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Published on April 6, 2023

Contents

Key takeaways	1
Introduction	2
Evolution of the fundraising market	2
Pace and size of fundraising	5
Billion-dollar fund profile	7
Is the era of billion-dollar funds subsiding?	9

The Transient Era of Billion-Dollar Funds

Why did 2022 see a record number of billion-dollar funds, and will this pace of fundraising continue?

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

- From 2006-2022, 62 unique GPs, five of them CVC arms, have raised 139 billion-dollar funds with commitments totaling \$277.9 billion.
- Over the last decade, the US VC market has expanded at the top, causing late- and venture-growth-stage startups to require more capital to support their operations and creating a fertile environment for the growth of billion-dollar funds.
- Propelled by an increasing number of mega-rounds, strong asset class returns and fund distributions to LPs, as well as adjusted risk profiles resulting from targeted investment strategies, 2021 and 2022 marked a distinct shift in the fundraising environment for these billion-dollar funds, in which a record 25 and 35 funds, respectively, closed with commitments totaling \$147.9 billion.
- Aligned with the fundraising slowdown in the broader US VC market, in Q4 2022 and the first quarter of 2023 only four billion-dollar funds closed. Considering the lack of viable paths to liquidity, investor portfolios impacted by the denominator effect, and the uncertainty of a near-term market rebound, we don't expect the market will be as fertile for these types of large vehicles in the near future.

Introduction

In recent years the US VC market has seen an unbridled pace of fundraising, culminating in 2022's record annual figure of \$162.6 billion in capital commitments. 2022's fundraising success was largely driven by the momentum generated over the prior few years, which will likely go down as one of the best times ever for VC fundraising. The record commitments were not spread evenly across fund sizes, however, with much of the capital being invested into larger vehicles: A record number of funds closed with commitments of \$1 billion or greater during the year—amassing \$93.0 billion, or 57.0% of the capital raised in 2022—for a small number of GPs.

Raising a billion-dollar fund is no easy feat for a GP, especially in a challenging market, but 35 billion-dollar funds were raised in 2022—40% more than closed in the prior year and more than three times as many as any year prior to 2020. Now, nearly half of the record \$300.0 billion in dry powder is held within these vehicles by a small group of investors, consolidating a lot of power into a few hands. The GPs that raised these large vehicles capitalized on investor demand to raise new funds at an incredibly fast clip, with 13 of the managers raising a new billion-dollar fund less than two years after their previous one, while a record 14 new managers entered the billion-dollar fund management group. Although these vehicles might not garner as much attention as startup unicorns, the weight they carry in VC is undeniably growing.

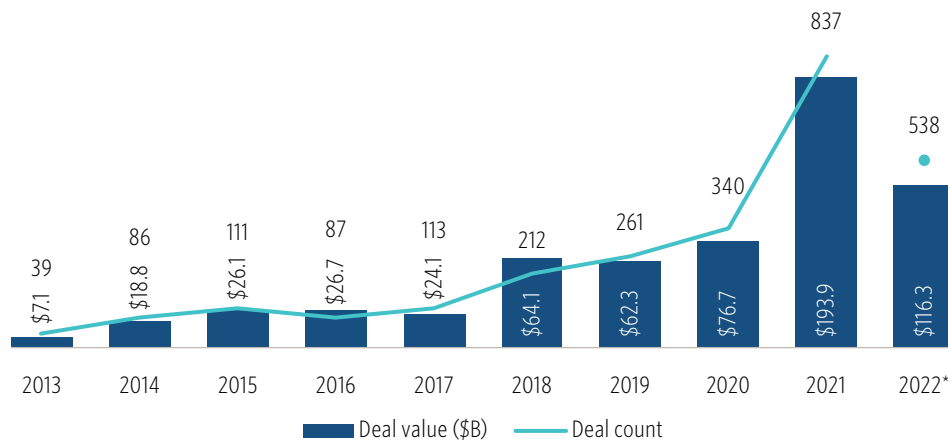
This note will explore the macroeconomic factors and the changes to the VC market that shifted fundraising activity trends and allowed a select group of GPs to close a record number of billion-dollar funds.

Evolution of the fundraising market

As a result of the VC market's dramatic growth in the last decade, startups have stayed private longer, and the number of unicorns has exploded. As a result, the VC market has expanded at the top, causing late- and venture-growth-stage startups to require more capital to support their operations prior to an exit event. Over the last five years, deal metrics in these stages have steadily crept upwards, straining funds without sufficient reserves of dry powder and forcing GPs to reevaluate proper fund sizes.

Late-stage median deal sizes, which had hovered around \$6 million until 2018, surged to nearly \$12 million in 2021. Venture growth median deal sizes followed a similar trend, increasing from \$13.7 million in 2017 to a peak of \$30.6 million in 2021. This growth has been made even more evident by the increase in US VC mega-rounds (\$100 million+)—1,375 in 2021-2022—which is more than the 1,274 mega-rounds closed in the preceding eight years combined.

US VC mega-round activity



Source: PitchBook • Geography: US
*As of December 31, 2022

Nontraditional investors have been one supplier of equity capital to these startups, but a select group of traditional venture capitalists have also expanded their fundraising efforts and raised billion-dollar funds to help fill the dealmaking void at the top of the market. From 2006-2022, 62 unique GPs, five of which were corporate venture capital (CVC) arms, raised 139 billion-dollar funds with commitments totaling \$277.9 billion. Most of the capital raised occurred in 2021 and 2022, which saw 42 unique GPs close 60 billion-dollar funds with commitments totaling \$147.9 billion. 25 of the VCs raised their first billion-dollar fund in the past two years, highlighting the attention this area of the market has received recently. Forerunner Ventures is a prime example of a firm that historically raised smaller funds, with sizes ranging from \$40 million to \$500 million, but saw a surge in fundraising activity and closed its first billion-dollar fund in 2022 with \$1.0 billion in commitments, enabling them “to invest at the earliest stages, maintaining a stake in how [they] support founders and teams shape the future, while also enabling [them] to invest in later-stage leaders and companies [whom they] recognize as true standouts.”¹

For these GPs to raise the necessary capital to participate effectively at the top end of the VC market, they must tap larger LPs with the means to fund these vehicles. However, large LPs such as endowments and pension funds need billion-dollar funds themselves to effectively invest into a venture strategy. For example, as of Q3 2022, the majority of the California Public Employees’ Retirement System’s (CalPERS) \$423.0 billion in assets were invested in public equities and fixed income, while its PE carveout represented just 11.5%, or \$48.8 billion.² Within CalPERS’ PE allocation, its venture capital investments target up to 7%, implying that up to \$3.4 billion of its portfolio could be invested in this asset class. Pension funds such as CalPERS have investment policies, or mandates, that limit their ability to invest in any VC fund because their “commitments to any one fund cannot exceed 25%,”³ making

1: “The Future Forerunners; Fund VI \$1B,” Forerunner, Kirsten Green, 2022, accessed on March 23, 2023.

2: “CalPERS Trust Level Quarterly Update—Performance & Risk,” CalPERS, September 30, 2022.

3: “California Public Employees’ Retirement System Total Fund Investment Policy,” CalPERS, November 14, 2022.

it especially difficult to fully invest their allocation across small funds. Larger LPs are incentivized to commit capital to larger funds to minimize the time spent evaluating GPs. In 2022, CalPERS made commitments to three funds launched by Lightspeed Venture Partners, helping Lightspeed’s funds exceed the \$1 billion threshold in commitments.

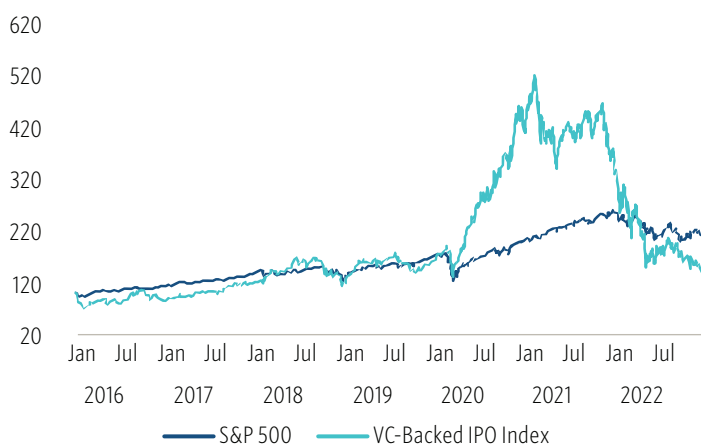
Investors raising billion-dollar vehicles have capitalized on several factors boosting LP interest in VC. For one, the VC strategy has generated strong returns over the past decade. Roughly \$326 billion in exit value was generated in 2020. That was followed by an astonishing \$753.2 billion in exit value in 2021, marking more than \$1 trillion in value generated from the VC market in just two years. Moreover, the elevated exit activity through 2021 translated to robust returns for LPs. Looking at VC fund-weighted horizon IRRs shows that US VC funds over the last 10 years have earned returns of 16.5%—and have seen even greater returns if the three-year and five-year horizon periods are considered.

The heightened exit activity and fund returns translated to 2020 and 2021 setting record annual fund distributions of \$54.3 billion and \$100.3 billion, respectively. Strong fund distributions back to LPs incentivized the re-investment of capital into the VC ecosystem, helping fuel fundraising activity. Strong cash inflows to LPs can also attract new participants to the VC market and encourage existing ones to increase their allocations to reputable GPs raising billion-dollar funds.

US VC fundraising activity

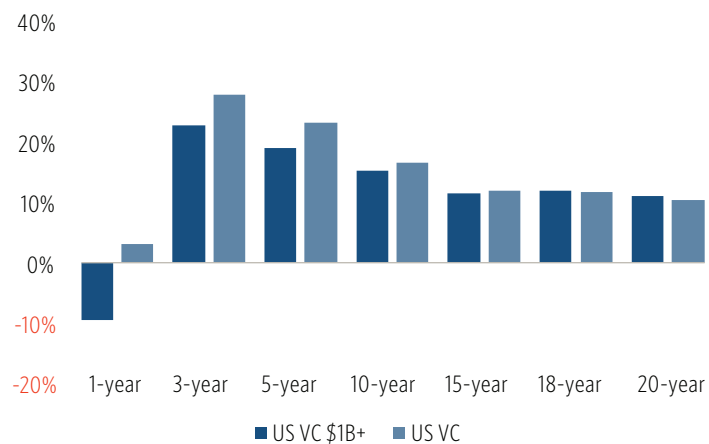
The growth of other asset classes in recent years has also led to increased ability for LPs to allocate to the VC asset class to balance their portfolios—an inverse denominator effect. Examining the performance of the S&P 500 and the US VC-backed IPO Index in 2020 and 2021 helps demonstrate the tremendous growth of investors’ portfolios, laying the foundation for healthy fundraising activity. The indexes’ upward trajectory through 2021 further contributed to the upward extension of the VC market because private companies used more highly valued public companies as comparables to set higher valuations and deal sizes in subsequent financing rounds.

US VC-backed IPO Index & S&P Index values rebased to 100



Source: PitchBook • Geography: US
*As of December 31, 2022

VC fund-weighted horizon IRRs by size bucket

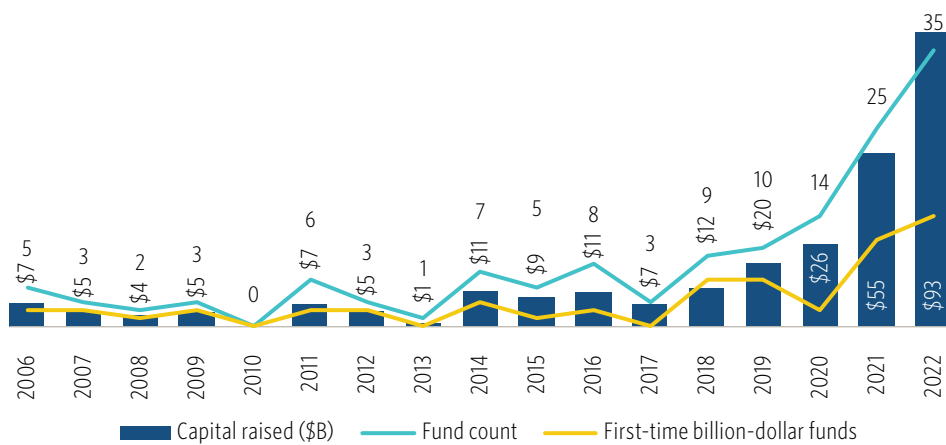


Source: PitchBook • Geography: US
*As of March 27, 2023

Pace and size of fundraising

The record US VC fundraising environment, spurred by increased LP interest, set annual records for five consecutive years (2018-2022). Billion-dollar funds may have existed for many years, but 2021 and 2022 marked a distinct shift in the fundraising environment for these vehicles. In 2021, the demand to secure access to promising and consistent returns from investment vehicles able to participate in late- and venture-growth-stage deals led investors to concentrate their capital among larger funds and close 25 billion-dollar funds. 2021's fundraising momentum surged into 2022, as a record \$93.0 billion closed across 35 funds with commitments of \$1 billion or greater. The recessionary activity in 2022 induced the denominator effect, afflicting investor portfolios and causing LPs to prioritize longstanding relationships with GPs and further concentrate their VC allocations within a greater number of billion-dollar funds. The shift in 2022 also set the stage for the record number of billion-dollar funds, as GPs looked to wrap up fundraising before the market became too frosty.

US VC \$1B+ fundraising activity



Source: PitchBook • Geography: US
*As of March 27, 2023.

Managers often space out their fundraising campaigns to focus on investing already committed capital and to demonstrate growth through unrealized portfolio gains to attract new and existing LPs to commit to new funds. In 2022, however, the average time between funds for the broader US VC market dropped to a decade low of just 1.8 years, highlighting how quickly managers returned to market and opened new funds. While the pace of fundraising picked up across the broader VC market, a subset of GPs expeditiously closed billion-dollar funds. GPs of billion-dollar funds raised at even faster pace with an average time between funds of just 1.6 years.

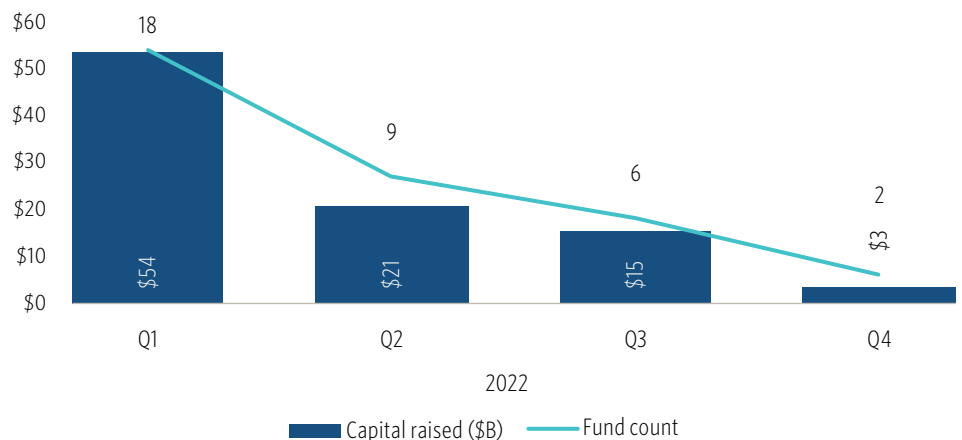
At a basic level, GPs were simply capitalizing on the heightened investor demand to capture a larger number of commitments than they had in prior raises. In 2022, the median US VC fund size step-up was 59.3%, more than 10% above any prior year and indicative of the unfettered flow of investor dollars. GPs raising billion-dollar funds saw an even greater amount of capital swarm their investment offerings. In 2022, Andreessen Horowitz closed billion-dollar funds in four of its fund families—

a16z Crypto IV, AH Bio Fund IV, LSV Fund III and Fund VIII—totaling \$13.5 billion in commitments. Andreessen’s billion-dollar funds had median step-ups of 93.2%, demonstrating the success reputable GPs had in raising massive amounts of capital.

Looking at quarterly fundraising activity in 2022, it is clear that the record number of funds with commitments totaling \$1 billion or more was not evenly distributed across the year. Further highlighting GPs’ ability to capitalize on the momentum of 2021 and return to market to raise more commitments, 27 of 2022’s 35 billion-dollar funds were closed during the first two quarters, while in Q4 2022 and the first quarter of 2023, only four of these large vehicles closed.

Investor appetite for billion-dollar funds has also been afflicted by their recent performance. Referring to the VC fund-weighted horizon IRRs chart above, we see that the one-year horizon performance for these funds is -4.9%, indicating that investments by these funds have not retained their value in the current market. Poor performance of billion-dollar funds has caused investors to temporarily stall new commitments to their managers and consider smaller funds that can more effectively deploy capital to venture stages that are more insulated from public market volatility.

US VC \$1B+ fundraising activity by quarter in 2022



Source: PitchBook • Geography: US
*As of March 27, 2023.

Top GPs who have raised a \$1B+ US VC fund by committed capital and count in 2022*

GP Name	Committed Capital (\$B)	Funds (#)
Andreessen Horowitz	13.5	4
Tiger Global Management	12.7	1
Alpha Wave Global	10.0	1
Chimera Capital	10.0	1
Lightspeed Venture Partners	6.6	3
General Catalyst	5.7	2
Founders Fund	5.4	2
Accel	4.0	1
Bessemer Venture Partners	3.9	1
Battery Ventures	3.1	1
ARCH Venture Partners	3.0	1
Thrive Capital	2.5	1
BOND Capital	2.5	1
Ribbit Capital	2.3	2
SVB Capital	2.0	1
Lead Edge Capital	2.0	1
StartupLab	1.9	1
Oak HC/FT	1.9	1
Y Combinator	1.4	1

Source: PitchBook • Geography: US
*As of March 27, 2023.

Billion-dollar fund profile

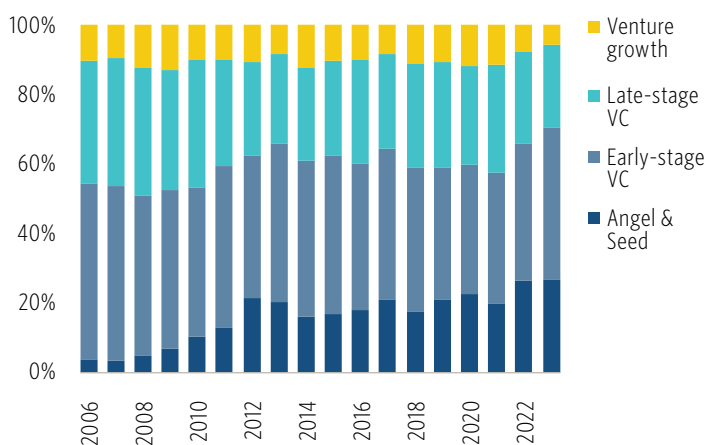
GPs of billion-dollar funds have traditionally invested across the entire VC lifecycle because they often manage several different sized vehicles, allowing them to efficiently invest at all stages. However, by investing in late- and venture-growth-stage startups through billion-dollar funds, GPs offer an adjusted risk profile to potential LPs. Our VC Returns by Series analyst notes peg the dollar failure rate of Series F financing investments at just 4.5%, significantly lower than earlier rounds.⁴ For example, the Series A dollar failure rate was 16.1%, based only on known failures.

4: PitchBook Analyst Note: VC Returns by Series: [Part I](#), [Part II](#), and [Part III](#).

Looking again at the VC fund-weighted horizon IRR chart above, we see that billion-dollar funds have consistently had lower returns than the broader market as a result the venture stages in which they participate and the relatively smaller upside potential for later-stage investments. By participating in financing rounds more likely to return capital and enable them to exit more quickly, GPs managing billion-dollar funds can make the statement to LPs that the funds entertain lower investment risk than smaller-sized VC fund alternatives. This offering can convince some risk-adverse investors looking for more consistent returns to participate in this asset class and contribute capital to billion-dollar funds.

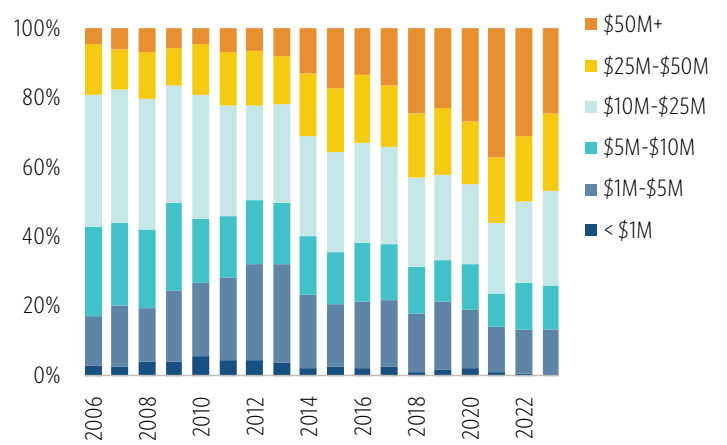
The recent year’s recessionary activity has significantly changed the VC landscape for late- and venture-growth-stage startups. The decline in public equities coupled with the lack of liquidity for investors resulting from the closed IPO window has led to investor pullback and a dramatic drop in median deal size and pre-money valuations. Nontraditional investors attempting to correct their portfolios’ overexposure to VC have slowed their participation in late- and venture-growth-stage deals; in 2022 PE investors participated in 14.7% of US VC deals on a deal count basis—a sizeable drop from their 2021 participation rate of 17.2%. Moreover, VCs participating in these stages have also slowed their pace of investment as they wait for public and private valuations to better reconcile. The investor pullback has translated to a 2022 venture-growth-stage median deal size of \$18.6 million, representing a 39.2% decline from the prior year, as well as a late-stage median deal size YoY decline of 16.7% to \$10.0 million. This shift poses a challenge to billion-dollar funds looking to efficiently deploy capital to the VC ecosystem because they will have to decide whether to temporarily stall or limit investments in late- and venture-growth-stage startups or reserve their capital to invest in startup follow-on rounds in a couple years; either way, we expect deal metrics in these stages will continue to decline.

Share of US VC deal count with participation from investors who have raised a \$1B+ VC fund by type



Source: PitchBook • Geography: US
*As of March 27, 2023.

Share of US VC deal count with participation from investors who have raised a \$1B+ VC fund by size bucket



Source: PitchBook • Geography: US
*As of March 27, 2023.

Is the era of billion-dollar funds subsiding?

2022 looks likely to retain the record for billion-dollar fund closings for some time. While the market won't quickly shift away from companies staying private longer, the market mechanics that set the stage for 2022's 35 billion-dollar fund closings have all but evaporated in the beginning of 2023.

Drawdowns in other asset classes have left many LPs with an unbalanced portfolio, and the long-term nature of VC commitments make it a difficult strategy to rebalance. The denominator effect is likely to push LPs to slow the pace of commitments to VC until public market portfolios recover. In the same vein, the recent poor returns many large venture vehicles are seeing because of the decline of valuations and the poor exit market aren't likely to present the strategy as an impactful use of capital. We have spoken often that a robust IPO market is the key to a return to more active dealmaking, and that sentiment holds true for billion-dollar fundraising as well. Without IPOs as a viable path to liquidity, the top end of the VC market, where the largest funds operate, will be much riskier than we have seen in the past.

The significant slowdown in VC fundraising observed from Q1 of last year to Q4 shouldn't be expected to abate any time soon. Early data for Q1 2023 highlights a persisting poor fundraising market, and just two billion-dollar vehicles closed through March 8. The fast pace of fundraising in 2022 that led to the record commitments and high number of large vehicles was a product of the booming VC market. Exit value, however, declined more than 90% in 2022 from the previous year.

As the macroeconomic environment has become more turbulent, and as VC returns and valuations continue to reconcile with public markets, investor confidence in this asset class has been tested. Those that have committed capital in recent years are in for the long haul, but they will likely keep a close eye on the performance of these exorbitantly large vehicles and withhold larger commitments until fund distributions resume. Additionally, in a market where valuations and deal sizes are declining, we expect GPs to return to raising smaller-size vehicles that can more effectively deploy capital. For these reasons, we don't expect the market to be as receptive to billion-dollar funds in the near term, and a return to the exuberance shown in 2021 and 2022 would be needed for record commitments to return to billion-dollar funds.

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