

Morningstar Unicorn Market Monitor: Q1 2023

Unicorns brace for a reset in valuations as funding falls.

Morningstar Inc.

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A confluence of macroeconomic factors that created headwinds for late-stage venture in the latter half of 2022 were further exacerbated by destabilization in the funding ecosystem caused by the collapse of Silicon Valley Bank and Signature Bank in the first quarter of 2023. Further, as interest rates continue to rise, an industry built upon abundant investor funding is feeling the pinch.

After a period of divergence, public and private-market valuations recently drew near as global stocks rallied in the first quarter. The Morningstar PitchBook Global Unicorn Index, a proxy for the late-stage venture market, trailed public markets in the first quarter of 2023—supporting the notion that private company valuations generally lag public equity prices.

Private market valuations of many unicorns have seen a drastic decline in the first quarter, with global payments firm Stripe, a bellwether for the late-stage market, seeing its valuation halved from USD 95 billion to an estimated USD 50 billion in the latest fundraise.

Leveraging the recently launched Morningstar PitchBook Global Unicorn indexes, we provide a wealth of data-driven insights on the risks and rewards looming in the late-stage venture markets. The Morningstar PitchBook Global Unicorn Indexes dynamically track trends in this segment using a proprietary mark-to-model pricing methodology, allowing investors to stay up to date on daily valuations based on private assessments as well as comparable public stock prices.

We would love to hear from you. Please send us your thoughts at UnicornIndexes@morningstar.com.

Key Takeaways

- ► The Morningstar PitchBook Global Unicorn 500 Index was flat in the first quarter of 2023, as it gained just 0.24%. In comparison, the Morningstar Global Markets Index, a proxy for the global public markets, rose nearly 7% during the quarter.
- ► The launch of ChatGPT has thrust artificial intelligence into the spotlight, creating seismic shifts across industries as investors pour capital into these innovative technologies, driving growth in the sector.
- ► The first quarter of 2023 saw only 19 late-stage venture capital mega-rounds (rounds of \$100 million or more) in the United States, which reflects a decrease in investors' confidence to deploy large amounts of capital into a single deal. By comparison, 98 mega-rounds were completed in the first quarter of 2022.

https://indexes.morningstar.com/

- ► A total of 335 newly minted unicorns entered the Morningstar PitchBook Global Unicorn Index in all of 2022, compared with just 11 new unicorns during the first quarter of 2023.
- ▶ India, previously second only to the U.S. for creating unicorns in 2022, has seen an unprecedented reversal of its startup valuations, with the Morningstar PitchBook India Unicorn 25 Index declining by 11.95% in the first quarter. In addition to layoffs and a challenging environment for IPOs, this has exposed some of the vulnerabilities underlying India's growth story.

Market Insights

The Morningstar PitchBook Global Unicorn 500 Index was flat in the first quarter of 2023, as it gained just 0.24%. In comparison, the Morningstar Global Markets Index rose 6.98% during the quarter. However, we saw increased interest in the Morningstar PitchBook US Unicorn 100 Index, which rose 4.00% during the quarter as the Morningstar US Market Index also rose 7.40%.

Unicorn Indexes	Q1 2023	1Y	3Y	5Y
Morningstar PitchBook Global Unicorn 500	0.24%	-5.24%	26.60%	25.60%
Morningstar PitchBook US Unicorn 100	4.00%	0.19%	41.78%	32.31%

 Morningstar PitchBook Global Unicorn 300
 0.24%
 -3.24%
 26.60%
 25.60%

 Morningstar PitchBook US Unicorn 100
 4.00%
 0.19%
 41.78%
 32.31%

 Morningstar PitchBook Asia Unicorn 100
 0.76%
 -1.65%
 15.88%
 18.41%

 Morningstar PitchBook Europe Unicorn 50
 1.06%
 -2.85%
 46.46%
 48.11%

Global Market Indexes

Exhibit 1 Trailing Returns %

Morningstar Global Markets	6.98%	-8.37%	15.66%	7.04%
Morningstar US Market	7.40%	-9.99%	17.71%	10.52%
Morningstar Asia	4.62%	-7.41%	8.37%	1.16%
Morningstar Europe	10.12%	-0.80%	15.23%	4.17%

The Morningstar PitchBook Global Unicorn indexes were launched in November 2022. The performance inception date, when the first backtested index values were calculated for the Morningstar PitchBook Global Unicorn Index, is Dec. 19, 2014.

Source: Morningstar. Data as of March 31, 2023.

Given the ongoing rate hikes and falling valuations, late-stage startups faced significant challenges while looking for an exit path in the first quarter. Many of these companies are trapped in a capital crunch caused by the withdrawal of nontraditional investors and a hostile exit environment for companies planning on going public. *Nontraditional investors* is an umbrella term that includes corporate venture capital groups, mutual funds, hedge funds, and sovereign wealth groups, which have been instrumental in venture capital deal activity in recent years. Nontraditional investors have continued to slow their capital deployment amid a risk-off environment. Mature startups are also subject to increased pressure from the existing investor syndicate to achieve liquidity, and the push toward a near-term exit will likely lead to an uptick in acquisition activities from corporations with ample cash reserves.

Two very different scenarios continue to emerge in the world of new funding. Companies that can forgo fundraising right now have opted to do so, as they don't want to risk a hit to their valuation marks. However, recent interest in artificial intelligence and its potential applications show there are dramatic fluctuations across the space. In January, Microsoft extended its 2019 partnership with OpenAI, whose

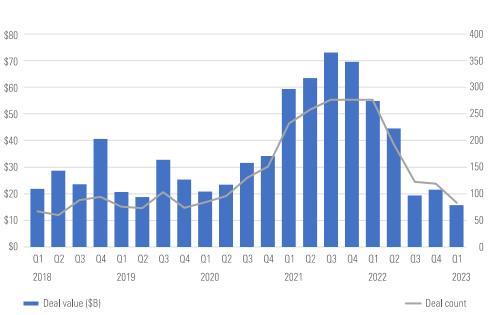
artificial intelligence tool called ChatGPT has excited consumers and investors alike since it was introduced in November. Microsoft invested an additional \$10 billion in OpenAl, which builds upon its \$1 billion investment in the company in 2019 and in 2021.

New Deal Flow Drops to 21-Quarter Low

Exhibit 2 Unicorn Deals by Quarter

Late-stage venture fundraising has fallen dramatically since its record heights in 2021, and it has hit a 21-quarter low. For unicorns, the first quarter of 2023 saw just \$15.9 billion in deal value across an estimated 85 deals.

The first quarter of 2023 saw only 19 late-stage venture capital mega-rounds (rounds of \$100 million or more) in the U.S., which reflects a decrease in investors' confidence to deploy large amounts of capital into a single deal. By comparison, 98 mega-rounds were completed in the first quarter of 2022, which further illustrates investors' change in sentiment.



Source: PitchBook. Data as of March 31, 2023.

Much of this pullback is attributed to the retreat of nontraditional investors, which late-stage startups were heavily reliant upon for financing in the past due to their large balance sheets and ability to meet the capital demands of these capital-intensive businesses. In the first quarter, just \$7.8 billion of late-stage deal value involved a nontraditional investor, which is only 10.2% of the entire sum invested last year. This absence of capital has contributed to a growing funding gap between startups looking for financing and investors that are willing to provide it.

For late-stage venture in particular, the gap has become so wide that PitchBook estimates there is just \$1 of funding available for every \$3.24 demanded, representing a demand-to-supply ratio of 3.24x. This dramatic gap between funding demand and supply is quite concerning, especially since a year ago the ratio for late-stage venture was 0.9x, indicating that more capital was available than was needed.

3.5x 3.0x Capital demand to supply ratio 2.5x 2.0x 1.5x 1.0x 0.5> 0.0x2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 - Later stage index

Exhibit 3 Capital Demand/Supply Ratio in the Late-Stage VC Marketplace

Source: Pitchbook. Data as of March 31, 2023

This shortage of capital is a major cause of concern for startups that need it for survival. While many companies anticipated a decline in funding and have tried to slow their cash burn, few startups are able to wait out this lackluster funding environment for long. The combination of reduced capital and macroeconomic headwinds could create a very difficult environment for many startups, in which the best-case scenario would be a down round and the worst-case scenario would be going out of business.

For companies with a postmoney valuation greater than \$1 billion that raised money in the first quarter of 2023, 81% had up rounds and 19% had down rounds. In comparison, the percentage of down rounds in full-year 2022 was 11%.

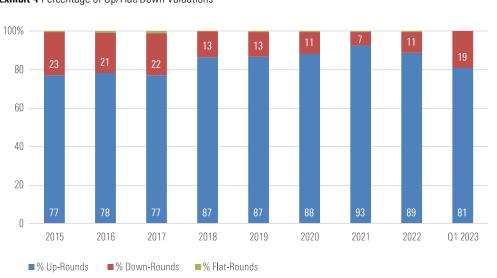


Exhibit 4 Percentage of Up/Flat/Down Valuations

Source: Morningstar. Data as of March 31, 2023.

Volatility Creates a Reset in Unicorn Valuations

The most noteworthy unicorn up round in the first quarter was Chinese company JD Industrial Products, which is an e-commerce platform for industrial products. In its latest funding round in March, JD Industrial Products' postmoney valuation of \$6.3 billion was over 3 times greater than its previous postmoney valuation.

Wiz, a U.S. cybersecurity firm, had the second-highest step-up multiple of 1.72 in the quarter. The company raised \$300 million of Series D venture funding in February 2023, which put the company's postmoney valuation at \$10.3 billion. Matrixport, a Singapore-based cryptocurrency financial-services platform, had the third highest step-up multiple in the quarter of 1.40 and a postmoney valuation of \$1.5 billion.

Exhibit 5 Largest Up Rounds for Morningstar PitchBook Global Unicorn Index Constituents in First-Quarter 2023

Unicorn	Step-Up Multiple	Latest Funding Round Date	Latest Post-Money Valuation (\$B)	Country	Primary PitchBook Vertical
JD Industrial Products	3.16	09-Mar-23	6.33	China	E-Commerce
Wiz	1.72	27-Feb-23	10.30	United States	Cybersecurity
Matrixport	1.40	01-Jan-23	1.54	Singapore	Cryptocurrency/ Blockchain
ByteDance	1.22	14-Mar-23	220.00	China	Mobi l e

^{*}Step-Up Multiple is the increase in a company's valuation, calculated by dividing a company's postmoney valuation at a round by its postmoney valuation at its previous funding round.

Source: Morningstar. Data as of March 31, 2023.

The mismatch between capital demand and supply created several down rounds during the quarter. The largest valuation markdown was Vox Media, which had a valuation markdown of 58%. Vox Media is no longer in the Morningstar PitchBook Global Unicorn Index as its postmoney valuation is now \$500 million. The second-largest valuation markdown was the payments company Stripe, which raised more than \$6.5 billion of Series I funding in March at a valuation of \$50 billion, representing a markdown of about 47%. Proceeds from Stripe's Series I round will be used to cover tax bills for restricted stock units issued to employees that expire at year-end.

Exhibit 6 Largest Down Rounds for Morningstar PitchBook Global Unicorn Index Constituents in First-Quarter 2023

Unicorn	Valuation Markdown	Latest Funding Round Date	Latest Post-Money Valuation (\$B)	Country	Primary PitchBook Vertical
Vox Media	-58.33%	06-Feb-23	0.50	United States	Mobile
Stripe	-47.37%	15-Mar-23	50.00	United States	FinTech
eToro	-30.00%	22-Mar-23	3.50	United Kingdom	Cryptocurrency/ Blockchain
SMS Assist	-5.00%	05-Jan-23	0.95	United States	Mobile

^{*}Valuation Markdown % is the decrease in a company's valuation. It is calculated by subtracting a company's postmoney valuation at a round from its postmoney valuation at the previous funding round and then dividing the result by the first postmoney valuation to express a percentage.

Source: Morningstar. Data as of March 31, 2023.

Unicorn Growth Continues to Slow

The number of newly minted unicorns continued to grow in the first quarter of 2023 but at a much slower rate than the previous year. A total of 335 new unicorns entered the Morningstar PitchBook Global Unicorn Index in all of 2022, compared with just 11 new unicorns during the first quarter of 2023. The cumulative valuation at point of creation for unicorns minted during the quarter was \$32 billion, which is behind the first quarter of 2022's \$294 billion. Unicorn creation was quite sparse in the first quarter, and this slowdown was fairly consistent across all major regions. Four unicorns were created in the U.S., two in Asia, and three in Europe. Interestingly, no new unicorns were created in India. India, previously second only to the U.S. for creating unicorns in 2022, has seen an unprecedented reversal of its startup valuations, with the Morningstar PitchBook India Unicorn 25 Index declining by 11.95% in the first quarter. In addition to layoffs and a challenging environment for IPOs, this has exposed some of the vulnerabilities underlying India's promising growth story.

Roughly a fourth of all unicorn startups have a valuation of less than \$1.2 billion, meaning these companies are at a substantial risk of losing their designation should they incur a down round. If the creation of new unicorns continues to slow and public markets continue to slide, investors may see a thinning of the unicorn herd—a first—later in 2023.

Aggregate Postmoney Valuation (\$B) Numebr of Unicorns Q1 2023 Aggregate Postmoney Valuation (\$B) ■ New Unicorns

Exhibit 7 Growth of Global Unicorns by Number and Assets

Source: Morningstar. Data as of March 31, 2023.

Steep Descent in Exit Activity

VC-backed startups are generally taking longer to exit, and a tumbling public market increases the motivation to delay a potential IPO. PitchBook estimates that, at the end of the first quarter of 2023, a total of 219 companies are in the IPO backlog.

As a result, portfolio company ages and the proportion of insider-led follow-on rounds are nearing all-time highs. Investors have also increased their expectations for profitability, which can be a difficult adjustment for companies that were built on a growth-at-all-cost mindset. We continue to believe an era of easy money for late-stage venture companies is likely coming to an end amid rising interest rates and fewer paths to exit.

Exhibit 8 Growth of Unicorns by Region Measured by Index Constituents

Index	Total Unicorns	New Unicorns Q1 2023	IPOs Q1 2023	Avg Valuation (\$B)	Total Valuation (\$B)
Morningstar PitchBook Global Unicorn	1,328	11	3	3.44	4,574
Morningstar PitchBook US Unicorn	706	4	0	3.33	2,352
Morningstar PitchBook Asia Unicorn	387	2	3	3.89	1,507
Morningstar PitchBook Europe Unicorn	135	3	0	3.23	436

Source: Morningstar. Data as of March 31, 2023.

 $\textbf{Exhibit 9} \ \mathsf{Performance} \ \mathsf{for} \ \mathsf{Morningstar} \ \mathsf{PitchBook} \ \mathsf{Global} \ \mathsf{Unicorn} \ \mathsf{Indexes:} \ \mathsf{Return} \ \%$

Unicorn Indexes	Q1 2023	1Y	3Y	5Y
Morningstar PitchBook US Unicorn	4.18%	0.29%	42.35%	33.93%
Morningstar PitchBook US Unicorn 100	4.00%	0.19%	41.78%	32.31%
Morningstar PitchBook Global Unicorn	2.29%	-2.34%	28.42%	26.64%
Morningstar PitchBook Global Unicorn 500	0.24%	-5.24%	26.60%	25.60%
Morningstar PitchBook Asia Unicorn	1.04%	-5.21%	14.53%	17.53%
Morningstar PitchBook Asia Unicorn 100	0.76%	-1.65%	15.88%	18.41%
Morningstar PitchBook Europe Unicorn	1.65%	-4.08%	41.80%	46.53%
Morningstar PitchBook Europe Unicorn 50	1.06%	-2.85%	46.46%	48.11%
Morningstar PitchBook China Unicorn 50	2.72%	15.04%	16.19%	20.15%
Morningstar PitchBook India Unicorn 25	-11.95%	-20.77%	8.98%	NA
Morningstar PitchBook UK Unicorn 20	-1.58%	-2.78%	66.90%	NA

Source: Morningstar. Data as of March 31, 2023.

Glossary

Deal, or Funding round: A discrete round of investment in which a business raises money to fund operations or growth in exchange for equity or an ownership stake. In venture capital investing, each funding round after the initial seed investment is given a series letter, beginning with A.

Down round: A funding round in which a company is determined to have a lower valuation than it had at the previous round.

Exit: A liquidity event for a private company, which can take the form of an initial public offering, a merger, or an acquisition.

Initial public offering: A company's debut on a public stock exchange, marking its transition from private to public company; at that point, the general population can invest in it.

Late-stage venture capital: A period of venture capital investment (usually after a Series C funding round) when companies have increased revenues and are near exit.

Mergers and acquisitions: A financial transaction that results in the combining of two companies to form a new company is a merger. One company buying another company and folding it into its operations is an acquisition.

Nontraditional investors: Investors other than venture capital firms that invest in venture-backed companies. These include corporate venture capital groups, hedge funds, mutual funds, and sovereign wealth funds.

Postmoney valuation: A company's dollar value as determined as inclusive of new capital invested in the round.

Premoney valuation: A company's dollar value as determined as excluding new capital invested in the round.

Step-up multiple: The percentage increase in a company's valuation, calculated by dividing a company's postmoney valuation at a round by its postmoney valuation at its previous funding round.

Unicorn: A venture capital-backed company with a postmoney valuation of \$1 billion or more.

Up round: A funding round in which a company is determined to have a higher valuation than it had at the previous round.

Valuation: A determination of a company's current dollar value based on a variety of factors, including capital and ownership structure. Often (though not always), each round of investor funding increases a

company's valuation, which is why valuations are often referred to as pre- or postmoney ("money," in this case, refers to a round of funding).

Valuation markdown %: The percentage decrease in a company's valuation. It is calculated by subtracting a company's postmoney valuation at a round from its postmoney valuation at the previous funding round and then dividing the result by the first postmoney valuation.

Venture capital: A form of financing where capital is invested into a company, usually a startup or small business, in exchange for equity in the company. It is a major subset of a much larger, complex part of the financial landscape known as *private markets*.

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Morningstar Indexes was built to keep up with the evolving needs of investors—and to be a leading-edge advocate for them. Our rich heritage as a transparent, investor-focused leader in data and research uniquely equips us to support individuals, institutions, wealth managers and advisors in navigating investment opportunities across major asset classes, styles and strategies. From traditional benchmarks and unique IP-driven indexes, to index design, calculation and distribution services, our solutions span an investment landscape as diverse as investors themselves.

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