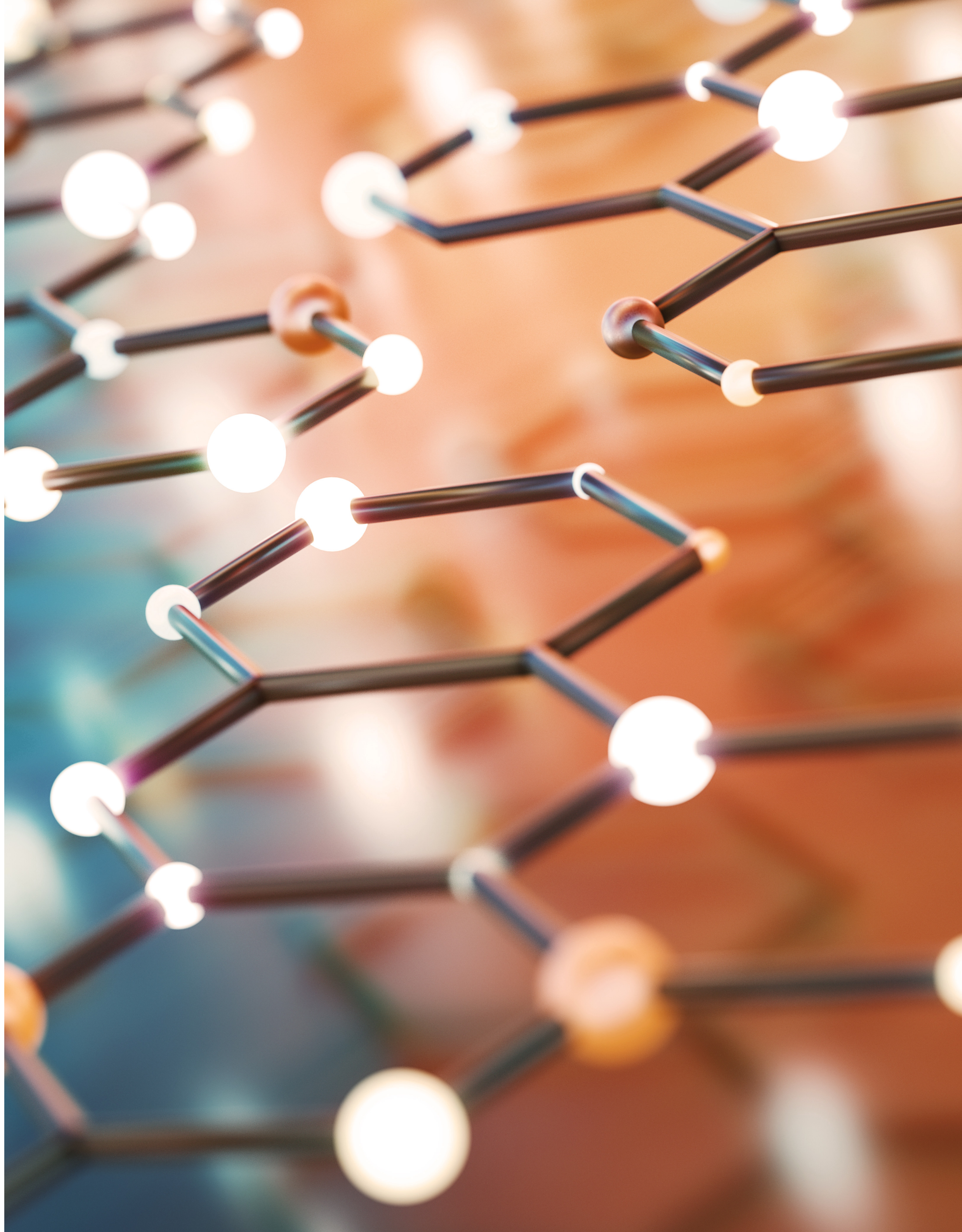
J.P.Morgan

# The Innovation Economy Outlook

A forward-looking view on the prospects and challenges facing the innovation economy and its participants

**2024**



# Executive summary

Against the backdrop of a tumultuous and unpredictable macroeconomic environment, we've witnessed the challenges of different stakeholders across the Innovation Economy. For founders, conditions for raising capital have toughened as investors have either slowed their dealmaking activity or gone dormant. The fall in valuations across most stages has hampered funding negotiations, and in turn companies' growth projections and cash runway. Unsurprisingly, the availability of capital and credit was the top challenge for business leaders, along with growing the top line and navigating uncertain economic conditions. For investors, fundraising has proved challenging, and the rate of capital deployment has generally slowed. The anemic exit environment has made realizing liquidity in their portfolios difficult. Both founders and investors will be keeping a close eye on the exit environment, particularly for signs of the IPO window opening. That could be the catalyst that kick-starts the venture capital cycle.

- Melissa and John

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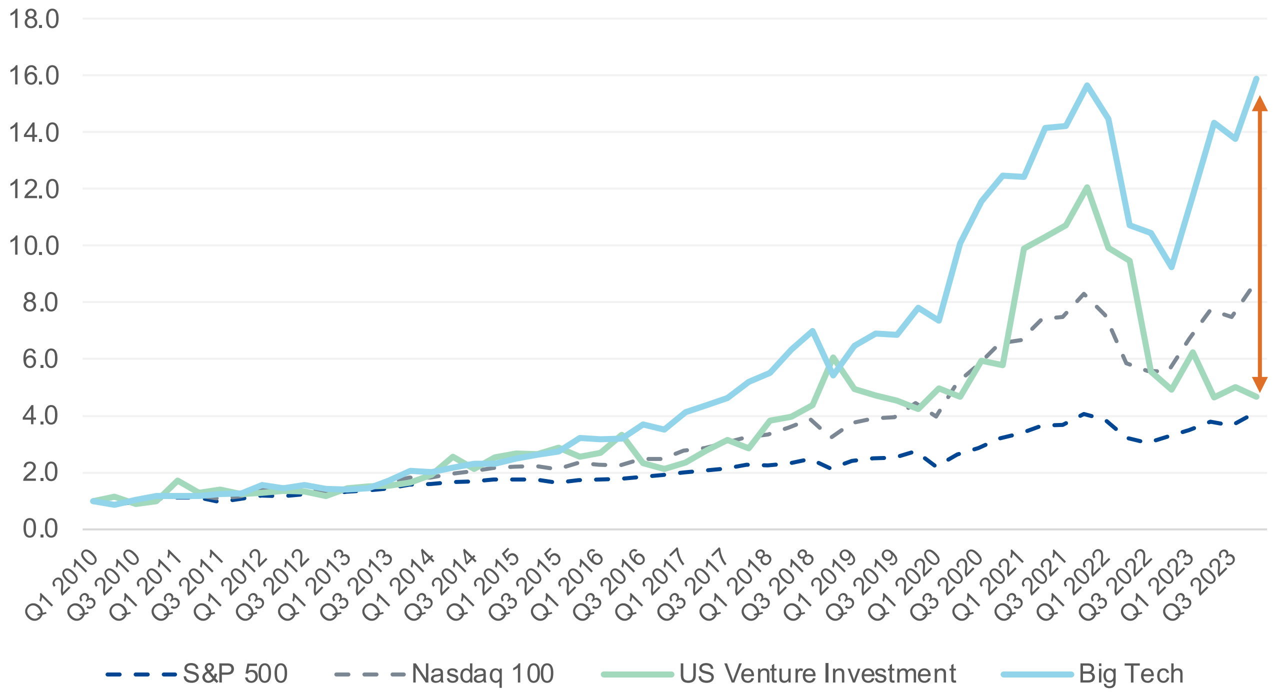
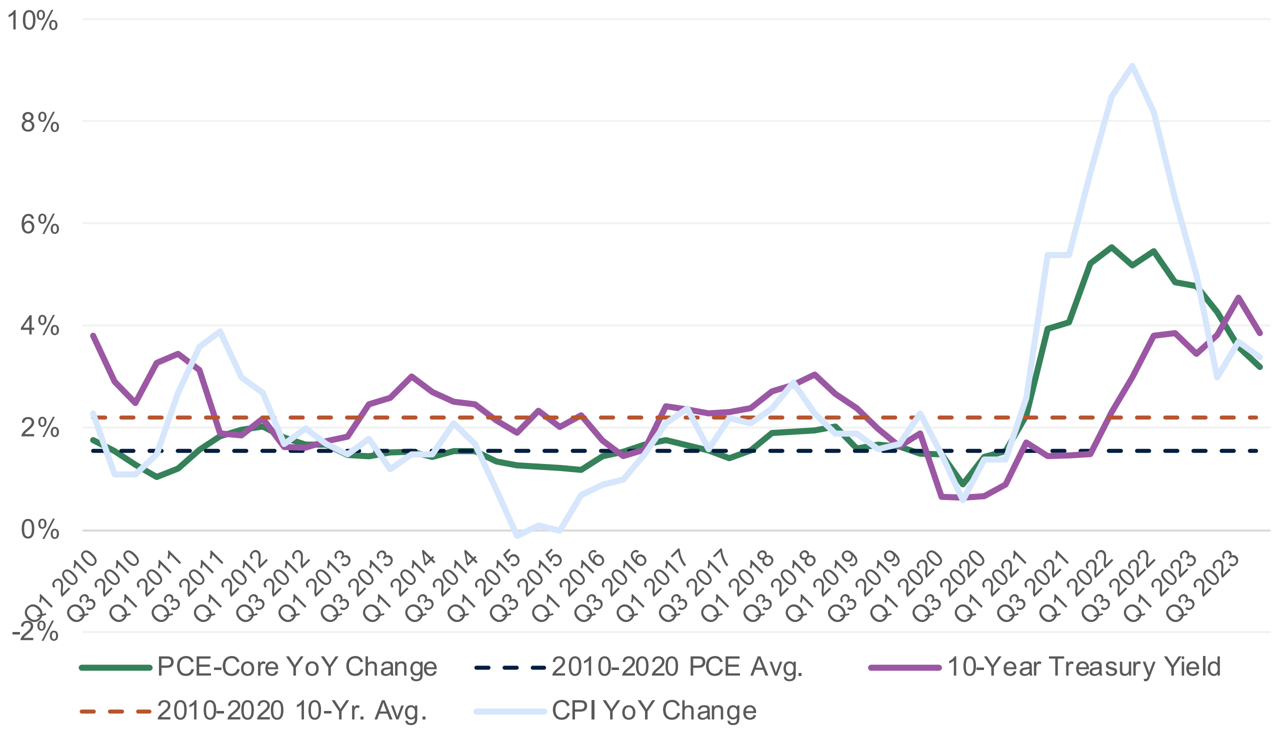
# Public markets rally, driven by technology, but venture investment falls

**Public market and Big Tech performance compared to U.S. venture investment***




*All measures indexed to Q1 2010. Big Tech comprises Apple, Microsoft, Amazon, Alphabet, and Meta.

**Key inflation indicators and 10-year U.S. Treasury interest rate trends***




*PCE = Personal Consumption Expenditures. CPI = Consumer Price Index.

## TRENDS

U.S. stock markets faded in 2022 but recovered in 2023 thanks in part to strong stock performance of Big Tech names like Apple and Amazon (and Nvidia). This is usually a strong signal to venture investors to deploy capital, as we saw between 2021 and 2022. However, in 2023 the stock market performance of Big Tech and U.S. venture investment diverged significantly. Starting in 2022 and accelerating in 2023, inflation cooled. The preferred measure of the Federal Reserve, PCE-Core, also ticked down which led Fed Chair Jerome Powell to indicate rates could start to be cut this year.

## IMPLICATIONS

Strong performance of (big) tech companies not only provides confidence to venture investors but is also vital to the recycling of capital (and talent) through investments, partnerships and acquisitions. When this activity wanes, the funding environment typically tightens.

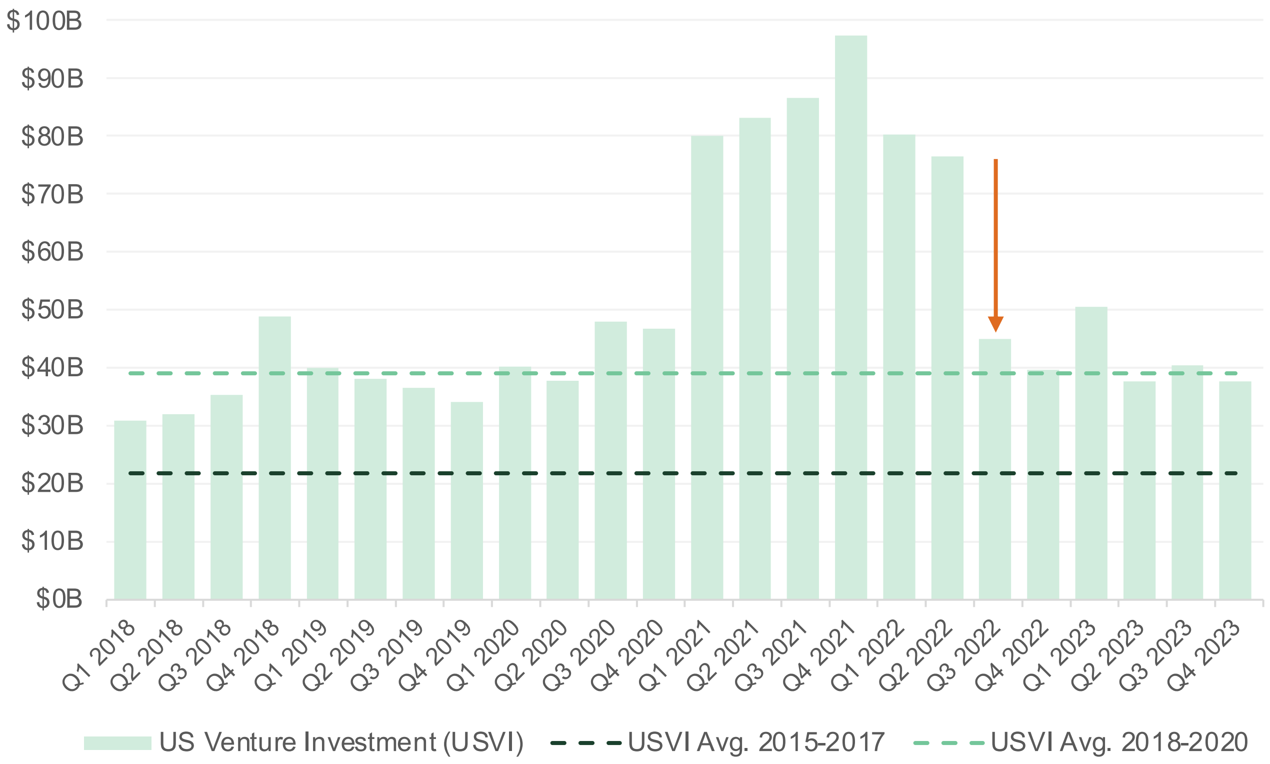
Inflation growth, measured by Core PCE, could moderate from 3.4% in 2023 to 2.4% in 2024. Based on J.P. Morgan's Business Leaders Outlook survey, 74% of respondents expect a higher cost of doing business in 2024 (vs. 63% in 2023).



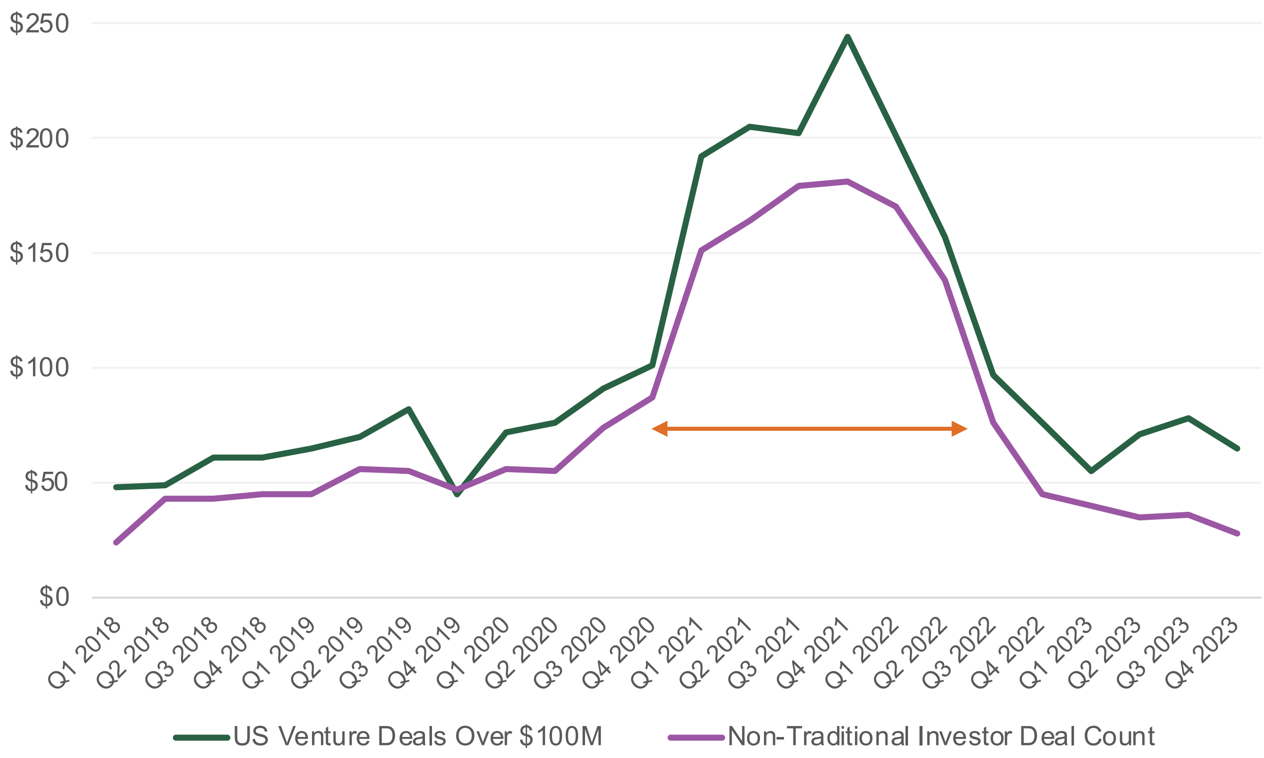
Sources: Bureau of Labor Statistics, Bloomberg, PitchBook, J.P. Morgan Business Leaders Outlook (BLO). More information on BLO can be found here.

# U.S. venture investment returns to normal?

### US venture investment trend




### Nontraditional investor deal activity and U.S. venture deals over $100M




### TRENDS

U.S. venture investment dropped to the 2018-20 average, as investors slowed or paused dealmaking activity amid a volatile macroeconomic backdrop. Additionally, it was a waiting game for investors as valuations kept dropping, who instead spent their time focusing on the health of existing portfolio companies. Another reason for the decline in venture activity is the continued slowdown of nontraditional investor activity. For investors who are doing deals, entry prices, expanded due diligence, thoughtful portfolio construction and ensuring seniority are top of mind.

### IMPLICATIONS

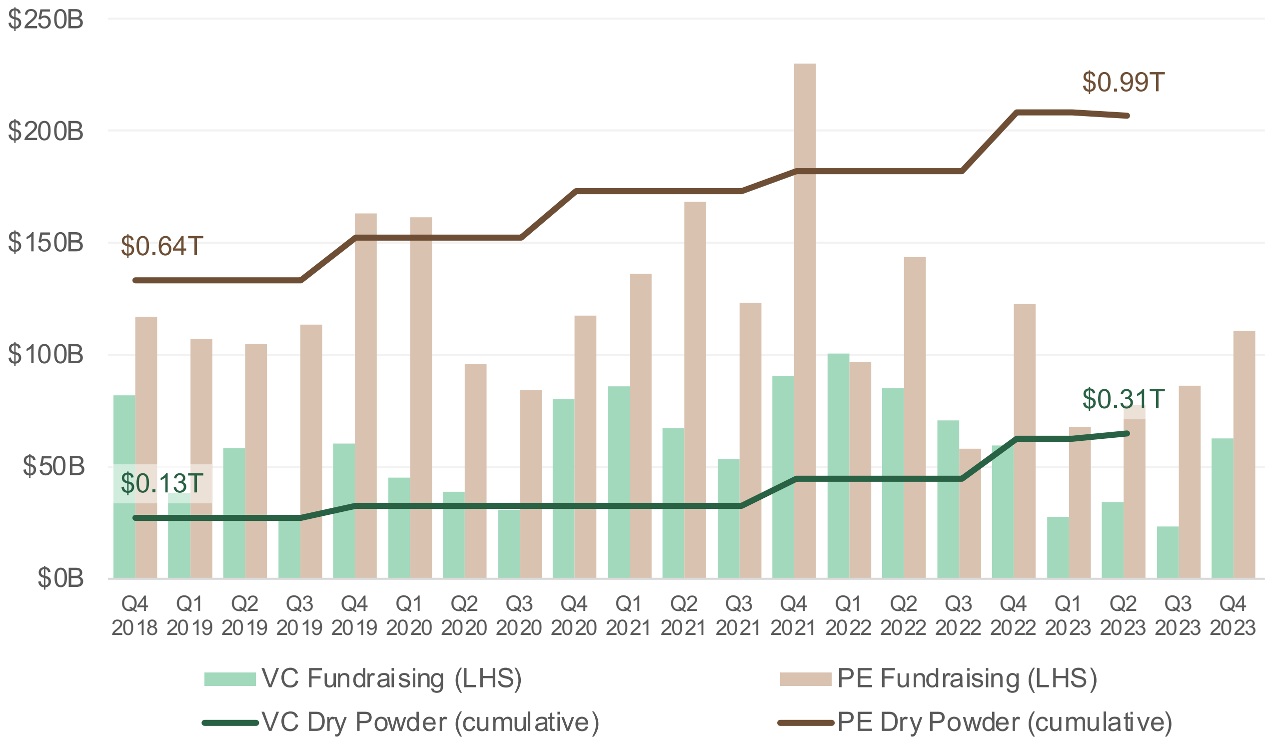
Based on our Business Leaders Outlook survey, 49% of respondents are optimistic regarding their industry's performance in 2024 (vs. 69% in 2023). Founders should balance this decline in optimism with strong operating and financial plans that are clear and realistic to investors. Many startups will need fresh infusions of capital in 2024, which is likely to be more difficult and costly to raise if nontraditional investors continue to stay on the sidelines.



Sources: PitchBook, J.P. Morgan Business Leaders Outlook (BLO). More information on BLO can be found here.

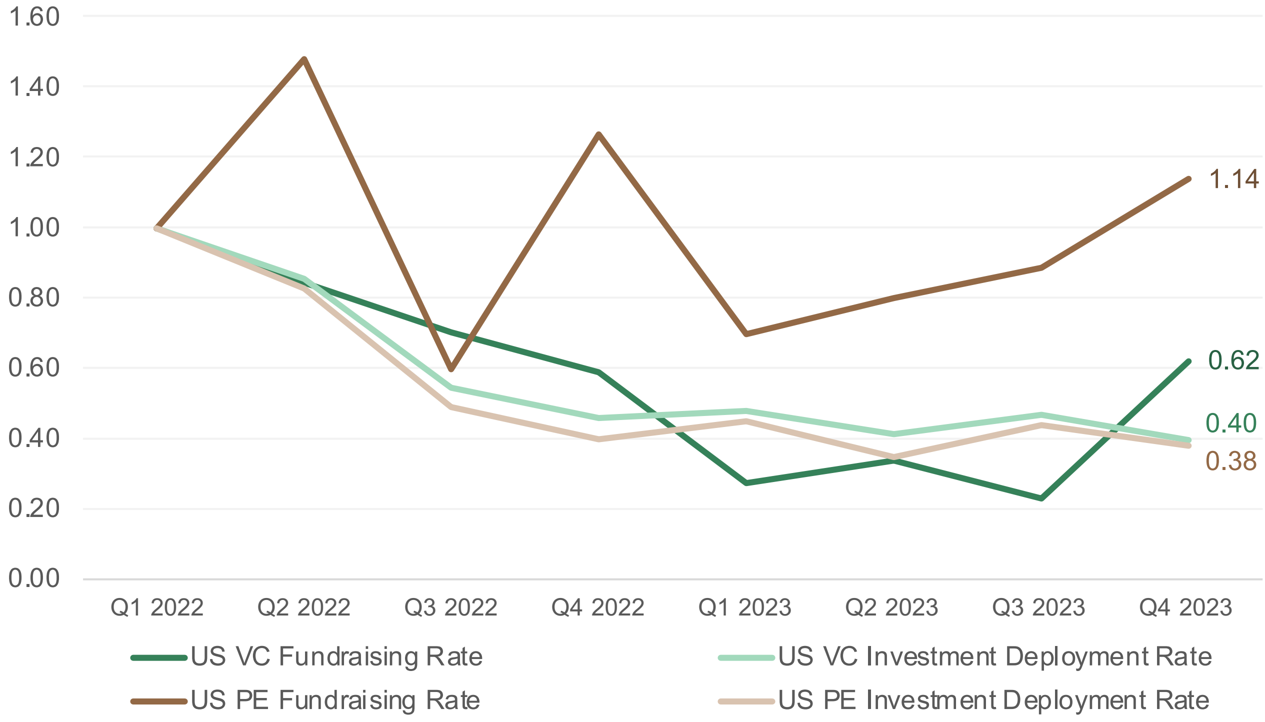
# U.S. venture dry powder plateaus as overall fundraising and deployment falls

### U.S. VC and PE dry powder overhang, U.S. VC and PE fundraising trends*




*U.S. PE fundraising for growth/expansion strategies only. U.S. PE dry powder is for all strategies.

### U.S. VC and PE fundraising and deployment rates*




*All measures indexed to Q4 2021. U.S. PE fundraising rate for growth/expansion strategies only.

## TRENDS

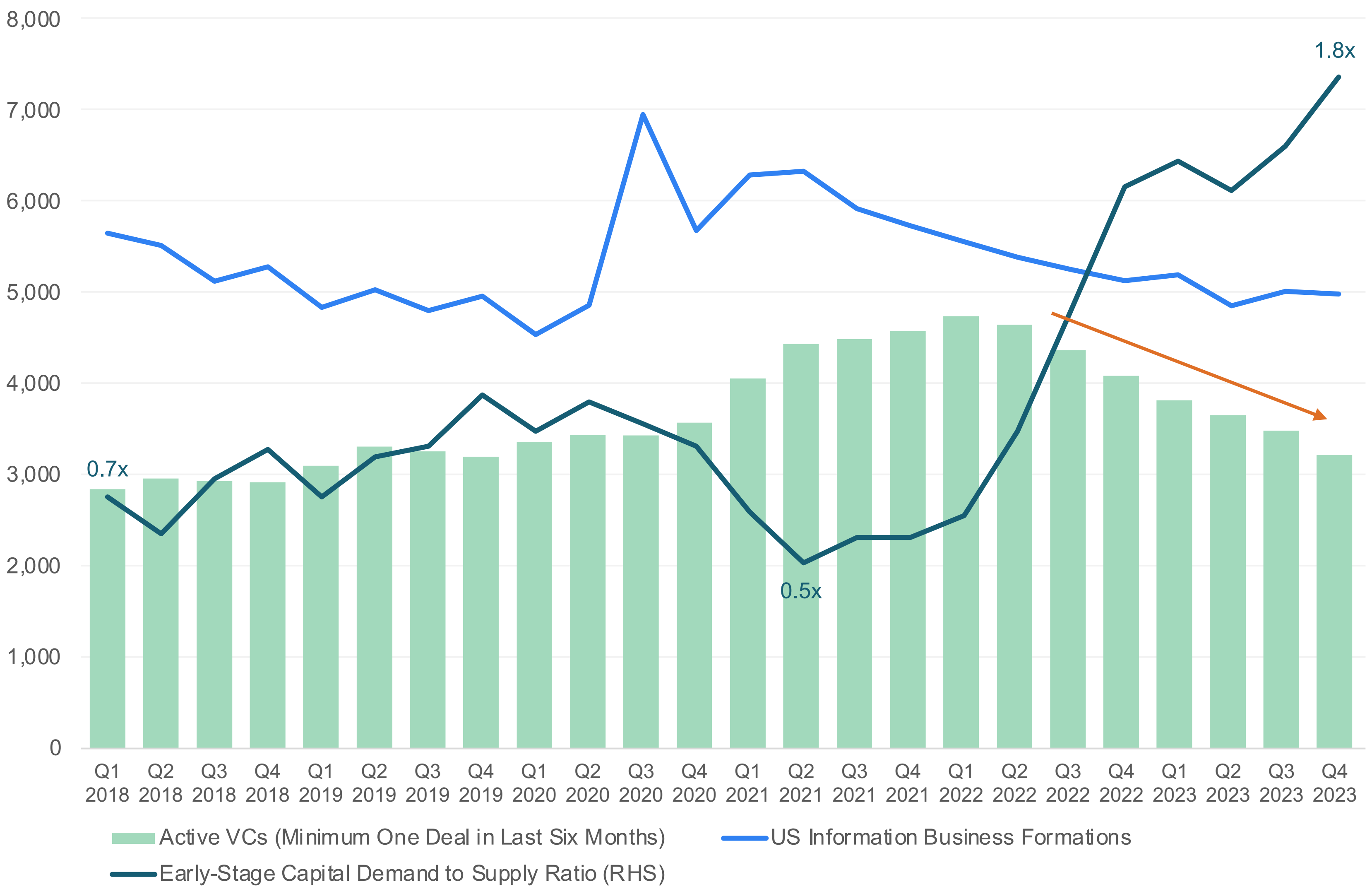
Funding for VC and PE firms leveled out in 2023, having declined from their respective peaks between Q4 2021 and Q1 2022. Dry power for VC firms grew by 4%, while for PE firms it fell 1%. For VC dry powder, 41% was raised more than two years ago, and 40% is in funds over $1 billion. For PE dry powder, similarly, 41% was raised more than two years ago, and 80% is in funds over $1 billion. PE fundraising is historically choppy, but the $111 billion raised in Q4 2023 is in-line with the period average of $117 billion. From its peak in Q1 2022, VC fundraising has declined significantly, although the $63 billion raised in Q4 2023 is a bright spot. For VC and PE deployment, both declined in sync, ending 2023 at around 40% the level of Q1 2022.

## IMPLICATIONS

The sentiment of limited partners (LPs) plays a major role. When distributions are flat and fund returns sink, as has happened with venture capital, decisioning around allocations to the asset class can be affected. This could be part of the reason for a slowdown in VC fundraising. On the other hand, PE strategies can have greater flexibility and a broader scope, which may be why they have been able to maintain fundraising levels.

# VC investors go dormant as fundraising environment becomes more challenging

**Number of active U.S. VC investors, U.S. information business formations, & early-stage capital D-S ratio***




*For a VC firm to be categorized as active, it needed to have made at least one investment in the last six months. U.S. information business formations based on U.S. seasonally adjusted high-propensity business applications. Early-stage demand-to-supply ratio is an estimated measure from PitchBook.

## TRENDS

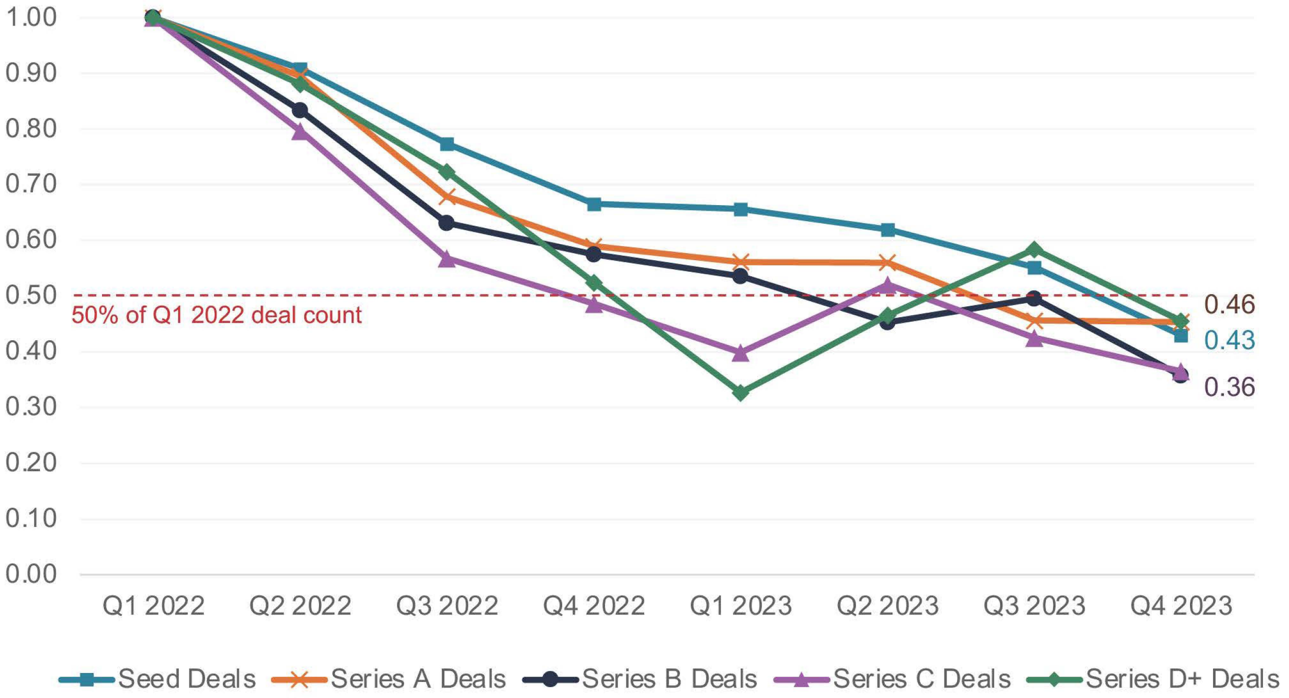
The number of active VC firms declined 32% from its peak in Q4 2021, based on PitchBook data. Some firms closed while others are "zombies," meaning they can't liquidate their assets or raise a successor fund. In a bloated, competitive market, raising capital from limited partners (LPs) and competing for the "best" deals is proving a struggle for many. The number of active VCs is expected to continue to decline, impacting inexperienced investors and ones who lack differentiation the hardest. Established firms can afford to bide their time and wait for the right deal, whereas startups running out of cash have fewer options. Negotiating power has swung back in favor of the investor, as shown by the higher demand for capital than what's currently available.

## IMPLICATIONS

If the current environment holds, less-established firms, typically those smaller in size or with less-experienced investors, will likely close or go inactive. One result could be a rise in the number of secondary funds, giving rise to investor turnover on company cap tables. Generally, founders evaluate investors not only on their term sheets but also what additional value they can bring. If certain investors roll off the cap table, a founder might lose access to a benefit.

# Deals level off after steep fall; California's share rebounds

### U.S. venture deal count trend by series*




*All measures indexed to Q1 2022.

### U.S. venture investment breakdown: Series/state/sector

**2021 Total Invested Capital: $348B**

Seed-Series A 19% | Series B-Series C 32% | Series D+ 29% | Other**

California 47% | New York 14% | Mass. 10% | Other

SaaS 13% | TMT 8% | AI 8% | Other

**2022 Total Invested Capital: $242B**

Seed-Series A 27% | Series B-Series C 29% | Series D+ 20% | Other**

California 41% | New York 13% | Mass. 9% | Other

SaaS 13% | AI 8% | FT** 7% | Other

**2023 Total Invested Capital: $167B**

Seed-Series A 23% | Series B-Series C 26% | Series D+ 16% | Other**

California 48% | New York 12% | Mass. 10% | Other

AI 15% | SaaS 11% | LS** 7% | Other

**Includes deals where series was not defined. FT stands for fintech. LS stands for life sciences.

### TRENDS

The number of venture capital deals has decreased since Q1 2022, with the rate of decline more pronounced the later the deal stage. In 2023, Andreessen Horowitz (a16z) had the highest number of Series A deals at 40. In 2021, this number of deals would have ranked them seventh; in 2021 the firm did 77 deals. For Series C deals in 2021, Tiger Global had the most deals (39), followed by Insight Partners (37) and SoftBank (31). In 2023, the three investors had 10 deals combined. The major development in 2023 was the surge in AI deals (15% of investment), overtaking SaaS (11%) for the first time. California also increased its dominance in 2023, receiving nearly half of all investment capital, helped by being a major hub of AI activity.

### IMPLICATIONS

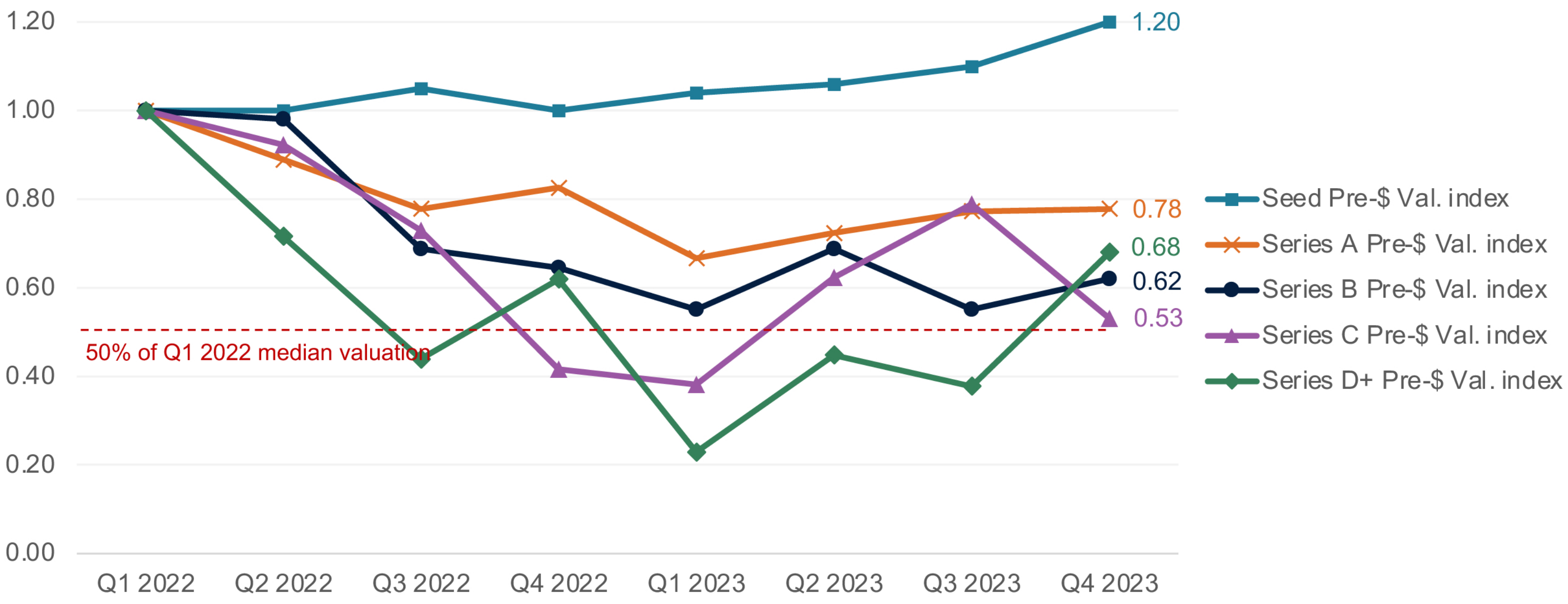
When investors start to ramp, they are likely to be more selective and would have raised their expectations compared to the peak-venture period in 2021. More focus will be placed on capital efficiency and defensibility of a startup's products or services. Being profitable or trending toward break-even will be a strong advantage. Companies in some hyped-up sectors, like AI, defense or climate tech, will have an advantage when fundraising. Others will have to make some tough decisions, which is why recapitalizations and down rounds are expected to increase in 2024.



Source: All facts and figures based on PitchBook data.

# Mixed impact as valuation trends diverge

**U.S. venture median pre-money valuation trend by series and Q4 2023 breakdown***




*All measures indexed to Q1 2022.

| | Seed | Series A | Series B | Series C | Series D+ |
|---|---|---|---|---|---|
| Deals closed in Q4 2023 | 798 | 306 | 116 | 54 | 46 |
| Change in deal count (LTM) | (439) | (92) | (71) | (18) | (7) |
| Median deal size | $3M | $12M | $29M | $45M | $83M |
| Deal size range (25th – 75th) | $1M – $5M | $7M – $20M | $11M – $43M | $23M – $83M | $34M – $137M |
| Median pre-money valuation | $12M | $35M | $90M | $173M | $697M |
| Pre-money valuation range (25th – 75th) | $7M – $20M | $20M – $60M | $49M – $176M | $78M – $339M | $155M – $2.0B |
| Median valuation step-up | N/A | 1.6x | 1.6x | 1.3x | 1.2x |
| Median months since last funding | N/A | 20 | 22 | 23 | 25 |

## TRENDS

Private company valuations typically lag public market pricing, as the incorporation of new data depends on a multitude of factors. One factor is the supply of capital, which dwindled as the large-check-writing nontraditional investors significantly reduced their activity (primarily at the late stage). This raised concerns of “zombiecorns,” companies with such high valuations that raising new capital (without taking a significant down round) is impossible and who are also struggling to reach profitability.

Valuations have held up at the early stage as investors moved downstream. Deploying smaller checks in startups less impacted by public markets was deemed less risky than doubling down on existing underwater investments. One factor less visible is the terms of the investments. While similar valuations may look the same, differences in terms can give investors greater downside protections and/or an outsized share of the upside.

## IMPLICATIONS

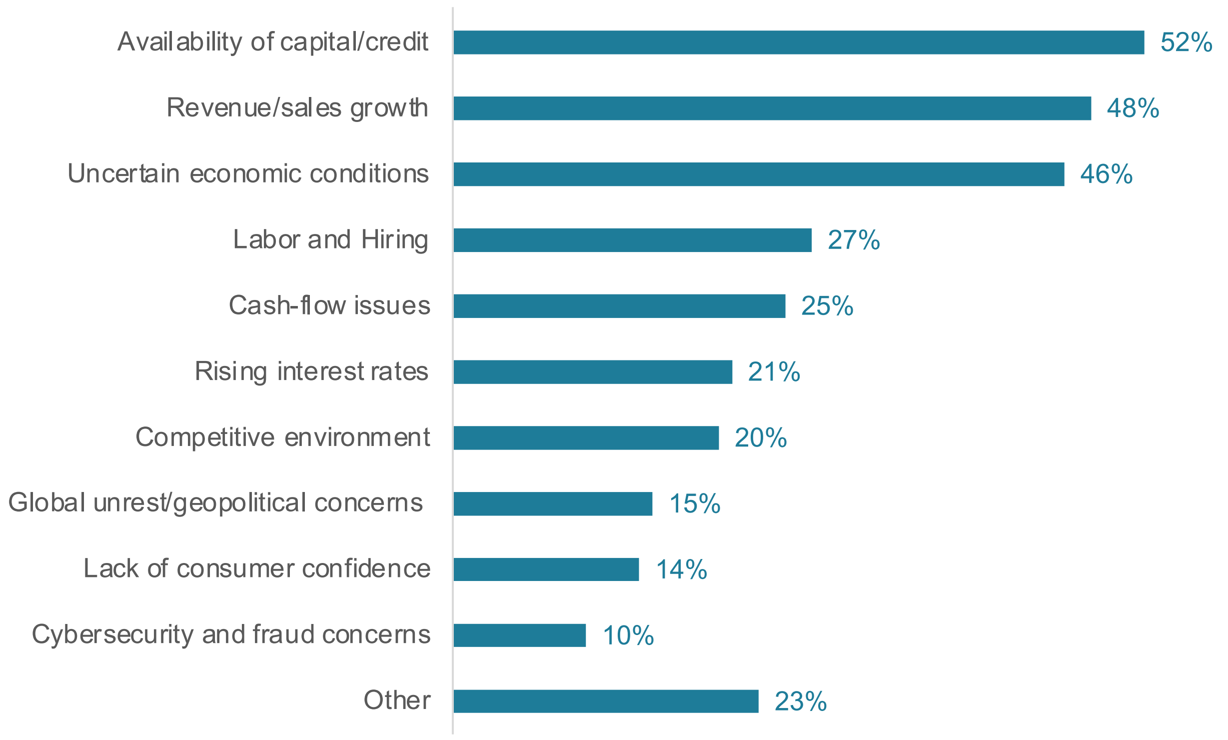
Based on our Business Leaders Outlook survey, respondents said that declining tech valuations would have a negative impact on capital fundraising (67%), growth projections (42%) and cash runway (41%). For each, the number of people indicating a negative impact increased from 2023. For other factors, like hiring/talent management and product development, the sentiment was mixed with the majority not expecting any impact.



Sources: PitchBook, J.P. Morgan Business Leaders Outlook (BLO). More information on BLO can be found here.

# Raising capital top of mind as the number who haven’t starts to mount

**What are the top three challenges facing your business?**




**Percentage of companies not yet raised since last funding round**

| Seed | Q4 2021 | Q2 2022 | Q4 2022 | Q2 2023 |
|---|---|---|---|---|
| Cohort Size | 1,429 | 1,365 | 943 | 945 |
| % Not Yet Raised a Subsequent Round | 56% | 74% | 81% | 96% |

| Series A | Q4 2021 | Q2 2022 | Q4 2022 | Q2 2023 |
|---|---|---|---|---|
| Cohort Size | 801 | 756 | 515 | 477 |
| % Not Yet Raised a Subsequent Round | 54% | 69% | 79% | 95% |

| Series B | Q4 2021 | Q2 2022 | Q4 2022 | Q2 2023 |
|---|---|---|---|---|
| Cohort Size | 399 | 304 | 230 | 187 |
| % Not Yet Raised a Subsequent Round | 61% | 78% | 80% | 97% |

| Series C | Q4 2021 | Q2 2022 | Q4 2022 | Q2 2023 |
|---|---|---|---|---|
| Cohort Size | 157 | 140 | 88 | 92 |
| % Not Yet Raised a Subsequent Round | 59% | 79% | 81% | 95% |

## TRENDS

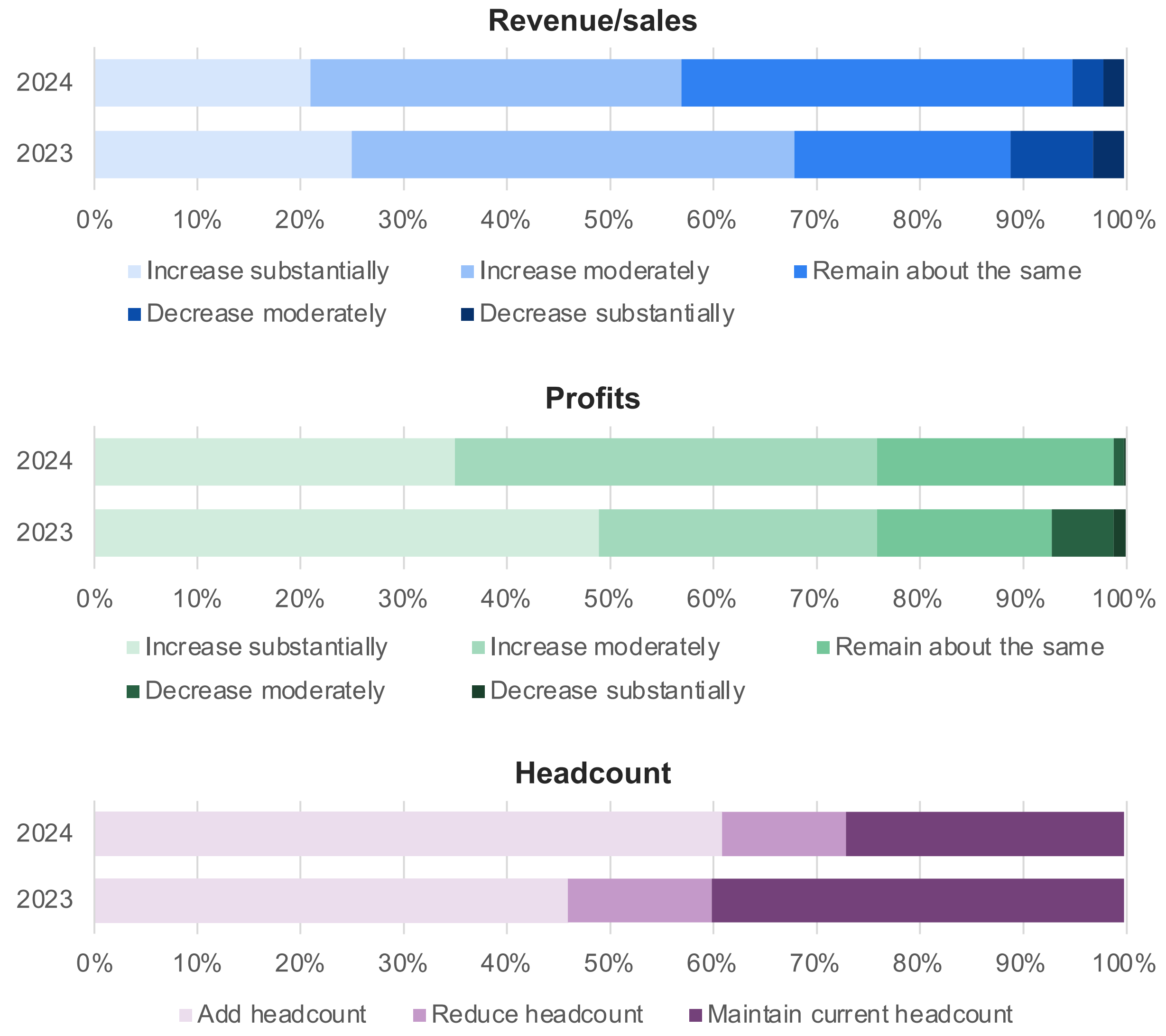
Even in the current tumultuous macroeconomic environment, the top challenge for business leaders was around the availability of capital and credit. For startups able to raise a new round of capital, the time since their last funding round generally increased. For example, the time between venture rounds for a company raising a Series C in Q4 2023 was 23 months compared to 16 months in Q4 2021, based on PitchBook data. A rule of thumb is to raise for 12 to 18 months of runway, which would mean many companies who raised in Q4 2021 should have raised again. However, this does not seem to be the case and adds to the growing backlog of companies looking for funding.

## IMPLICATIONS

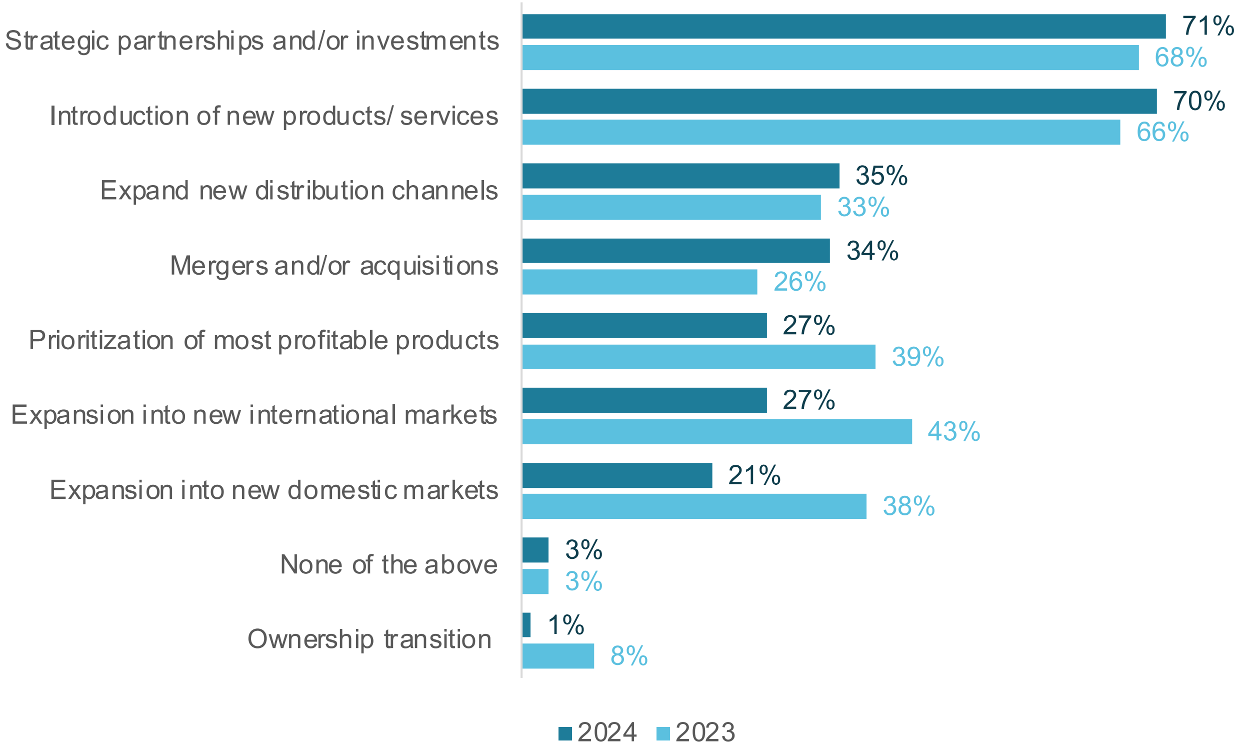
Investor guidance for 2023 was to become “default alive.” Put another way, reduce spend and have a clear path to profitability. In the current climate, investors will be looking for evidence of these actions while also maintaining sales, hitting milestones and maintaining solid unit economics. Considering the backlog of companies potentially waiting to raise, being able to show strong company fundamentals will increase the chances of securing funding, especially when deal activity picks back up.

# Leaders expecting a positive 2024

### What are your expectations for your business for the year ahead?




### Which of the following is your company planning in the next 12 months?

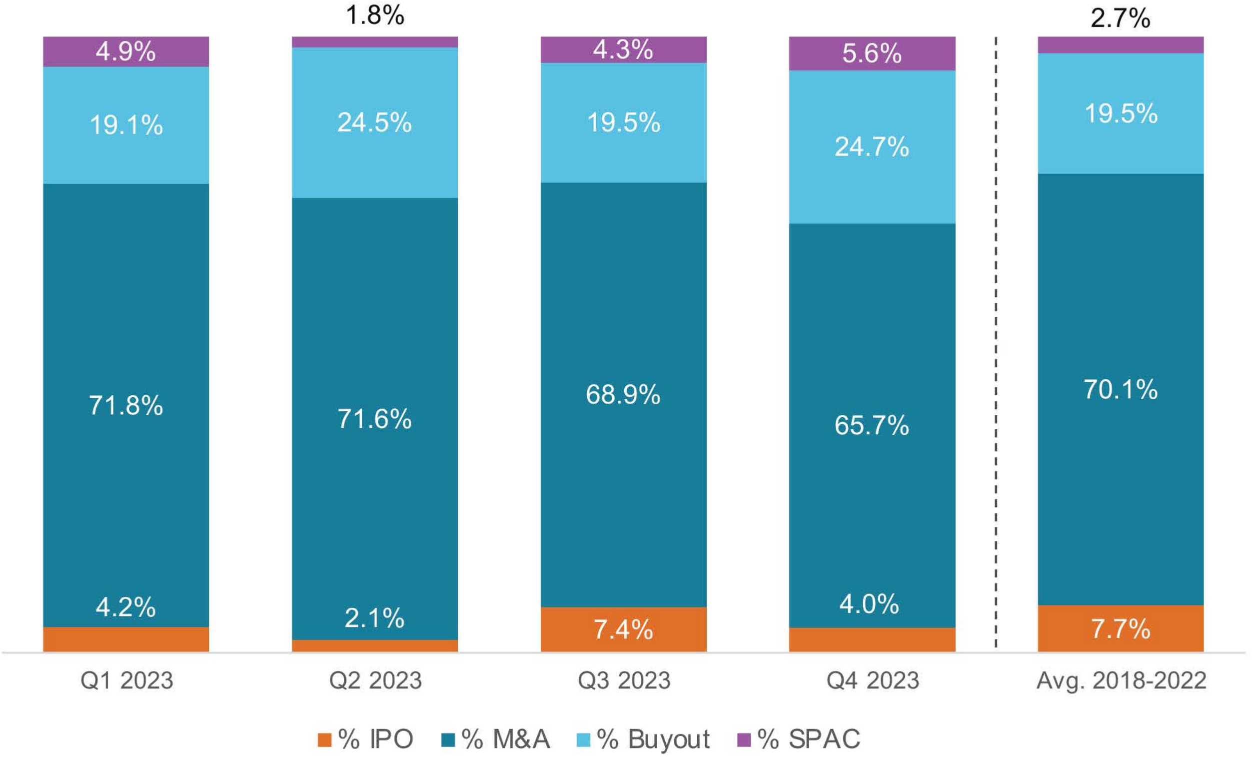



### HEADLINE

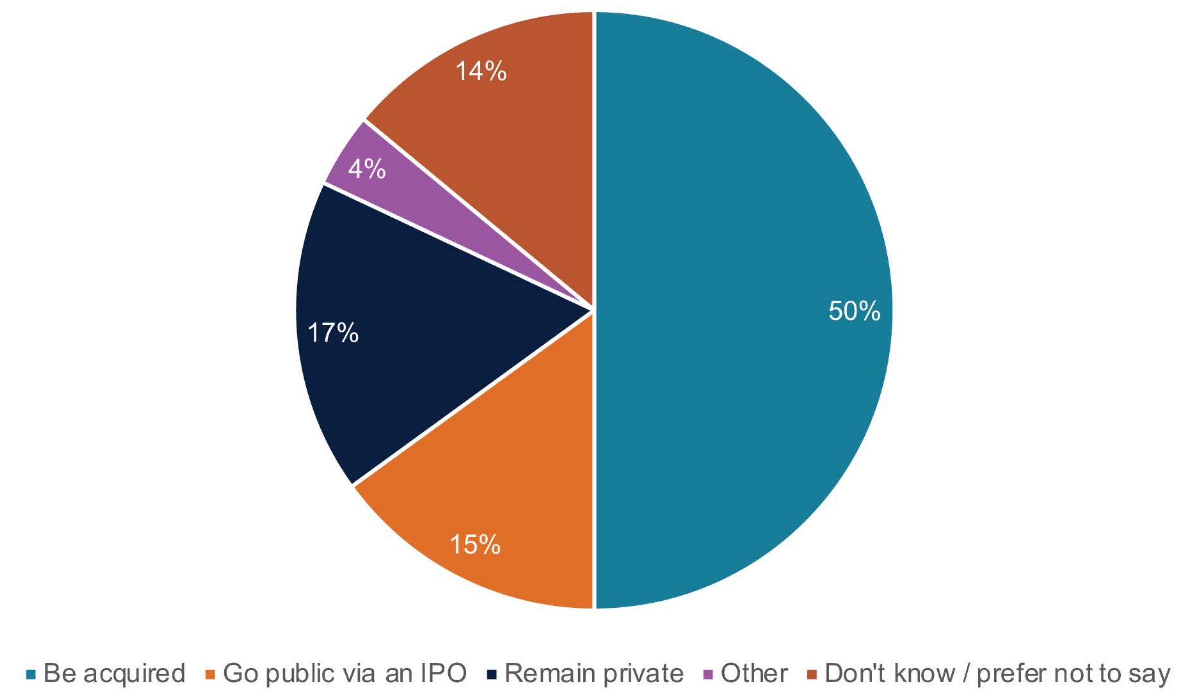
Summarizing our Business Leaders Outlook survey responses, most leaders continue to expect growth in revenue and profits in 2024. More hiring is expected in 2024, which is a good thing for an industry that had more than 260,000 layoffs in 2023 per Layoffs.fyi. A noticeable shift in company planning between 2023 and 2024 is much less of a focus on expansion into new domestic and international markets and slightly more focus on exploring a merger or acquisition.

# A disconnect between exit expectations and reality?

## U.S. venture-backed exits breakdown by type




## Which of the following best describes the long-term goal for your company?*




*J.P. Morgan Business Leaders Outlook (BLO). More information on BLO can be found here.

## TRENDS

Even though stock markets performed well in 2023, venture-backed exits remained muted. In total, there were 46 venture-backed IPOs, better than the 36 in 2022 but much lower than the 216 in 2021. For M&A activity, there were 731 transactions classified as strategic and 227 PE buyouts. This compares to 1,052 strategic transactions and 310 buyouts in 2022. The belief held by many is things won't improve until all parts of the venture capital cycle are working, which means a new wave of IPOs. Valuations are a limiting factor in M&A negotiations and especially for taking a company public, as the capital stack provides a hurdle for IPO pricing.

## IMPLICATIONS

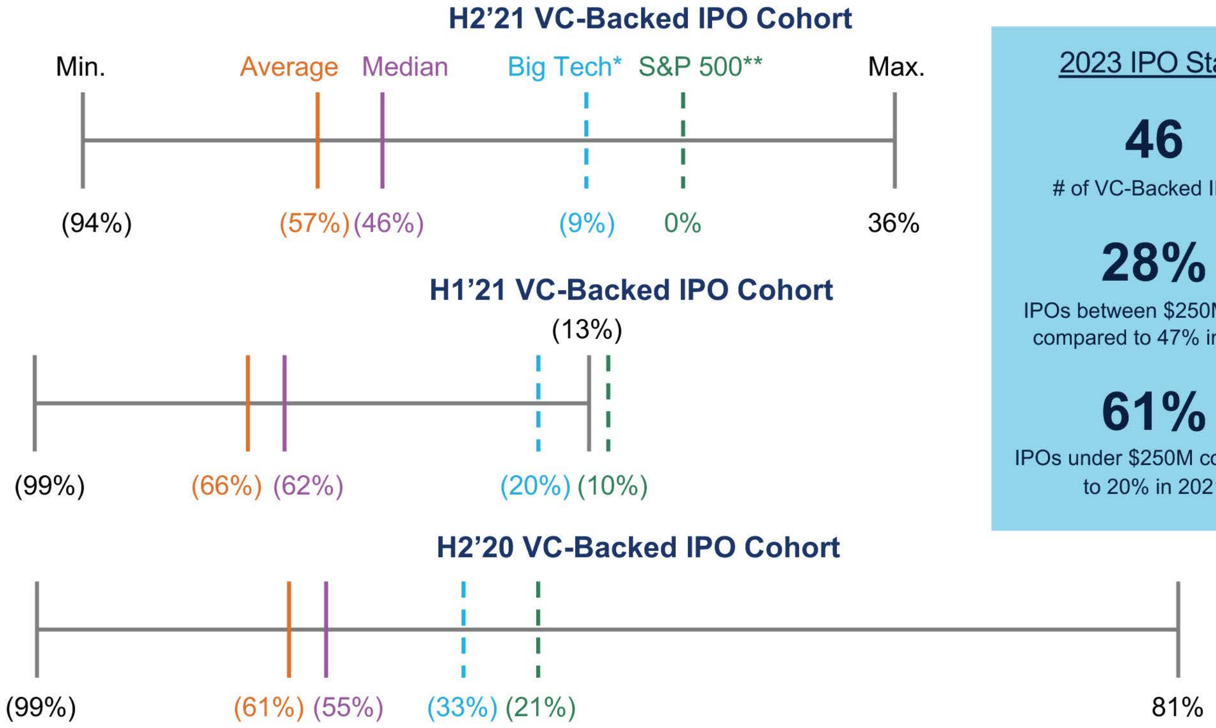
Timing an exit in 2024 could be tricky with an uncertain macroeconomic environment and an upcoming U.S. election. As the state of the exit market in 2024 is unpredictable, many leaders are considering a dual-path approach; starting the IPO process while also pursuing M&A. The main benefit of a dual-track process is flexibility and information discovery for leaders, whereas the disadvantages are the resource and time commitments and risk of impact on operations.



Sources: All facts and figures based on PitchBook data, except where indicated.

# Venture-backed IPOs have largely underperformed

## Select IPO cohorts returns since going public




2023 IPO Stats

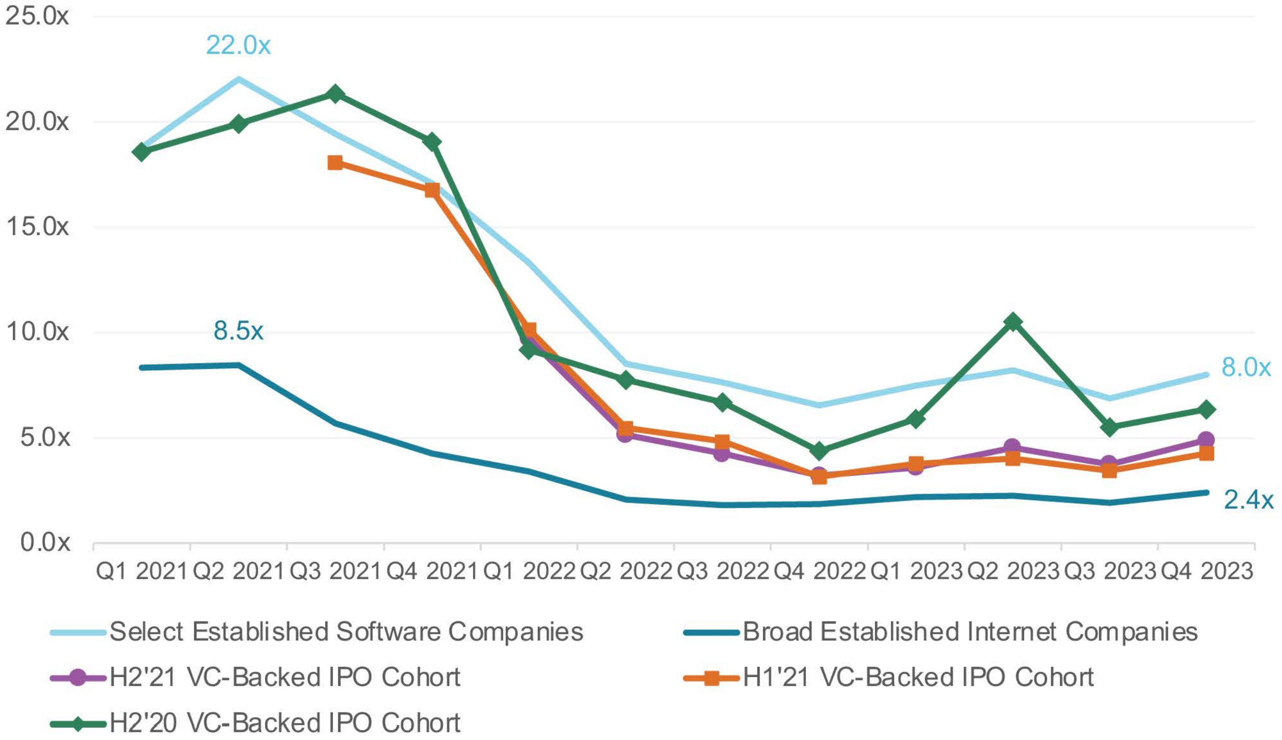
**46**
\# of VC-Backed IPOs

**28%**
IPOs between $250M - $2B compared to 47% in 2021

**61%**
IPOs under $250M compared to 20% in 2021

*Big Tech comprises Apple, Microsoft, Amazon, Alphabet, and Meta. **Return since IPO cohort period.

## EV/forward revenue multiple trend of select IPO cohorts




## TRENDS

For IPOs, investors need to be confident in the mid- to long-term performance of the companies going public. Based on the performance to date of prior VC-backed IPO cohorts, the evidence is not there (yet). The proportion of small-cap IPOs, the likely sweet spot for many venture-backed companies, has declined compared to 2020 and 2021. For all private companies, the hurdle rate has increased, as EV/forward revenue multiples have dropped significantly, meaning most will have had to grow into their private valuation before exiting (or perform an unwanted recapitalization).

## IMPLICATIONS

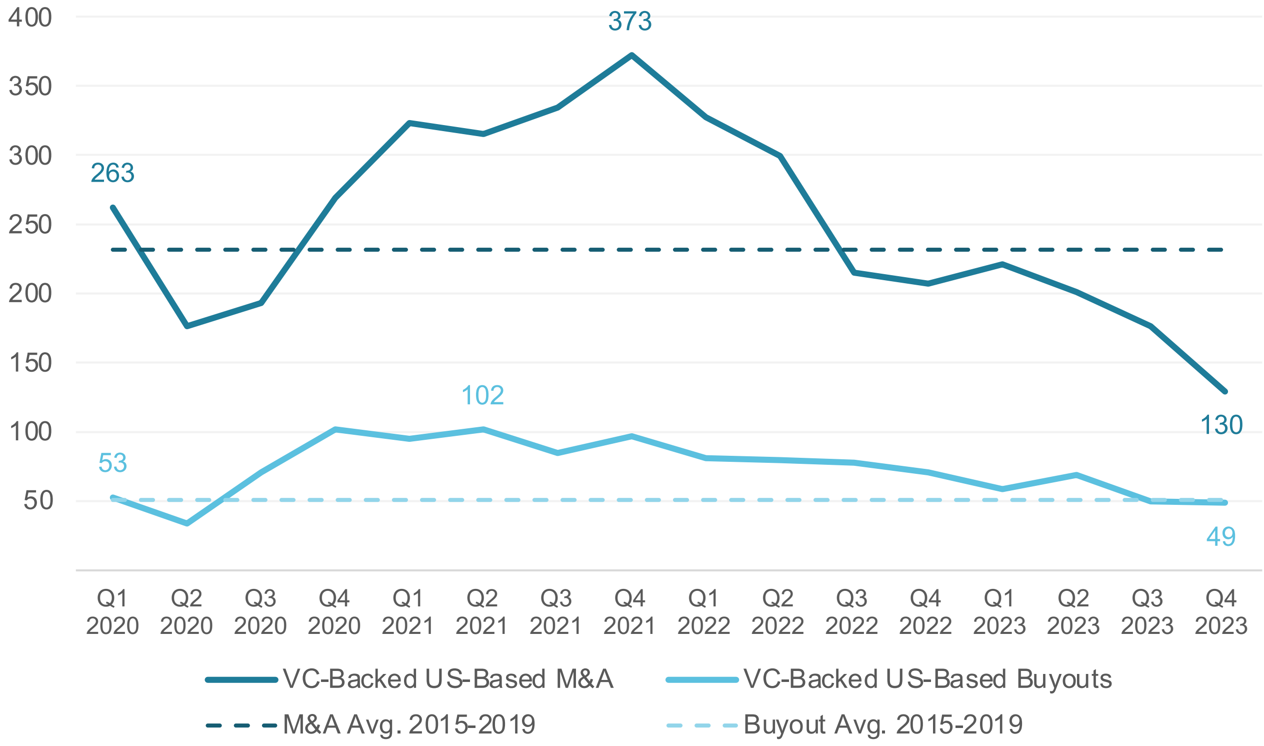
With a high level of scrutiny and continuous performance expectations, private companies considering an IPO need to be prepared. The IPO market stands a chance at reopening, but perhaps only for companies of a certain size and/or who are feeling the pressure to exit. Venture investors are bracing for this scenario, which would make realizing liquidity in their portfolios difficult and in turn limit their ability to return capital to LPs, raise new funds and increase capital deployment.



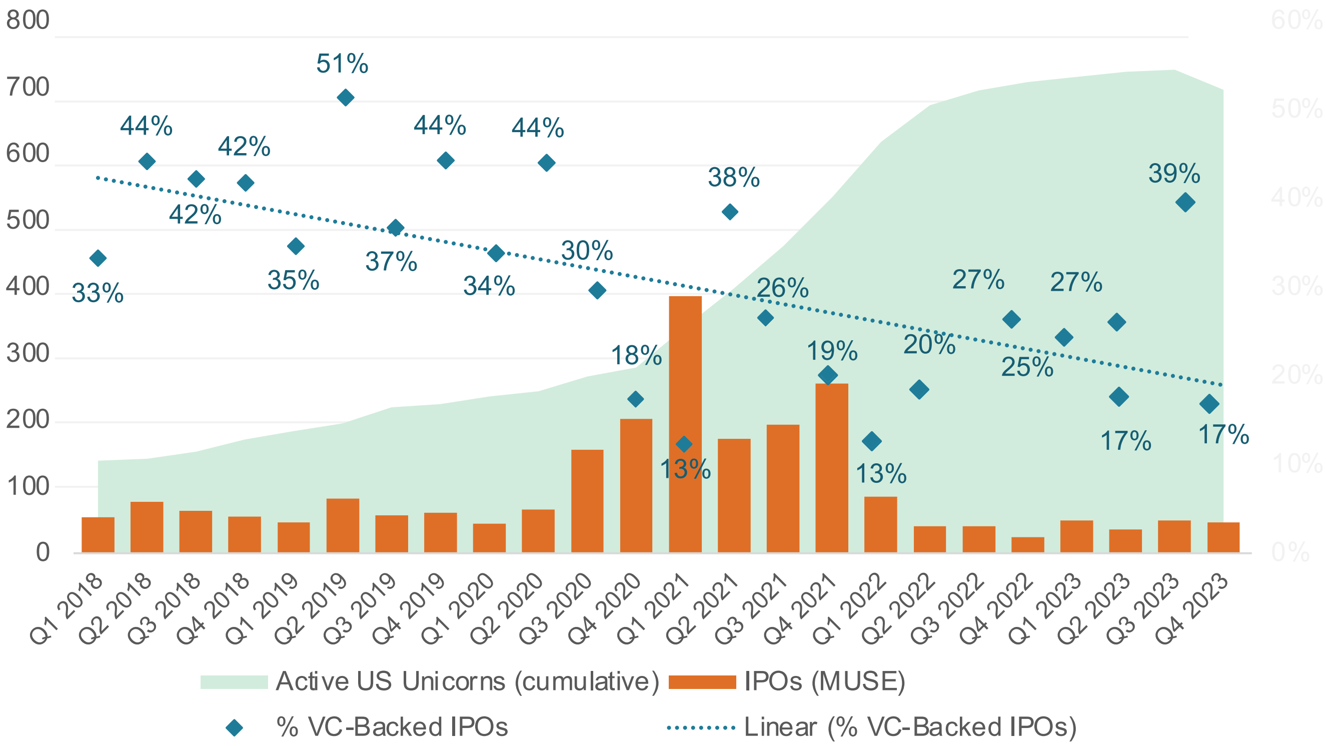
Source: All facts and figures based on PitchBook data.

# Hopes of an exit in 2024 rests on M&A?

**VC-backed, U.S.-based M&A and buyout activity**




**IPO (MUSE) activity and active U.S. unicorn count***




*MUSE stands for Major U.S. Exchanges.

## TRENDS

The number of M&A transactions involving VC-backed companies fell in 2023 after what looked like a small recovery. The usual top acquirers, the likes of Amazon, Microsoft and Alphabet, slowed their activity in 2023. For larger acquisitions, the increased level of enforcement actions from the FTC and other regulatory bodies has hindered activity. The most notable example was the collapse of the Adobe-Figma deal for $20 billion. However, for many “unicorn” companies pursuing an M&A deal might be the most feasible option. The number of active unicorns has grown to around 700, which at 2023’s rate of IPOs would take nearly four years to clear; not to mention the proportion of VC-backed IPOs has been declining.

## IMPLICATIONS

Strategic interest in startups remains high as firms, especially Big Tech, have strong cash reserves and high stock prices for facilitating transactions. PE deals declined, in part waiting for valuations to reach their trough and expectant of interest rates declines. The rate and level of these declines could supercharge buyout activity. If the IPO window remains shut and new private fundraising is difficult or unappealing, expect many companies to flip to an M&A strategy. Exploring M&A (and divestures) has become a top priority for boards of directors.