

# Index of Venture-Backed IPOs

## New tools for evaluating price performance of VC-backed IPOs

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### Key takeaways

- **VC-backed IPOs have trailed the market over the long term.** While venture-backed companies that listed publicly have fared better than public benchmarks over a one-year horizon, the index of market-cap-weighted VC-backed IPOs has underperformed over the past decade. The returns have been remarkably steady over that time span; however, the rolling on and off of new constituents as companies age out of the index perhaps stunted the performance through the post-crisis recovery.
- **Smaller IPOs have driven a substantial amount of performance.** Over the short and long term, the equal-weighted index has actually outperformed the market-cap counterpart by a significant margin. Given biotech startups tend to be smaller at the time of IPO, they currently constitute more than half of the equal-weighted index by weight, in stark contrast to the large-cap biased market-cap version. Since these healthcare ventures go public earlier in their life, they can see exponential returns in the public markets if their products prove successful. Because many technology unicorns have already built a massive amount of value in the private markets, they find it more difficult to continue sustaining growth once transitioning into a public company.

### Introduction

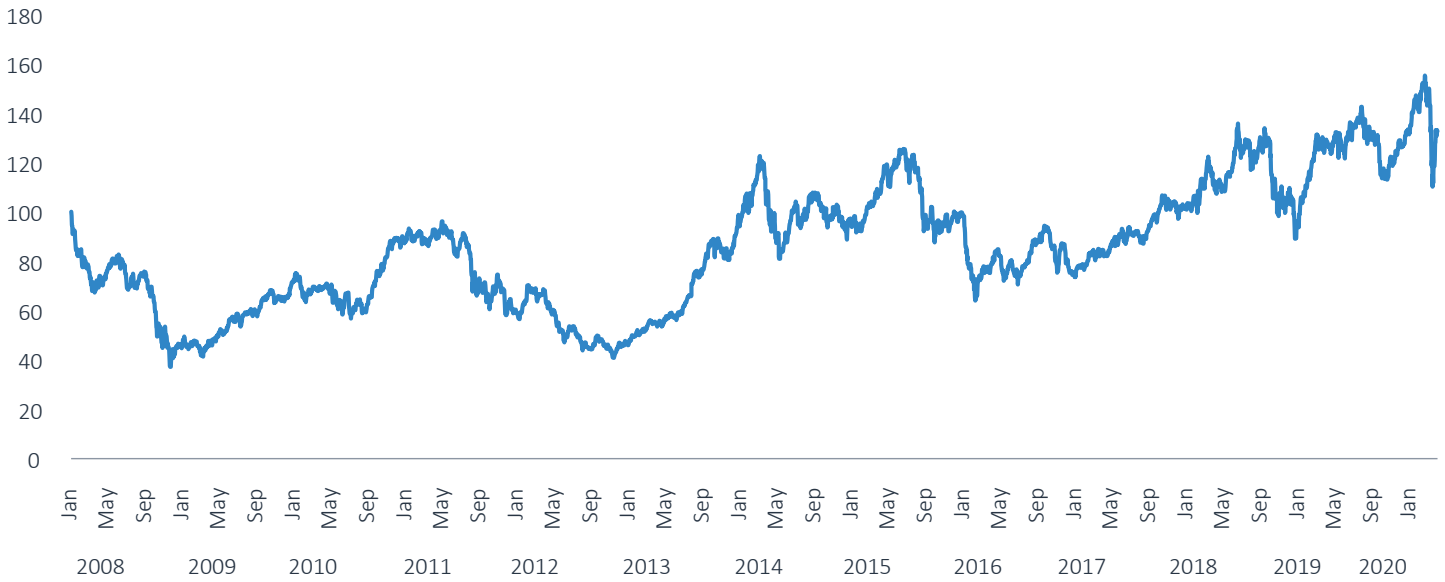
IPOs are a popular exit option for some of the largest VC-backed companies. However, given the structure of the transaction, VC firms are often not able to sell into the IPO itself, leaving them holding shares until the lock-up expires at the earliest—and potentially much later than that. With a formalized index of recent VC-backed IPOs, investors will be able to clearly view how these newly listed companies have fared relative to the broader market in order to inform investment decisions or compare these companies' performance to those in their current portfolio. We've provided two different weighting approaches (market cap and equal weighted) to cater to various investor types and allow for more analysis in the future. A detailed methodology appears later in the note.

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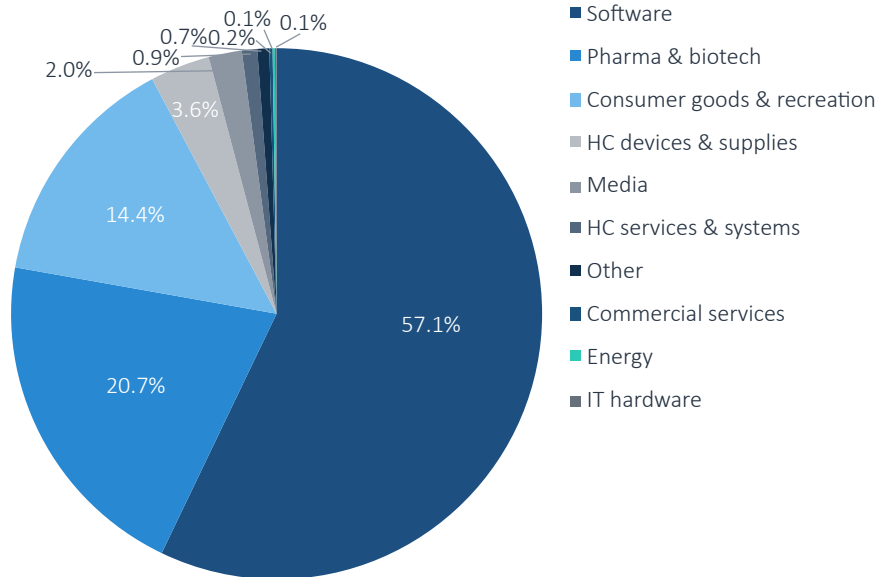
### Market-cap-weighted index

Market-cap-weighted index performance\*



Source: PitchBook | Geography: Global  
\*As of March 31, 2020

Companies in the market-cap-weighted index by sector and weight\*



Source: PitchBook | Geography: Global  
\*As of March 31, 2020

## Market-cap-weighted index performance comparison\*

Strategy	1-year	5-year	10-year
Market-cap-weighted index	4.1%	4.2%	6.8%
S&P 500	-7.0%	6.7%	10.5%
Russell 2000 Growth	-18.6%	1.7%	8.9%

Source: PitchBook | Geography: Global  
\*All index values are CAGRs as of March 31, 2020

## Top 10 companies in the market-cap-weighted index by weight\*

Company name	Weight	IPO date	Industry code
Uber	10.2%	May 10, 2019	Automotive
Pinduoduo	8.9%	July 26, 2018	Internet retail
Zoom Video Communications	8.6%	April 18, 2019	Communication software
Spotify	4.7%	April 3, 2018	Entertainment software
DocuSign	3.5%	April 27, 2018	Business/productivity software
Slack	3.2%	June 20, 2019	Communication software
BioNTech	2.8%	October 10, 2019	Biotech
CrowdStrike	2.5%	June 12, 2019	Network management software
Datadog	2.3%	September 19, 2019	Network management software
GSX Tchedu	2.1%	June 6, 2019	Educational and training services (B2C)

Source: PitchBook | Geography: Global  
\*As of March 31, 2020

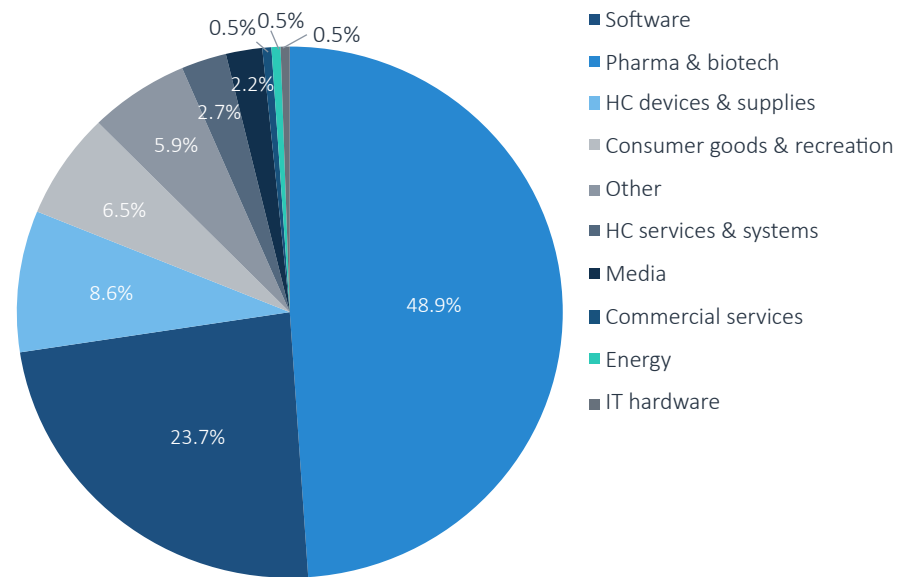
### Equal-weighted index

Equal-weighted index performance\*



Source: PitchBook | Geography: Global  
\*As of March 31, 2020

Companies in equal-weighted index by sector and weight\*



Source: PitchBook | Geography: Global  
\*As of March 31, 2020

## Equal-weighted index performance comparison\*

Strategy	1-year	5-year	10-year
Equal-weighted index	9.5%	15.1%	17.7%
S&P 500	-7.0%	6.7%	10.5%
Russell 2000 Growth	-18.6%	1.7%	8.9%

Source: PitchBook | Geography: Global  
 \*All index values are CAGRs as of March 31, 2020

## Top 10 performers in Q1 2020

Company name	Quarterly returns	IPO date	Industry code
Vir	172.8%	October 11, 2019	Biotech
Forty Seven	143.8%	June 28, 2018	Biotech
Kezar Life Sciences	116.8%	June 21, 2018	Biotech
Zoom Video Communications	116.8%	April 18, 2019	Communication Software
CENTOGENE	98.6%	October 28, 2019	Other healthcare services
GSX Techedu	93.8%	June 6, 2019	Educational and training services (B2C)
Twist Bioscience	79.3%	October 31, 2018	Biotech
BioNTech	72.4%	October 10, 2019	Biotech
BioXcel Therapeutics	71.2%	March 8, 2018	Therapeutic devices
Alector	60.5%	February 7, 2019	Drug discovery

Source: PitchBook | Geography: Global

## Methodology

To introduce the product, we're diving deep into the rationale behind the methodology to help fully explain what the different indices are displaying.

### *Index inception*

- The index has been retroactively created as of January 1, 2008 (that is, including IPOs from 2006 onward).
- At inception, the index was based to 100.

### *Population*

- Every VC-backed IPO included is listed on the NYSE and Nasdaq, regardless of company headquarter location. We chose this broader geographical scope to better reflect the investments of the developed VC participants, who may have diversified strategies investing across Europe, China and the US.
- Companies must debut with a post-money valuation of more than \$50 million to be considered for inclusion.

### *Reconstitution*

- Newly listed companies that fit the criteria are first included beginning the first day of the quarter after they exit via IPO and continue to be included until the first day of the quarter after they have been trading for two years. For instance, a company that completes an IPO in February 2018 will be included during the March 31, 2018 rebalance and dropped out at the March 2020 rebalance.
- In addition to normal deletions from aging out of the two-year window criteria, companies will also be removed from the index following an acquisition, bankruptcy or their market cap falling below \$50 million at any rebalance. If the event falls in the middle of the quarter, these companies are removed at the next rebalance date.
- Companies can be added to the index on a more expedited basis: If a company falls in the 95th percentile market cap of companies in the index, it will be added the day after its IPO.
- All index weights are rebalanced quarterly, or in the event of an inter-period addition or deletion.

### *Weighting*

**Market-cap weighted:** Market-cap weighting emphasizes larger listings and the top end of the VC market and is a common weighting mechanism for indices. This weighting will be more useful to late-stage VC investors who invest in pre-IPO securities, as well as asset managers who invest in public offerings. This index is rebalanced using the divisor method to ensure its value reflects changes in performance instead of changes in constituents. Additionally, at every rebalancing period we instituted a 20% cap for the weight of any single company in the index to avoid extreme concentration.

**Equal weighted:** We also present a second version of the index that is equal weighted and that will give a slightly different view of the VC-backed IPO market, de-emphasizing large IPOs such as Uber, Spotify, Facebook, etc., which dwarf most other listings. It instead gives outsized influence to smaller listings, predominantly in healthcare or biotech, that dominate VC-backed IPO volumes. Furthermore, many of the larger market cap companies created significant value in the private market, whereas these smaller businesses, in theory, might be earlier in their growth curve and provide more upside potential for public market investors. This look might be more beneficial to earlier-stage and biotech investors with a higher risk-return profile.