

QUANT RESEARCH

A Fork in the Road

A QUANTITATIVE PERSPECTIVE ON US VC







Introduction

A dichotomy is developing across nearly all aspects of the VC landscape. Unicorns are launching IPOs at the fastest rate since 2021, but exits remain stunted. Large funds continue to dominate new commitments, yet fundraising is tracking for an eight-year low. For every slice of data in VC there is a line in the sand creating separate realities.

The most glaring example is the size of investment and frenzy of activity in AI, which continues to see investment counts and values rise each year. But the divergence is not just between AI and the rest of the market; there are dividing lines within the sector itself. The scale of deals from some of the largest firms in the sector (in the horizontal platforms segment) have vastly outpaced those in other segments (such as autonomous machines and vertical applications), even as deal counts in those segments explode.

Competing tensions are leading to inaction among economists and investors. The Federal Reserve (the Fed) held off on rate cuts over the summer, balancing early deterioration in the jobs market with resilient economic activity. Just as inflation is cooling in goods, electricity and natural gas are preventing the Consumer Price Index (CPI) from reaching the Fed's 2% goal. This uncertainty has surfaced in allocator behavior, slowing commitments as LPs wait not only for clearer signs of a market bottom but also for distributions from existing portfolios to be recycled into new vintages.

A few high-flying IPOs show that there is reason for excitement in the market, but the deal environment remains stagnant as companies age. Companies are staying private longer, both because a small number can continue to raise private capital and because many remain burdened by valuations set during the zero-interest-rate-policy (ZIRP) era, which now sit largely out of step with today's exit environment.

Looking ahead, venture's ability to sustain historical multiple on invested capital (MOIC) profiles within AI will be challenged by the flood of capital chasing deals in the segment. Despite broader stagnation, there seems to be an endless supply of capital for the hottest AI startups, leaving the industry potentially overexposed to one theme and still waiting for the broader market to rebound.

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Key takeaways

- Inflation continues to cool, albeit at a slower pace, as CPI has yet to reach the Fed's 2% target. The prices of natural gas and electricity have jumped over the past 12 months, reflecting the intense power needs of hyperscalers and modern datacenters (page 7).
- Measures of consumer sentiment have trended lower in 2025 (<u>page 6</u>), reflecting uncertainty amid changing tariffs and a cooling job market (<u>page 8</u>). Employers are likely shifting to a "low hire, low fire" mindset to keep overhead low but avoid the pain of the labor shortages seen in the post-pandemic era.
- Exit counts and values are recovering from their 2024 slump with trailing sixmonth totals surpassing short-term trends but remaining suppressed compared with long-term trends (page 11).
- The weak IPO market and sluggish M&A activity are driving a difficult liquidity landscape for investors. In 2025, distribution yields have ticked down and remain well below historical norms, with late-2010s vintages continuing to show lower distributions as a percentage of NAV compared with earlier funds. The US VC direct secondary market, estimated at \$61.1 billion in our Q2 2025 US VC Secondary Market Watch, is notable but modest relative to venture's broader liquidity needs (pages 15 and 32).
- Capital is increasingly concentrated among a handful of large platforms. The top 10 funds have accounted for 42.9% of commitments YTD, while emerging managers continue to face friction despite stabilizing after the ZIRP era (page 17).

- The PitchBook VC Dealmaking Indicator remains investor friendly, though it is trending closer to neutral for early-stage startups. All stands out as the hottest vertical, capturing the lion's share of attention and continuing to offer the most favorable environment for startups (page 21).
- Compared with recent sectoral cycles, the scale of investment in AI is unprecedented (<u>page 22</u>). This flurry of investment has largely been concentrated in a small handful of marquee deals that dwarf all other rounds. The 10 largest deals represent 41.2% of all VC activity YTD (<u>page 25</u>).
- Within AI, horizontal platforms dominate deal value, far outpacing vertical applications and autonomous machines even as deal counts in those segments accelerate (page 23).
- Al companies command a significant late-stage premium, with their median Series
 D+ pre-money valuation roughly three times higher than that of non-Al peers
 (page 26).
- High entry prices reshape venture outcomes: Early-stage deals carry higher risk but also greater upside, while in Series D+ deals, outcomes converge toward the median and exit hurdles become exceptionally large (pages 27 through 29).



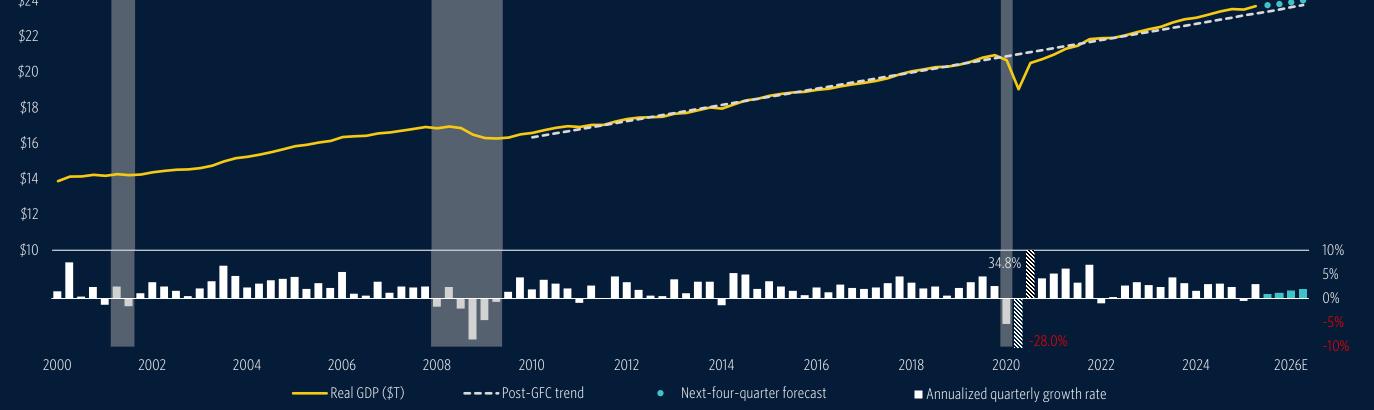
Red light, green light



GDP continues to exceed its post-global-financial-crisis (GFC) trend, though forecasts see the potential for a reversion to the mean. Uncertainty regarding tariffs and consumer demand are driving expectations...

Figure 1 Real GDP growth compared with post-GFC trend

\$24
\$22

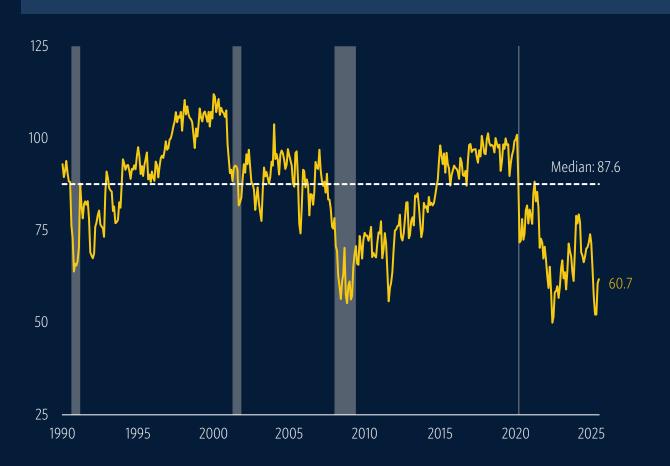


Sources: Bureau of Economic Analysis, WSJ Economic Forecasting Survey • Geography: US • As of June 30, 2025



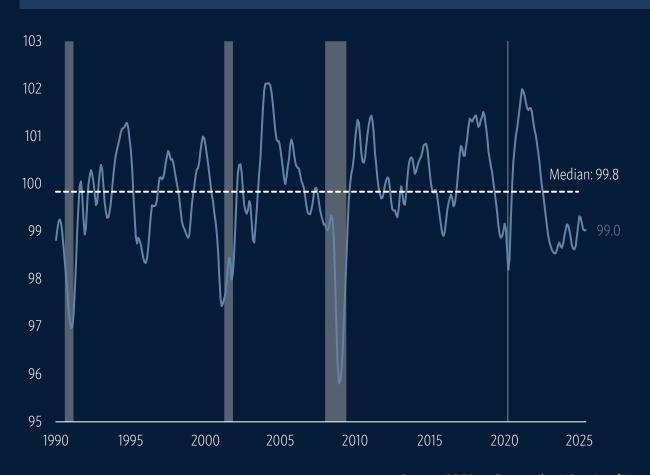
...as illustrated by the University of Michigan Consumer Sentiment Index and OECD Business Confidence Index remaining well below their long-term medians.

Figure 2 University of Michigan Consumer Sentiment Index



Source: University of Michigan • Geography: US • As of July 31, 2025

Figure 3 Business Confidence Index



Source: OECD • Geography: US • As of June 30, 2025



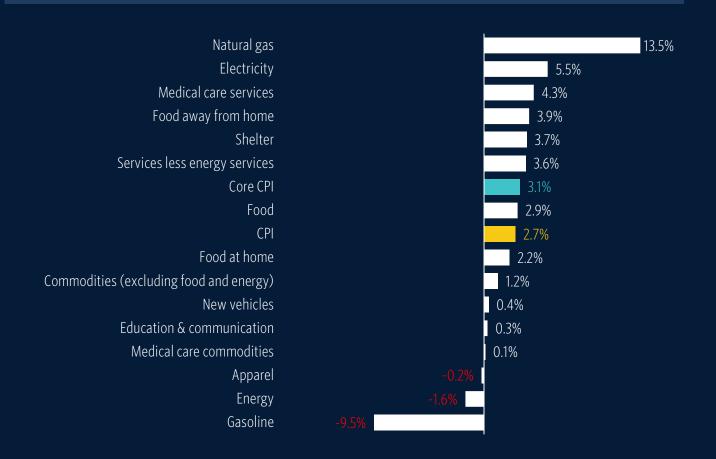
CPI continues to cool at a modest pace but remains above the Fed's 2% target. Rising natural gas and electricity costs, driven partly by AI datacenter demand, are the core drivers of sustained inflation.

Figure 4 > YoY change in CPI



Source: <u>Bureau of Labor Statistics</u> • Geography: US • As of July 30, 2025

Figure 5 One-year change in CPI by select categories

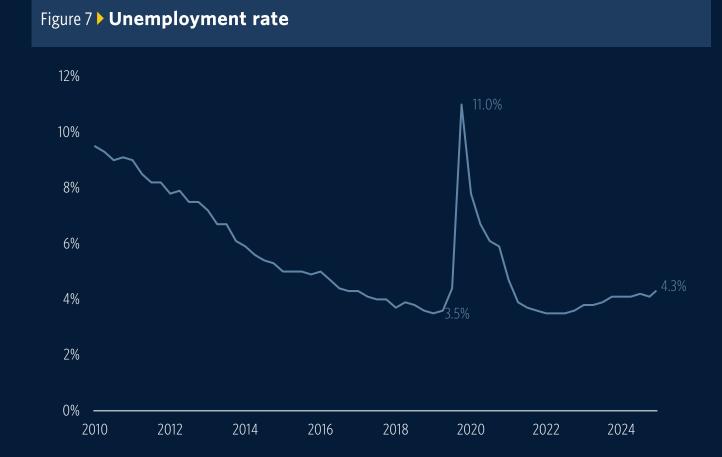


Source: <u>Bureau of Labor Statistics</u> • Geography: US • As of July 30, 2025



Job growth has slipped below pre-pandemic averages, while unemployment continues to edge higher. Continued claims have also started to rise, signaling a cooling labor market.

Figure 6 • QoQ payroll change 4% Pre-pandemic average: 1.1% 2% 0% 2010 2012 2014 2016 2018 2020 2022 2024



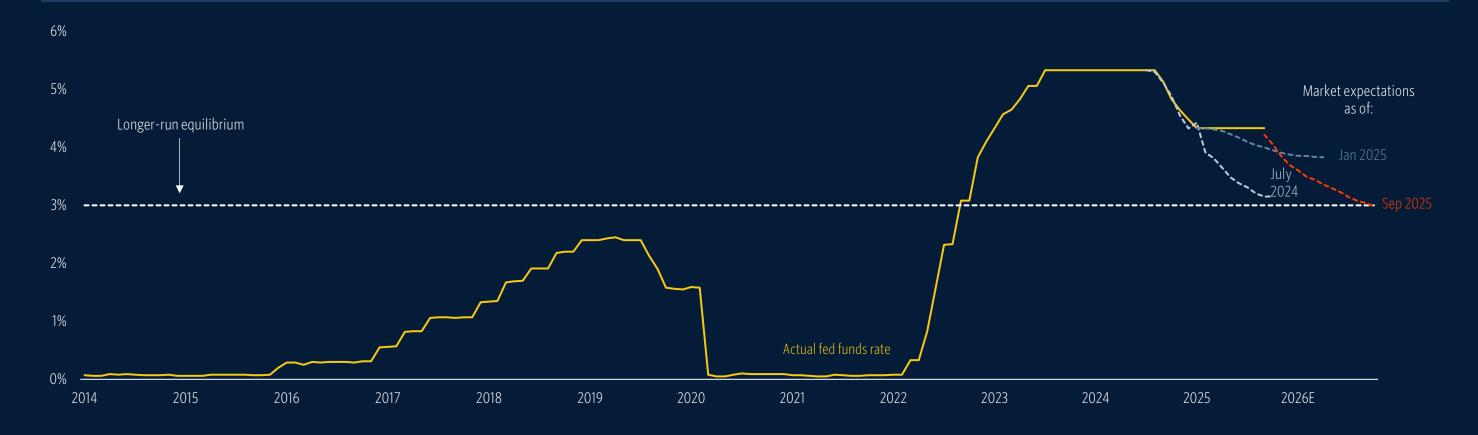
Source: Bureau of Labor Statistics • Geography: US • As of August 31, 2025

Source: <u>Bureau of Labor Statistics</u> • Geography: US • As of August 31, 2025



As the labor market softens, markets expect the Fed to deliver a 25-basis-point cut at the September meeting, with additional easing priced in before year-end.

Figure 8 > Federal funds rate with forward market expectations



Sources: Federal Reserve, CME Group • Geography: US • As of September 12, 2025

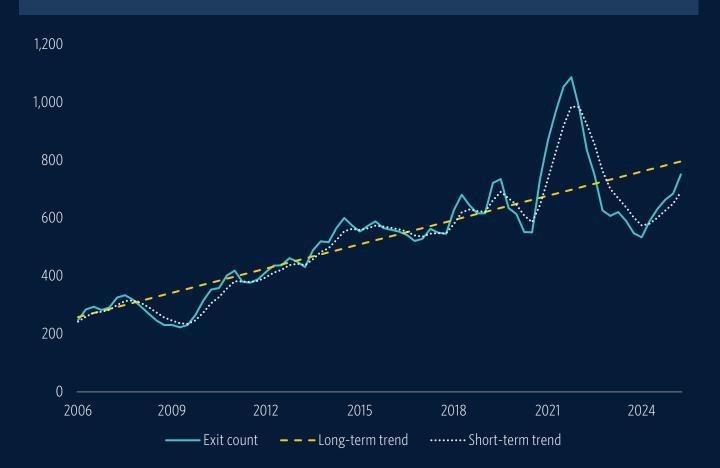


Two lanes emerge



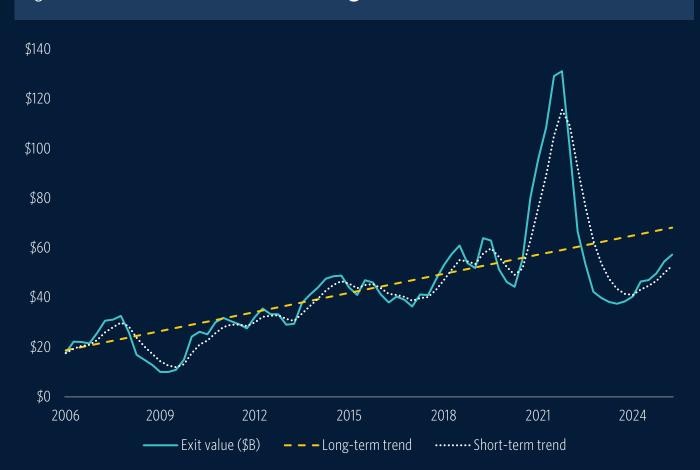
VC exit activity continued to improve in H1 2025, surpassing short-term trends but remaining suppressed compared with long-term trends. Exit counts are increasing at a faster pace than values, signaling a shift toward smaller deals on average.

Figure 9 VC exit count short- and long-term trends



Source: PitchBook • Geography: US • As of June 30, 2025 Note: Data is seasonally adjusted and includes estimates for the four most recent quarters.

Figure 10 VC exit value short- and long-term trends

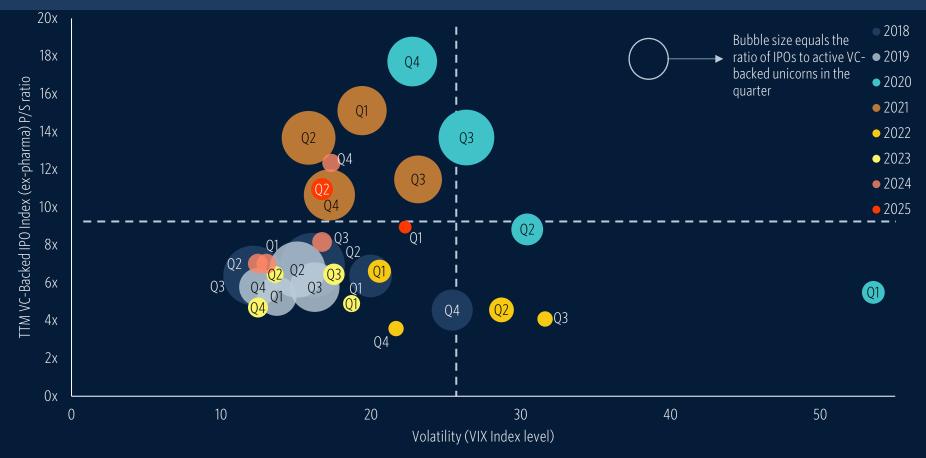


Source: PitchBook • Geography: US • As of June 30, 2025 Note: Data is seasonally adjusted and includes estimates for the four most recent quarters.



The backlog continues to grow despite declining volatility and rising public multiples. Pricing expectations are still anchored to 2021 valuations.

Figure 11 > Trailing 12-month (TTM) P/S ratio of VC-Backed IPO Index (excluding pharma) versus VIX Index level



Source: PitchBook • Geography: US • As of June 30, 2025



The IPO window

IPO price/sales (P/S) ratios are plotted against the VIX Index level to examine the historical relationship between volatility and valuations. Bubble sizes represent the ratio of IPOs to the number of unicorns through the end of each quarter.

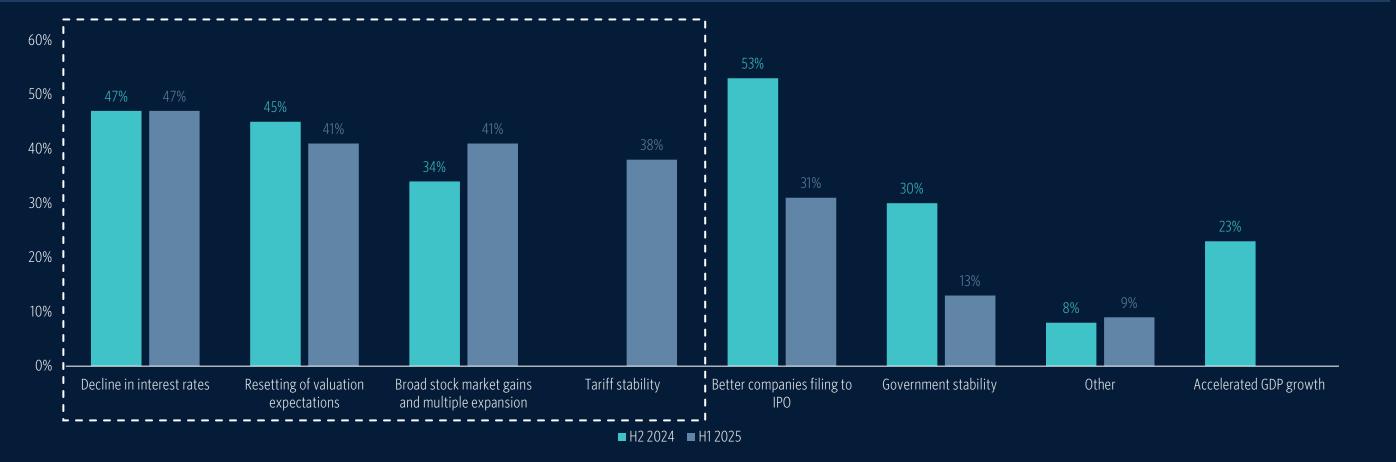
Historically, the combination of relatively high P/S ratios and low volatility has represented the optimal IPO window, where stable market conditions supported new listings. 2020 and 2021 were exceptions, where exuberant multiples drove robust IPO activity even with a slight uptick in market volatility.

Despite high multiples, albeit from limited constituents, and low volatility in 2024, the IPO market remained subdued. This lack of activity could be signaling that private market investors are anchoring to lofty price expectations set in 2020 and 2021.



In 2025, tariff uncertainty has further weighed on sentiment, turning last year's abstract concerns about government stability into tangible market headwinds (as noted in our H1 2025 VC Tech Survey).

Figure 12 Factors VC investors view as most important to driving an increase in IPO activity



Source: PitchBook • Geography: Global • As of May 23, 2025

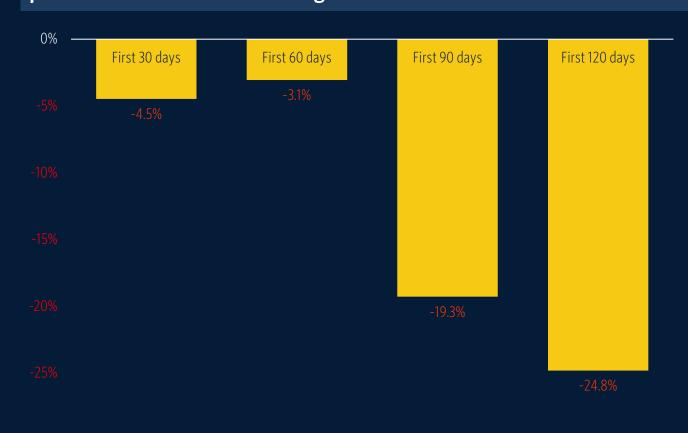


Exit performance remains broadly weak, with most recent IPOs underperforming. Any signs of recovery have been concentrated in a handful of names, many linked to AI, leaving overall liquidity pressures unchanged.

Figure 13 Post-IPO performances of select VC-backed companies

Company	Return since listing	Relative to Morningstar Growth			
Circle	58.6%	49.6%			
Hinge Health	49.3%	37.7%			
Omada	3.0%	- <mark>4</mark> .8%			
MNTN	-22.6%	-34.1%			
Voyager	-45.7%	-53.3%			
Chime Financial	-28.8%	-36.0%			
Figma	-39.2%	-38.5%			

Figure 14 Median VC-Backed IPO Index (excluding pharma) constituent performance relative to Morningstar Growth Index

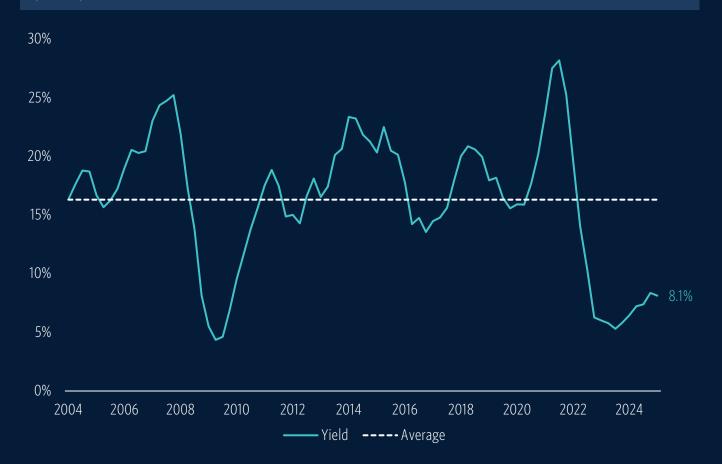


Sources: Morningstar, PitchBook • Geography: Global • As of August 31, 2025 Note: Data is based on the closing price on the first day of trading. Sources: Morningstar, PitchBook • Geography: Global • As of August 31, 2025 Note: Data includes relative returns for all seven companies listed in figure 13.



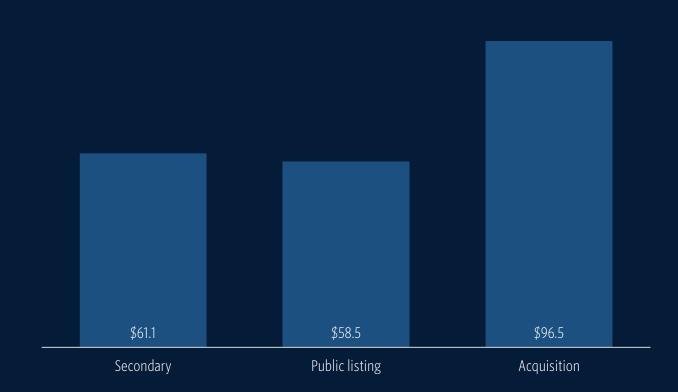
Liquidity for LPs remains scarce. With distributions slowing as companies stay private longer, LPs have turned to the nearly \$61 billion secondary market (Q2 2025 US VC Secondary Market Watch), but it remains modest for VC's liquidity needs.

Figure 15 > 12-month VC distribution yield as a share of net asset value (NAV)



Source: PitchBook • Geography: US • As of March 31, 2025 Note: Data for Q1 2025 is preliminary.

Figure 16 TTM VC exit value (\$B) by type



Sources: PitchBook, Caplight, Forge, Hiive, Nasdaq Private Market, Next Round Capital, Notice.co, and Rainmaker Securities • Geography: US • As of June 30, 2025



As a result, LPs are being stringent with their available capital, focusing on experienced managers with strong track records. This concentration has led to a growth in megafunds...

Figure 17 Megafunds (\$1B+) as a share of all venture capital raised (\$B)



Source: PitchBook • Geography: US • As of June 30, 2025

Figure 18 Venture capital raised (\$B) by manager experience

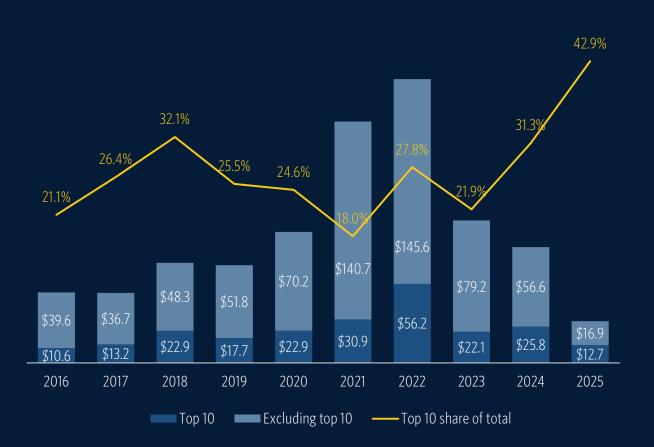


Source: PitchBook • Geography: US • As of June 30, 2025 Note: Data includes only US investors investing in US VC deals.



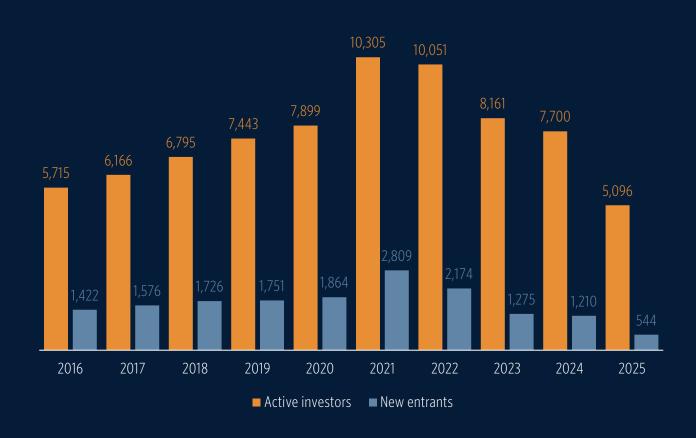
...and a drop in overall market participants. The top 10 funds now account for 42.9% of capital raised as capital is increasingly concentrated in a handful of platforms and overall fundraising remains muted.

Figure 19 Venture capital raised (\$B) by top 10 funds



Source: PitchBook • Geography: US • As of June 30, 2025

Figure 20 Count of active VC investors and new entrants

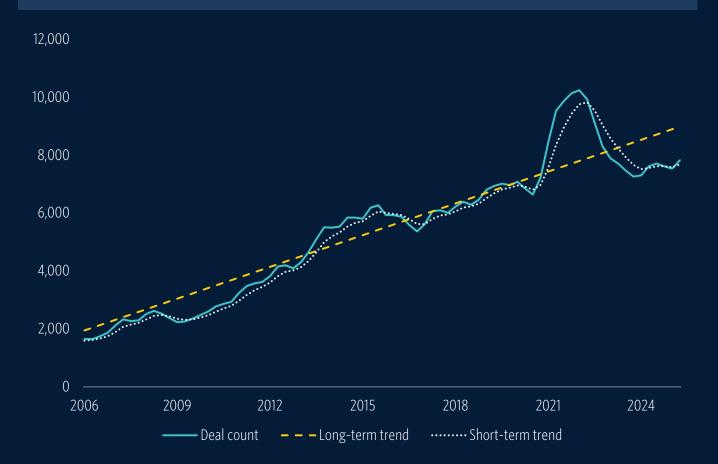


Source: PitchBook • Geography: US • As of June 30, 2025 Note: Data includes only US investors investing in US VC deals.



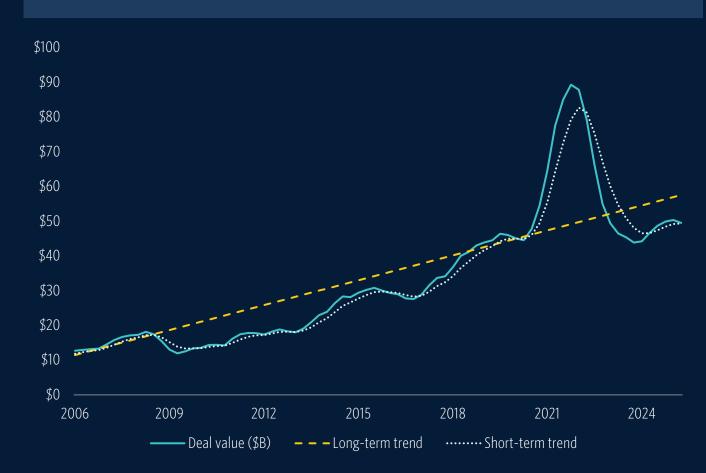
VC dealmaking remains suppressed compared with long-term trends and 2021 highs. VC deal values have trended closer to historical figures as the funding environment has been supportive of fewer, larger deals...

Figure 21 > VC deal count short- and long-term trends



Source: PitchBook • Geography: US • As of June 30, 2025 Note: Data is seasonally adjusted and includes estimates for the four most recent quarters.

Figure 22 VC deal value short- and long-term trends



Source: PitchBook • Geography: US • As of June 30, 2025 Note: Data is seasonally adjusted and includes estimates for the four most recent quarters.



...and mature companies as AI remains the sole bright spot in an otherwise lackluster market.

Figure 23 Trailing six-month VC deal trends dashboard

				Deal count				Deal value	
	Segment	Current	% of total	Long-term score	Short-term score	Current (\$B)	% of total	Long-term score	Short-term score
	Total	7,826	100.0%	-1.6	-0.3	\$49.5	100.0%	-0.8	-0.3
Vertical	AI & ML	2,811	35.9%	2.4	0.1	\$19.7	39.8%	1.6	0.2
	Big Data	626	8.0%	-1.5	-0.5	\$5.6	11.3%	-0.4	0.0
	Fintech	854	10.9%	-0.7	-0.4	\$5.9	11.9%	-0.7	-0.3
	Healthcare	930	11.9%	-1.1	-0.9	\$7.4	15.0%	-0.4	-0.6
>	Life sciences	632	8.1%	- <mark>2.6</mark>	-0.9	\$6.1	12.3%	-2.0	-1.5
	Mobile	615	7.9%	-2.5	-0.5	\$3.4	6.8%	-2.2	-0.8
	SaaS	2,345	30.0%	-1.2	0.2	\$16.8	33.9%	-0.6	0.5
	Pre-seed/seed	2,173	27.8%	-2.8	-1.2	\$6.7	13.6%	-0.7	-1.0
Stage	Early-stage VC	2,705	34.6%	-0.8	0.4	\$14.7	29.7%	-1.1	-0.4
Sta	Late-stage VC	2,382	30.5%	0.4	0.4	\$20.6	41.6%	-0.6	-0.1
	Venture growth	554	7.1%	3.3	1.0	\$7.5	15.1%	-0.2	0.6

Trend (Z-score)

-2.0 +2.0

Dashboard methodology

The deal trends dashboard provides a quantitative assessment of overall deal activity in the past six months. It shows each vertical and stage after adjusting for seasonality and reporting lags. The top seven verticals in this venture dashboard were selected based on their number of venture deals over the past two years.

The long- and short-term Z-scores represent a Z-score normalized derivative from a full-period linear trend line and a 12-month exponential moving average, respectively.

Source: PitchBook • Geography: US • As of June 30, 2025 Note: "Current" refers to the seasonally adjusted trailing six-month value.



AI highway



Investors remain selective with their capital, keeping the general market firmly in investor-friendly territory. Early-stage Al deals are approaching neutrality as investors compete for exposure.

Figure 24 ▶ PitchBook VC Dealmaking Indicator



Source: PitchBook • Geography: US • As of July 31, 2025

Figure 25 Early-Stage VC Dealmaking Indicator by select verticals



Source: PitchBook • Geography: US • As of July 31, 2025



Venture has seen repeated waves of hype, from social software to mobility tech to crypto. But no cycle has reached the scale of today's AI boom, which continues to grow.

Figure 26 Share of TTM VC deal value by sector 70% 60% 50% 40% 30% 20% 10% 2006 2007 2008 2009 2011 2012 2013 2014 2016 2017 2018 2019 2021 2022 2023 2024 —— Al —— Mobility tech —— Climate tech —— Crypto —— Social software —— Fintech

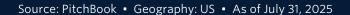
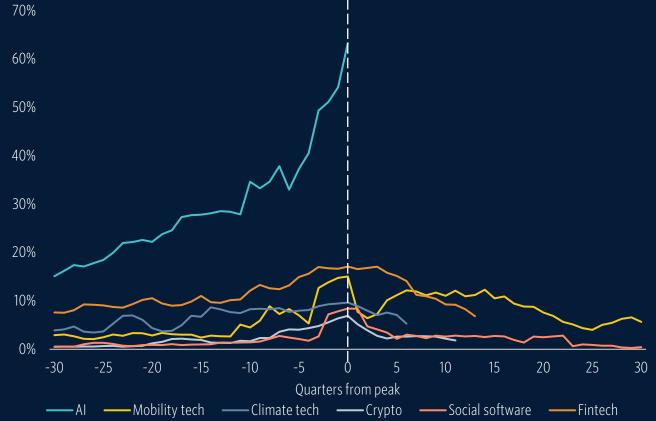


Figure 27 Share of TTM VC deal value by sector, aligned around peak



Source: PitchBook • Geography: US • As of July 31, 2025



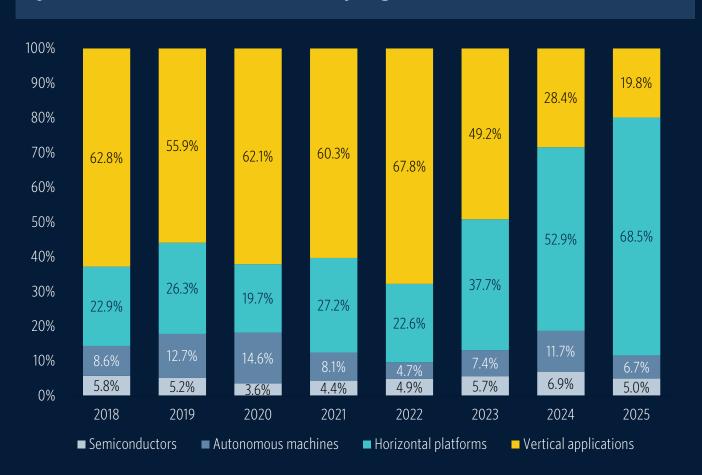
The AI boom is dominating VC funding and deals, accounting for 55.2% of recorded deal value YTD. More specifically, the horizontal platforms segment (which includes OpenAI and Anthropic) represents 68.5% of total AI VC deal value.

Figure 28 AI VC deal value (\$B) by segment and share of all VC deal value



Source: PitchBook • Geography: US • As of August 31, 2025

Figure 29 Share of AI VC deal value by segment

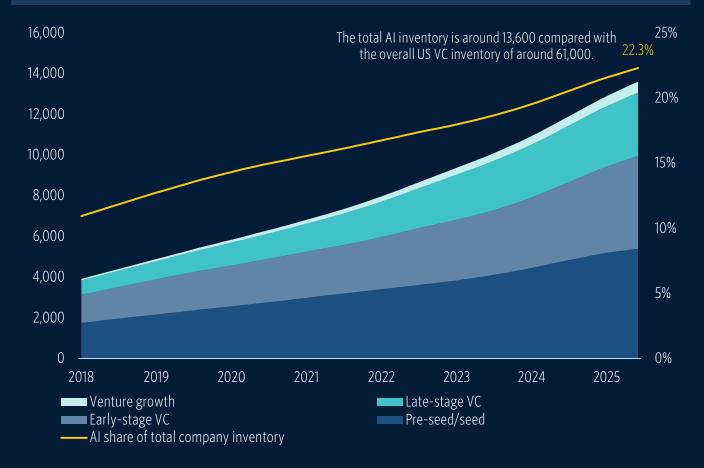


Source: PitchBook • Geography: US • As of August 31, 2025



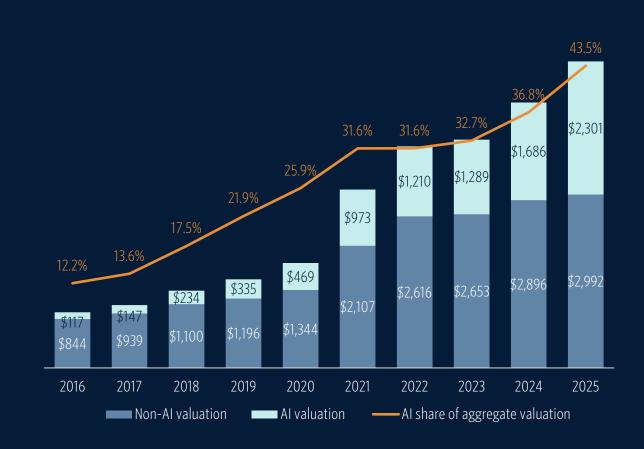
In 2025, AI has accounted for one in five startups and captured nearly one of every two dollars: 22.3% of VC-backed companies and 43.5% of the aggregate private valuation, raising exit hurdles and concentrating returns.

Figure 30 VC-backed AI company inventory by stage



Source: PitchBook • Geography: US • As of August 31, 2025

Figure 31 Al's share of aggregate known post-money valuation (\$B)

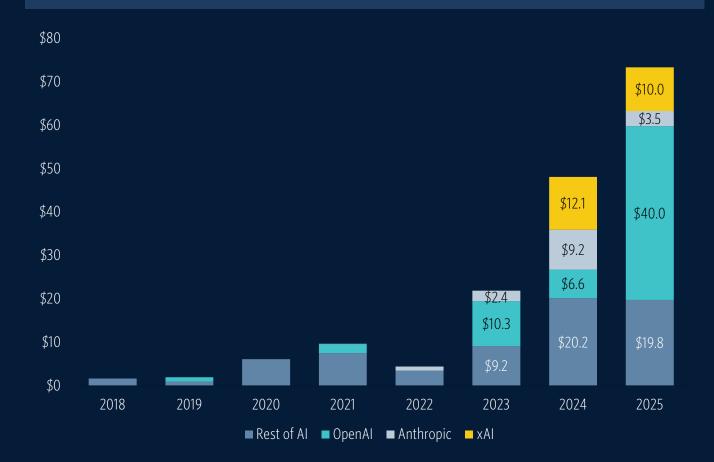


Source: PitchBook • Geography: US • As of August 31, 2025 Note: The post-money valuation is as of the latest priced round by the end of each year.



In 2025, OpenAI, Anthropic, and xAI have captured over \$50 billion in deal value. This mirrors a broader shift as the top 10 deals now account for 41.2% of VC funding, up from 15% to 20% before the AI boom.

Figure 32 AI VC deal value (\$B) by top three highest-valued unicorns



Source: PitchBook • Geography: US • As of August 31, 2025

Figure 33 VC deal value by top 10 deals as a share of all VC deal value



Source: PitchBook • Geography: US • As of August 31, 2025



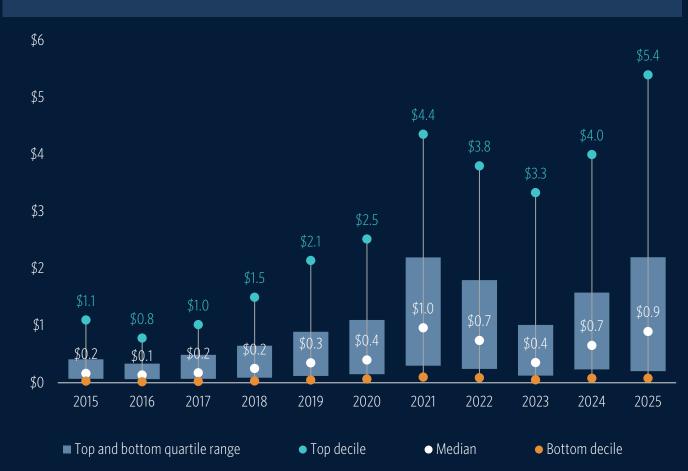
Al commands a late-stage premium, with the median Series D+ valuation 3x higher than that of non-Al companies. Across the market, Series D+ valuations have expanded around 5x at the top decile and around 4x at the median since 2015.

Figure 34 > 2025 median VC pre-money valuation (\$M) by series



Source: PitchBook • Geography: US • As of June 30, 2025

Figure 35 Series D+ VC pre-money valuation (\$B) dispersion

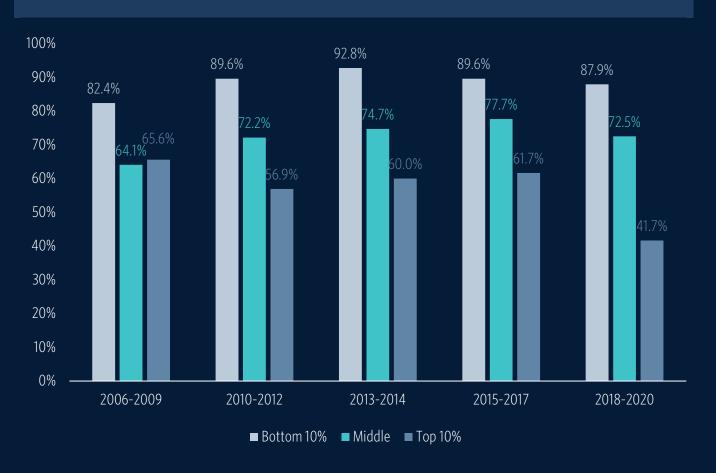


Source: PitchBook • Geography: US • As of August 31, 2025



Top-decile pricing cuts 0x-1x outcomes across stages in most cohorts; the 2006-2009 period is the exception, as exit windows shut and Series D+ deals exited into a downturn.

Figure 36 Ox-1x MOIC by entry year and valuation percentile (Series A)



Source: PitchBook • Geography: US • As of August 31, 2025 Note: Failures are bucketed into 0x-1x MOIC. Valuation buckets use pre-money percentiles computed within stage x entry cohort (year of entry) to control for era effects. Exit outcomes cover 2009 through 2025 YTD.

Figure 37 > Ox-1x MOIC by entry year and valuation percentile (Series D+)

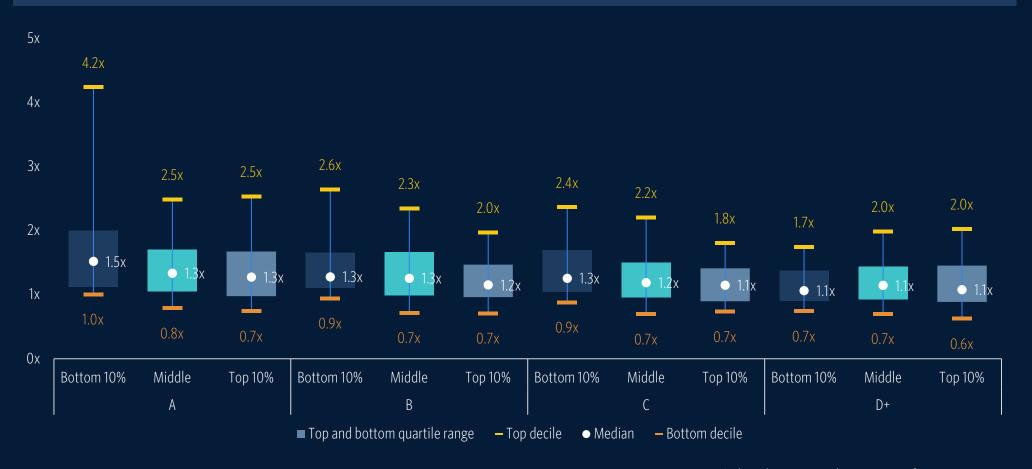


Source: PitchBook • Geography: US • As of August 31, 2025 Note: Failures are bucketed into 0x-1x MOIC. Valuation buckets use pre-money percentiles computed within stage x entry cohort (year of entry) to control for era effects. Exit outcomes cover 2009 through 2025 YTD.



Realized exits highlight the trade-off: Pricier rounds cut failures but compress upside. Early stages retain fat-tail potential, while D+ outcomes cluster closer to the median.

Figure 38 Dispersion of annualized MOICs by series and valuation percentile



Source: PitchBook • Geography: US • As of August 31, 2025 Note: Valuation buckets use pre-money percentiles computed within stage x entry cohort (year of entry) to control for era effects. Exit outcomes cover 2009 through 2025 YTD.



Annualized return

Our "return by series" analysis explores the relationship between the investors' entry point and eventual returns, measured by known exit values, through deal-level data.

The sample includes around 4,000 realized deals from Series A through Series D+; bankruptcies and out-of-business companies are excluded, and positions held for less than one year are shown as unannualized MOICs.

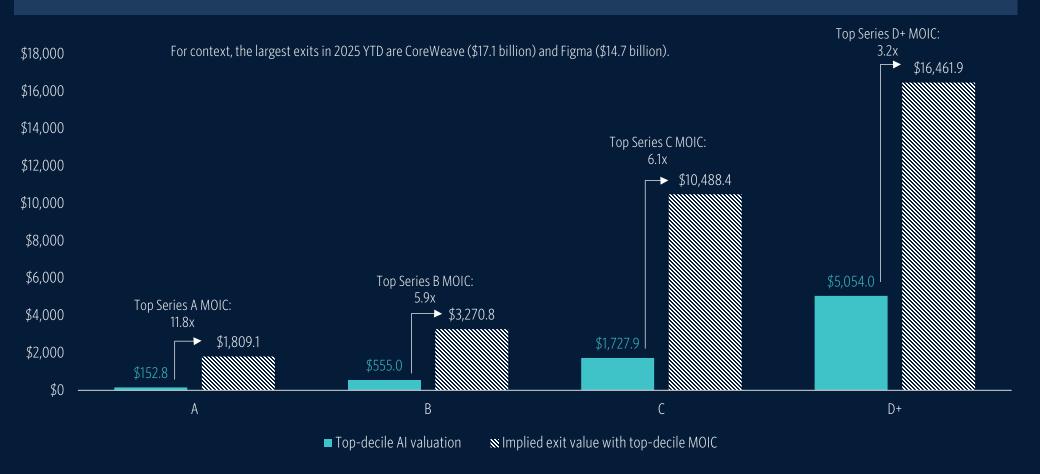
Total VC returns reflect both the frequency of successes and the value/timing of those successes. This view isolates the latter (speed and magnitude of value creation), while the prior page's 0x-1x bucketed MOICs speak to success distribution.

For more on the return by series methodology and dataset, check out our Q3 2024 PitchBook Analyst Note: VC Returns by Series Part IV.



If top-decile prices meet top-decile outcomes, what would the exit size need to be to earn the power-law returns that VC is known for?

Figure 39 > 2025 top-decile AI VC pre-money valuation (\$M) versus historical top-decile MOIC



Source: PitchBook • Geography: US • As of August 31, 2025 Note: Valuation buckets use pre-money percentiles computed within stage x entry cohort (year of entry) to control for era effects.

A closer look

For each series (A, B, C, D+), we multiply 90th-percentile AI premoney valuations by historical top-decile MOICs to estimate the required exit size. This simple approach provides a directional yardstick for "winner" outcomes, though it excludes dilution, ownership, and timing effects.

Venture returns are concentrated in a handful of winners. Using top-decile MOICs as the benchmark highlights how Al's late-stage premium sets an exceptionally high bar for those outcomes.



Mapping the next turn



Al continues to dominate VC exits. Buyouts are the only exit type outperforming long-term averages, though short-term scores show improvement across the board.

Figure 40 > Trailing six-month VC exit trends dashboard

		Exit count					Exit value				
	Segment	Current % of total L		Long-term score Short-term score		Current (\$B) % of total		Long-term score Short-term scor			
	Total	751	100.0%	-0.5		0.7	\$57.3	100.0%	-0	.7 0.4	
	AI & ML	207	27.6%	3.6		0.4	\$14.3	25.0%	2	.3 0.3	
	Big Data	90	12.0%	1.3		0.6	\$7.7	13.4%	1	.2 0.4	
S	Fintech	95	12.6%	1.9		0.3	\$8.7	15.2%	1	.5 0.7	Trend (Z
Verticals	Healthtech	85	11.3%	1.7		0.3	\$7.7	13.5%	0	.8 0.1	-2.0
Ve	Mobile	85	11.3%	-1.3		0.5	\$6.2	10.8%	-0	.9 0.3	
	SaaS	310	41.3%	1.4		0.5	\$22.2	38.8%	0	.4 0.3	
	TMT	81	10.8%	-2.3		0.1	\$7.3	12.7%	-2	.1 0.3	
	Acquisition	546	72.6%	-0.4		0.8	\$37.5	65.4%	-0	.2 0.6	
Type	Buyout	174	23.1%	0.6		0.4	\$13.7	23.9%	(0.2	
	Public listing	32	4.3%	-1.3		0.0	\$6.1	10.6%	-	.1 0.2	

Source: PitchBook • Geography: US • As of June 30, 2025 Note: "Current" refers to the seasonally adjusted trailing six-month value.

Dashboard methodology

The exit trends dashboard provides a quantitative assessment of overall exit activity in the past six months. It shows each vertical and exit type after adjusting for seasonality and reporting lags. The top seven verticals in this venture dashboard were selected based on their number of venture-backed exits over the past two years.

The long- and short-term Z-scores represent a Z-score normalized derivative from a full-period linear trend line and a 12-month exponential moving average, respectively.

ore)



While exit activity is improving, recent vintages remain slow to distribute, held back by inflated 2020-2022 markups. Average NAV paths have yet to realign with historical norms.

Figure 41 > VC distributions as a share of fund NAV at the end of year four

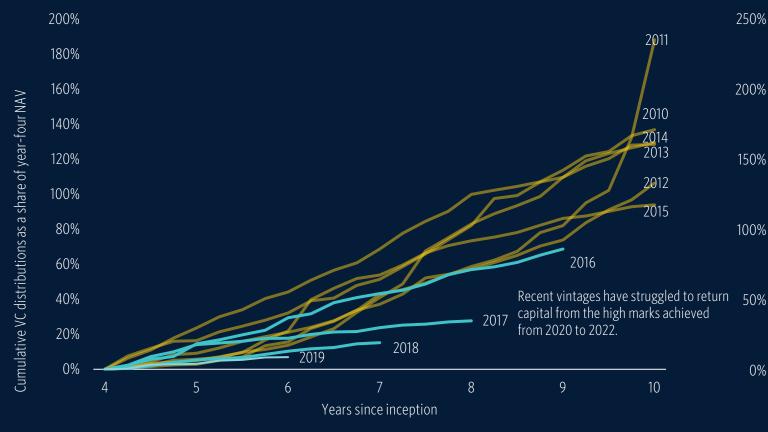
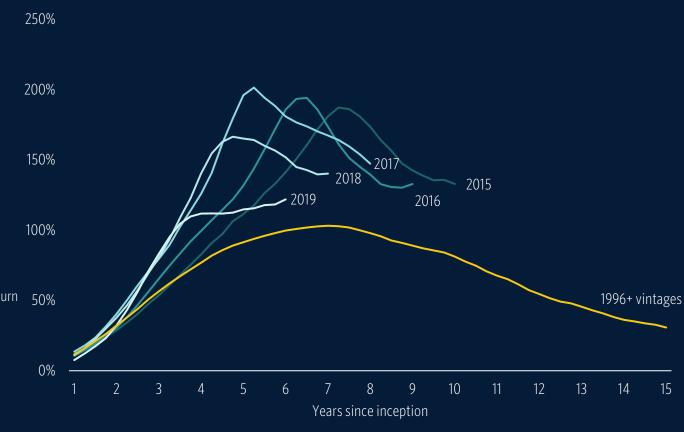


Figure 42 Average NAV as a share of VC fund commitments by select vintage



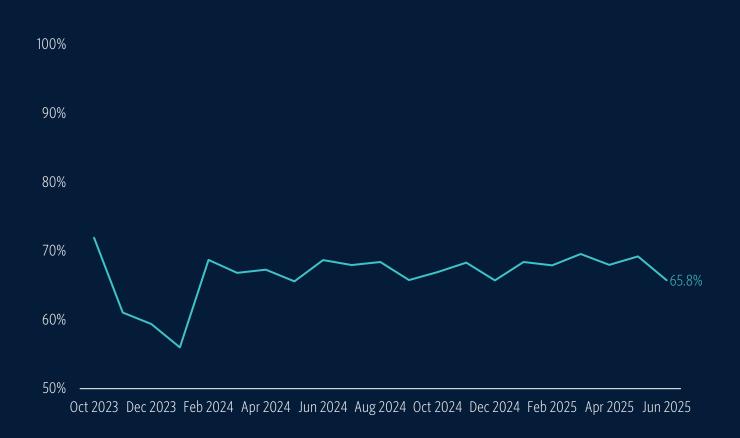
Source: PitchBook • Geography: US • As of December 31, 2024

Source: PitchBook • Geography: US • As of December 31, 2024 Note: Average NAV values are smoothed using a four-quarter rolling average.



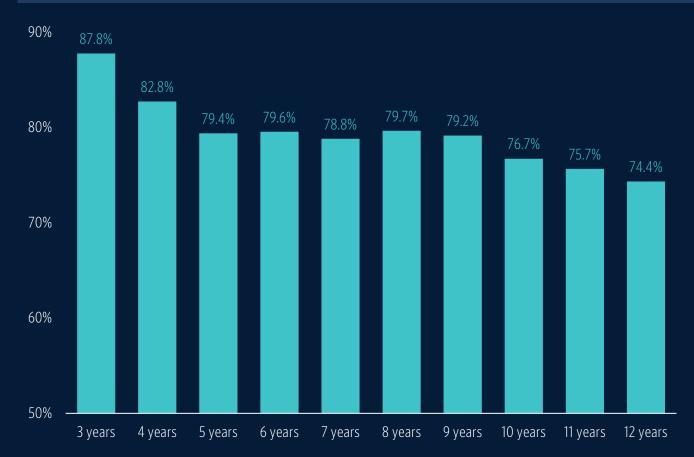
No significant change is evident in secondary market pricing, with older funds most impacted as transactions continue to clear below NAVs...

Figure 43 Secondary pricing of LP interests (% of NAV)



Source: SecondaryLink • Geography: Global • As of June 30, 2025
Note: Pricing data includes both bids and closed transactions.

Figure 44 > Secondary pricing of LP interests by fund age (% of NAV)

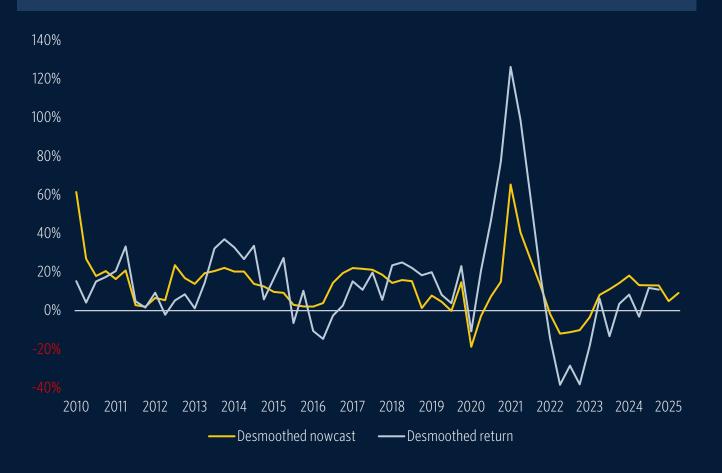


Source: <u>SecondaryLink</u> • Geography: Global • As of June 30, 2025 Note: Pricing data includes both bids and closed transactions since 2015.



...yet despite persistent liquidity strain, the PitchBook VC Barometer points to a neutral-to-favorable return environment, with underperformance shifting back toward neutral in comparison with fundamentals.

Figure 45 Rolling one-year desmoothed VC fund returns and nowcast



Source: PitchBook • Geography: US • As of June 30, 2025

Figure 46 Difference between one-year desmoothed VC fund returns and nowcast



Source: PitchBook • Geography: US • As of June 30, 2025



Additional research

Market updates



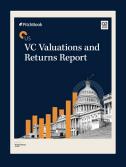
Q2 2025 PitchBook-NVCA Venture Monitor

Download the report <u>here</u>



Q2 2025 US VC Secondary Market Watch

Download the report <u>here</u>



Q2 2025 US VC Valuations and Returns Report

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Q4 2024 PitchBook Benchmarks (with preliminary Q1 2025 data)

Download the report <u>here</u>



Q3 2025 Quantitative Perspectives: US Market Insights

Download the report <u>here</u>



Q3 2025 Analyst Note: Navigating the New Standards for VC-Backed IPOs

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