

PitchBook Data, Inc.

John Gabbert Founder, CEO

Nizar Tarhuni Vice President, Institutional Research and Editorial

Paul Condra Head of Emerging Technology Research

Institutional Research Group

Analysis



Paul Condra
Head of Emerging Technology Research
paul.condra@pitchbook.com



Kyle Stanford, CAIA
Lead Analyst,
Venture Capital
kyle.stanford@pitchbook.com



James Ulan
Lead Analyst, Emerging Technology
james.ulana@pitchbook.com



Ali Javaheri
Associate Analyst, Emerging Technology
ali.javaheri@pitchbook.com

pbinstitutionalresearch@pitchbook.com

Publishing

Designed by **Caroline Suttie**

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EMERGING TECH RESEARCH H2 2023 VC Tech Survey

VCs say AI leads innovation, are cautiously optimistic about IPOs, and are cognizant of geopolitical risk.

PitchBook is a Morningstar company providing the most comprehensive, most accurate, and hard-to-find data for professionals doing business in the private markets.

Key takeaways

- VC investors show a marked increase in their optimism about VC activity, expecting an upswing over the next year, with an emphasis on profitability as a key investment criterion.
- Despite a widespread belief that overvalued market valuations have inhibited IPO performance, there is a cautious expectation of improved IPO activity, influenced by anticipated market gains and interest rate declines.
- Geopolitical risks, particularly the impacts of war, now factor significantly into technology sector outlooks. These risks are affecting international investment strategies, with China becoming less attractive to investors and Europe and Latin America becoming more attractive.
- AI retains its position as the most promising area for technology innovation, with generative AI expected to disrupt and create unicorns, while biotech benefits from AI advancements. Conversely, the crypto sector is seen as overinvested and less likely to experience growth.

Executive summary

Our H2 2023 VC Tech Survey provides insights from 72 VC investors to gauge their perspectives on technological innovation and fundraising expectations within the venture capital ecosystem. This survey follows the themes of our [H1 survey](#), providing a continuous perspective of how attitudes toward technology and the VC industry have evolved throughout the past year.

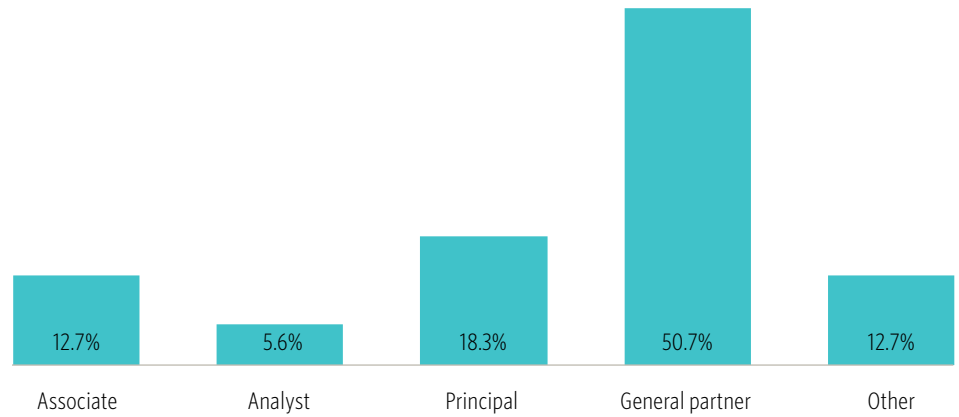
In regard to fundraising, respondents are notably more optimistic that VC activity will start to pick up over the next year. The number of respondents who expect an increase in investment nearly doubled from our H1 survey. Notably, the path to profitability still remains the top concern for investors, indicating that diligence on investments remains elevated, but a greater share also report product-market fit as a key criterion. Survey respondents stayed cautious on IPO activity, noting that market valuations may still be too high. Respondents viewed this as a key reason for most of 2023's IPOs remaining below their offering prices.

Fundraising strategies remain steady, and venture capitalists continue to view 2023 as a portfolio vintage likely to have high return potential. However, relative to our H1 survey, respondents are now more optimistic that 2024 may also see high returns—an indication that market participants expect the sluggish VC environment to persist longer than originally expected at the start of the 2023. Geopolitical tensions have climbed the ladder of concerns, with a significant increase in investors acknowledging the profound impact of global conflicts on the technology sector's future. Europe and Latin America top the list of attractive non-US regions to invest in, with China cited as the least attractive.

As in our previous survey, AI emerged as the leading contender for innovation, captivating investors and overshadowing other sectors. Despite some concerns of overhype, generative AI is anticipated to be a significant disruptor and potential unicorn generator. Respondents are also bullish on the biotechnology sector, a unique beneficiary of AI advancements that are propelling pharmaceutical breakthroughs and drug development. Investors chose crypto technologies as the least likely to see growth and adoption over the next year, as they see this sector as overinvested.

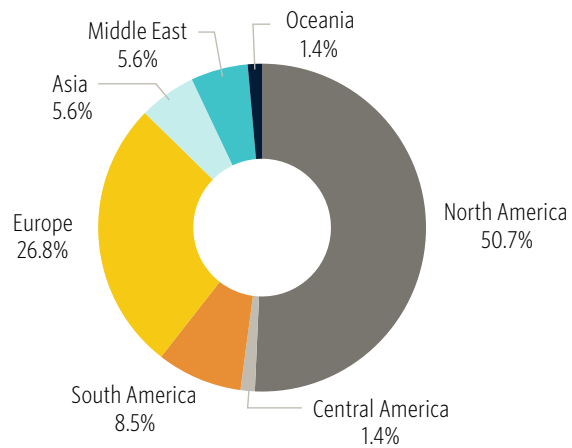
Survey-taker demographics

Figure 1: What is your role at your venture capital firm?*



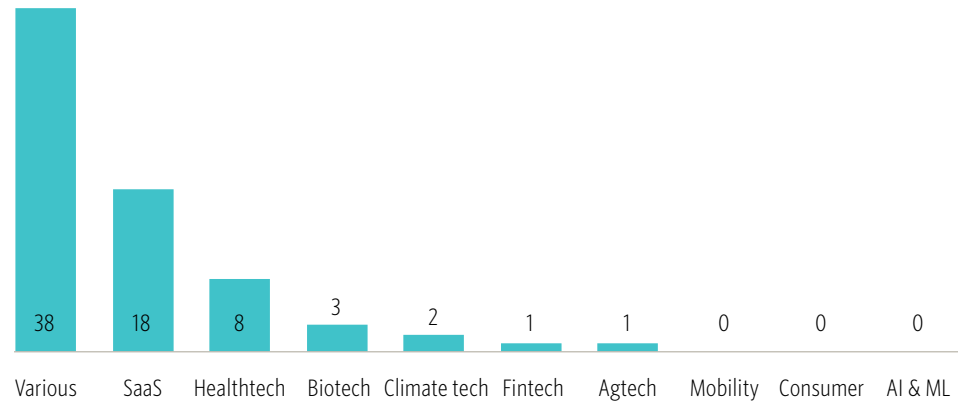
Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 2: Where is your VC firm located?*



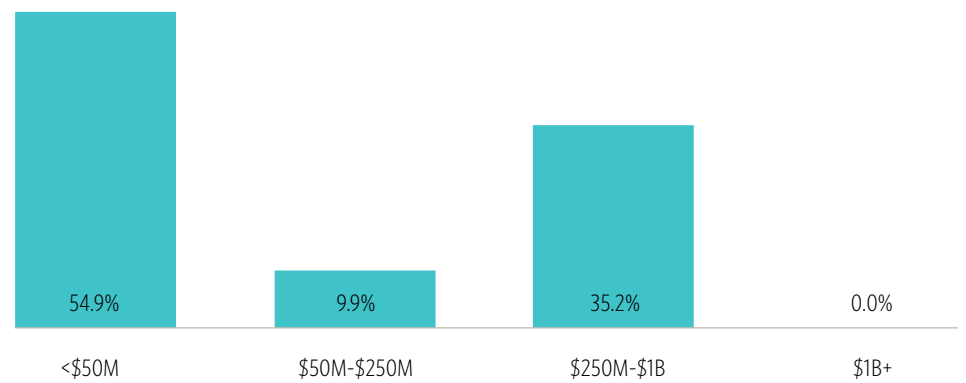
Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 3: What sort of technologies does your firm primarily invest in?*



Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 4: What is your firm's current AUM?*



Source: PitchBook • Geography: Global
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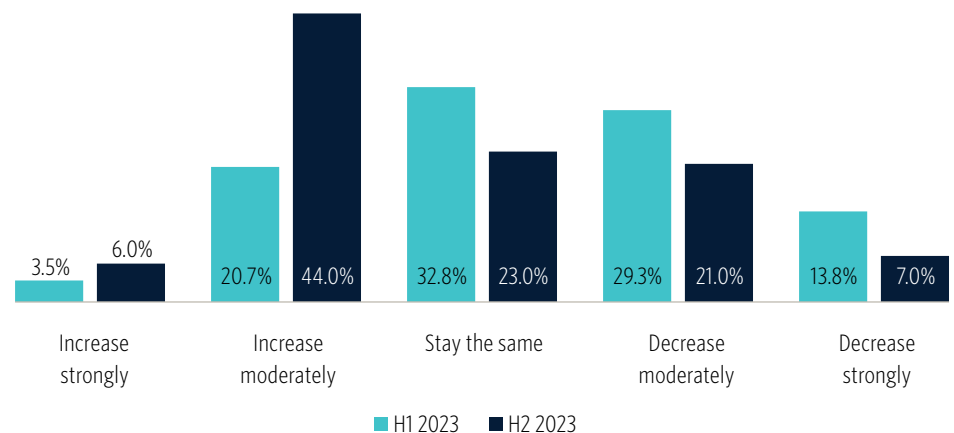
VC ecosystem expectations

While respondents said their fundraising strategies have remained largely unchanged since the first half of the year, they were notably more optimistic on their investment outlook, with a greater majority now expecting increased VC activity over the next 12 months. Respondents also have high expectations that 2024—in addition to 2023—will be a strong vintage year. This differs from our H1 survey, wherein only 2023 was viewed as having a highly favorable return expectation, and suggests investors see the current market environment persisting for longer than they did at the start of the year.

Regarding IPO exits, respondents said they expect the pace of IPOs to pick up mildly but cited overheated valuation expectations as one of the biggest factors keeping companies from going public. A high initial valuation was also cited as the reason so many of this year’s IPOs have not performed well. Respondents said they expect valuations to come down over the next six to 12 months and see continued gains in the broader stock market and a decrease in interest rates as key catalysts for more exit activity.

Geopolitical dynamics appear to have an increased influence on investors’ outlook than they did earlier in the year. The second half of the year saw a dramatic rise in respondents, from 5% to 27%, who believe that war will significantly impact the technology sector in the coming years (second only to high interest rates). This shift in sentiment likely stems from escalating geopolitical tensions and conflicts, including the latest Israel-Hamas war, the ongoing war in Ukraine, and rising US-China frictions. When it comes to international investing strategies, respondents viewed China as the least attractive nondomestic region for investment, with Europe and Latin America topping the list as most attractive.

Figure 5: Do you expect total dollars of VC investment in technology startups to increase or decrease over the next 12 months compared with the previous 12 months?*



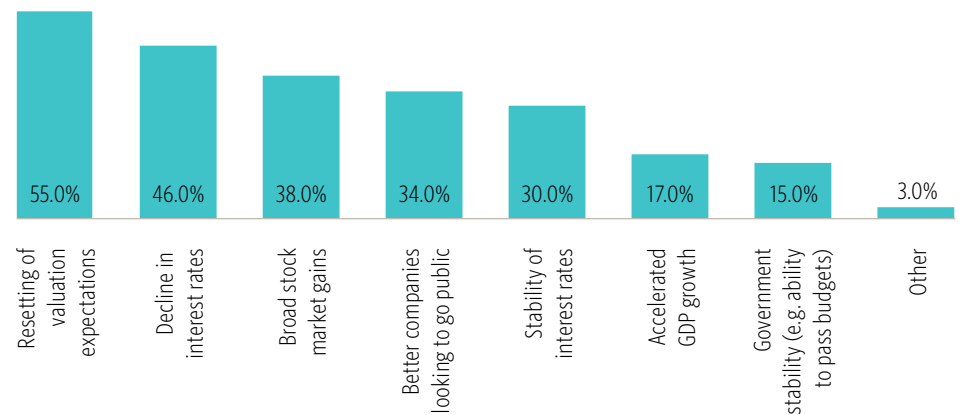
Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 6: Which regions outside of the US currently appear the most attractive for VC investment?*



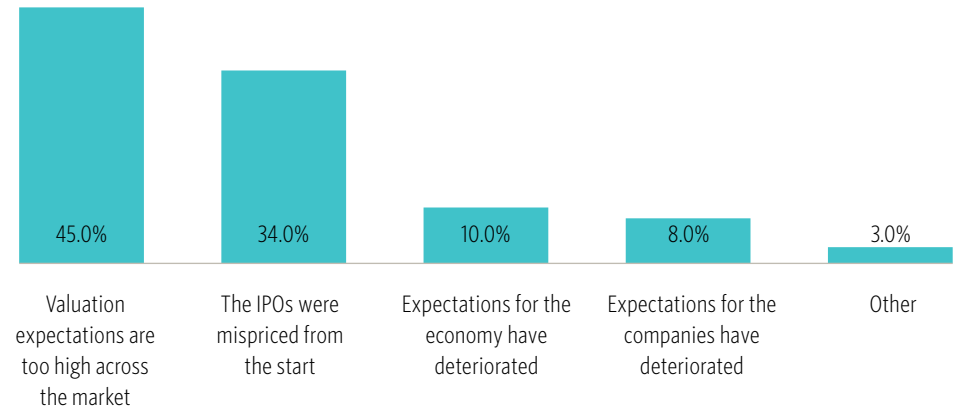
Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 7: Which factors do you view as the most important to driving an increase in IPO activity? (Choose up to three.)*



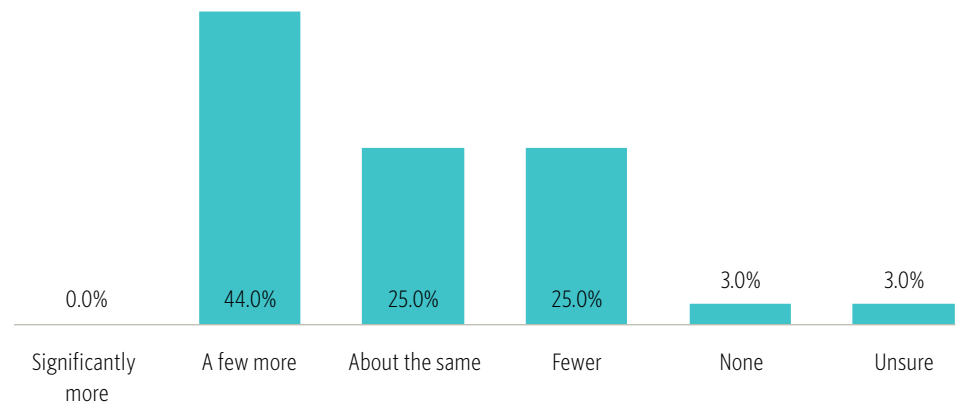
Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 8: Why do you think recent notable IPOs (ARM, Instacart, Cava, Klaviyo) have seen their stock prices retreat significantly from their initial highs?*



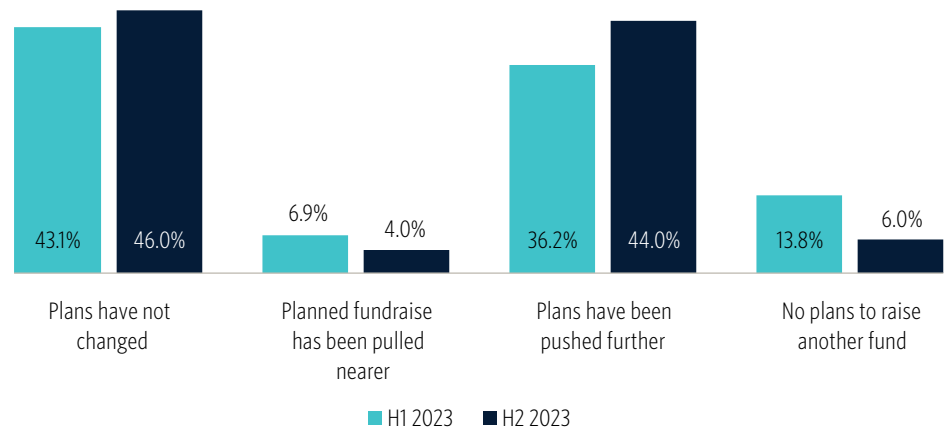
Source: PitchBook • Geography: Global
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Figure 9: Do you expect more or fewer unicorn startups to exit via IPO in the next 12 months?*



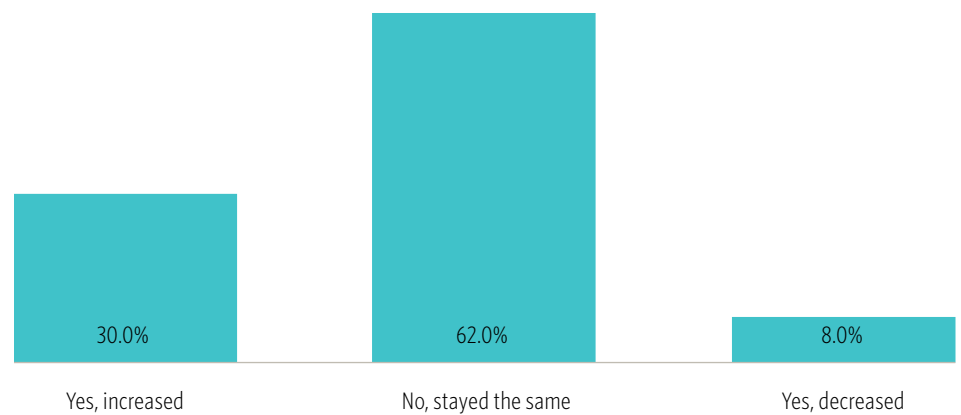
Source: PitchBook • Geography: Global
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Figure 10: How has the current state of the market impacted your future fundraising plans?*



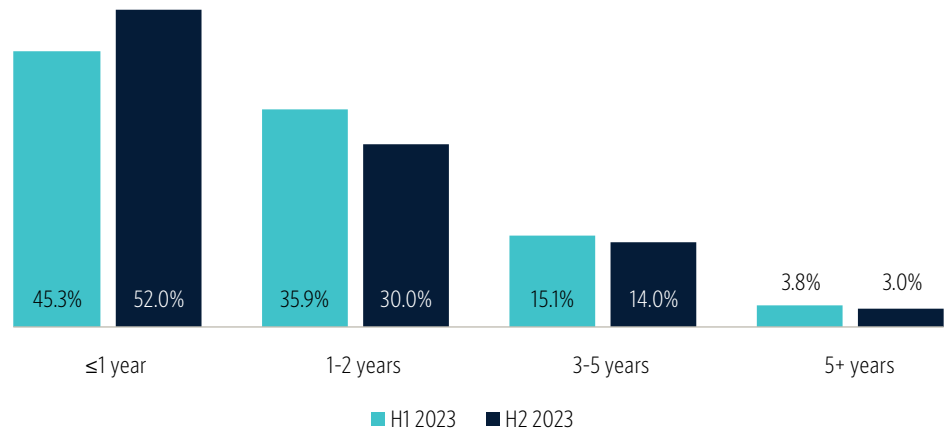
Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 11: Did the percentage stake acquired in rounds you invested in change over the last 12 months?*



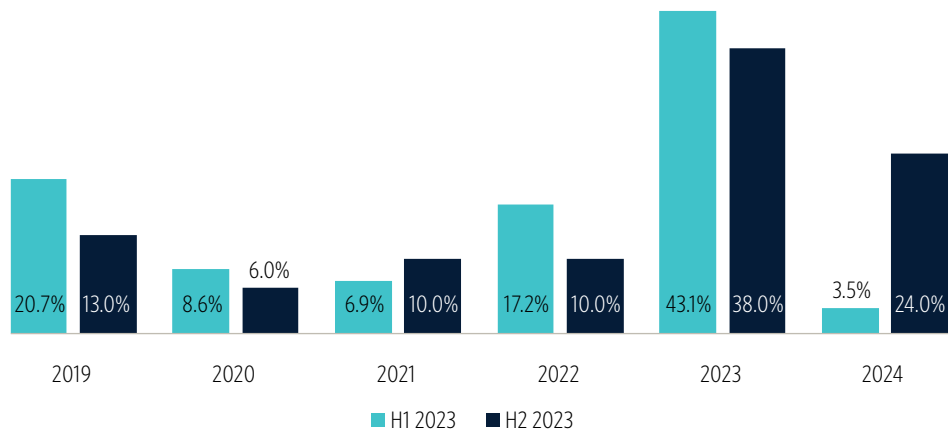
Source: PitchBook • Geography: Global
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Figure 12: When do you plan to begin raising your next fund?*



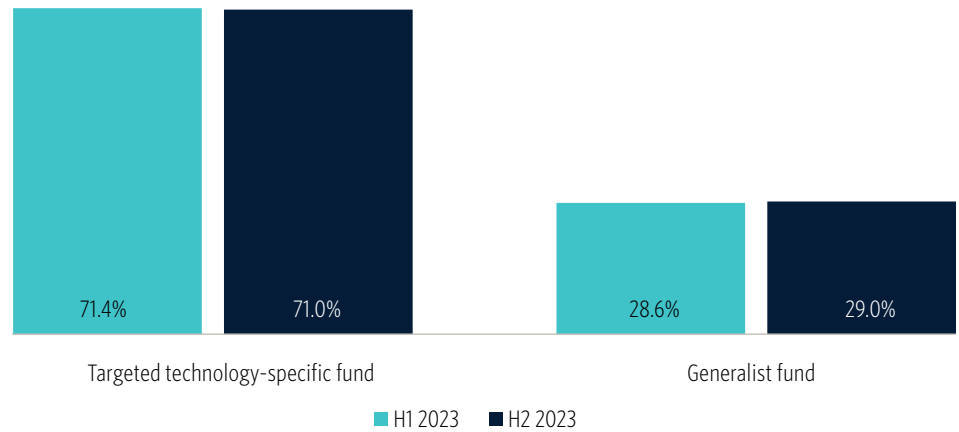
Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 13: Which VC vintage do you think will have the highest IRR out of this group?*



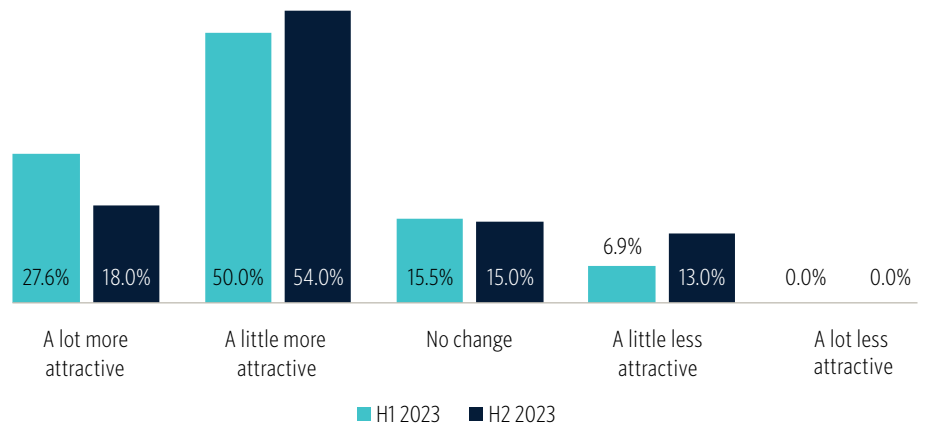
Source: PitchBook • Geography: Global
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Figure 14: In the current environment, which style of fund seems easier to raise?*



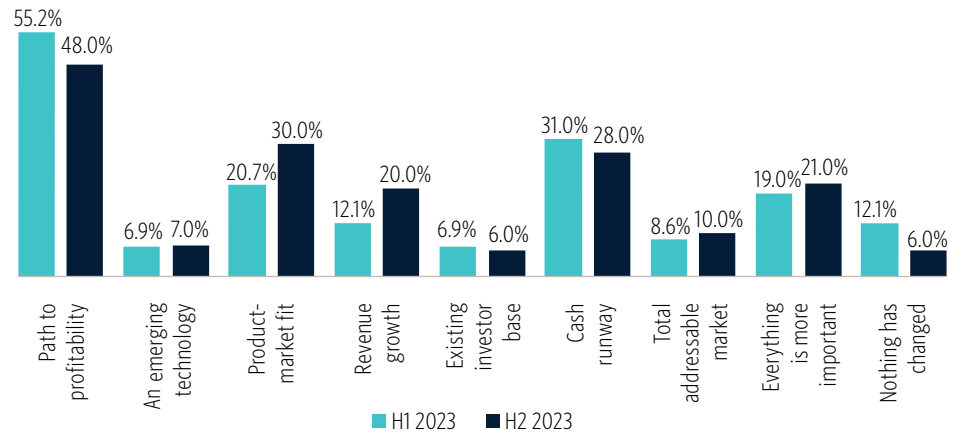
Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 15: Do you expect valuations to be more or less attractive in the next six to 12 months than they were in the last six to 12 months?*



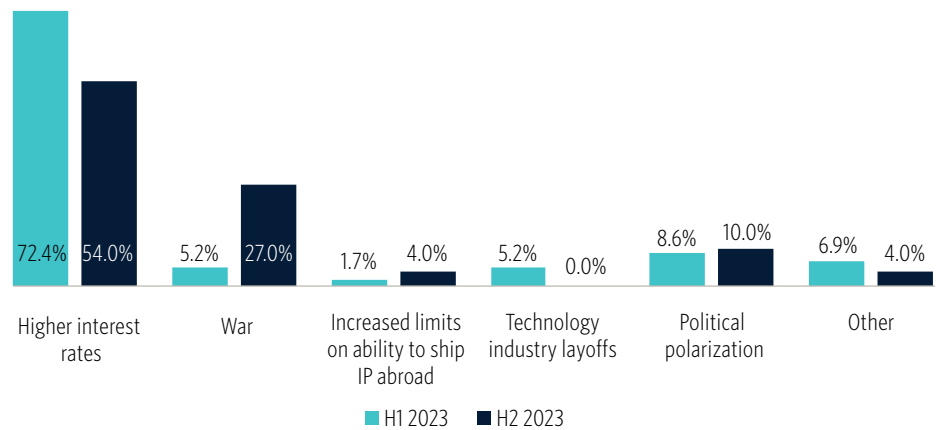
Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 16: When evaluating new investments, which factors have become more important over the past year than they were before? (Choose up to two.)*



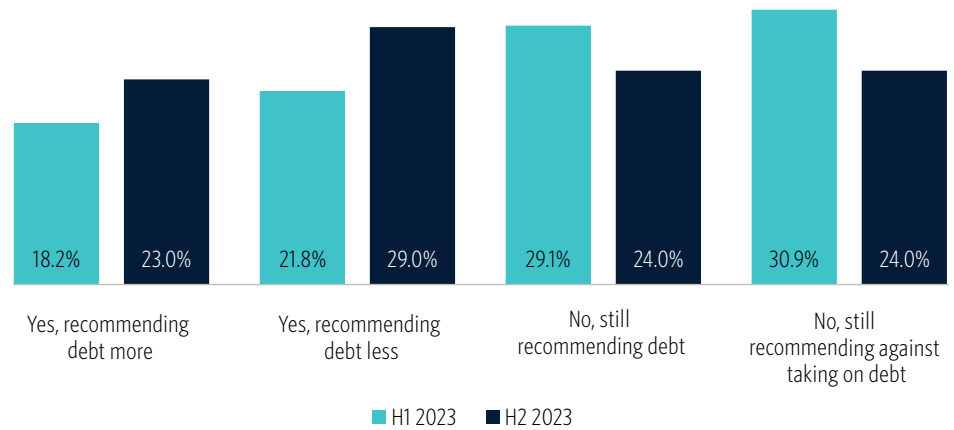
Source: PitchBook • Geography: Global
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Figure 17: Which of the following macroeconomic and sociopolitical factors are likely to have the biggest impact on technology over the next few years?*



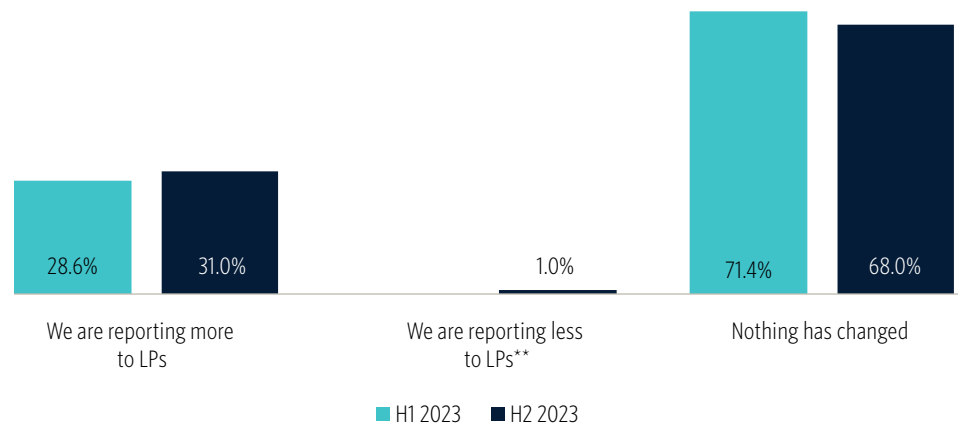
Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 18: Has your recommendation of taking on debt changed for your portfolio companies over the past year?*



Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 19: How have higher reporting standards impacted your reporting to LPs?*



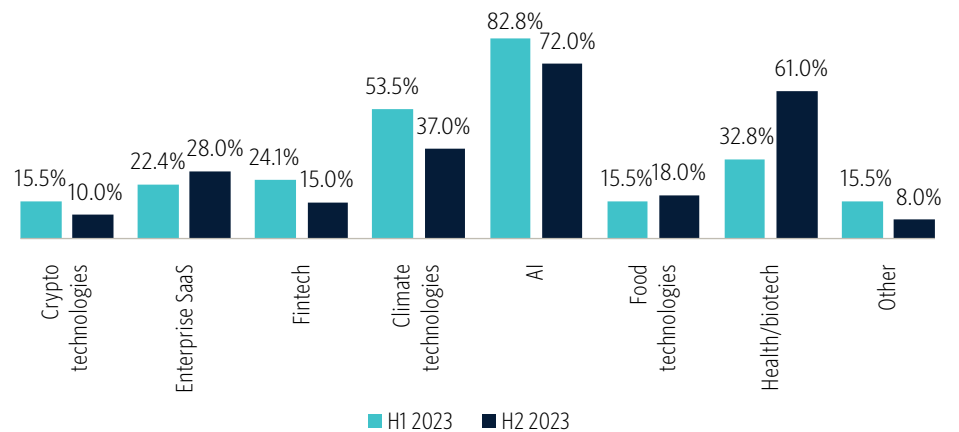
Source: PitchBook • Geography: Global
*As of November 3, 2023

**Note that we did not include this answer choice in the H1 survey.

Technology expectations

As in our H1 survey, AI is still expected to see the most innovation among technology areas over the next year. However, sentiment may have cooled mildly, as survey respondents said by a large margin that they felt expectations for generative AI have been overhyped. Enthusiasm for biotechnology has surged, potentially influenced by the success of drugs such as Ozempic and the convergence of machine learning with drug discovery processes. Climate technologies also appeared near the top of rankings for innovation. Sentiment toward crypto technologies remains low, with investors viewing the space as among the most overinvested.

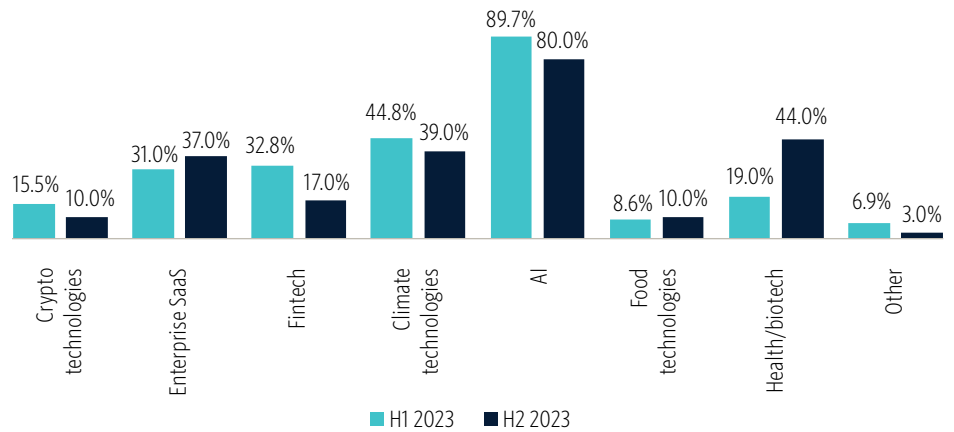
Figure 20: In which areas of technology do you expect the most innovation over the next 12 months? (Choose up to three.)*



Source: PitchBook • Geography: Global
*As of November 3, 2023

AI continued to show the most promise, but since our last survey, there was a near doubling of respondents who said biotech would experience the most innovation. This could be due to bullish attitudes on weight loss drugs such as Ozempic as well as the application of machine learning and generative AI to drug development. Respondents expressed a similar attitude, exhibiting parallel changes from the H1 survey, when asked which areas of technology they expected to experience the most growth and adoption.

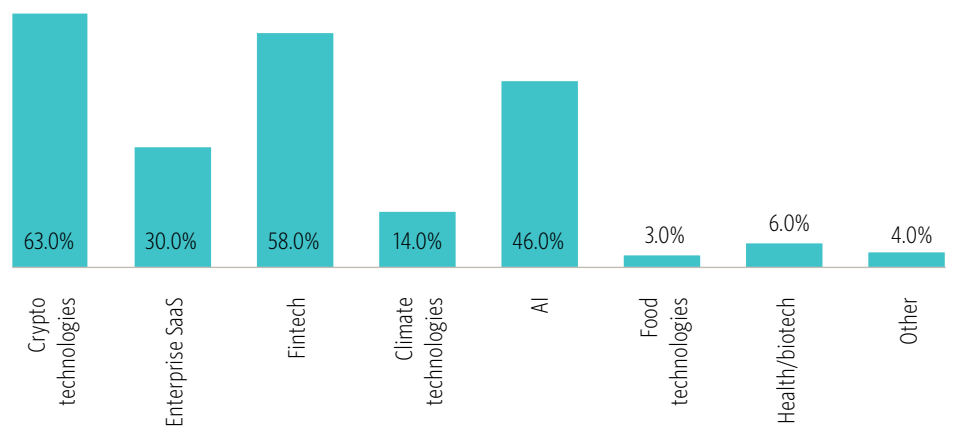
Figure 21: In which areas of technology do you expect the most growth and adoption over the next 12 months? (Choose up to three.)*



Source: PitchBook • Geography: Global
*As of November 3, 2023

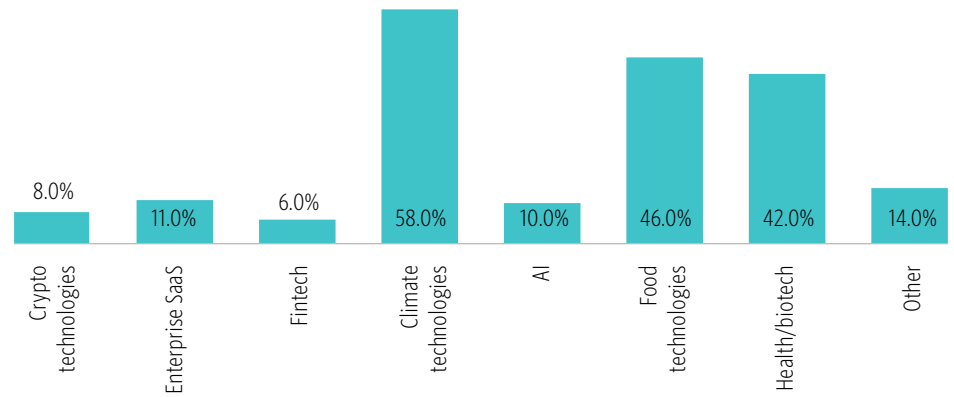
Respondents also indicated that there is too much investment in crypto technologies—a sentiment also captured by our [Emerging Tech Indicator](#) report. Conversely, respondents still saw climate technologies as underinvested.

Figure 22: Which areas of technology do you view as overinvested (as in, there is too much VC investment)? (Choose up to three.)*



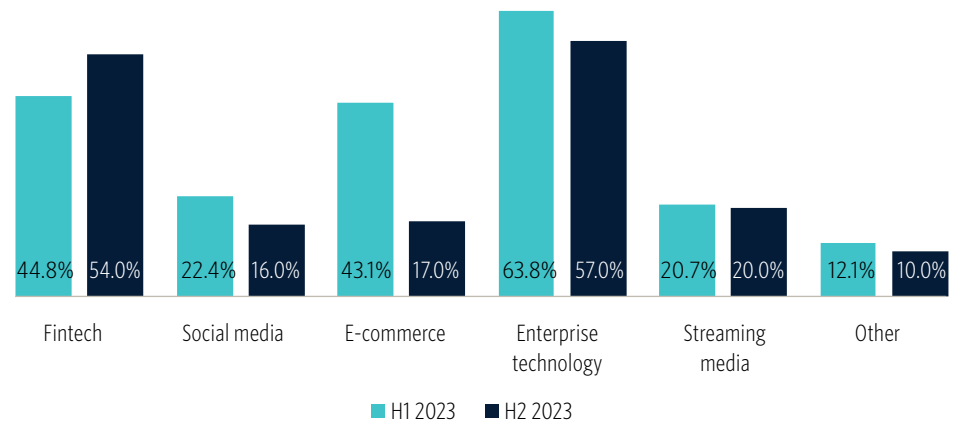
Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 23: Which areas of technology do you view as underinvested (as in, there is too little VC investment)? (Choose up to three.)*



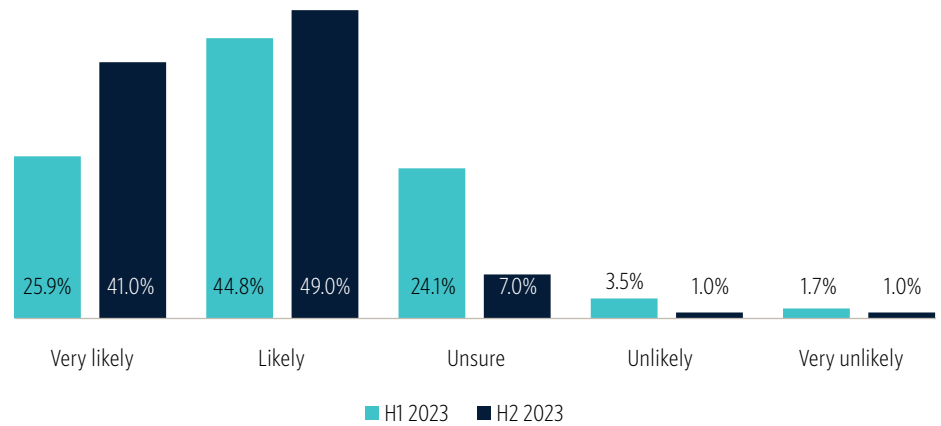
Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 24: In which areas of technology are incumbents most likely to experience disruptive/competitive pressures from startups over the next 12 months? (Choose up to three.)*



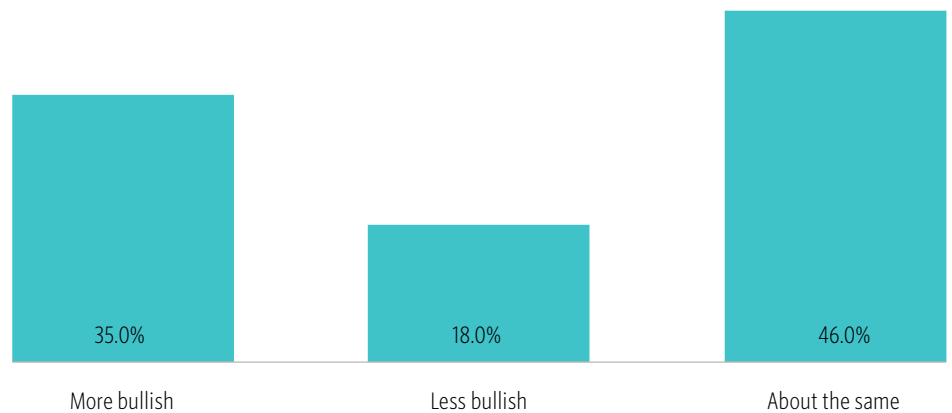
Source: PitchBook • Geography: Global
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Figure 25: How likely is it that advances in generative AI will spawn a new wave of technology unicorns in the next five years?*



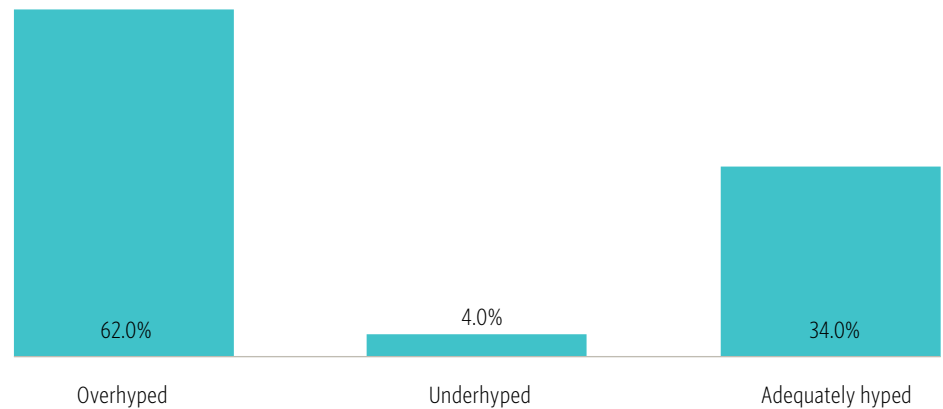
Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 26: Are you more or less bullish toward generative AI as a disruptor compared with how you felt at the start of 2023?*



Source: PitchBook • Geography: Global
*As of November 3, 2023

Figure 27: Do you believe expectations for generative AI have been overhyped, underhyped, or adequately hyped?*



Source: PitchBook • Geography: Global
*As of November 3, 2023

Respondents are still very bullish toward generative AI, with increased confidence in a new wave of technology unicorns relative to the first half of the year. A majority believe that expectations have been overhyped, but 35% still said they were more bullish than before. Based on the survey responses, generative AI's most compelling use cases appear to be centered on automation and efficiency improvements across various industries. Generative AI can enhance diagnostics, copywriting, and data mining while also playing a significant role in healthcare research and improving customer engagement. The technology is particularly valued for its ability to automate repetitive tasks, generate content, and assist with design and analysis, pointing to a potential future in which AI integration becomes a universal tool for innovation and productivity enhancement.