth at all costs" to placing a premium on the path to profitability is most difficult for the venture-growth companies that have been built on the former model.

Demand-supply ratio skyrocketed in 2022

Capital demand-supply ratio in the venture-growth marketplace



PitchBook-NVCA Venture Monitor *As of December 31, 2022

A WORD FROM INSPERITY How venture capital firms can benefit from working with Insperity

Venture capital is an important investment vehicle to provide startups with financial support and other key resources, including know-how, expertise, and networking. As venture capital firms exist to support emerging companies and businesses exist to serve customers, Professional Employer Organizations (PEOs) like Insperity exist to handle many of the HR daily tasks related to payroll, government compliance, and benefits plan sponsorship. By taking on these HR administrative burdens, Insperity can enable portfolio companies to focus on building their business and maintaining operational growth and scalability, which in turn supports the value being created for your investments by helping to reduce employer-related risk and cost. Also, venture capital firms get peace of mind, as noted by Blair Garrou, cofounder and Managing Director at Mercury Fund, who states, "you don't want to be in crisis mode, especially as a startup, because time is money, and time to market is money. If you can reduce that risk for our entrepreneurs, all the better."

C.A.R.E.

Thousands of early-stage companies have used Insperity's value proposition of CARE—Cost containment, Administrative offload, Risk mitigation, and Enhanced HR—to succeed at every stage of growth. Insperity's team works with portfolio companies to determine their unique needs, develop a road map based on growth projections, and implement efficiencies through exit. Insperity also helps your ventures accelerate by handling many of the daily HR tasks, freeing the time that management spends on noncore business activities so they can increase productivity and generate revenue.

Mitigate risk

Next time you are working with your portfolio management teams, ask yourself if you want them working on nonproductive activities, like HR administration, dealing with employee handbook issues, or adding and removing employees from health benefits. Venture companies' management teams are not typically experienced in human resources. Insperity provides HR-related compliance support to its clients, which helps to reduce any chances of incurring fines, as well as the risk of employee lawsuits. The last thing a startup needs is a disgruntled employee derailing the business with a costly lawsuit, which could cripple your new venture company. Insperity's HR solutions provide the ideal combination of dedicated, strategic service and feature-rich technology that helps to dramatically reduce risk and increase efficiencies.

Increase growth

In a 2020 survey, when comparing employee engagement levels, Gallup found that topquartile business units and teams had 23% higher profitability compared to those in the bottom-quartile for employee engagement.¹ Insperity can help optimize your investment by:

- Providing HR infrastructure that integrates a human capital management system into one platform that also provides more accurate workforce insights and forecasting
- Helping to minimize risk related to HR compliance and employer liability, while also providing greater clarity in your human capital costs

 Offloading administrative duties to allow the business leaders to focus on strategic growth initiatives while Insperity helps take care of the company's employees, ultimately making companies more attractive at sale

Private capital markets team

Insperity's Private Capital Markets (PCM) team is a newly created marketing and business development division designed to focus on Insperity's partnerships with private equity, venture capital, and family office firms and their portfolio companies. Insperity's focused human capital strategy helps companies protect their bottom line and grow top line revenue. With the common goal of meeting high growth potential, Insperity's toolbox of resources and depth of service are well aligned with private capital initiatives. Our operational readiness prioritizes four primary capabilities that Insperity can bring to portfolio companies: speed of implementation, financial predictability, flexible offerings, and operational improvement. The PCM team encompasses our overall approach to the VC ecosystem, connecting our customer-for-life strategy to the full continuum of your private capital market investments.

"Our Private Capital Markets team is focused on two main initiatives: increasing the level of support available to private capital market clients and raising awareness to existing capabilities specific to private capital needs." -Emily Hak, Insperity Managing Director, Private Capital Markets

Talent

Many early-stage companies infused with excitement, innovation, ambition, and drive would prefer to let Insperity handle administrative tasks and allow their business leaders to remain focused on developing their product or service and maximizing sales growth. In addition, attracting and retaining higher-caliber employees is mandatory for a small business' success, and a solid benefits package can help with employee recruitment and retention. When a company chooses Insperity, its employees can get access to big company benefit plans, and, because Insperity is the sponsor, the company does not have the duties of a plan administrator.

Exit

A 2019 analysis found that the expected return on investment for PEO clients, based on cost savings alone, is about 27% per year,² further providing economic advantages to a venturebacked startup. In another study, 70% of companies that were PEO clients reported that their revenues had increased since becoming a PEO client, and 66% of such companies reported that their profitability had increased since becoming a PEO client.³

Does working with a PEO like Insperity sound appealing for your portfolio companies? Jonathan Kaplan, COO at Next Coast Ventures, understands the value of working with Insperity: "We believe companies should focus on their core competencies. Insperity's core competency is flawlessly delivering the full suite of human resources, payroll, and benefits support to Next Coast Ventures, including a world-class technology platform and a strong managed services team. We recommend Insperity as a valued partner to all of our portfolio companies."



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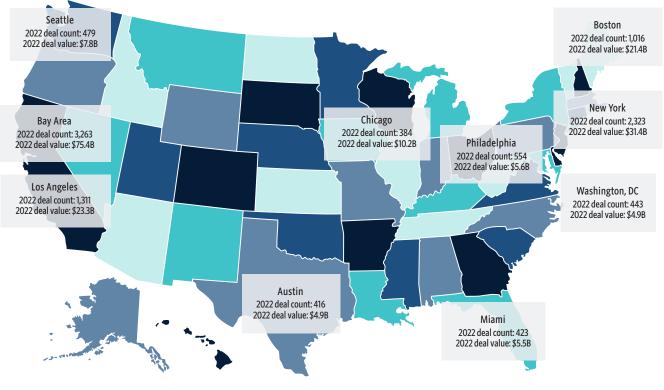
Insperity

J.P.Morgan



Regional spotlight

Four ecosystems surpass 1,000 deals for second consecutive year*



PitchBook-NVCA Venture Monitor *As of December 31, 2022

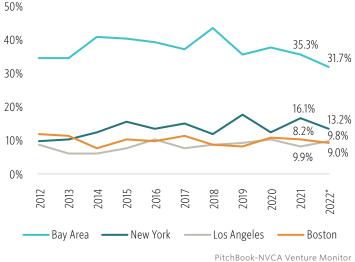
New York deal count proportion falls back below 15% Share of US VC deal count by ecosystem

25% 21.9% 20.6% 20% 15.0% 14.7% 15% 8.4% 8.3% 10% 5% 6.5% 6.4% 0% 2018 2012 2013 2015 2016 2019 2017 2014 020 202 2022 Los Angeles Bay Area – New York Boston

PitchBook-NVCA Venture Monitor *As of December 31, 2022

Bay Area proportion of deal value lowest since 2012

Share of US VC deal value by ecosystem



A WORD FROM J.P. MORGAN What lies ahead for venture

"While the macroeconomic and market backdrop could remain challenging in the near term, J. P. Morgan continues to invest in ways to holistically serve the startup community through the cycle. Our recent acquisition of Global Shares, a digital cap table solution, and launch of Capital Connect, a digital capital-raising platform we built for earlystage private companies, are just two examples of how we are investing and innovating to meet the varied needs of the venture ecosystem."

 Melissa Smith, Head of Specialized Industries -Middle Market Banking & Specialized Industries, Commercial Banking

Venture players will have to balance nearterm macro challenges with longer-term opportunities

With expectations for a deteriorating macro environment in the U.S. in 2023, venture markets are likely to remain challenged in the near term. Founders will need to continue to dial back cash burn where possible to extend runway. This is especially true in Series B or later, where the gap between valuations at the last raise and current market realities is the largest. Reduced growth forecasts and elevated uncertainty continue to challenge valuation assumptions.

We expect the next six months to be telling in terms of how VCs are triaging their portfolios. Many companies that last raised in the heady days of 2021 will be needing additional capital in the coming quarters and are hopefully well down the path to raising their next round. We do not think founders should wait for market conditions to improve to raise capital if it is available sooner. Valuations are likely to be down regardless, and we expect a crowded field of companies looking to raise later this spring to early summer. As VCs remain selective in using reserves to support existing investments, we could see a pickup in strategic merger activity and/or other partnership transactions solely for the purposes of pooling liquidity resources.

The tone in public markets could also be important and a leading indicator for private markets, where trends tend to lag by two to three quarters. Given the deteriorating fundamentals and tight financial conditions, we expect elevated volatility and lower valuations for equities in the first half of the year, when 2022 lows could be retested. This sell-off, combined with disinflation, rising unemployment and declining corporate sentiment, could be enough for the Federal Reserve to start signaling a pivot. This would likely drive an asset recovery and push equities higher into the second half of the year.

In this environment, where the cost of capital is higher and the economy is slowing, some areas of business investment, such as physical plants and buildings, could be cut back over the coming year. At the same time, we expect expenditures for equipment and technology, including software, to remain resilient. Solutions to enhance efficiencies, modernize supply chains and safeguard infrastructures are increasingly viewed as nondiscretionary outlays for commercial customers. The rise in geopolitical tensions and incidences of cyberaggression over the past couple of years reinforces this view.

U.S. consumers appear to be entering 2023 on solid financial footing, albeit with a depleted buffer of savings relative to the beginning of 2022. Despite stiff inflation for much of the year, consumer spending maintained a positive pace in 2022, fueled by reduced savings rates and rising credit card balances. While we are not seeing widespread signals of financial strain as delinquencies hover near historic lows, it is possible that consumer spending could slow in 2023 if labor markets soften. Regardless, shifting consumer priorities from goods toward experiences (i.e., services) are underway and likely to persist in the medium term.

While the tech sector, along with some areas of housing, such as mortgage originators, have started to announce workforce reductions, it is still



Ginger Chambless Head of Research, Commercial Banking

Ginger Chambless is a Managing Director and Head of Research for JPMorgan Chase

Commercial Banking. In this role, she produces curated thought leadership content for commercial banking clients and internal teams. Her content focuses on economic and market insights, industry trends, and the capital markets.

Additional contributors: **Pamela Aldsworth** Head of Venture Capital Coverage **Andy Kelly** Managing Director, Venture Capital Coverage

early days. Across the U.S. economy, labor market conditions have remained strong as businesses added jobs at an elevated pace in recent months and the number of open jobs remained high compared with historical levels. We do expect the effects of higher interest rates and the slowing economy to cause some loosening in labor market conditions by the second half of the year. For startups with capital, this type of environment could present opportunities for founders to fill certain roles in a less competitive backdrop.

Private capital markets have been resilient amid a slowdown in IPOs

Private capital markets have served as a critical source of funding for later-stage private companies given the pause in IPO markets this year. Carly Roddy, Head of J. P. Morgan's West Coast Capital Markets team, notes that although this capital has become more expensive and structured—and is coming from different investor bases than in the past—private capital is available. Roddy credits this to the flexibility of private capital markets,

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where there is additional room for negotiation between issuers and investors on transaction terms. While deals continue to be completed on clean terms, many deals in today's market now include structural downside protection for investors.

Meanwhile, for emerging founders without access to private capital markets or large established investor networks, the capital-raising process can be time-consuming and challenging to navigate. J.P. Morgan's new digital platform, Capital Connect, aims to simplify and facilitate the process for startups by addressing key pain points, according to Michael Elanjian, Head of Digital Investment Banking and Digital Private Markets. Some founders tell us that they spend too much time hunting for warm introductions to the right investors, taking valuable time and focus away from getting their business started with critical pre-money funding. Having access to a self-service platform to network with other founders and VCs, raise capital and analyze market trends can be a way to save time and resources in the capitalraising process.

Another challenge we have observed is that overlooked founders are unable to concentrate on growing their young businesses when they are too busy looking for Impact-focused investors. It is important for the longer-term health of the ecosystem to be inclusive of a diverse set of founders, not just the well-connected. Venture capital going into businesses founded by women and people of color remains a stubbornly low percentage of all venture capital investment activity, underscoring the importance of democratizing access to investor networks.

Emerging founders can understandably find the lack of transparency in the capital-raising process daunting. Gaining analytical insights into market trends, including valuation metrics and deal terms, is very important for founders to make informed decisions when raising capital. A robust database of recent transaction terms can help founders evaluate the market environment and benchmark deal terms.

With the slowdown in the exit markets, and in the IPO market in particular, in 2022, private companies have increasingly evaluated secondary liquidity solutions for insiders. Transparent management of employee ownership and liquidity via a digital cap table can help with employee retention.

On the investor side, emerging fund managers can easily get stretched between spending time with portfolio companies while searching for the right LPs to raise their next fund. Access to a broad network of high-net-worth individuals and family offices with aligned investment objectives could help solve fundraising and capital allocation needs simultaneously.

Founders should be prepared for a turn in the exit environment

While history tells us we could still be several quarters away from a broad reopening in the IPO market, active follow-on issuance after Labor Day is an encouraging sign and is often seen as a precursor to more activity in the primary market. According to Mike Millman, Global Chair of Equity Capital Markets, other important factors for IPOs to make a comeback would be a less volatile market, greater multiple stability, increased confidence on growth and margin outlooks, and improved trading performance from recent IPOs.

In the meantime, a clearer backdrop for growth and inflation, slower pace of Fed tightening, and less rate and yield volatility in 2023 should improve credit market conditions enough to bring more strategics and investors off the sidelines to transact M&A.

In preparation for a pick-up in exit environment activity, whether it is months or quarters away, there are best practices for private companies to consider. First, stress-test the business model and forecasting ability across a range of economic scenarios over the outward quarters and years. Investors are increasingly focused on how a business may fare through an economic cycle and path to profitability. Expect due-diligence periods to take place over weeks and months, not the hours and days that were the norm in 2020 and 2021.

Second, it is important to analyze both the balance sheet needs of your business as well as insider or employee monetization needs. This should be done ahead of any potential transaction discussions so investor expectations are aligned from the start.

And lastly, founders should continuously be fostering relationships across venture capital, PE, sovereign wealth funds and family offices. It is critical to have a robust relationship network on which to capitalize for a primary capital raise or to help facilitate secondary sales.

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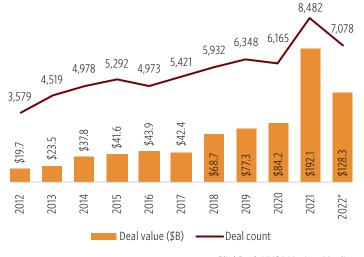


J.P.Morgan



Enterprise tech

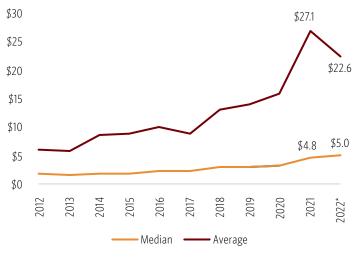
Enterprise tech deal activity significantly outpaced prepandemic figures US enterprise tech VC deal activity



PitchBook-NVCA Venture Monitor *As of December 31, 2022

Median deal value stagnates

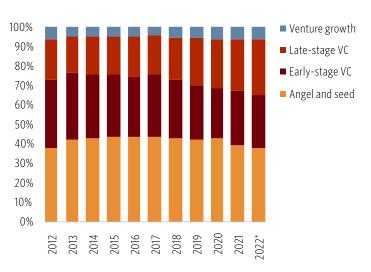
Median and average US enterprise tech VC deal values (\$M)



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Late-stage deals increasing in proportion

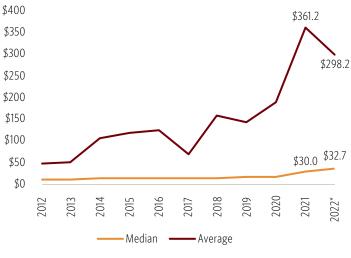
Share of US enterprise tech VC deal count by stage



PitchBook-NVCA Venture Monitor *As of December 31, 2022

Average valuation falls below 2021 figure

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



PitchBook-NVCA Venture Monitor *As of December 31, 2022

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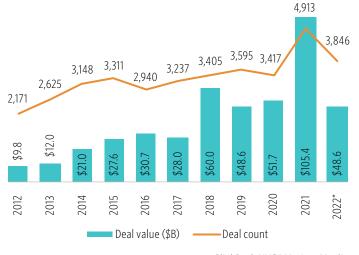
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Consumer tech

Consumer tech deal value declines significantly

US consumer tech VC deal activity



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Average deal value falls back to prepandemic levels

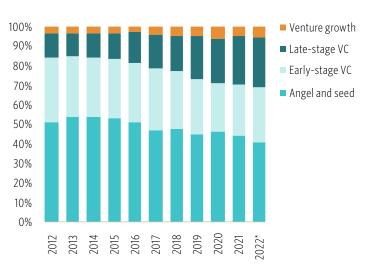
Median and average US consumer tech VC deal values (\$M)



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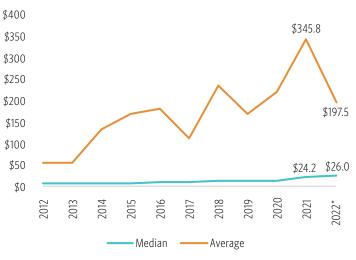
Seed deals continue decline

Share of US consumer tech VC deal count by stage



PitchBook-NVCA Venture Monitor *As of December 31, 2022

Median valuation rises above 2021 level Median and average US consumer tech VC pre-money valuations (\$M)



PitchBook-NVCA Venture Monitor *As of December 31, 2022



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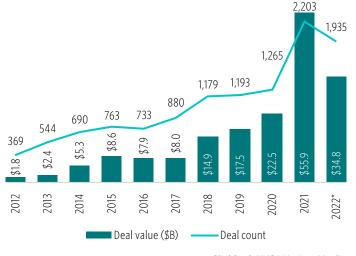
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Fintech

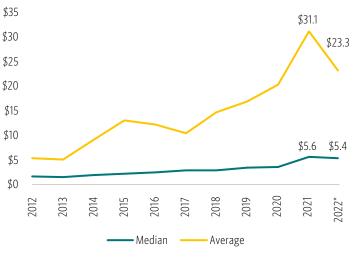
Fintech deal count declines but remains historically high

US fintech VC deal activity



PitchBook-NVCA Venture Monitor *As of December 31, 2022

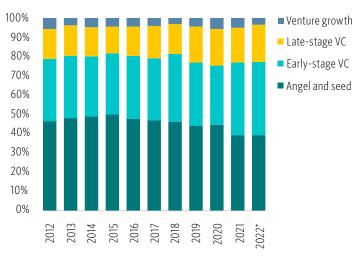
Deal values are on the decline Median and average US fintech VC deal values (\$M)



PitchBook-NVCA Venture Monitor *As of December 31, 2022

Deal count proportion declines across all deal stages

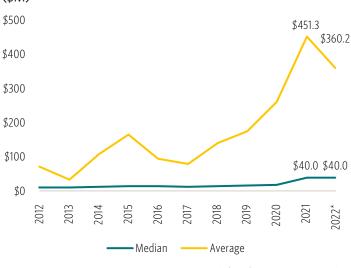
Share of US fintech VC deal count by stage



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Average valuation slips below \$375 million

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



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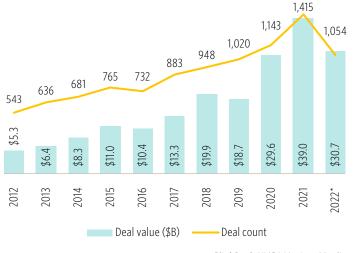
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Biotech & pharma

2022 investment total on par with 2020 figure

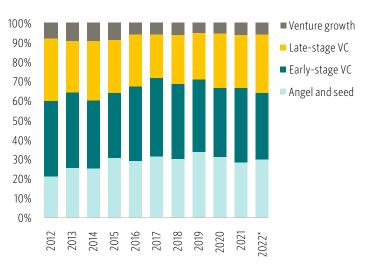
US biotech & pharma VC deal activity



PitchBook-NVCA Venture Monitor *As of December 31, 2022

Proportion of early-stage deals shrinking

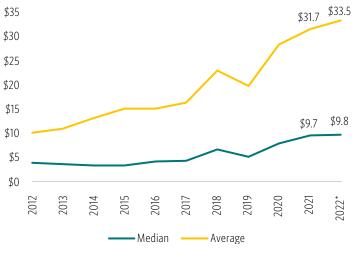
Share of US biotech & pharma VC deal count by stage



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Median deal value growth stalls

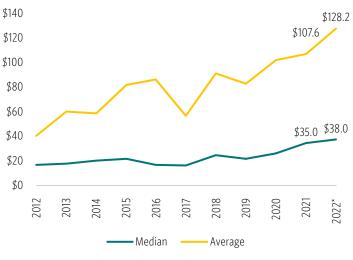
Median and average US biotech & pharma VC deal values (\$M)



PitchBook-NVCA Venture Monitor *As of December 31, 2022

Valuations set record highs

Median and average US biotech & pharma VC pre-money valuations (\$M)



PitchBook-NVCA Venture Monitor *As of December 31, 2022

Investors spend too much time trying to find the right founders

From strategic networking, to exclusive benchmarking data, and deal-management tools, Capital Connect by J.P. Morgan gives you the tools you need to get deals done.







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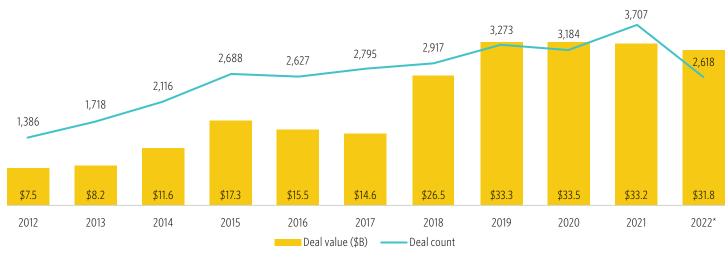
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Venture debt

Fourth consecutive year venture debt surpasses \$30 billion in value

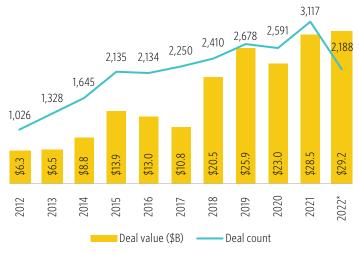
US venture debt activity



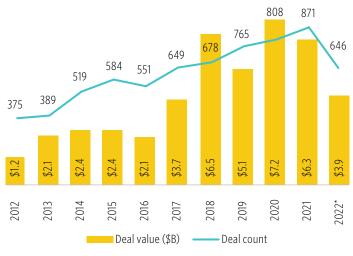
PitchBook-NVCA Venture Monitor *As of December 31, 2022

Tech debt exceeds 2021 figure

US tech venture debt activity



Healthcare debt sets five-year low US healthcare venture debt activity



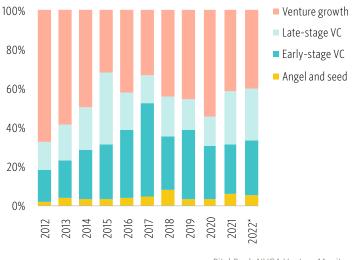
PitchBook-NVCA Venture Monitor *As of December 31, 2022





41% of venture debt going to venturegrowth stage

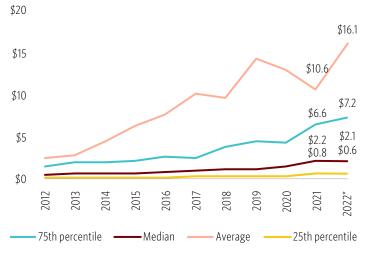
Share of US venture debt deal value by stage



PitchBook-NVCA Venture Monitor *As of December 31, 2022

Average early-stage loan size increases significantly YoY

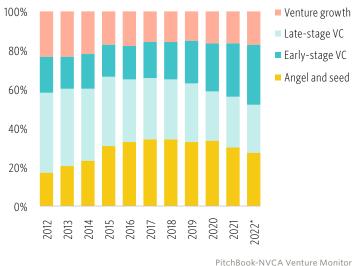
Range of US early-stage venture debt rounds (\$M)



PitchBook-NVCA Venture Monitor *As of December 31, 2022

Number of loans further concentrate in late stage and venture growth

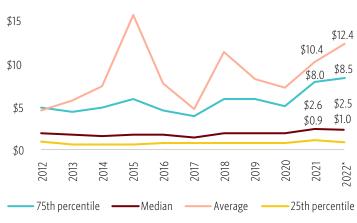
Share of US venture debt deal count by stage



*As of December 31, 2022

Median loan size shows negligible decrease from prior year Range of US late-stage venture debt rounds (\$M)

\$20



A WORD FROM DENTONS VENTURE TECHNOLOGY GROUP A conversation with global colleagues on venture and technology trends

Victor Boyajian, Global Chair of Dentons Venture Technology group, sat down with select colleagues representing North America, Europe, and Asia to get a well-rounded, global view of the venture and technology investing markets.

Characterizing the global venture landscape

Victor Boyajian, San Francisco/New York:

Coming off a frenetic 2021, a year when venture market constituents struggled to keep up with the pace of transaction activity, 2022 has seen more volatility and uncertainty as to where markets are going. VC firms and portfolio companies are seeing changes in funding terms at every stage of the VC lifecycle, which requires different strategies.

Chris Errico, New York: One segment of the venture landscape where we're still seeing resiliency is the seed stage, which seems to be somewhat insulated from the greater market dynamics at play. There also appears to be a lot of investor optimism in the 2023 dealmaking pipeline given the abundance of dry powder currently held by VC firms. It definitely feels like founders will need to recalibrate their expectations as the pendulum swings back toward investors in terms of deal pricing and valuation terms.

Mike Hollinger, Toronto: Trends in Canada-US cross-border investments are stage-specific. Since March, VC investment in early-stage deals has been strong. While we've seen some pullback of US investment, if we look back to 2018, we're still well ahead. Joe Altendorff, London: In the UK market, investors have money to spend but hesitation about where to spend it. And you've got to have that top end of your pipeline to have transactions that then come into fruition in Q1 and Q2 of 2023. It'll be curious to see what causes the dam to break. Will it be companies dropping their valuations or investors deciding they want to invest anyhow at a high valuation, or both parties meeting on a metric or in a structure that allows them to deploy the money but without necessarily undermining valuations through a different way of investing those funds?

Luisa Arnal, Mexico City: Here in Latin America, we have a lot of dry powder—around \$5 billion. Not only are funds not getting smaller, but many are oversubscribed. 2023 is going to be a great year for investments in regional funds. I'm also seeing funds taking different strategies, such as opportunity funds, specific-sector funds, earlystage/seed investments, and funds focused on ESG strategies.

The outlook for M&A activity

Boyajian, San Francisco/New York: The M&A market has been mixed. While large-scale M&A exits have softened, many of our clients are aggressively pursuing accretive acquisitions as a way to hit their strategic goals and meet the growth expectations of their PE or venture backers.

Hollinger, Toronto: On the corporate strategic side, investment has slowed. Late-stage investment, especially into Canada's otherwise strong financial services sector, has also been affected by increases in the cost of capital, upon which the sector depends. If you are in a position of strength in terms of performance, it can be a time to undertake strategic acquisitions.



Victor Boyajian

Global Chair, Global Venture Technology and Emerging Growth Companies Group

Victor Boyajian is global chair of

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 to New York and around the globe. The venture team ranks in PitchBook's top 10 for global venture deals.

Errico, New York: We're seeing similar trends in the financial services sector given the new highinterest-rate environment. A lot of companies that rely on originating loans are facing significant headwinds to their business models as the Federal Reserve has ratcheted up interest rates.

Identifying insulated or countercyclical industries

Altendorff, London: Across energy transmission, renewables, and clean tech, we've got five company-side raises underway right now, and they're all actively negotiating term sheets or closing rounds. There are always some sectors that are either unaffected or countercyclical, and it's about finding those. Cybersecurity, for example, continues to be robust. As one of my clients says, "Hackers don't care about inflation."

Pascal Jiang, Shanghai: In Asia-Pacific, the e-commerce sector has been a hotbed of venture investment activity. In China, the three biggest

sectors trying to lock up investment are artificial intelligence, semiconductors, and healthcare. Electric vehicles and new energy are the two sectors that have achieved some growth despite the pandemic's drag on the overall economy.

Boyajian, San Francisco/New York: US-based venture investors are tapping into US government dollars targeting specific sectors, such as the Inflation Reduction Act, which includes \$369 billion in funding to tackle climate change, and the CHIPS and Science Act, which contains \$52 billion in subsidies for semiconductor research, design, and production. Our clients are looking for ways to extend their runways by taking advantage of nondilutive government funding techniques.

Navigating cross-border investments

Boyajian, San Francisco/New York: For an emerging growth company, there are several considerations when deciding whether to make an investment abroad. One is whether your management team is prepared to transition to a global operation. Before moving aggressively into a market, make sure you have the infrastructure to match your goals and the buy-in from the investors sitting around your table.

Hollinger, Toronto: Canada regularly has years where aggregate dollars invested by non-Canadians are more than 50 percent of the market. There's a lot of comfort in foreign investors investing in Canada, especially at later stages. But as late-stage deals have pulled back a little bit, that has had an overall effect on the market.

Staying opportunistic

Errico, New York: Much more so than over the past five years, company boards are being put to the test as a result of market dislocations or funding gaps, and we're seeing bold investors be

rewarded for stepping in and "catching the falling knife." It's not uncommon in these instances to see off-market terms, such as 2-3 times liquidation multiples or participating preferred structures as boards are left with no choice—it's either take the money on Draconian terms or turn the lights off. So it's important to be conversant with pay-to-play standards and best practices with respect to pullups or other mechanisms investors use to structure down rounds or reset cap tables and so forth.

Boyajian, San Francisco/New York: It's also a great time to grab talent. A lot of the larger institutions in the tech world are reimagining their workforce, and that talent is being released into the labor market now. If you're well positioned, you should be grabbing what you could not touch before because you didn't have the compensation capabilities to do so.

Hollinger, Toronto: That's going to be a trend in Canada for the rest of this year and into next. We've seen something that doesn't have a direct parallel to prior cycles that have seen large-scale layoffs: the biggest difference being how many more of them there have been in this cycle. So it's the same pattern amplified, although maybe not investable till 2024 and beyond. There's also a widespread sentiment that it's a wonderful time to start something new—to turn talent into founders.

Investor hesitation has impacted startups

Boyajian, San Francisco/New York: Board members—who are the investors for the most part—are demanding that there be more of a return to fundamentals and, if there's venture backing, an accelerated pathway to cash flow break-even. Also impacting the willingness of investors to invest in new opportunities: ensuring they have enough dry powder for existing portfolio companies so that they can manage through any prospective headwinds. That is particularly the case if you're a smaller fund that doesn't have deep pockets.

Arnal, Mexico City: We see a different investor, more prudent and selective, more focused on companies that have a real business as opposed to a grow-at-all-costs ethos. We are also seeing a lot of conditions made for a deal to close. I'm also seeing institutional investors getting the right to participate in next vehicles because they don't have to deal with due diligence, and they respect the managers of the funds.

Boyajian, San Francisco/New York: In closing, we are coming off a good long run, and the current market dislocation is a first for many parts of the ecosystem. Whether you are on the company side, the fund side, or the LP side, surround yourself with strong advisors around the board table. Take advantage of the wisdom of more-seasoned entrepreneurs and the wealth of knowledge in your investor base.

Joe Altendorff is co-chair of Dentons UK Venture Technology and Emerging Growth Companies practice in London.

Luisa Arnal is co-chair of Dentons Venture Technology and Emerging Growth Companies practice in Mexico City.

Chris Errico is co-chair of Dentons NY Venture Technology and Emerging Growth Companies practice.

Mike Hollinger leads Dentons Venture Technology and Emerging Growth Companies practice in Toronto.

Pascal Jiang is a partner in Dentons Shanghai office who focuses on the technology, communications, media, entertainment and sports sectors.



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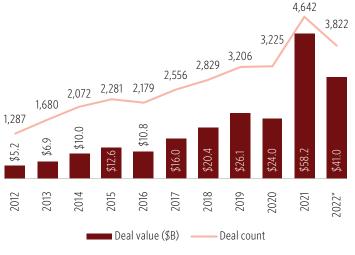
Insperity

J.P.Morgan



Female founders

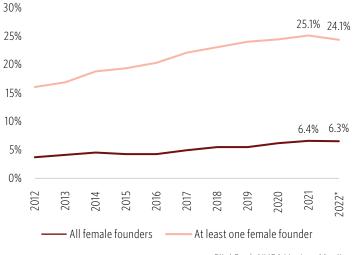
Capital invested in female-founded companies hits second-highest annual level US VC deal activity in companies with at least one female founder



PitchBook-NVCA Venture Monitor *As of December 31, 2022

2022 proportion of all-female-led deals remains in line with 2021

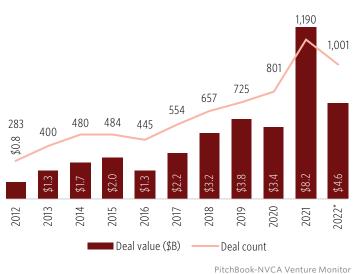
Female-founded company deal count as a share of all US VC deal count



PitchBook-NVCA Venture Monitor *As of December 31, 2022

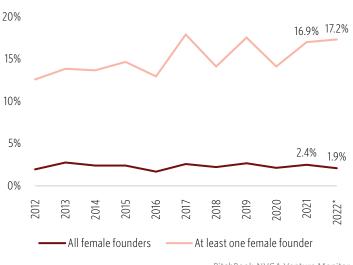
2022 deal count exceeds 2020 figure

 $\operatorname{US}\operatorname{VC}$ deal activity in companies with all-female founder teams



*As of December 31, 2022

Amid the economic downturn, femalefounded companies are receiving less capital Female-founded company deal value as a share of all US VC deal value



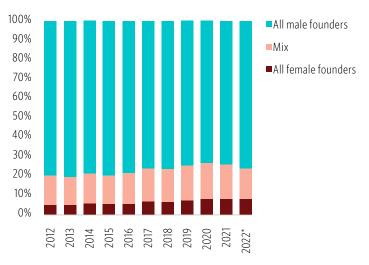


Insperity

J.P.Morgan



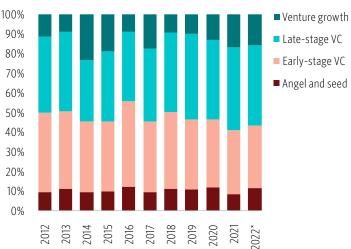
All-female founder teams experience slight decline in proportion of first financings Share of US VC first financings by founder gender



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Proportion of deal value in angel and seed stages remains relatively consistent

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

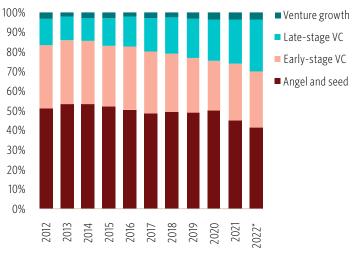


PitchBook-NVCA Venture Monitor *As of December 31, 2022

2022 proportion of all deal stages

decreases

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



PitchBook-NVCA Venture Monitor *As of December 31, 2022

Bay Area leads the US for female-founder investment, but New York not far behind Top five US CSAs by capital raised for companies with all-

female founder teams (2019-2022)

Combined statistical area	Capital raised (\$B)*
Bay Area	\$5.7
New York	\$5.4
Los Angeles	\$1.9
Boston	\$1.3
Austin	\$0.7

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New York leads the US in deal count

Top five US CSAs by deal count for companies with all-female founder teams (2019-2022)

Combined statistical area	Deal count*
New York	865
Bay Area	634
Los Angeles	408
Boston	175
Washington, DC	124



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Nontraditional investors

Nontraditional investors continue slowing deployment to VC

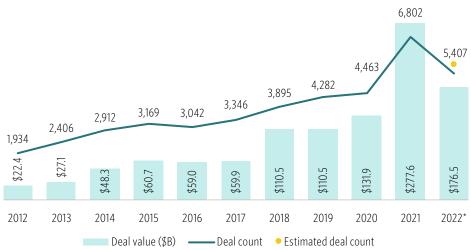
US VC deal activity with nontraditional investor participation by quarter \$80 2,000 1,800 \$70 1,600 \$60 1,400 \$50 1,200 \$40 1.000 800 \$30 600 \$20 400 \$10 200 \$0 0 01 03 04 02 03 04 01 02 03 04 01 02 03 04 01 02 03 04 01 02 01 02 03 04 2017 2018 2019 2020 2021 2022* Deal value (\$B) — Deal count • Estimated deal count _

> PitchBook-NVCA Venture Monitor *As of December 31, 2022

Capital from nontraditional investors remains a key driver of the venture ecosystem but is continuing to show signs of a cooldown as many of these institutions-including hedge funds, asset managers, and sovereign wealth funds-focus on grappling with volatile public markets. In 2022, 80.1% of total US VC deal value derived from deals that included nontraditional investors. While this figure is historically high, it is a notable decline from the 85.2% share of total deal value that we observed in 2021. In Q4, just \$24.1 billion of deals involved a nontraditional investment, marking the lowest quarterly total we have observed since Q4 2019.

Nontraditional investors are not only slowing deployment to US VC but also shrinking in number for the first time in more than a decade. 2022 tallied 4,617 unique nontraditional investors, including corporate venture capital (CVC) firms, PE funds, and crossover investors that have invested in US-headquartered companies, which is a 13.4% decline from

Deal value participation declines 36% but remains historically hiah



US VC deal activity with nontraditional investor participation

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2021's count of 5,330. While this total is the second highest we have seen, it is the first time there has been a YoY decrease, perhaps signaling that VC is no longer providing an acceptable risk/return trade-off for some of these investors.

Despite this decrease in unique nontraditional participants, nearly half (45.1%) of all venture deals in 2022 included a nontraditional investment. While this is a slight decline from 2021's share of 46.4%, this still represents





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Nearly 2,500 deals led

US VC deals led or solely funded by nontraditional investors



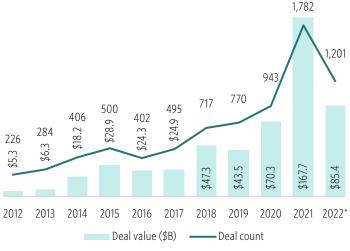
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a historically high share of total VC deal count. This figure has largely been buoyed by CVC firms that, unlike other nontraditional investor types, participated in a greater percentage of US VC deals in 2022 compared with the year prior. Indeed, 26.2% of deals—an estimated 3,698 investments—included a CVC participant, exhibiting the

flexibility of some corporate balance sheets provided by record earnings in recent years. However, rising interest rates and the threat of a global recession, among other factors, will likely increase risk aversion among CVCs, ultimately tightening the deployment of capital into VC-backed businesses in 2023.

Crossover participation continues its rapid descent

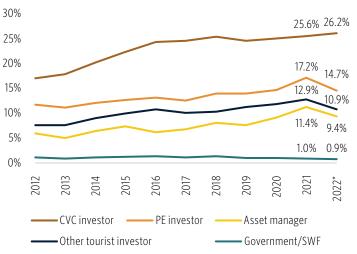
US VC deal activity with nontraditional and crossover investor participation



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Conversely, these very same economic factors may create unique opportunities for CVCs to keep up the pace of strategic partnerships. Declining valuations, along with the lack of exit opportunities for many private VC-backed businesses, lower the cost of entry, ultimately allowing investors to strike a deal at a discount relative to what it may have cost in 2021.

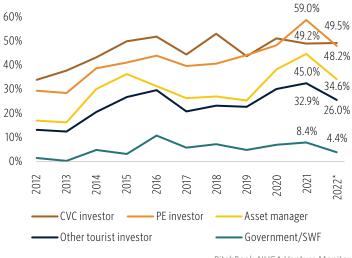
CVC investors remain active deal participants



Share of US VC deal count by nontraditional investor type

Deal value participation falls for almost all investor types

Share of US VC deal value by nontraditional investor type



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Exits

US VC exit activity by quarter \$300 600 \$250 500 \$200 400 \$150 300 \$100 200 \$50 100 \$0 0 01 02 03 01 02 Q3 04 01 02 03 01 01 02 03 04 01 02 03 04 04 04 02 03 04 2017 2018 2019 2020 2021 2022 Exit value (\$B) Exit count Estimated exit count

Exit activity declines sharply to historic low

PitchBook-NVCA Venture Monitor *As of December 31, 2022

The end of 2022 was characterized by a lethargic pace of exits, as many VC-backed startups and their investors were struggling to find a path to liquidity. Through the end of the year, we observed \$71.4 billion in exit value generated, a 90.5% decline from 2021's annual total of \$753.2 billion and the first time that annual exit value has fallen below \$100 billion since 2016. Notably, O4 2022 saw just \$5.2 billion in capital exited the lowest quarterly total we have observed in more than a decade.

One of the most striking observations of 2022 was the low rate of public listings for VC-backed companies. Just 14 public listings occurred in Q4, and the median post-money valuation of publicly listed VCbacked companies fell by \$550.2 million in 2022, demonstrating institutional investors' pronounced loss of appetite. Considering the positive correlation between public stock market performance and the appetite for public listings, we expect exits to remain low through the first half of 2023 as interest rates continue to rise and the threat of a global recession continues to loom.

YTD exit activity finishes below \$100 billion for first time since 2016



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Buyout activity for VC-backed companies has also declined, as the increasing cost of capital has made it more difficult, and expensive, to secure debt financing used for leveraged buyouts. We saw a 34.7% QoQ decline in the number of buyouts:

47 in Q4 compared with 72 in Q3. We also saw a sharp decline in the median post-money valuation for buyouts of VCbacked companies, falling from \$280.0 million in 2021 to \$120.0 million in 2022. Acquisition activity was also relatively

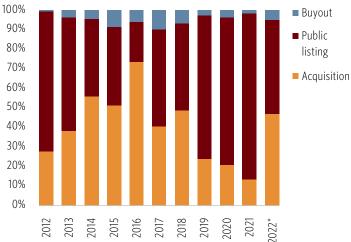


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Nearly 50% of 2022 exit value was generated by acquisition, breaking from historical trend

Share of US VC exit value by type



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are seeing volumes decrease, as many

would-be acquirers are grappling with

Prolonged periods of frozen liquidity may

pressure some startups to raise equity

financing at lower valuations and less

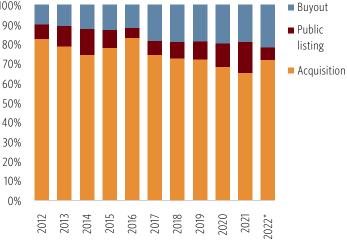
volatile economic conditions.

lukewarm; Q4 tallied just 146 acquisitions totaling roughly \$763 million, which is the lowest quarterly deal count and value we have seen in nearly a decade. Despite the benefits that corporations can reap from strategic acquisitions, such as gaining a new customer base or reducing costs, we

Share of US VC exit count by type

reaches five-year low

YTD share of exits via public listing

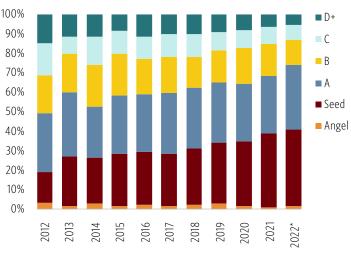


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favorable deal terms relative to previous financing rounds. Doing so can severely dilute current stakeholders and make it more difficult for startups to retain and attract talent, consequently affecting company growth and performance.

Seed stage sees majority of US VC acquisitions in 2022

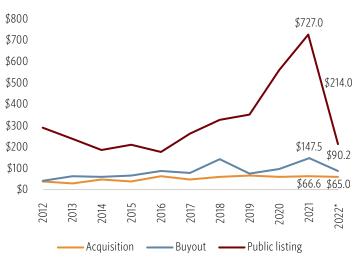
Share of US VC round count by round series where next round is an exit via acquisition



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Median public listing exit value falls by more than 70%

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





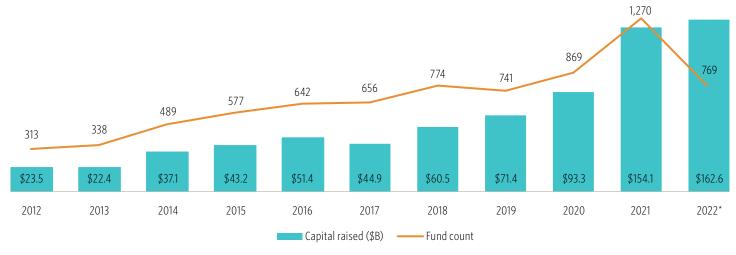
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Fundraising

US VC capital raised sets record annual high

US VC fundraising activity

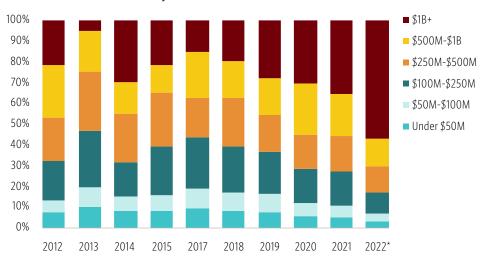


PitchBook-NVCA Venture Monitor *As of December 31, 2022

2022 saw \$162.6 billion closed across 769 funds, setting an annual record for capital raised and marking the second consecutive year exceeding \$150 billion. We attribute much of the year's fundraising strength to the momentum generated in 2021. VC funds closed in the first three quarters of the year more than likely began soliciting LP allocations prior to the economic downturn. With roughly \$12 billion in raised capital added since the last report, the fundraising lull toward the end of 2022 could be the result of LPs experiencing the denominator effect, becoming overexposed to this asset class and halting new commitments to VC funds for the year. Q4 could be a precursor to what we may see in 2023 if LPs remain overexposed to venture, and the total capital raised in 2023 could set a four-year low.

In 2022, an increasing amount of capital was concentrated in larger-sized funds led by experienced managers. \$114.8 billion, or 70.6% of the capital raised, was committed to funds of \$500 million

71% of capital raised committed to funds with \$500 million AUM or larger Share of US VC fund value by size bucket



or more, and 78.9% of the capital raised went to funds led by experienced managers. The activity suggests that investors are less willing to take gambles on new managers without historical track records or go through the costly exercise of performing due diligence on new firms.

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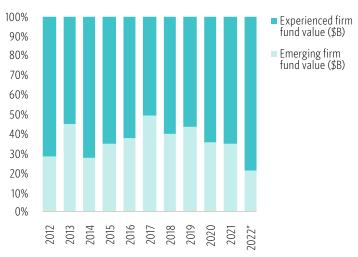
Despite the concentration of capital among experienced managers, 2022 saw emerging managers capture \$34.4 billion in commitments, the second-largest annual figure on record, and we expect this trend to continue in the coming year.





Capital concentrates with experienced managers

Share of US VC raised by emerging or experienced managers

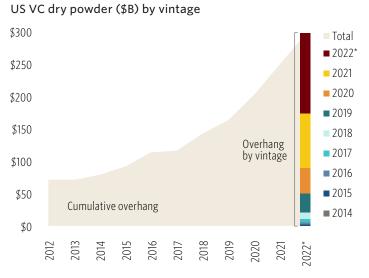


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In 2022, a record 35 funds closed with more than \$1 billion in commitments, surpassing the previous high of 25 in 2021. The two largest funds closed in 2022 include Tiger Global's \$12.7 billion fund and Alpha Wave Global's \$10.0 billion fund, which accounted for 14% of the total capital raised. Since the last report, there were no additional funds closed that were a billion dollars or more. The lack of outsize funds in Q4 could be the result of LPs already reaching their annual commitments or of GPs capable of raising such funds having already done so in the last couple of years.

2022 also saw capital concentrate in the largest ecosystems, with 72.6% of the capital raised funneled into the Bay Area and New York. The onset of the

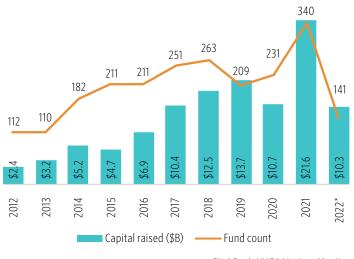
US VC cumulative dry powder just shy of \$300 billion



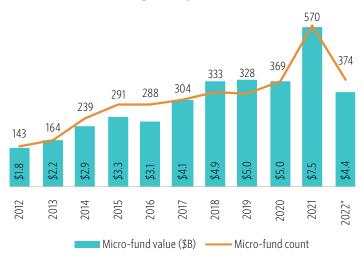
PitchBook-NVCA Venture Monitor *As of September 30, 2022

COVID-19 pandemic and remote work unshackled investors' capital from their native ecosystems, but as we emerge on the other side, there has been a return to traditional VC epicenters. However, there have been some notable exceptions to this trend in middle-market and smaller ecosystems, such as Denver, Nashville, and Philadelphia, where capital raised has been on par or ahead of 2021 figures.

2022 saw more than \$10 billion closed across 141 funds



Micro-fund closings fall in line with prepandemic levels US VC micro-fundraising activity



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US VC first-time fundraising activity

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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, CVC 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 involve partial debt and equity.

Angel and seed: We define financings as angel rounds if there are no PE or VC firms involved in the company to date and we cannot determine if any PE or VC firms are participating. In addition, if there is a press release that states the round is an angel round, it is classified as such. Finally, if a news story or press release mentions only individuals making investments in a financing, it is also classified as angel. As for seed, when the investors and/or press release state that a round is a seed financing, or it is for less than \$500,000 and is the first round as reported by a government filing, it is classified as such. If angels are the only investors, then a round is marked as seed only if it is explicitly stated.

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, and participating investors. 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, and participating investors.

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, and participating investors.

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 PE. "Crossover" investors are a subset of nontraditional investors—specifically asset managers, hedge funds, mutual funds, and sovereign wealth fundsthat 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 the 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.

PitchBook, NVCa

A perfect partnership: PitchBook and the National Venture Capital Association

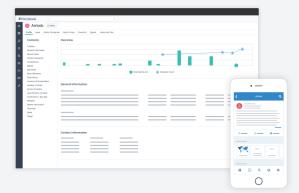
Why we teamed up

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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