

J.P.Morgan

INNOVATION ECONOMY

Innovation Economy update

H1 2025



Executive summary

“Amid macroeconomic uncertainty and rising geopolitical tensions, 2025 has been anything but boring. The same can be said for the innovation economy. There was an unusual dynamic where the broader slowdown in venture financing meant many companies had to reduce their spending while considerable amounts of capital were being handed to the major players in generative AI. One consequence was the lowest number of deals this decade but the highest level of investment. Unsurprisingly, startups working on AI benefited the most, securing valuation premiums across all stages. This has driven overall valuations to or near all-time highs and deal terms are generally founder-friendly. The missing piece has been an active IPO market that can provide the level of liquidity investors (and their Limited Partners) have been waiting for. A fully-functioning venture ecosystem relies on recycled capital, including a sufficient number of venture-backed companies going public. However, just recently, a flurry of IPOs has led to optimism that the IPO window may finally be open.”

- John and Andrew

Co-heads of Innovation Economy:



John China
Co-Head of Innovation Economy



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Co-Head of Innovation Economy

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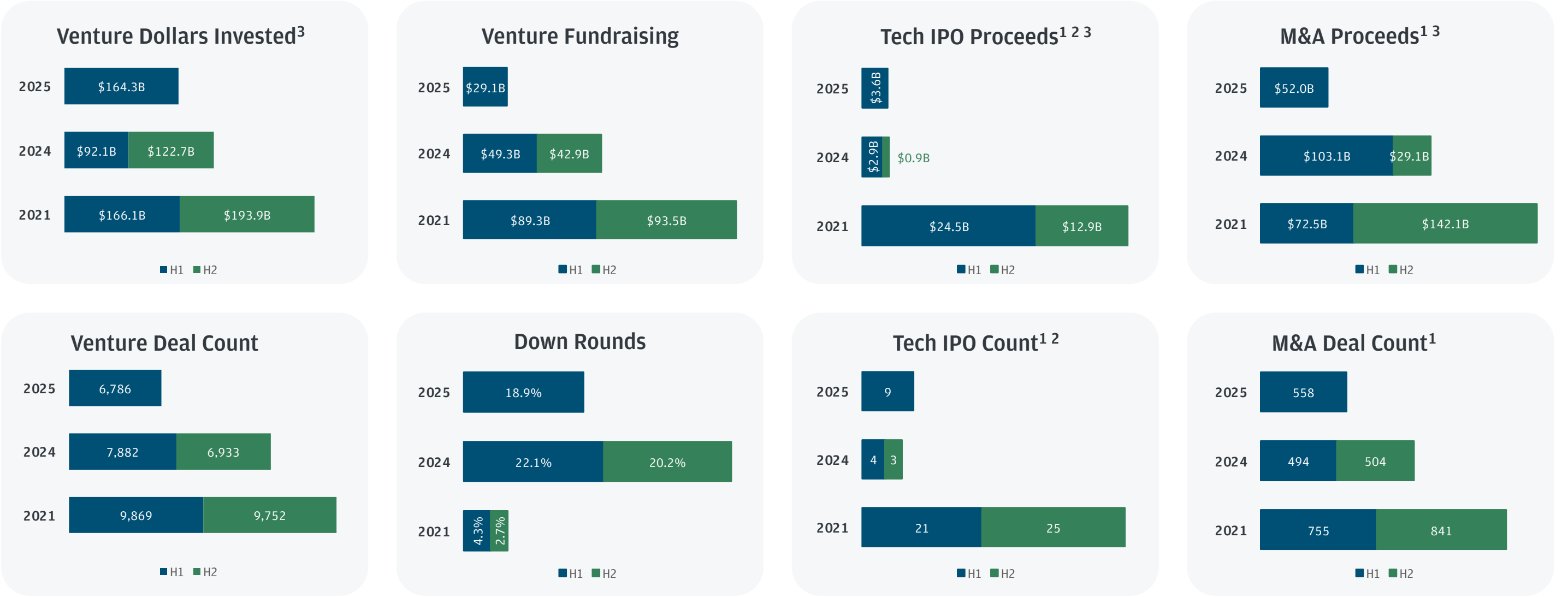


Vincent Harrison
Innovation Economy
Insights Analyst

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- 02 Funding landscape
- 03 Founder considerations
- 04 Liquidity and exits

Key innovation economy indicators dashboard: H1 2025



Notes: ¹Includes IPOs and M&A transactions in which the company going public or being acquired is U.S.-based and was venture-backed prior to the transaction. M&A includes strategic acquisitions, buyouts and reverse mergers. ²Includes only companies listed on major U.S. exchanges. ³Includes only deals with a disclosed transaction amount.

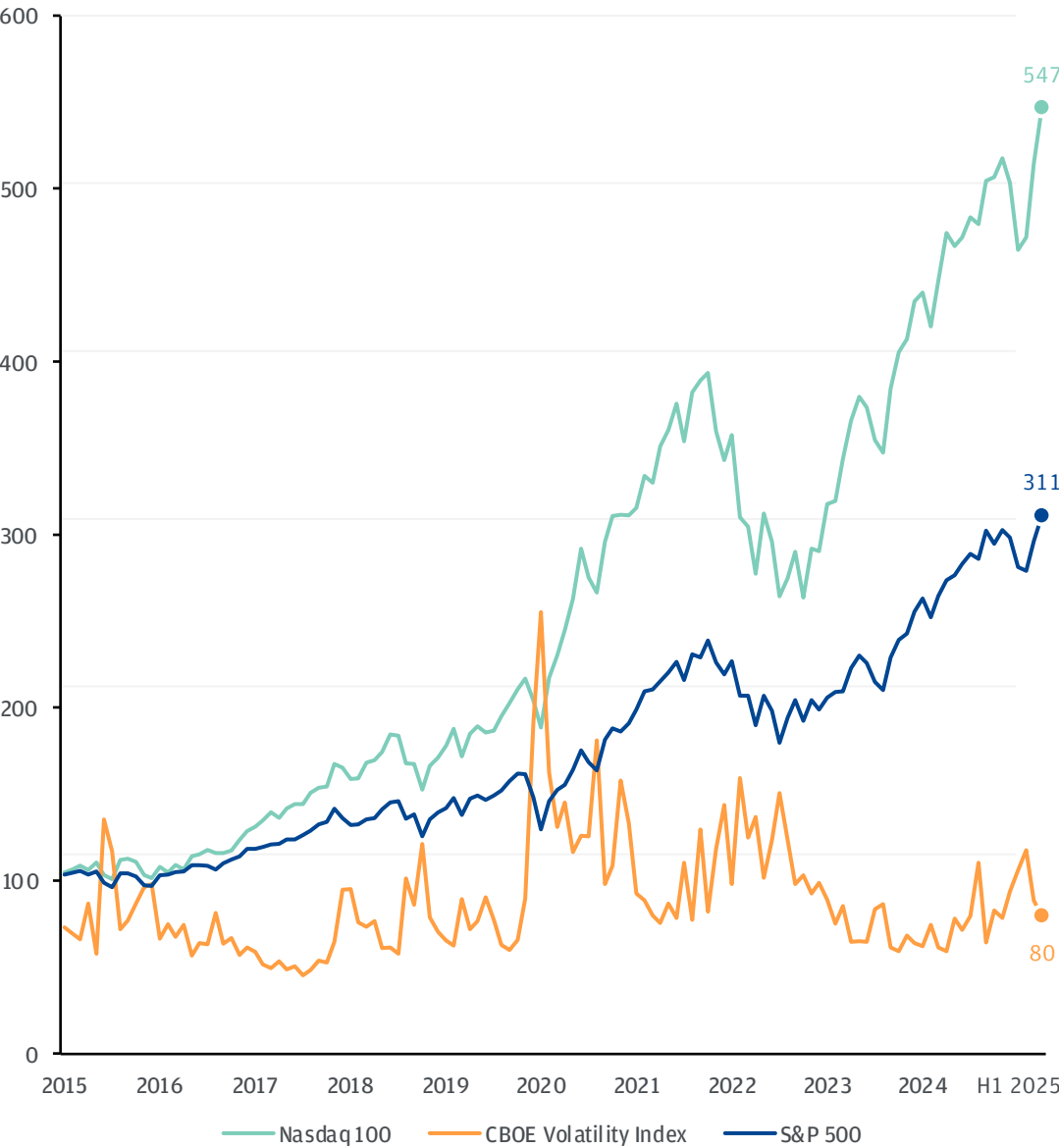
01

Macro themes

Public markets bolstered by the promise of AI

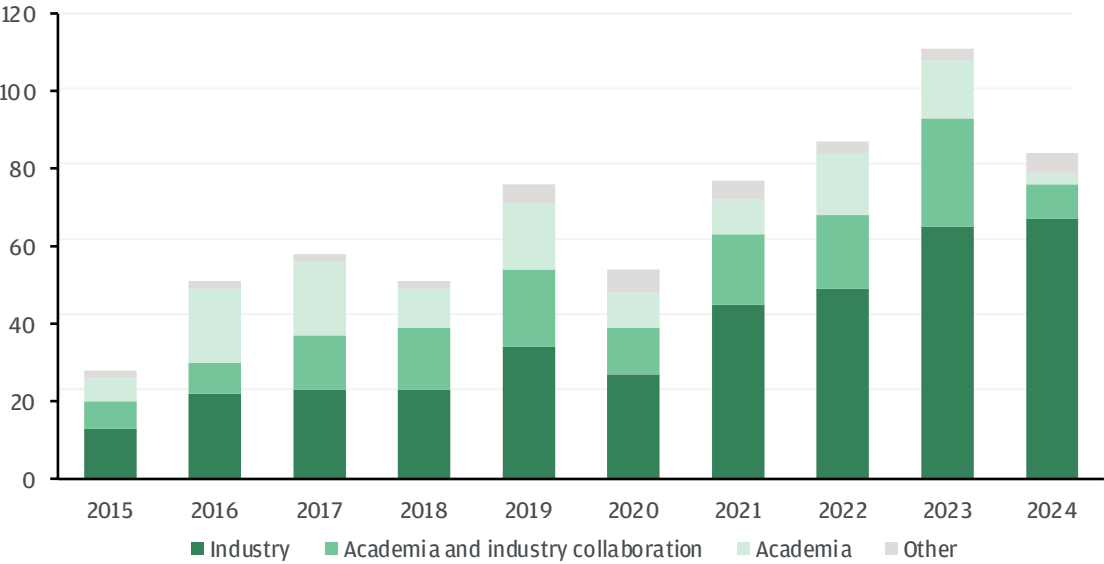
PUBLIC MARKETS CONTINUE TO PERFORM DESPITE VOLATILITY SHOCKS

S&P 500 (SPX) AND NASDAQ 100 (NDX) PERFORMANCE VS. CBOE VOLATILITY INDEX (VIX)¹



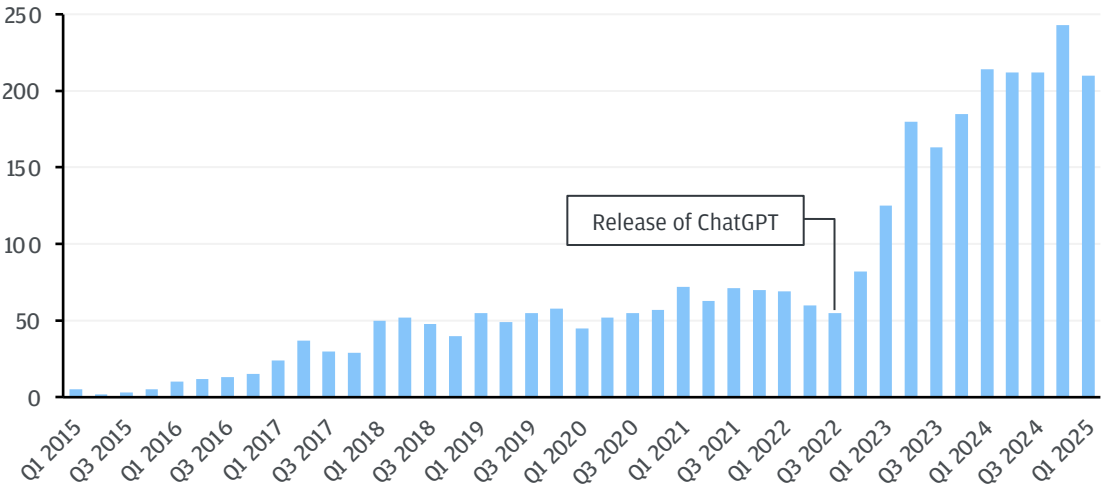
INDUSTRY LEADS IN CUTTING-EDGE AI DEVELOPMENT

AFFILIATION OF RESEARCH TEAMS BUILDING NOTABLE AI SYSTEMS, BY YEAR OF PUBLICATION²



AI TOP OF MIND FOR BUSINESS LEADERS

COUNT OF S&P 500 FIRMS CITING AI ON EARNINGS CALLS

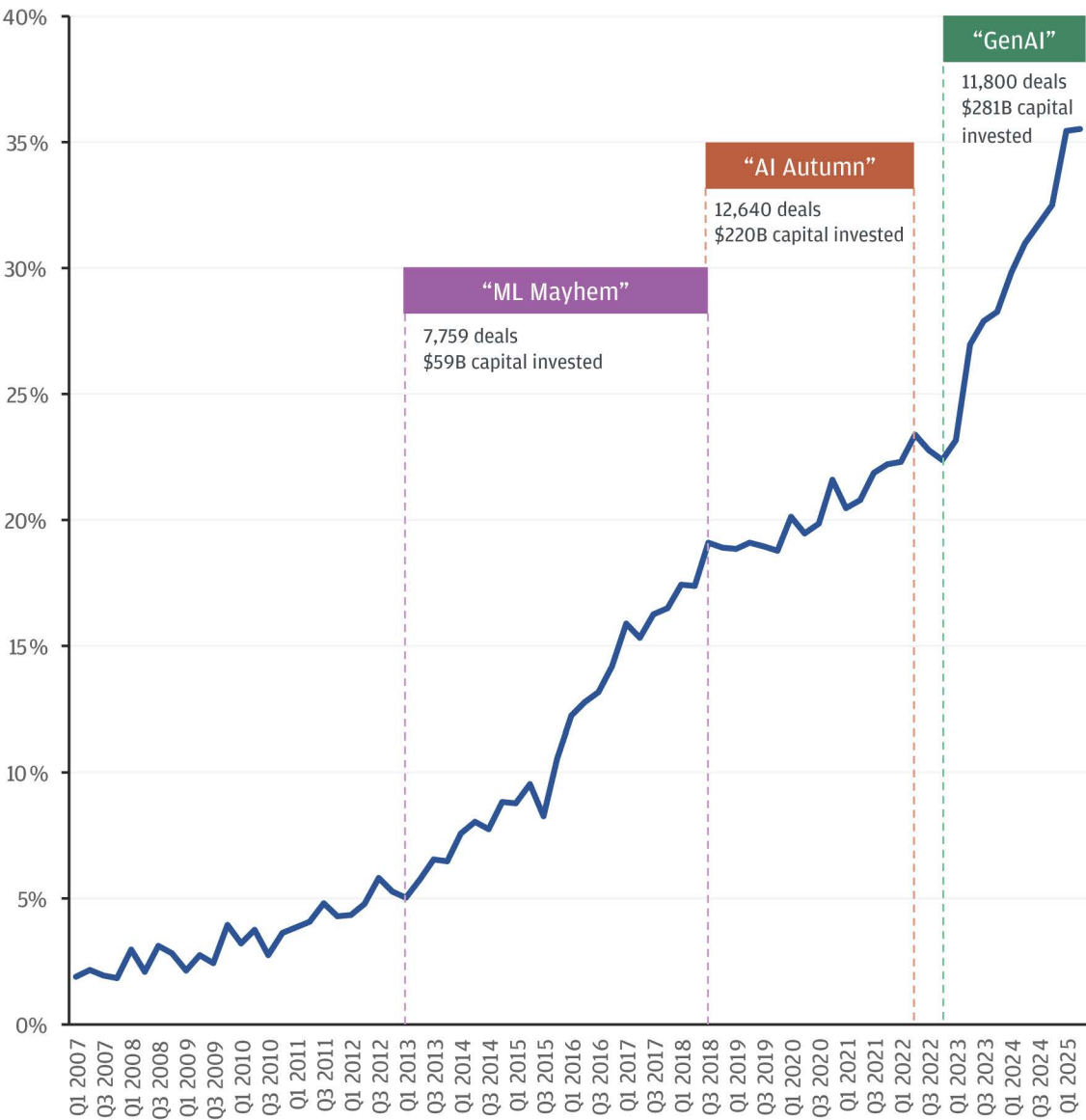


AI is no longer an emerging marvel – it’s a business mandate. The promise of AI’s impact on multiple aspects of business productivity, combined with the risk of being left behind, has led enterprises to race to develop and integrate AI into their operations. With capital, data and computing power driving the shift, the center of innovation has moved from academia to industry. This momentum is also fueling a wave of AI-native products and infrastructure that will define the next era. Markets have been resilient despite heightened macroeconomic and geopolitical uncertainty. Volatility has recently tempered, and public tech company valuations have meaningfully improved. If this stability holds, it may support a resurgence of IPO activity. The convergence of these factors could create tailwinds that empower both established enterprises and emerging startups across all sectors to innovate and seize new growth opportunities.

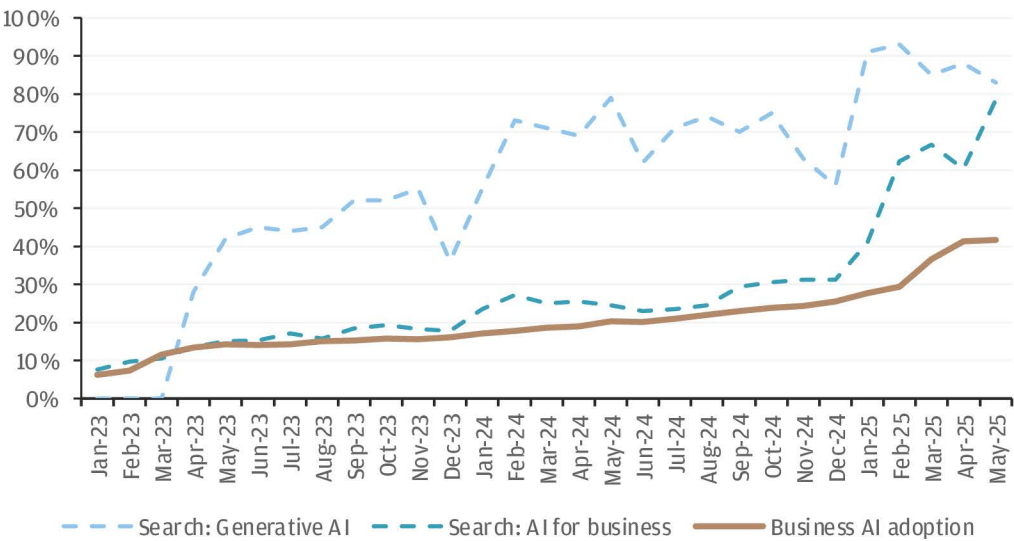
Notes: ¹Monthly closing price index from January 2015 to June 2025. Indexed to January 2015, where January 2015 = 100. ²Systems are categorized as “Industry” if their authors are affiliated with private sector organizations, “Academia” if the authors are affiliated with universities or academic institutions, or “Academia and industry collaboration” when at least 30% of the authors are from each.

No end in sight for AI (investment) as the next technology epoch materializes

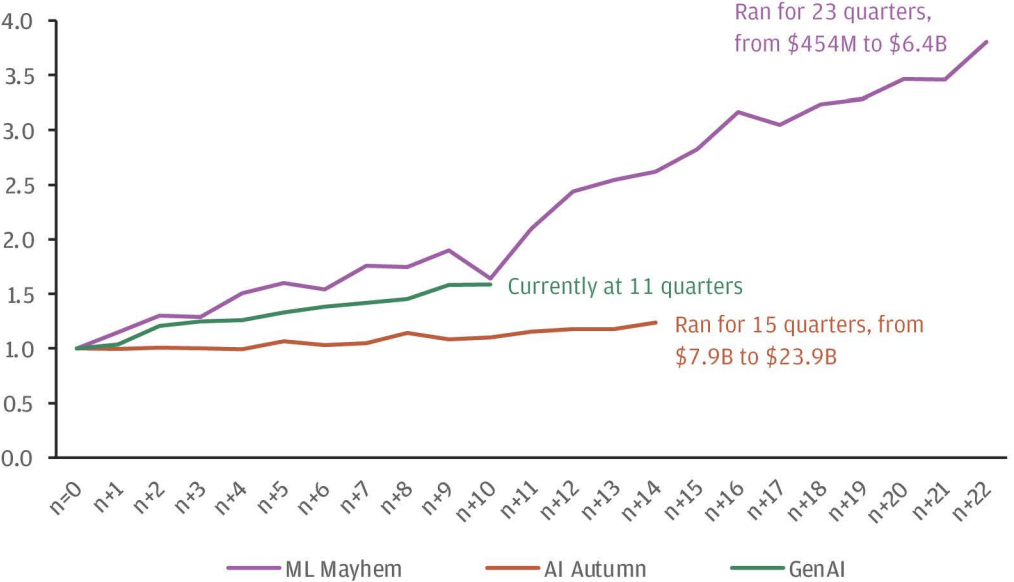
AI (INVESTMENT) COMES IN WAVES¹
U.S. AI INVESTMENT AS A PERCENTAGE OF TOTAL US VENTURE INVESTMENT



BUSINESSES TAKE TIME TO EVALUATE AND ADOPT
AI BUSINESS SENTIMENT INDICATORS



MORE ROOM TO RUN FOR AI INVESTMENT
PRIOR AND CURRENT AI INVESTMENT CYCLES INDEXED²



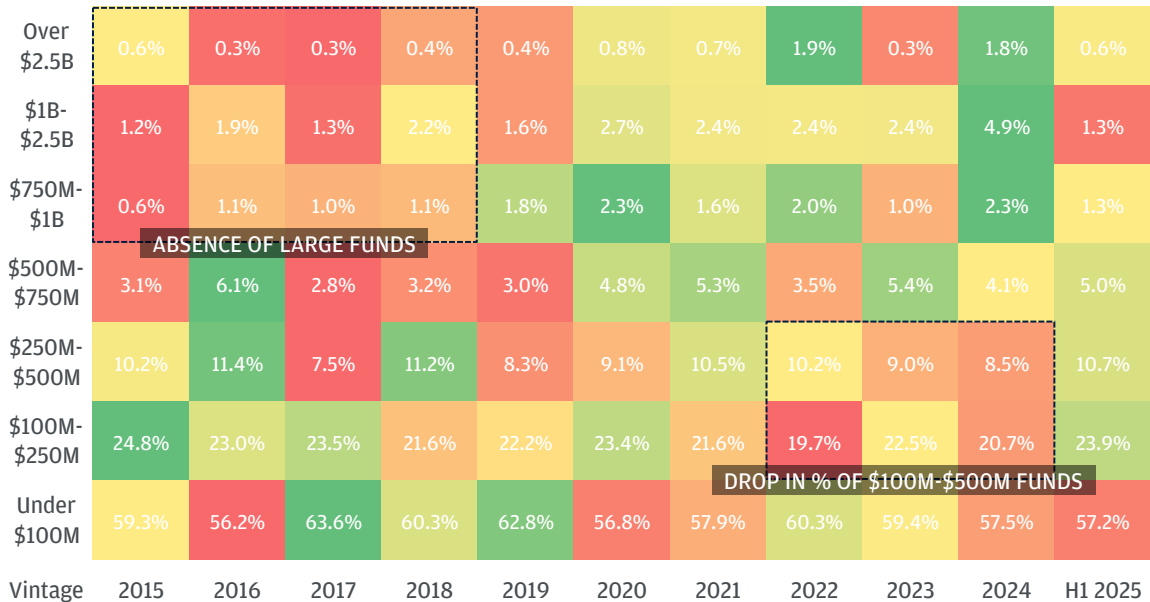
Many tech leaders have shared their perspectives on what this current AI wave may become, ranging from the next computing layer to something more profound. Clearly, many see the potential (as well as the risks) of AI, including venture investors. Startups working on AI have grown to dominate venture capital investment, with periods of supercharged dominance. The current period is one such example, driven by advancements in “generative AI” for creating text, images, music, etc. AI is a constant point of discussion for businesses as it has a broad (and growing) number of use cases, including research and development, customer support, hiring, legal and compliance. Many see the profound impacts AI could have, with some leaders in tech introducing AI-first principles, automating functions previously done by employees and advocating for managers to explore AI before making new hires.

Notes: ¹ML stands for Machine Learning, GenAI stands for Generative AI. ²Indexed to starting quarter of next wave.

The extent of the fragmentation of venture may be oversold

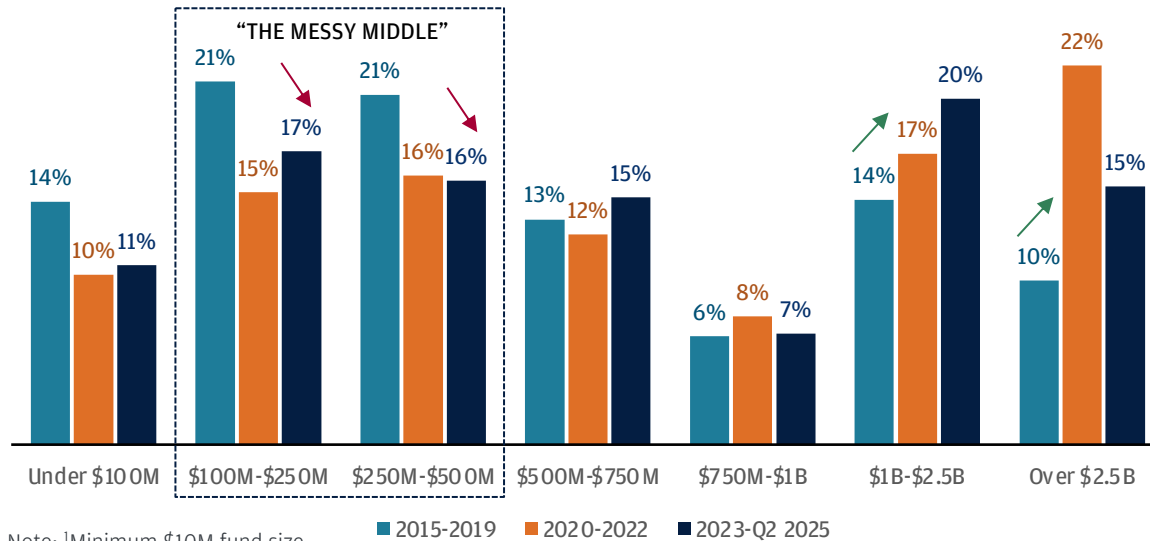
HINTS THAT FIRMS ARE MOVING AWAY FROM THE MESSY MIDDLE

DISTRIBUTION OF U.S. VENTURE CAPITAL FUNDS BY FUND SIZE¹



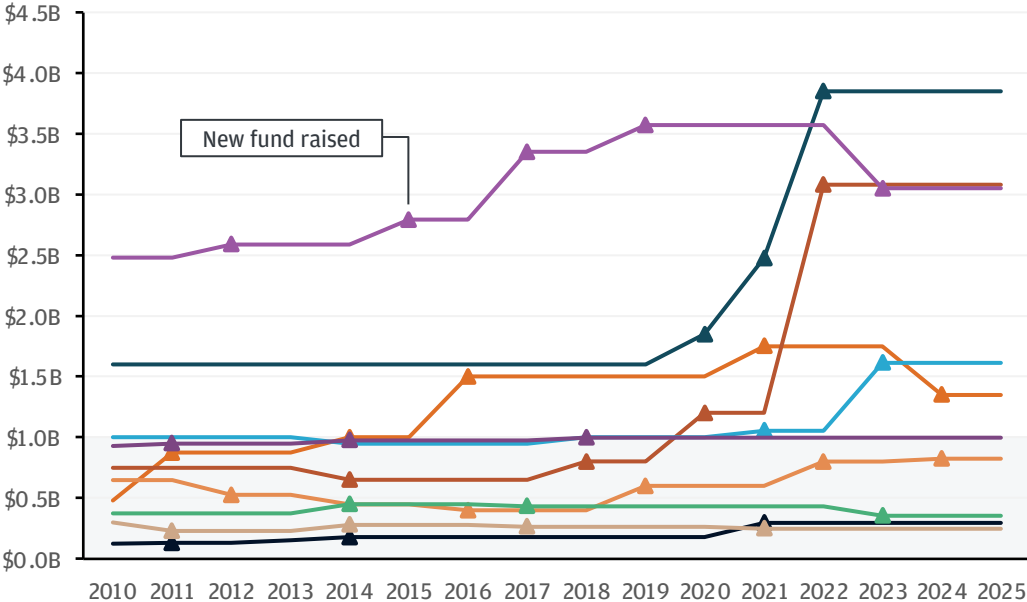
SHARE OF CAPITAL RAISED SHIFTS TO LARGER FUNDS

DISTRIBUTION OF TOTAL U.S. VENTURE CAPITAL RAISED BY FUND SIZE



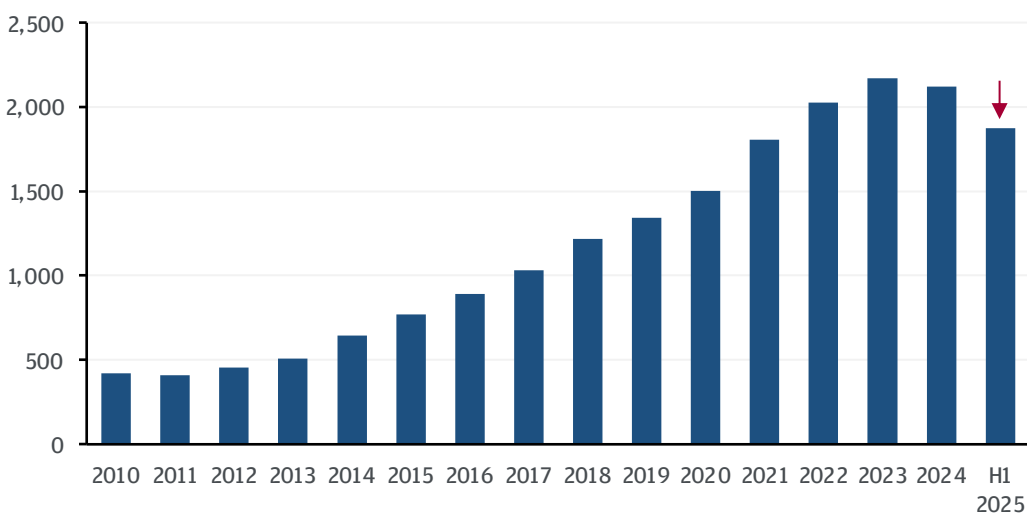
THE OLD SCHOOL MOSTLY STICK TO WHAT THEY KNOW

FUND SIZE TRAJECTORY FOR THE 10 MOST ACTIVE VENTURE CAPITAL FIRMS IN 2010



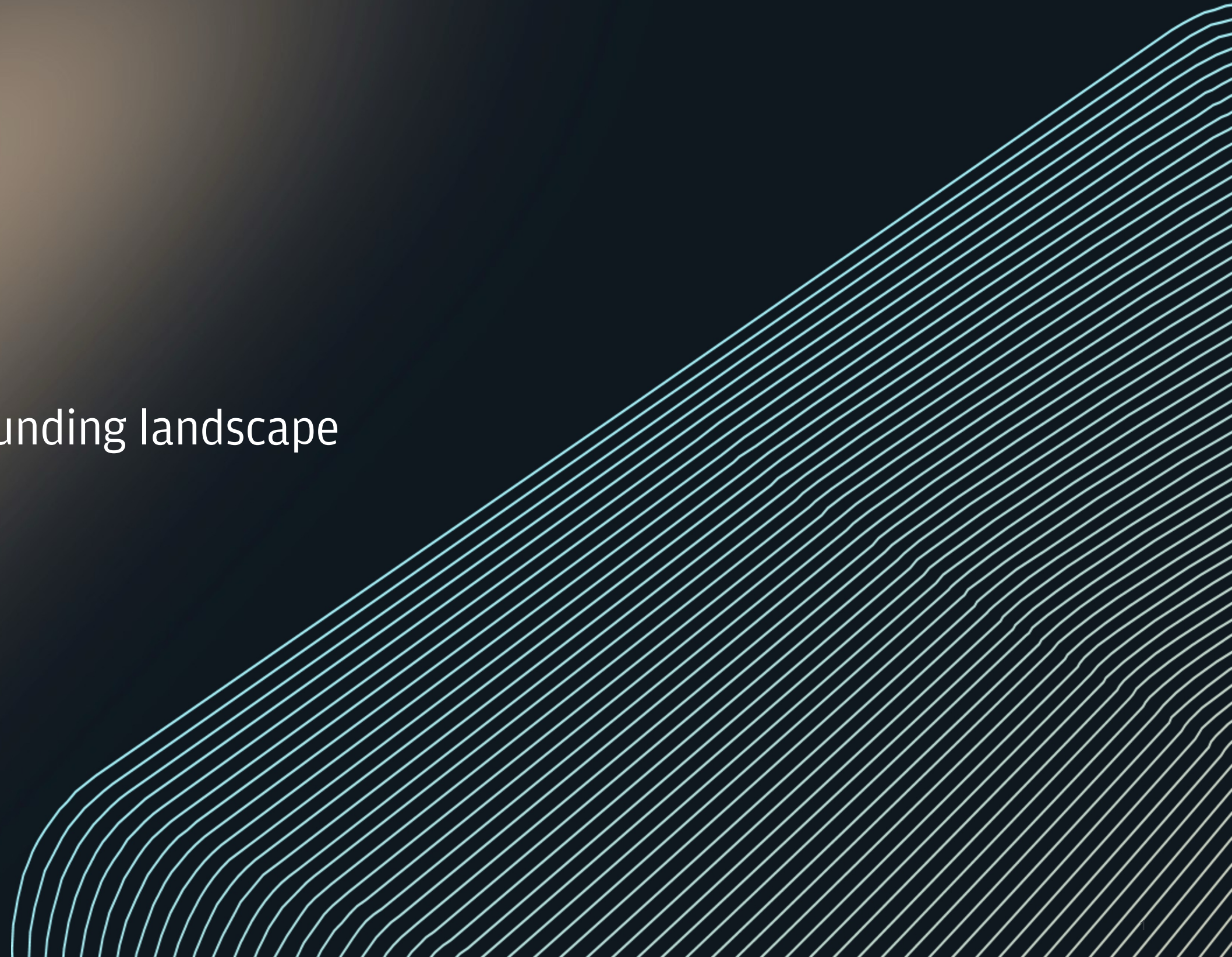
A STRONG EXIT ENVIRONMENT...FOR INVESTORS?

ACTIVE U.S. VENTURE CAPITAL INVESTORS



Over the last decade, various venture strategies have emerged. Several firms have opted to raise substantially larger funds, partly driven by the entrance of crossover investors toward the end of the 2010s. Others have shifted their focus to sector specialization or have added new strategies (typically a region-focused fund, early-stage fund and/or opportunity fund) to complement their core fund. Some experienced firms have stuck with tradition and haven't materially increased their fund sizes or added new focus areas or strategies. While total funding has shifted towards larger fund sizes, the fragmentation of venture may not be as pronounced as initially thought. Strategic shifts have altered the "venture math" for each fund, with some more closely resembling asset managers than traditional, power-law-driven VCs. For founders, strategy can dictate the level of attention and support a firm is able to provide.

02 | Funding landscape





CARLY RODDY

Managing Director,

Head of Private Capital Markets Americas

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Secondaries are driving activity

As the IPO market remains selectively open, many investors are seeking alternative paths to both full and partial exits. These alternative exit paths can be driven by the desire to achieve a valuation mark, take some money off the table or return much-needed liquidity to LPs that have been focused on DPI. As such, there has been an increase in private secondary activities, which has been a key theme driving activity across the private markets.

Companies are remaining private

As the private markets continue to grow, many companies are finding they're able to meet their liquidity and funding needs without going public. This has led to a dramatic increase in the number of private "unicorns" – private companies valued at \$1 billion or more – over the past few years. The number of active, private unicorns is currently at an all-time high, with an estimated 780+ in the U.S. Experts project that globally these companies are worth approximately \$3.4 trillion today.

Select J.P. Morgan-led transactions

StackAdapt: \$235 million, Lead Placement Agent, 02/04/2025

Trucordia: \$1.3 billion, Placement Agent and Capital Markets Advisor, 06/04/2025

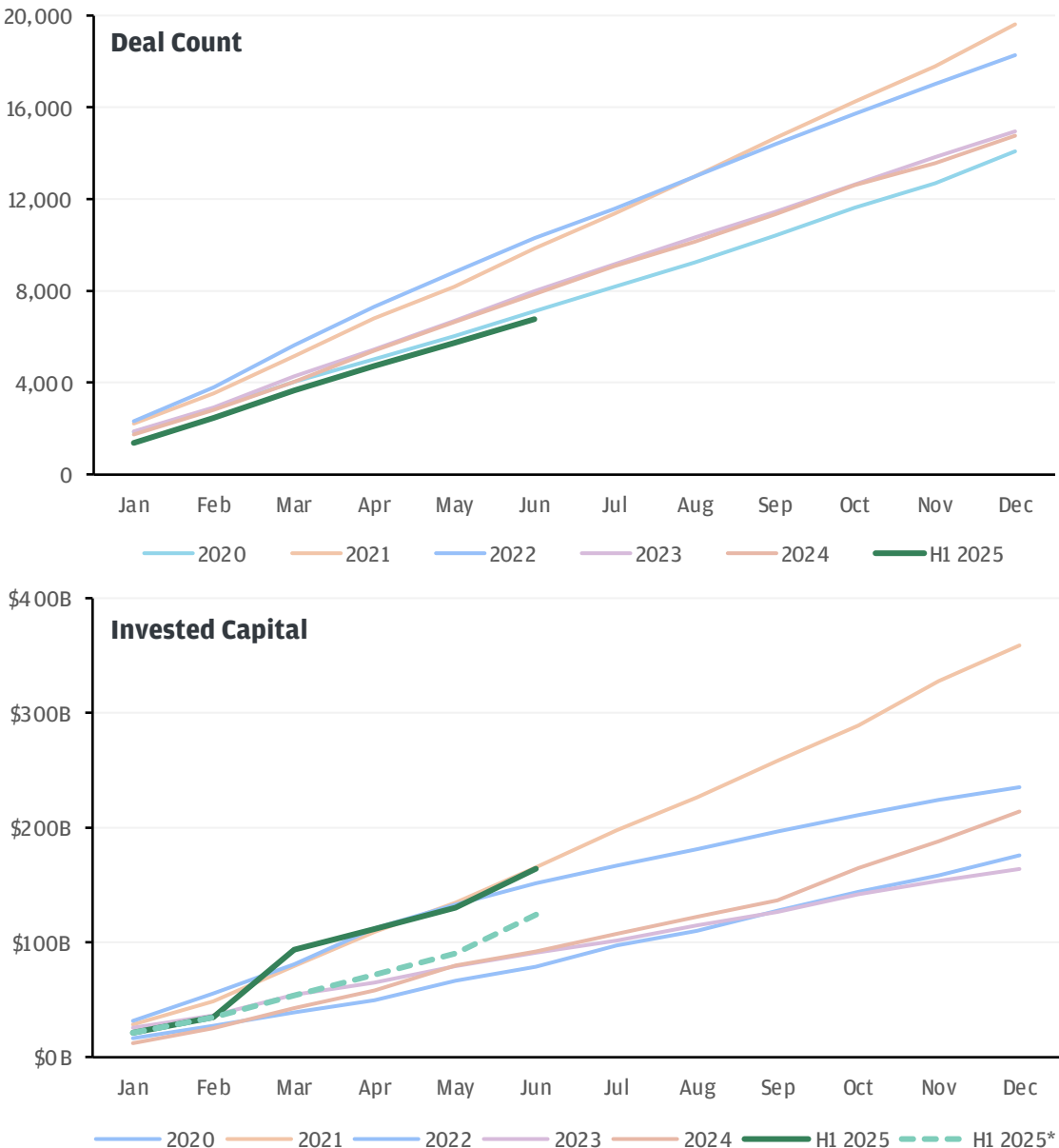
Airwallex: \$300 million, Placement Agent, 05/21/2025

Lambda: \$480 million, Placement Agent, 02/19/2025

Odoo: €500 million, Exclusive Placement Agent, 11/20/2024

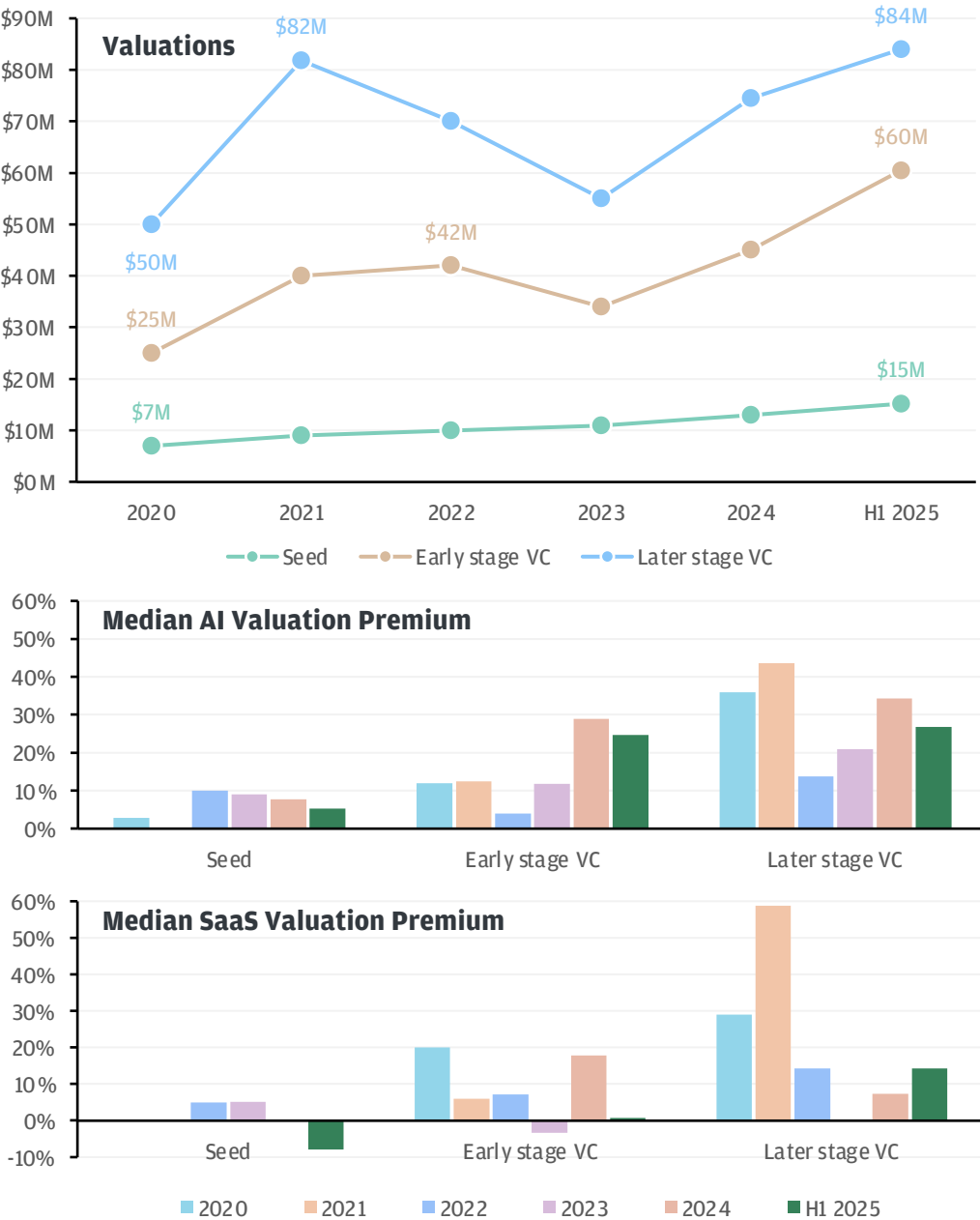
A pronounced divergence between venture deals and investment

A TALE OF TWO MEASURES, MORE DOLLARS INVESTED ACROSS FEWER DEALS
CUMULATIVE U.S. VENTURE DEAL AND CAPITAL INVESTMENT ACTIVITY BY YEAR



Note: *H1 2025 investment excludes OpenAI's \$40B raise.

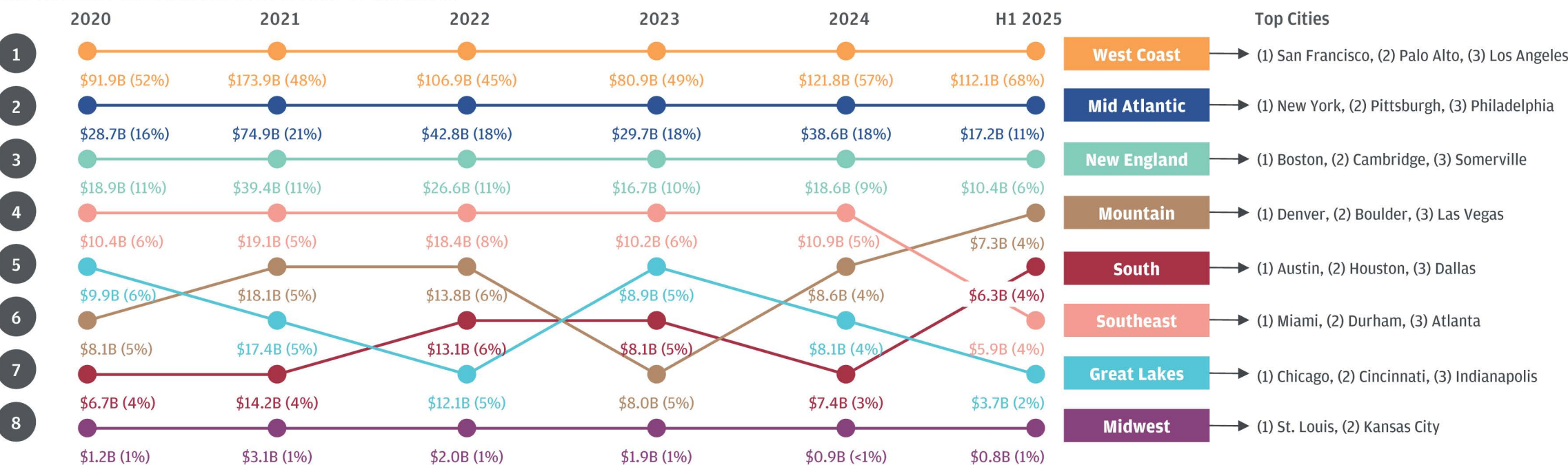
VALUATIONS AT A PREMIUM (FOR SOME)
OVERVIEW OF MEDIAN U.S. VENTURE PRE-MONEY VALUATIONS BY STAGE



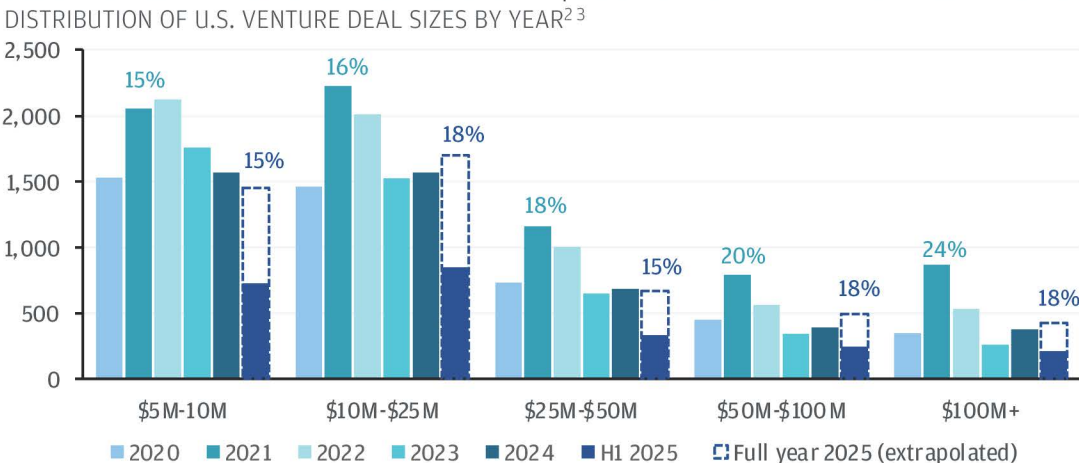
Venture activity in 2025 is exhibiting an unprecedented trend. Deal activity is trending below 2020, which is the lowest this decade. However, capital investment is on track to be the highest this decade, although this includes a \$40B round. Netting out this round puts 2025 on track to still exceed the bar set in 2021. To highlight the extreme concentration in the first half of 2025, 64% of capital went to AI (compared to 49% in 2024 and 27% in 2021), and 44% went to \$1B rounds (compared to 25% in 2024 and 10% in 2021). The concentration of activity in AI has pushed median valuations across all stages to all-time highs. However, there is substantial variance across sectors by stage and over time. Startups in the AI sector have consistently commanded a valuation premium, especially at the later stage. This is less true for the other dominant sector, SaaS, except during the time of “peak venture” in 2021, and, even then, more so at the later stage.

Capital concentration within venture is a catalyst for opportunity

THE WEST BENEFITS FROM THE AI GOLDRUSH U.S. VENTURE FUNDRAISING ACTIVITY RANKED BY U.S. REGION¹



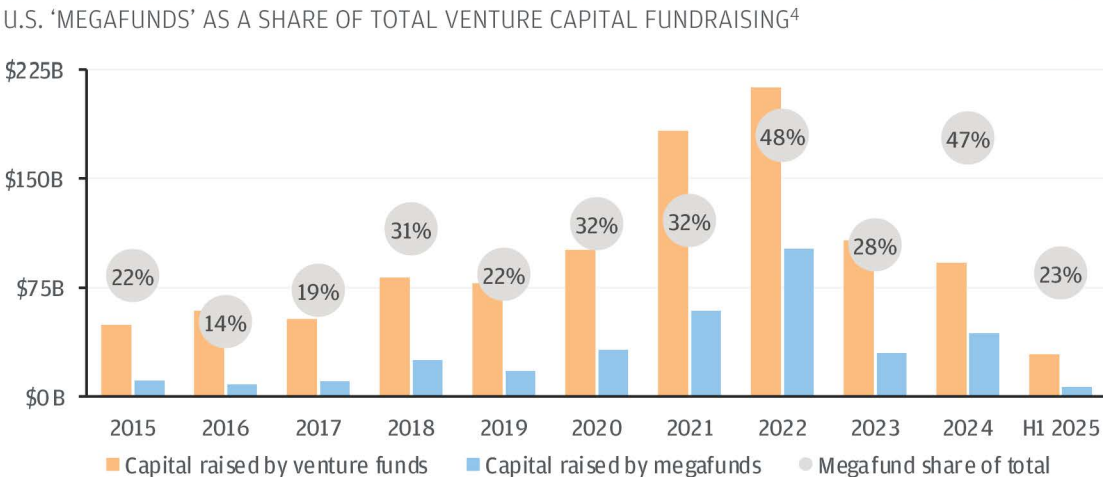
2025 ON PACE TO HAVE HIGHER SHARE OF \$50M+ DEALS THAN PRIOR TWO YEARS



Notes: ¹Top cities based on H1 2025 data. Percentages are rounded to the nearest whole percentage. ²Extrapolated based on year-to-date trend. ³Percentages represent the activity adjusted proportion of deals of a certain size range that took place in that year.

⁴Megafunds are defined as venture funds with a minimum fund size of \$1 billion.

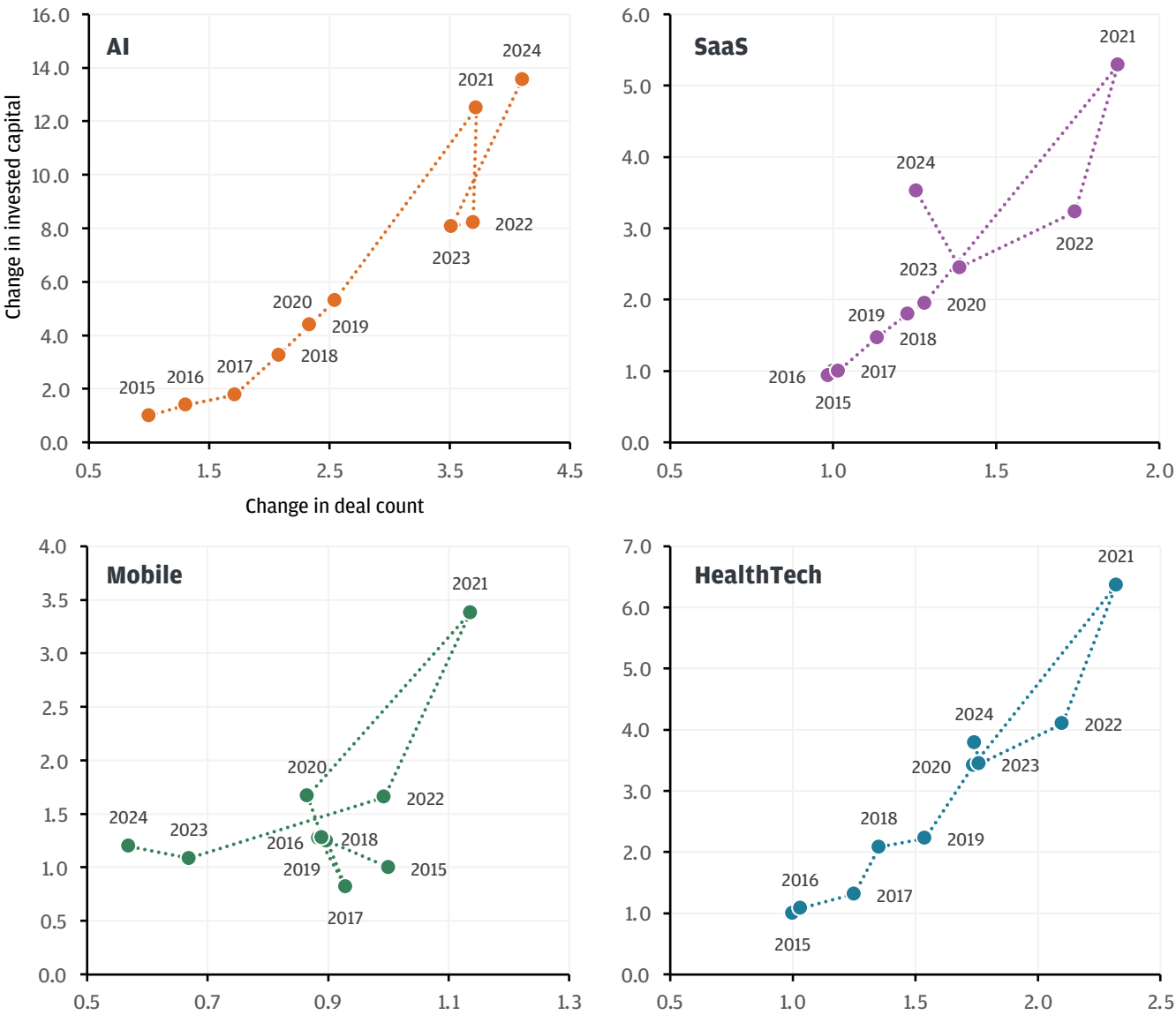
BILLION DOLLARS FUNDS RAISED NEARLY HALF OF ALL VENTURE DOLLARS IN 2024



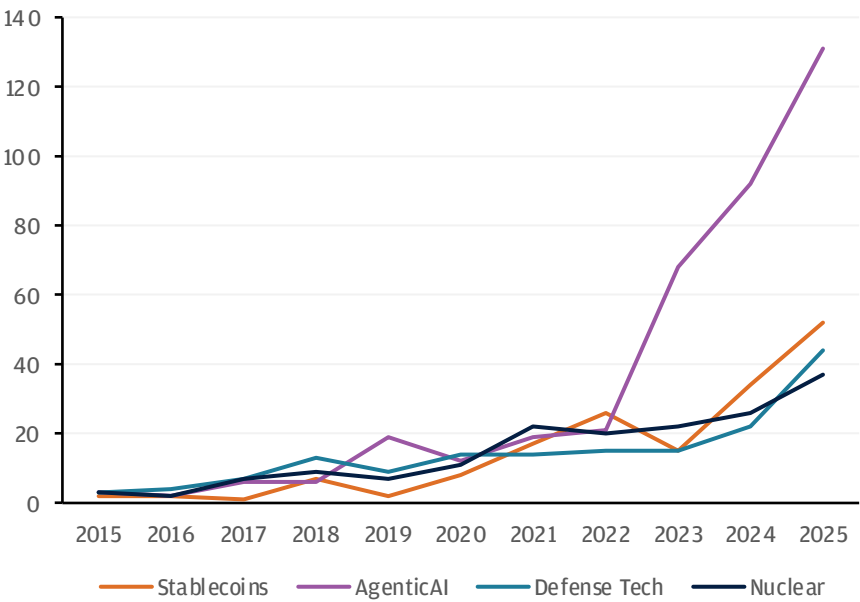
The West Coast remains the leader in venture fundraising, capturing nearly 70% in H1 2025. This significant share underscores the enduring strength of innovation hubs like Silicon Valley—even in uncertain times—thanks to extensive networks, robust infrastructure and top-tier talent, especially in frontier technologies like AI. Meanwhile, cities within the Mountain region are emerging as key players, highlighted by deals in various sectors, including space technology and clean tech. The shift toward larger individual deal sizes in 2025 is noticeable, though not more pronounced than in 2021, when the size and velocity of deal making were unprecedented. Funds over \$1 billion, or mega-funds, accounted for nearly half of all dollars raised by investors in 2024. One consequence was a much tougher environment for emerging managers, with fundraising hitting historic lows and many quietly exiting.

Artificial intelligence has consistently and increasingly dominated venture

AI INVESTMENT HAS BEEN CONSISTENTLY PERSISTENT
CHANGE IN DEAL COUNT AND INVESTED CAPITAL, INDEXED TO 2015¹, FOR SELECT SECTORS



THE NEXT ROCKET SHIP
DEAL ACTIVITY FOR SELECT EMERGING AREAS²



KEEPING OUR EAR TO THE GROUND
NOTABLE AREAS OF ACTIVITY³

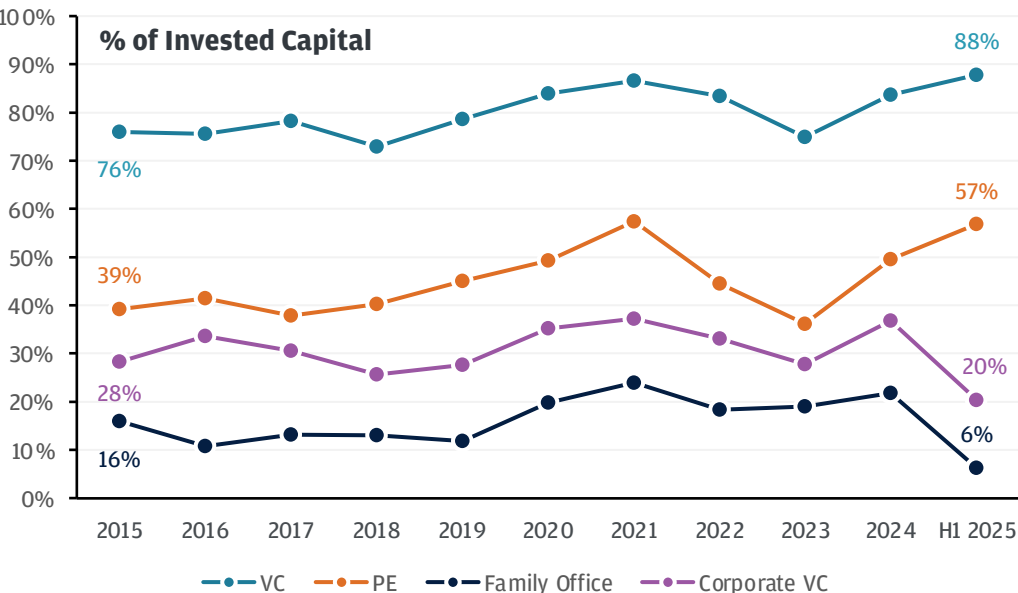
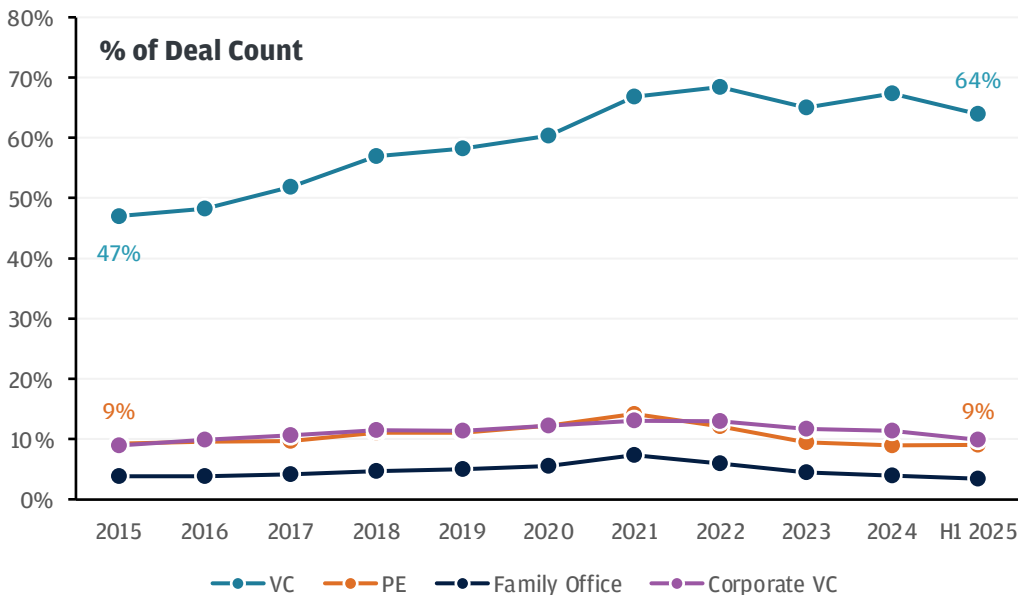
Application Area	Description
Workflow Automation	Automating routine tasks and processes.
Predictive Modeling	Using data to generate insights and forecast trends.
Remote Monitoring	Monitoring systems remotely for timely interventions.
Customer Service	Enhancing customer interactions through AI-driven platforms.
Security & Compliance	Protecting data and systems from threats.
Healthcare Monitoring	Focused on patient care, diagnostics, and personalized medicine.
Supply Chains	Optimizing supply chain processes.
Sustainable Energy	Relating to renewable energy, energy storage, and efficiency.
Manufacturing and Production	Enhancing production processes through automation, 3D printing, and robotics.
Digital Transactions	Facilitating online sales, payments and customer engagement.

Artificial intelligence and SaaS have been the two dominant (broad) categories for venture investment over the past ten years, followed by mobile and healthtech. The remarkable aspect of the rise of AI is the persistent growth in deals and capital investment. This is different from other sectors, which saw notable slowdowns in 2023 and 2024. Emerging applications are harder to identify, but by using investor statements as signals, the potential beginnings of an emergence or reemergence can be observed in stablecoins, defense tech and nuclear—these may follow a prior notable breakout application, AgenticAI. Based on recent patent activity and leveraging the vantage point of J.P. Morgan, areas that are becoming more popular (excluding AI) align with cybersecurity, supply chains, manufacturing, healthcare, sustainable energy and customer service.

Notes: ¹2015 = 1.0. ²2025 extrapolated based on trend as of 6/30/2025. ³Based on recent patent activity and cross referenced with observations from the [J.P. Morgan Startup Banking team](#).

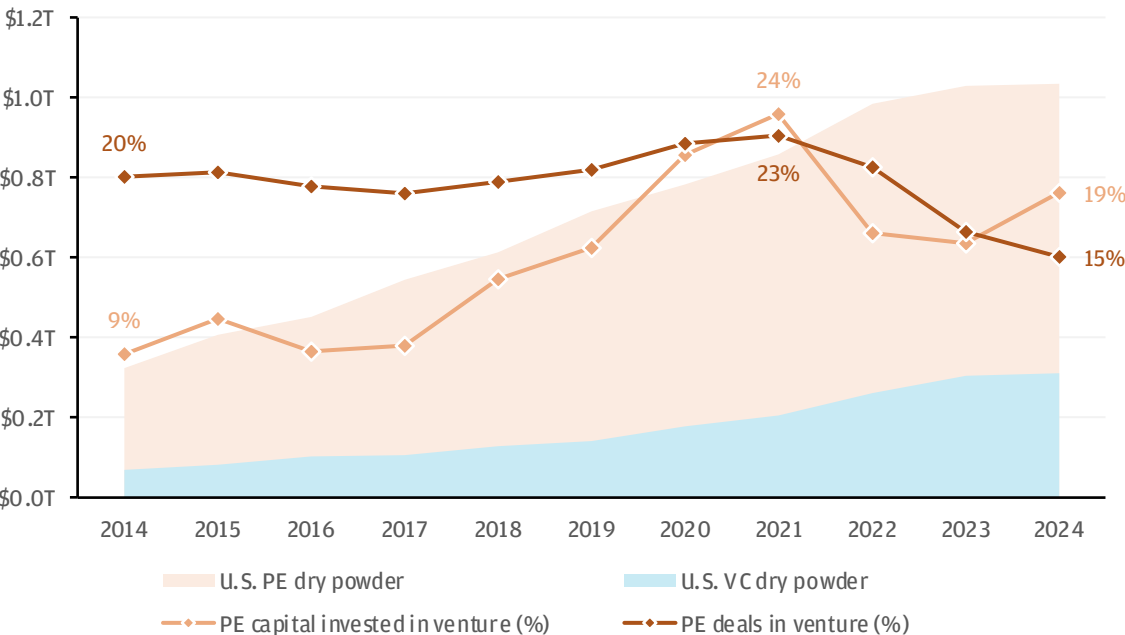
The role of private equity in venture

PRIVATE EQUITY BRINGS THE BIG BUCKS PARTICIPATION IN U.S. VENTURE FOR SELECT INVESTOR TYPES¹

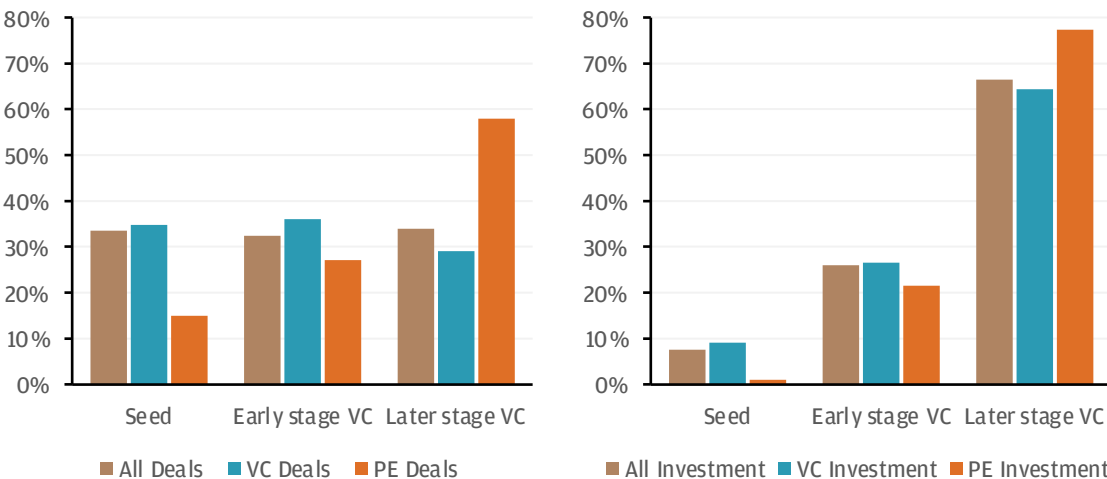


Note: ¹Primary type only, based on PitchBook's methodology.

DRY POWDER FOR BOTH VC AND PE REMAINS AT RECORD HIGHS U.S. VC AND PE FIRM DRY POWDER



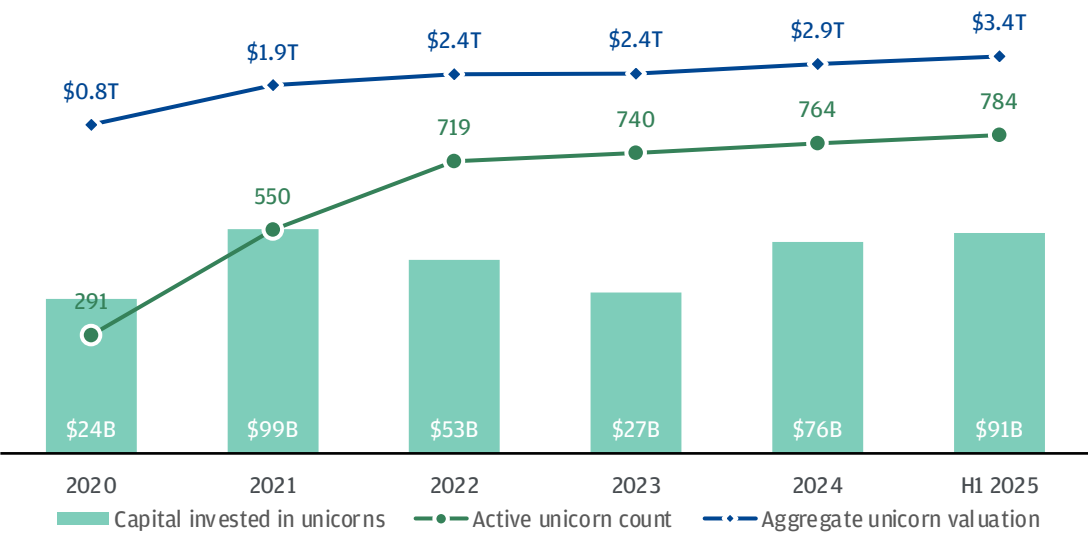
PRIVATE EQUITY STEPS UP LATE-IN-THE-GAME BREAKDOWN OF VENTURE ACTIVITY BY INVESTOR TYPE IN 2024



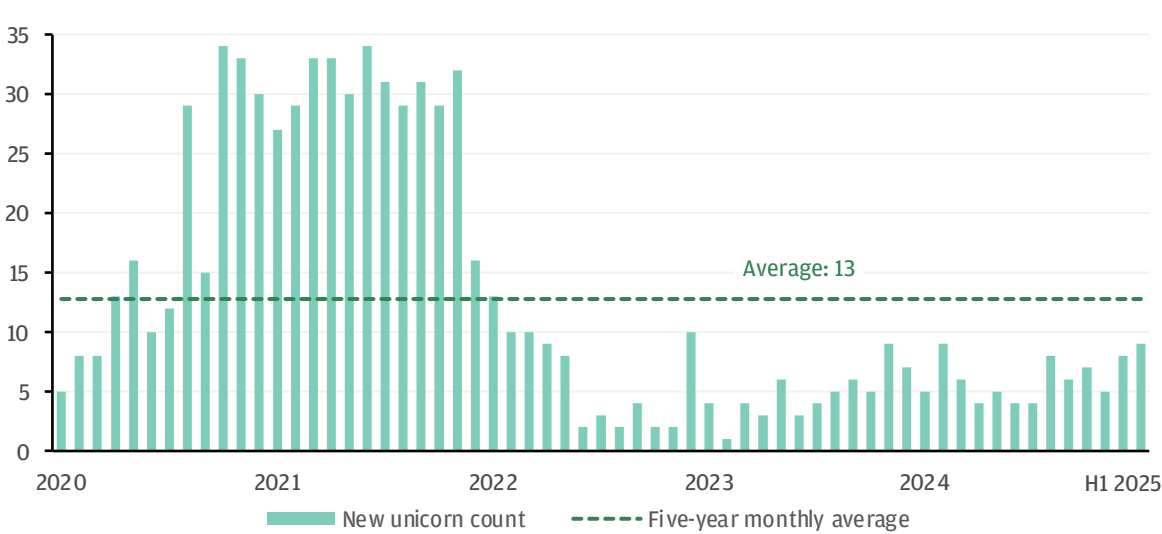
Private equity firms are becoming increasingly pivotal in supporting the innovation ecosystem. While they are involved in a smaller proportion of venture deals, they account for a significantly larger share of the capital invested – 11% of deals versus 45% of capital over the last decade. In 2024, private equity firms had dry powder amounting to 3.3 times that of venture capital. The same data indicates that private equity reserved much of its capital for later-stage investments. As the venture capital landscape continues to evolve, the distinction between venture capital and private equity may become increasingly blurred. For instance, many large firms have transformed into Registered Investment Advisers (RIAs), which allows them to tap into a broader pool of capital providers and manage various types of investments, including public stocks.

Ready-corns or zombie-corns: Have unicorn companies positioned themselves for an exit?

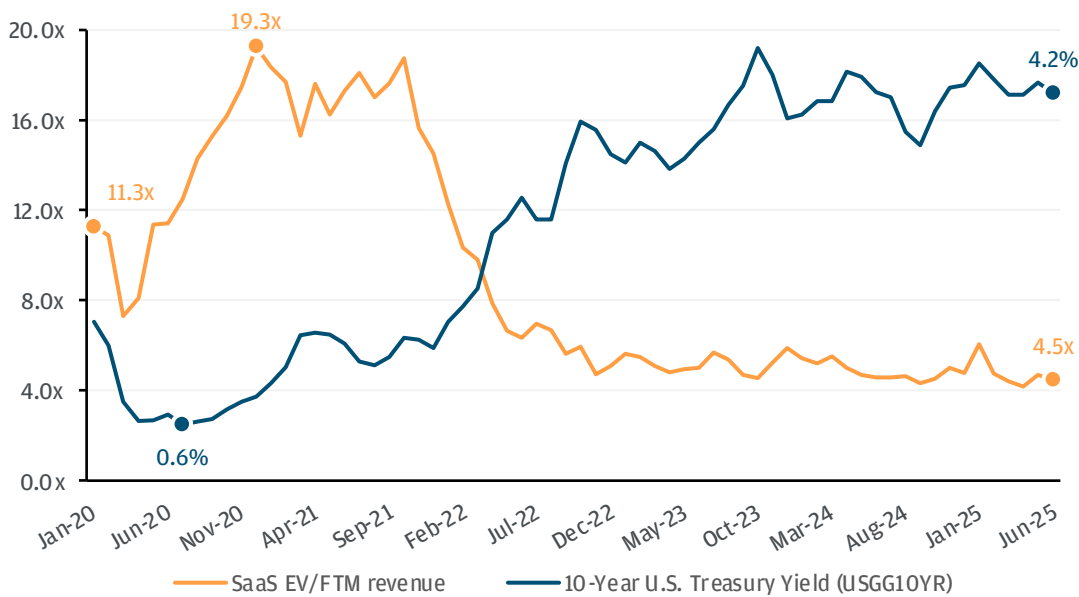
AGGREGATE VALUE OF ACTIVE UNICORNS IS CURRENTLY AT AN ALL-TIME HIGH...
AGGREGATE UNICORN VALUATION, CAPITAL INVESTMENT, AND ACTIVE UNICORN COUNT¹



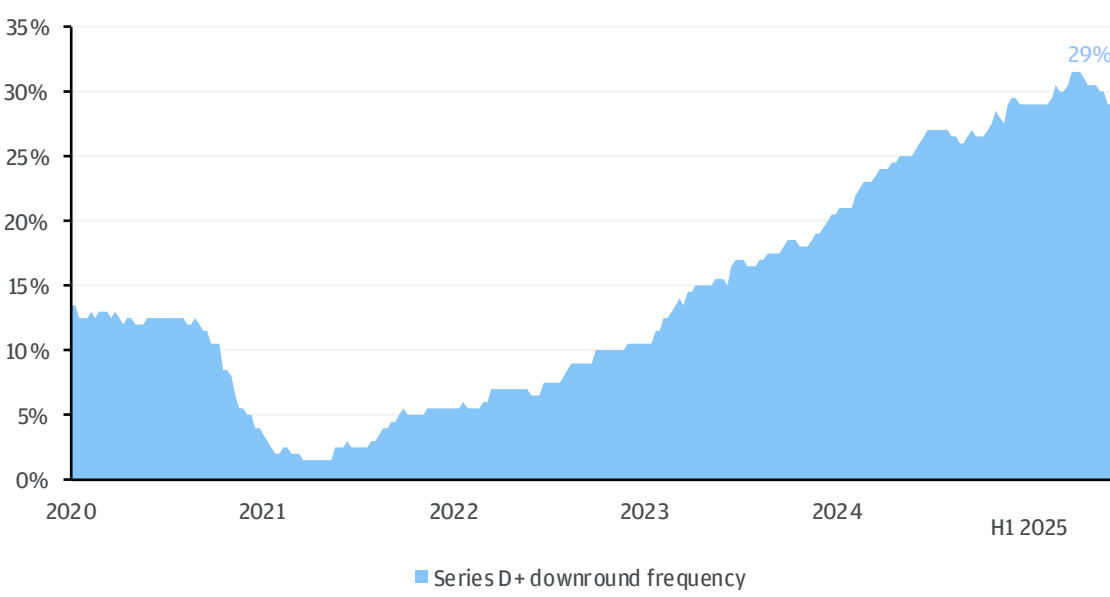
HOWEVER, THE RATE OF NEW UNICORN CREATION HAS SLOWED AS...
MONTHLY COUNT OF NEW UNICORNS CREATED IN THE U.S.



PUBLIC MARKET MULTIPLES HAVE FALLEN AMID A RISING RATE ENVIRONMENT...
SAAS MEDIAN EV/FTM REVENUE RATIOS VS. 10-YEAR U.S. TREASURY YIELDS



WHICH ALSO CORRELATES WITH THE RISE IN DOWN ROUNDS AT THE LATE-STAGE
FREQUENCY OF DOWN ROUNDS AMONG U.S.-BASED SERIES D+ STARTUPS



Over the past few years, unicorn creation has slowed, reflecting a move away from the heightened valuations driven, in part, by a low-rate environment. Despite this, the U.S. remains home to an impressive cohort of active unicorns, collectively valued at nearly \$3.4 trillion. Many of these companies have stayed private for more than 10 years – a considerable wait for early employees and investors seeking liquidity. While some companies are content to remain private, with access to private capital as needed, others are eager to tap into public markets for both funding and shareholder liquidity. One challenge for some is the valuation overhang lingering from the peak venture period (2021 to Q2 2022). Some have resorted to down rounds to reset their valuations, while others have postponed raising new capital in the hope that they will grow into their previous private valuations as public market multiples recover to levels that justify their enterprise value.

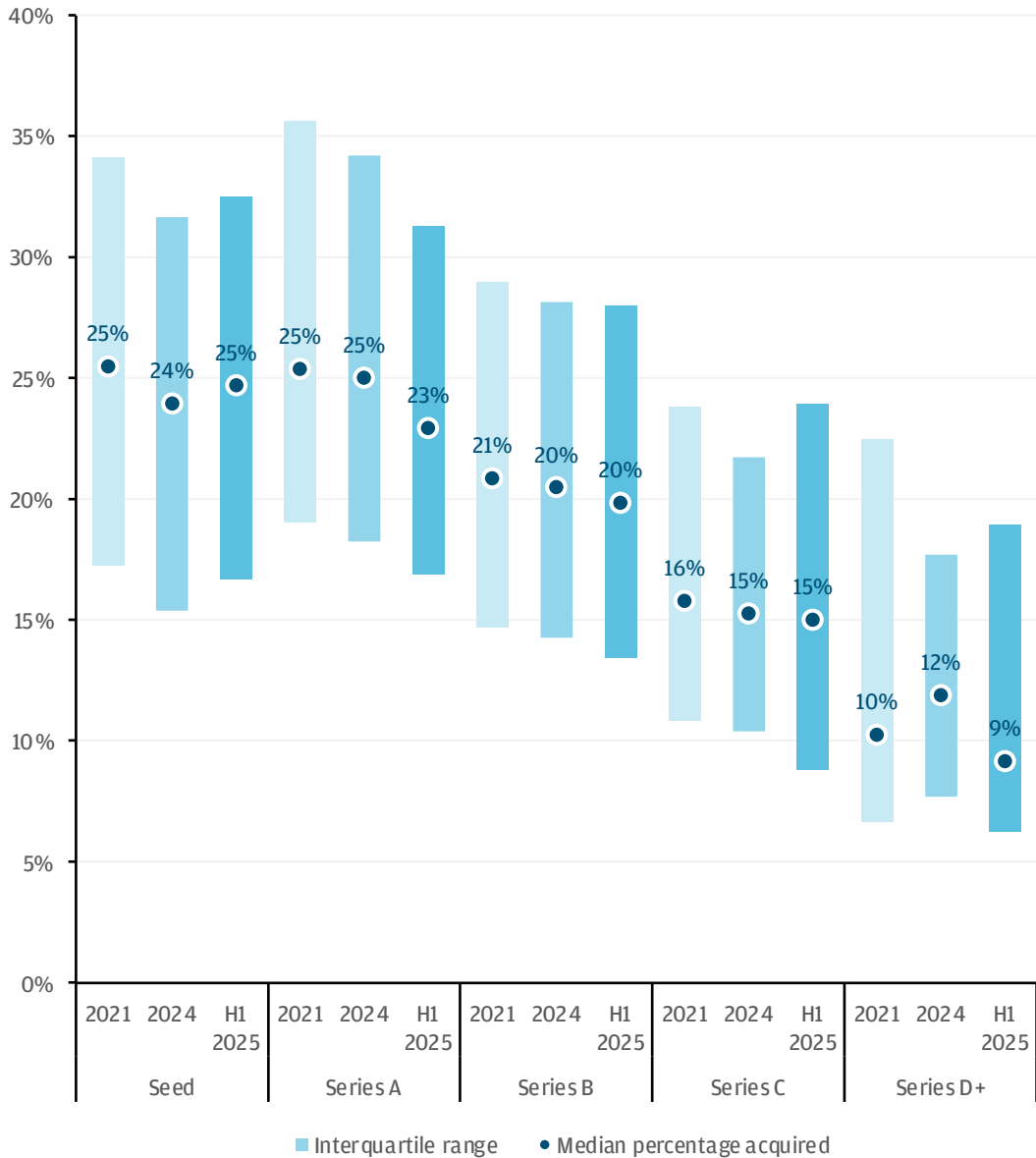
Note: ¹Valuation is post-money.

03

Founder considerations

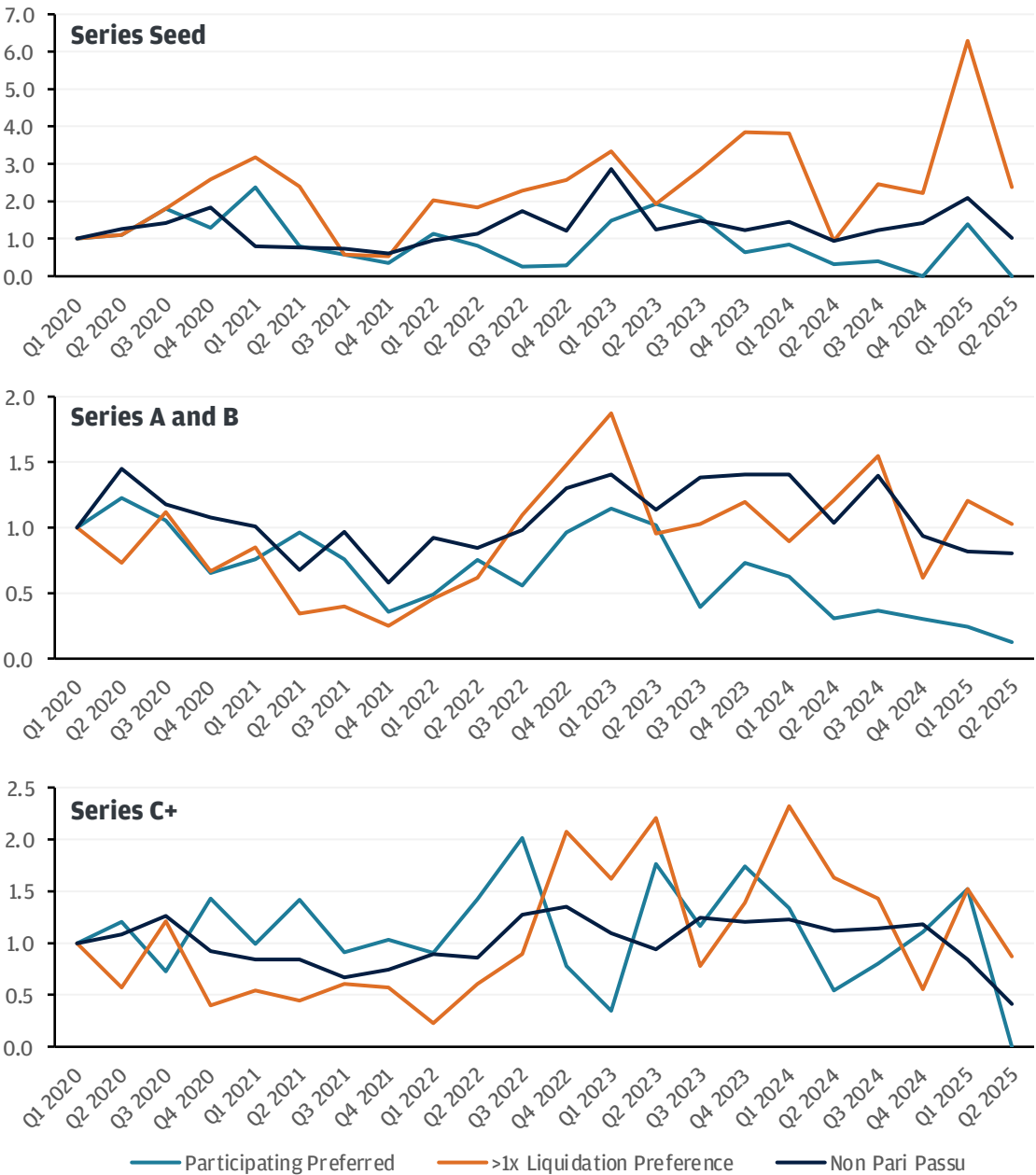
Coming to (favorable) terms

DESPITE CONCERNS OF THE CONTRARY, DILUTION LEVELS CREPT LOWER
MEDIAN AND INTERQUARTILE RANGE OF PERCENTAGE ACQUIRED BY STAGE FOR SELECT PERIODS



Note: ¹Indexed to Q1 2020, where Q1 2020 = 1.0. Aumni data is only inclusive of U.S. companies.

CLEANER TERMS FOR FOUNDERS, EXCEPT AT SEED STAGE
SELECT EQUITY DEAL TERMS INDEXED BY SERIES¹



The amount of ownership exchanged for equity investment is influenced by the current venture environment, such as valuation levels and deal sizes being raised. The negotiating power between founders and investors also plays a role, affecting not just the amount raised and valuation, but also the deal's underlying terms. For example, provisions for preferred stockholders can increase effective dilution depending on the company's future performance. The popularity and impact of different provisions vary over time. Today, even though the fundraising environment is challenging for many founders, dilutive terms are less frequently agreed upon compared to two years ago. An exception is at the seed stage, where liquidation preferences greater than 1x remain more common than usual.

04 | Liquidity and exits



TEGH KAPUR

*Managing Director,
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J.P.Morgan

The IPO window is wide open

The IPO window is wide open, showcasing a vibrant equity capital market backdrop. Since May, 13 IPOs have priced, collectively raising ~\$6 billion. The technology sector, in particular, has experienced a robust surge in IPO activity, with eight tech and tech-adjacent IPOs priced this year. Notably, these IPOs are performing exceptionally well in the aftermarket, demonstrating strong trading momentum. Since May, six tech IPOs have priced, raising ~\$4 billion with each deal witnessing impressive first-day gains, averaging a ~66% increase. Furthermore, smaller tech assets are successfully entering the market, as evidenced by four of the last six tech IPOs having market capitalizations under \$5 billion.

Select J.P. Morgan-led transactions

Circle: \$1.2 billion, Lead Left Bookrunner and Stabilization Agent, 06/04/2025

Chime: \$994 million, Lead Active Bookrunner, 06/11/2025

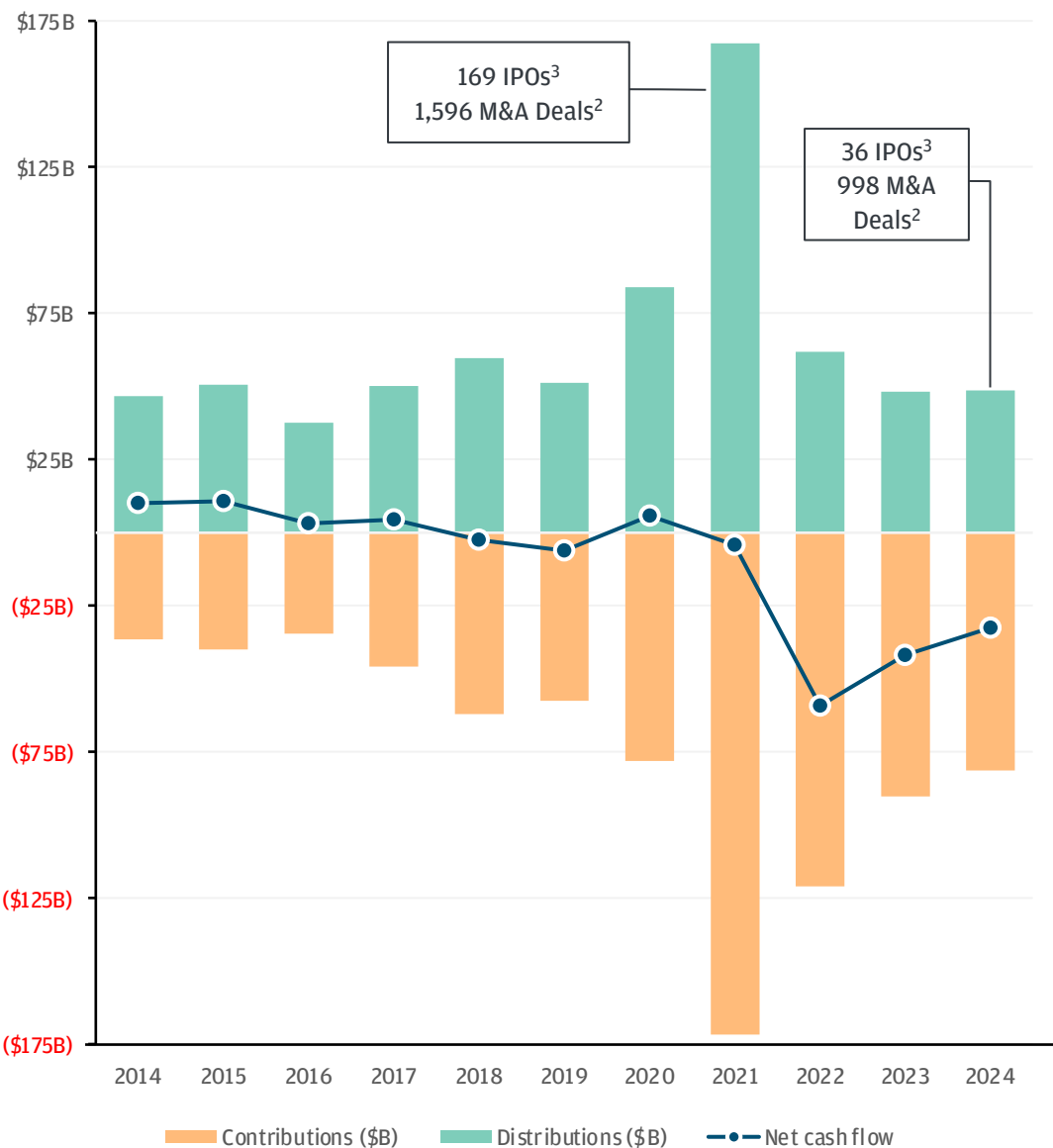
Voyager: \$440 million, Joint Lead Bookrunner, 06/10/2025

Coreweave: \$1.6 billion, Joint Lead Bookrunner, 05/27/2025

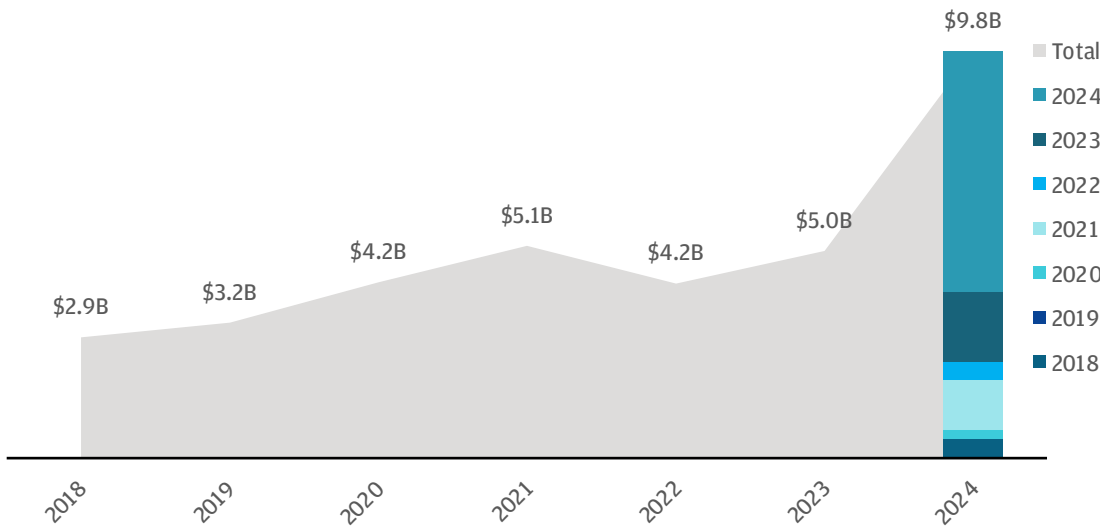
Sailpoint: \$1.3 billion, Active Bookrunner, 02/12/2025

Secondaries: Part of the solution, but not the final answer

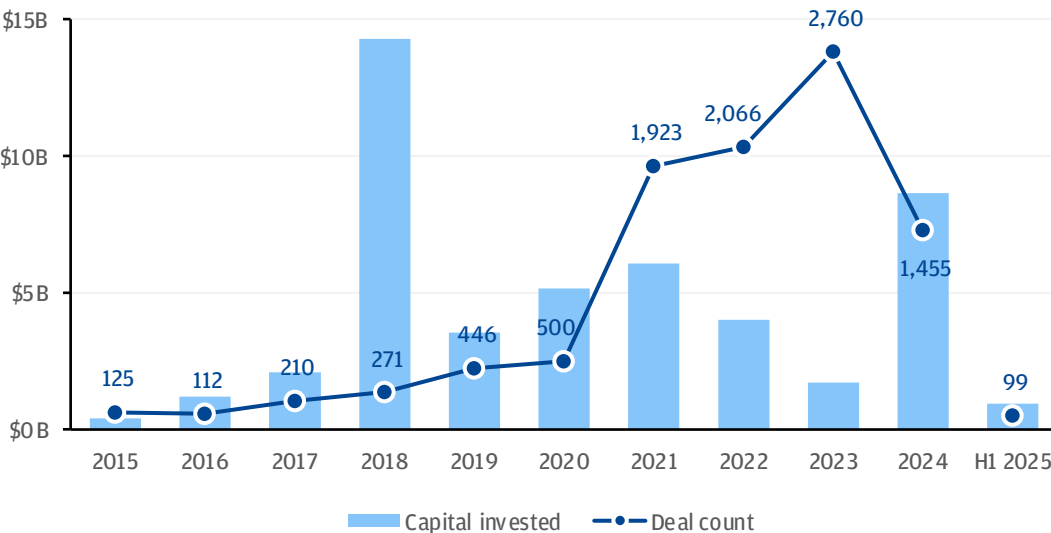
CASH FLOWS REMAIN IN NEGATIVE TERRITORY DUE TO A LACK OF SIZEABLE EXITS
U.S. VENTURE CAPITAL FUND CONTRIBUTIONS VS. DISTRIBUTIONS¹



VENTURE SECONDARY FUNDS RAMP UP
U.S. VENTURE SECONDARY DRY POWDER, CUMULATIVE VS. BY SECONDARY FUND VINTAGE¹



SECONDARY FUNDS FILL SOME OF THE LIQUIDITY GAP LEFT BY IPOs
U.S. SECONDARY TRANSACTIONS IN VENTURE-BACKED STARTUPS

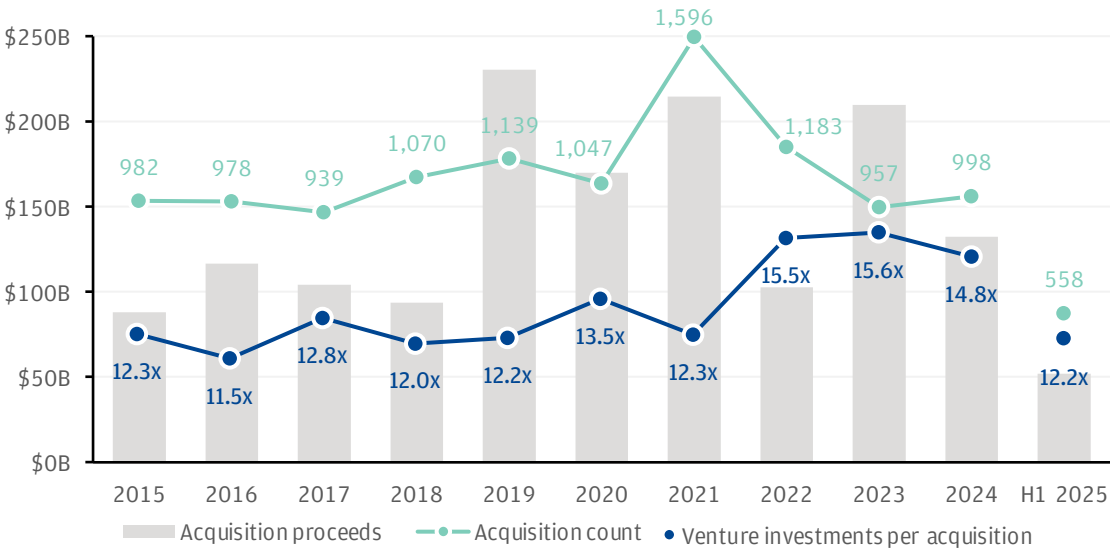


Secondary activity within the venture ecosystem has accelerated in the past year, responding to ongoing liquidity challenges that may present well-priced opportunities. With venture fund distributions hampered by low IPO activity, secondary transactions have stepped in to help bridge the liquidity gap. For late-stage companies, secondaries can be especially valuable, offering liquidity to early investors, founders, and employees, and thereby easing some of the pressure to go public. Additionally, secondary markets provide emerging managers with a dual advantage: The ability to invest in high-quality deals while also selling shares to return capital to their LPs. This is particularly crucial as emerging managers—unlike their established counterparts with proven track records and stable LP relationships—often face greater pressure to demonstrate returns more quickly.

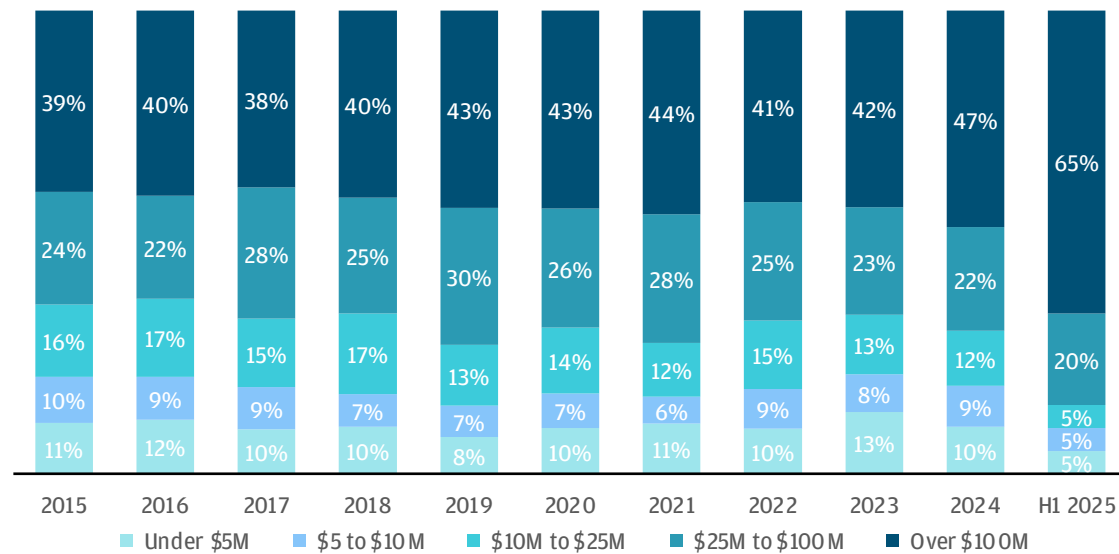
Notes: ¹2024 is through September 30, 2024. ²Includes M&A transactions in which the company being acquired is U.S.-based and was venture-backed prior to the transaction. ³Includes venture-backed companies listing on major U.S. exchanges.

Acquisition activity steady, larger deal sizes a good sign

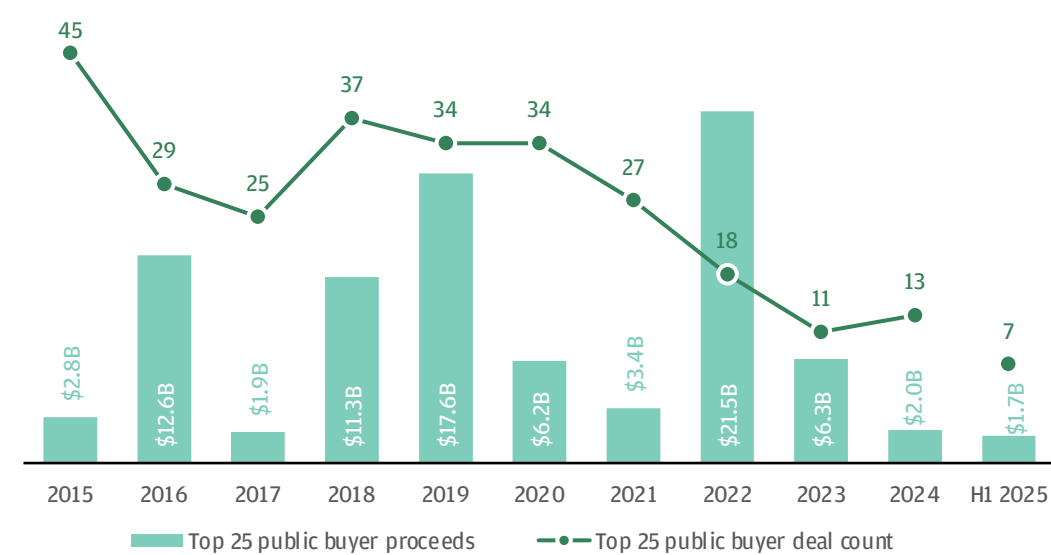
THE PROPORTION OF VENTURE DEALS TO ACQUISITIONS IS NARROWING
U.S. VENTURE-BACKED ACQUISITION ACTIVITY AND RATIO OF VENTURE INVESTMENTS AND ACQUISITIONS¹



MOST ACQUISITIONS IN H1 2025 ARE OVER \$100 MILLION
U.S. VENTURE-BACKED M&A EXIT COUNT BY SIZE OF TRANSACTION¹



PUBLIC ACQUIRERS SPEND MORE; VENTURE-BACKED ACQUIRERS BUY MORE
ACQUISITION ACTIVITY BY VENTURE-BACKED BUYERS AND 25 HIGHEST-VALUED PUBLIC COMPANIES



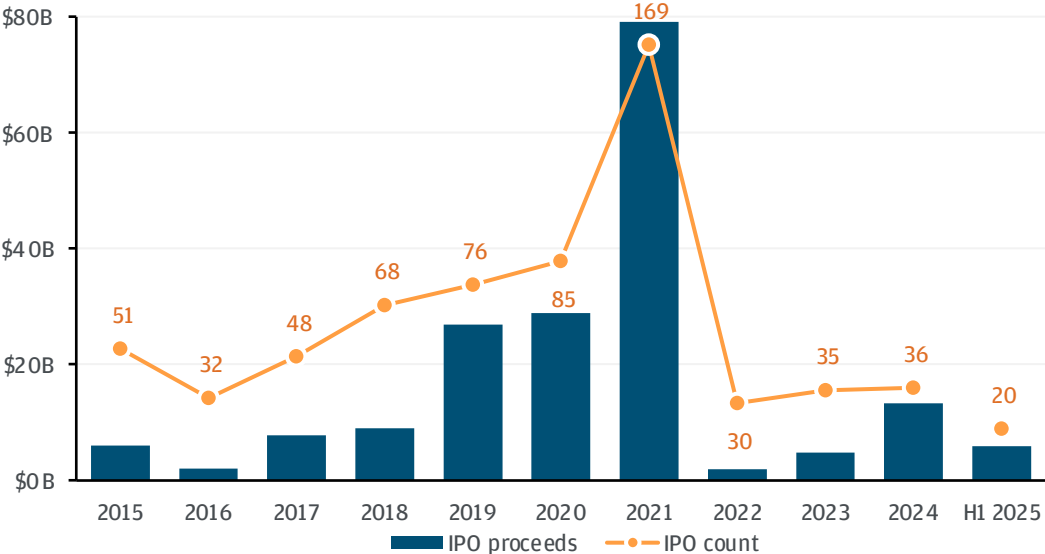
The M&A landscape for venture-backed companies remains steady, with room for growth. The gap between venture investments and the acquisitions of venture-backed startups is narrowing—a positive sign that M&A remains a viable exit option. Public buyers – in this case the top 25 highest-valued U.S. public companies by market capitalization—engaged in fewer but larger transactions. Venture-backed buyers have scaled back their activity in recent years, with the exception of an outsized transaction in 2025. The increased frequency of deals exceeding \$100 million may signal rising confidence among buyers willing to make significant strategic commitments. A lighter regulatory landscape may spur further large-scale acquisition activity, especially as the race for AI continues to heat up.

Notes: ¹Includes M&A transactions in which the company being acquired is U.S.-based and was venture-backed prior to the transaction. M&A includes strategic acquisitions, buyouts, and reverse mergers. ²Only includes deals with a disclosed transaction amount. Transaction values are typically only disclosed for a fraction of deals, for instance 23% in 2024.

Fortune favors the brave: IPO markets open to those willing to take the plunge

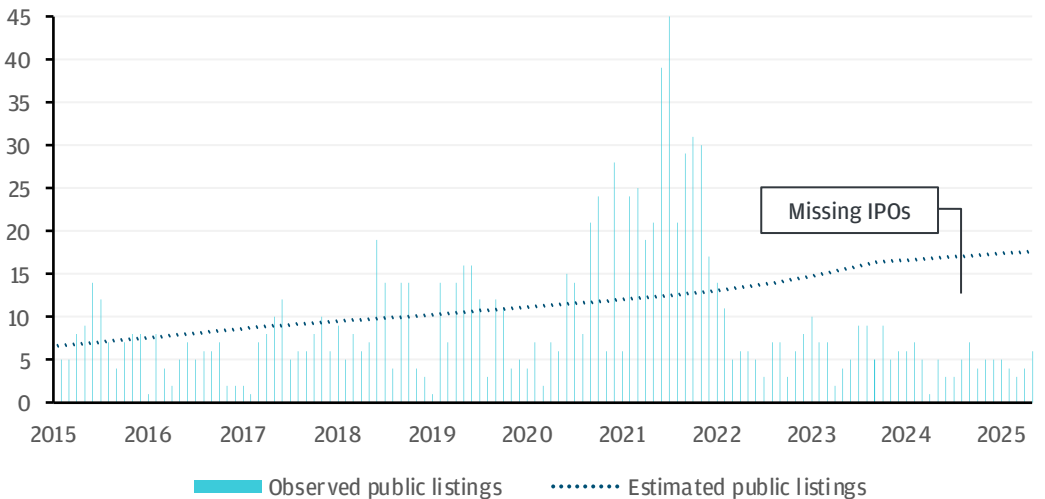
IPO ACTIVITY RISING SLOWLY BUT SURELY

U.S. VENTURE-BACKED IPO ACTIVITY¹



IPO BACKLOG CONTINUES TO GROW AS COMPANIES STAY PRIVATE LONGER

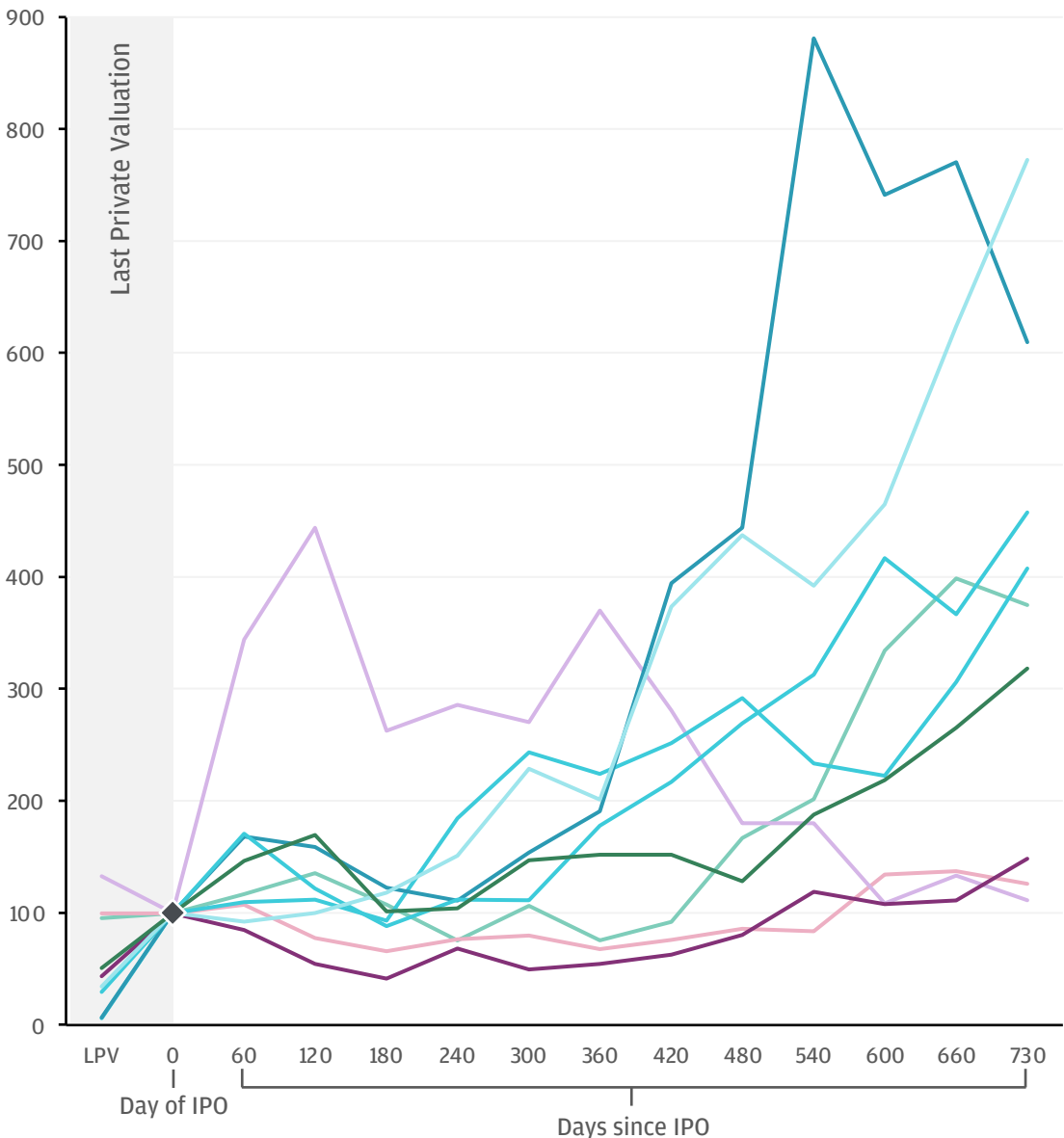
COUNT OF VENTURE-BACKED PUBLIC LISTINGS VS ESTIMATION^{1,2}



Notes: ¹Includes only companies that were venture-backed and U.S.-based at time of IPO and were listed on a major U.S. exchange. ²Public listings include both reverse mergers and IPOs. ³Indexed to 100 at IPO.

PUBLIC MARKET PERFORMANCE MORE POSITIVE THAN NOT

MARKET CAPITALIZATION FOR FIRST TWO YEARS OF NOTABLE VENTURE-BACKED TECH IPOs (INDEXED)^{1,3}



While IPO activity has been subdued since mid-2022, there are some potential signs of optimism. A recent run of IPOs in Q2 2025 has made up for a slow start to the year. More offerings should be on the horizon as companies that did not go public in 2023 and 2024 add to the IPO backlog. However, not all companies are ready, as some lack sufficient size, growth or a clear path to profitability. Additionally, some notable IPO candidates are choosing to remain private, continuing to raise private capital, with a secondary component to meet employee and investor liquidity needs. This strategy, however, could mean they are missing out as performance data shows that many recent IPO cohorts have seen their equities trend above the listing price. With few IPOs to date, it remains unclear whether the window is truly open until more exits occur and the depth of public market investor demand is better tested.

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