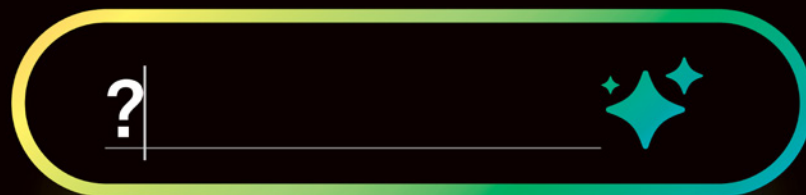




The AI Capex and IPO Boom: Will it End in Tears?



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At A Glance

- Artificial intelligence (AI) is a general-purpose technology (GPT) likely to have an impact similar to previous breakthroughs, such as electricity and the steam engine. GPTs always feature an extended capital expenditure (capex) expansion, a Cambrian explosion of startups and a boom-and-bust cycle.
- Today there are over 2,000 unicorns (private companies valued more than US\$1 billion), up 8 times from a decade ago, with a majority located in the U.S. and financed by a boom in venture capital (VC) funding. Unicorns are most prevalent in the bottom three tiers of the AI stack: foundational models, AI-first applications, and physical AI, which includes autonomous vehicles (AVs), robotics, drones and space.
- The AI capex cycle is driven by the growing herd of unicorns—a handful of hyperscalers that are about to turn negative free cash flow (FCF)
- To fund the capex boom, net equity issuance is likely to hit record highs in 2026 and 2027. Issuance includes mega initial public offerings (IPOs), such as SpaceX, potentially followed by Anthropic and OpenAI. Additionally, there is an acceleration in seasoned equity offerings (SEOs), expiring lockups, and tech debt issuance. This is a lot for markets to absorb, especially when many IPOs are being priced at elevated, eye-popping multiples.
- Net equity issuance had been negative for decades, as U.S. buybacks approached US\$1 trillion annually. Such de-equitization lowered the cost of capital and provided a nice tailwind for equities. However, this favourable backdrop has been reversed and now constitutes a moderate headwind.
- How have IPOs performed historically? Quite well, on average surpassing the return on the overall equity market. However, this average masks a wide range of outcomes and a right-skewed distribution.
- Over the last few decades, IPOs by companies in the tech sector that are VC-backed and issue dual class shares typically outperformed, while smaller companies and those with price to sales higher than 40 times have usually disappointed
- Looking ahead, we expect markets to remain choppy, as they digest record issuance. Many IPOs feature nosebleed valuations, reflecting lofty expectations and plentiful liquidity. With so much good news already priced in, a lot has to go right.

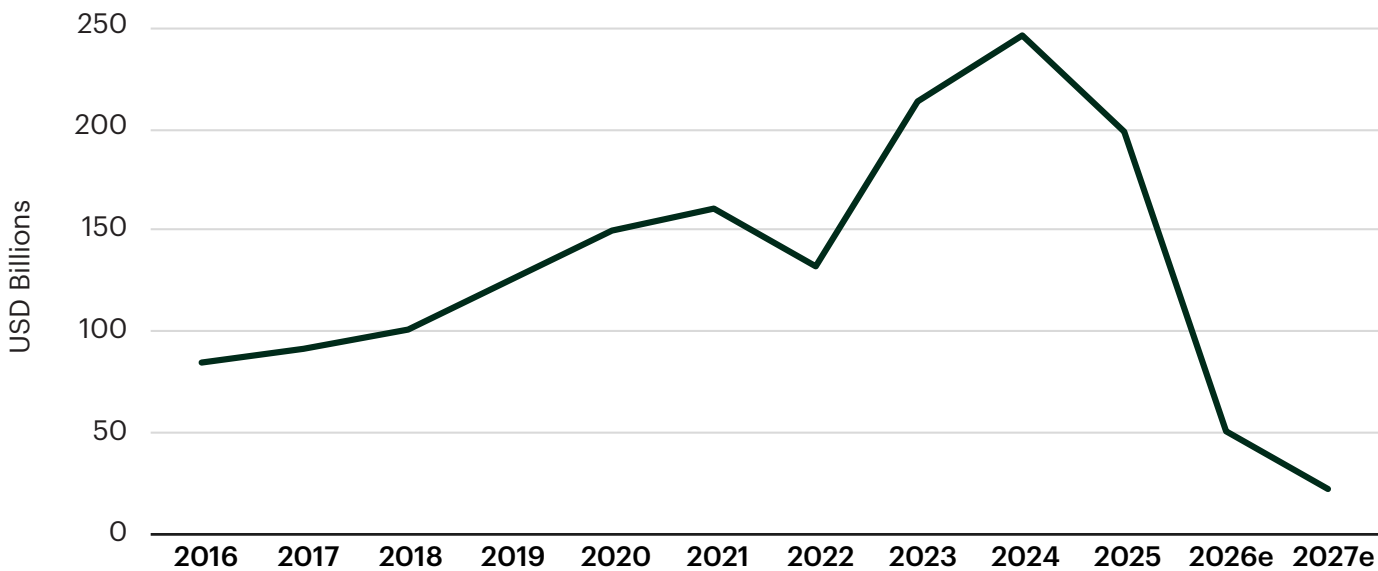
Hyperscalers: Capital-lite to Capital-heavy Business Models

GPTs invariably generate extended capex cycles (e.g., 7 decades for railways and three decades for electricity).¹ While this cycle might be compressed, one of the most notable features is the spending of hyperscalers. Their capex is on track to exceed US\$1 trillion next year, potentially causing the group to turn FCF negative (**Figure One**).

How long will hyperscaler capex growth remain so strong? Some commentators argue that 2027 or 2028 will mark the peak, but such an early volte-face would be inconsistent with past GPTs, the widely held view that AI is a revolutionary technology, and the critical role it plays in the U.S.-China superpower race.²

Figure One: Capital light no more

The five hyperscalers—Meta (META), Oracle (ORCL), Microsoft (MSFT), Google (GOOG) and Amazon (AMZN)—have produced significant cash over the last decade but are set to soon turn negative FCF (USD billions). Revenue growth remains robust, but capex is soaring (up 20 times from a decade ago), approaching the US\$1 trillion mark.



Source: Bloomberg Finance L.P. Data as of July 17, 2026.

In addition to hyperscalers and other public companies, the capex boom is also being driven by the growing herd of over 2,000 unicorns (**Figure Two**). GPTs historically result in a Cambrian explosion of startups, a small minority of which eventually become public. The primary benefit of listing is

funding optionality, escaping the hamster wheel of fundraising.³ The main disadvantage of going public is a loss of control, handing governance over to an independent board. To get around this, roughly 50% of IPOs now issue dual class shares (up from 8% a decade ago).²

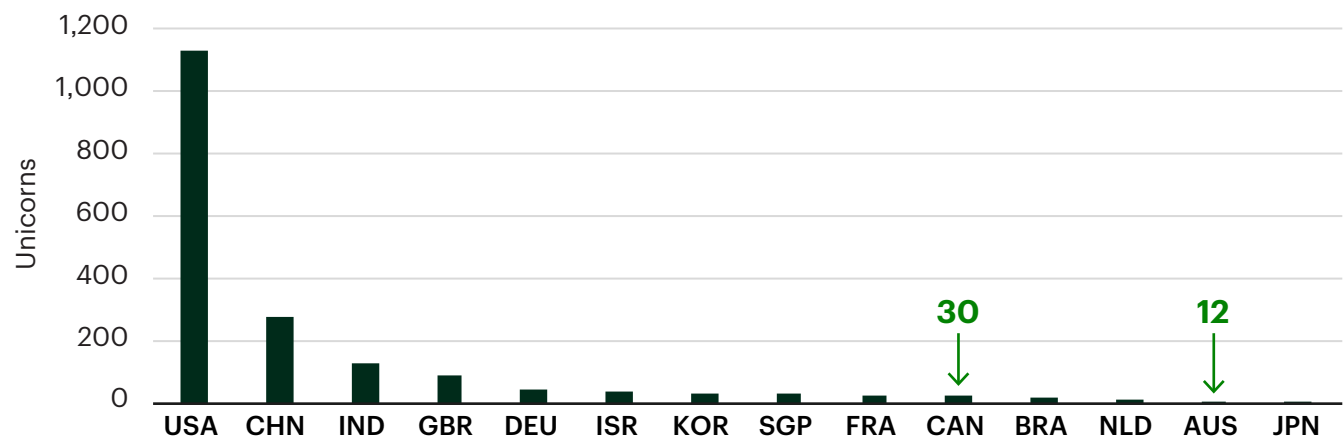
¹ Engines That Move Markets: Technology Investing from Railroads to the Internet and Beyond, Alasdair Nairn, 2001.

² Initial Public Offerings: Updated Statistics, Jay R. Ritter, Eugene F. Brigham Department of Finance, Insurance, and Real Estate, Warrington College of Business, University of Florida, July 7, 2026.

³ Bloomberg Finance L.P. July 17, 2026.

Figure Two: Number of unicorns by country

There are now over 2,000 globally, up 8 times from a decade ago, and yesterday’s unicorn boom implies today’s IPO boom. 54% of the unicorns are located in the U.S., followed by China (13%), India (6%) and Great Britain (5%).

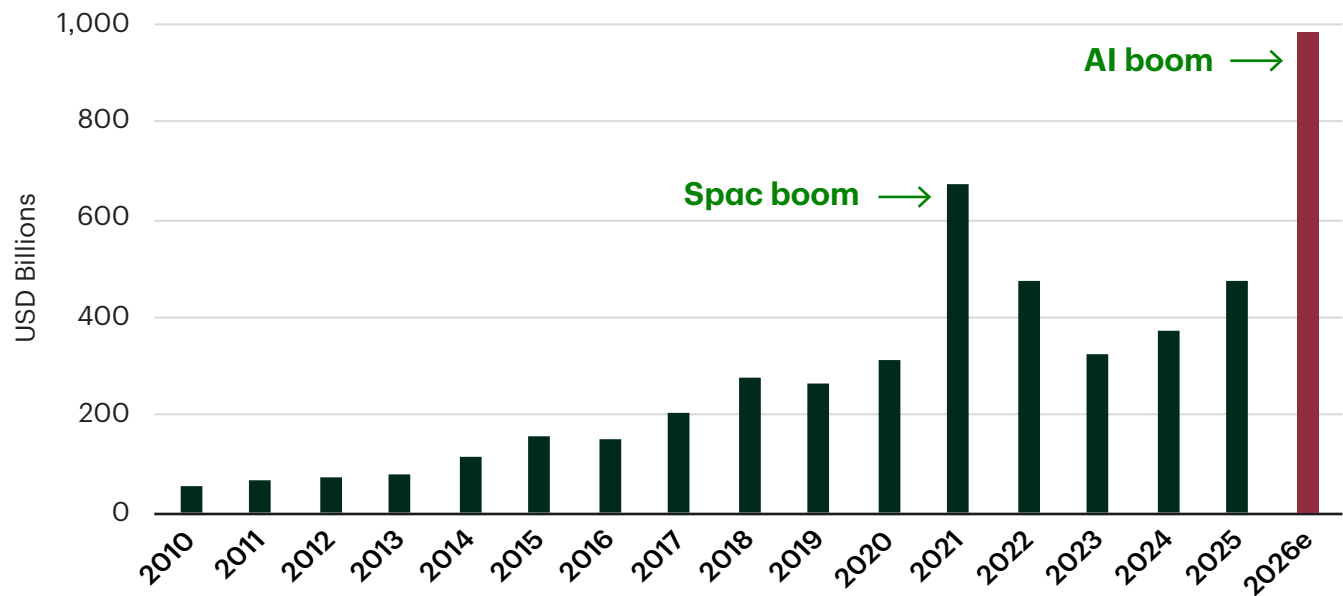


Source: Bloomberg Finance L.P. Data as of July 17, 2026.

The unicorn boom reflects America’s secret sauce, its VC ecosystem (Figure Three). Most of the VC capital has been invested in the bottom three tiers of the AI stack: foundational models, AI-first applications, and physical AI (AVs, drones, robotics, space). Further, the most successful unicorns usually seek to list on public markets. For example, of the top ten unicorns in early 2020, five have since IPO’d.

Figure Three: VC investment globally (USD billions), up 5 times from a decade ago

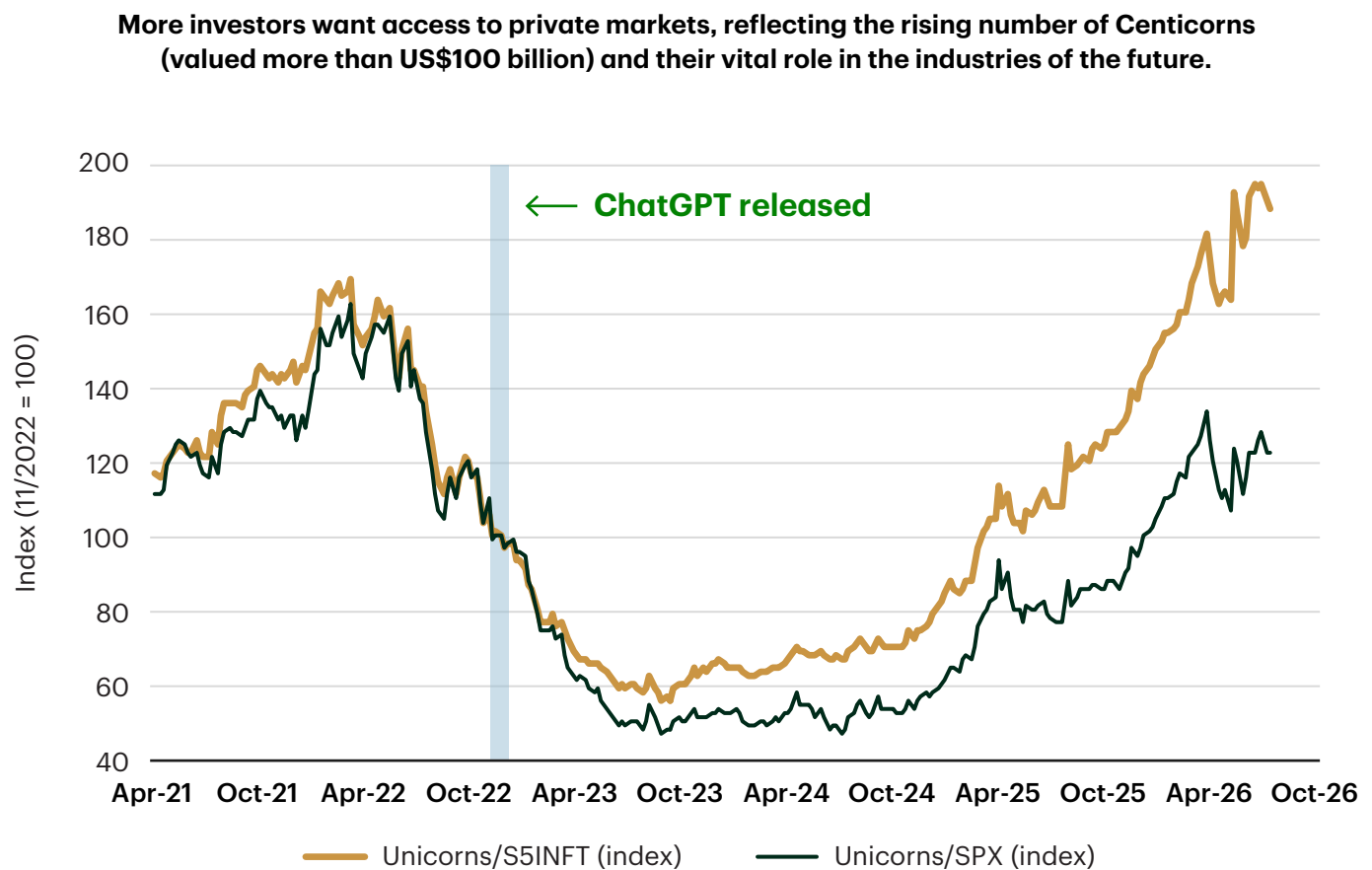
More unicorns are hitting the at-the-market, and they’re doing it for longer and for bigger cheques. Significant cash is flowing into VC funds, which are competing aggressively to invest in AI startups.



Source: Bloomberg Finance L.P. Data as of July 17, 2026.

Unicorns have outperformed the S&P 500 Index since the release of ChatGPT (**Figure Four**). This has frustrated the vast majority of investors who don't have direct access to VCs. This has become a bigger issue as the VC industry matures and the average age of tech companies going public has doubled to twelve years. For example, SpaceX was founded twenty-four years ago, giving the impression that the lion's share of gains have already accrued to VCs and insiders, leaving relatively little for public market investors.⁴

Figure Four: Since the release of ChatGPT (11/2022), Unicorn indices have surged ahead of the S&P Index and the tech sector



Source: Bloomberg Finance L.P. Note: The Morningstar®-Pitchbook U.S. Unicorn index consists of 20 late-stage unicorns, with pricing estimated using three factors: funding rounds, secondary activity, and closest public companies. Data as of July 17, 2026.

Unicorns

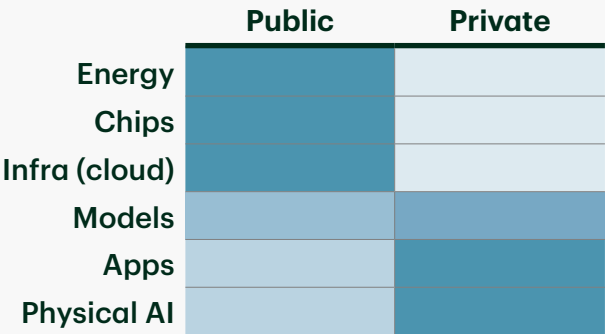
⁴Databricks Is Raising Funds at \$134 Billion Valuation, The Wall Street Journal, December 16, 2025.

Titans Rise and Titans Fall: What Will 2035 Look Like?

A lucky few of today’s unicorns may someday join the list of tech titans. GPTs like AI are, by definition, highly disruptive technologies that unleash a Schumpeterian wave of creative destruction. Further, most investors have relatively little exposure to the industries of the future, as few of these companies are public. This implies that, viewed from the perspective of 2035 or 2040, a majority of investors are actually underweight tech (Figure Five).

Figure Five:

Most companies in the industries of the future, such as AI-first applications and physical AI, are still private. Viewed holistically, considering both types of markets, this suggests the vast majority of investors are actually underweight tech.



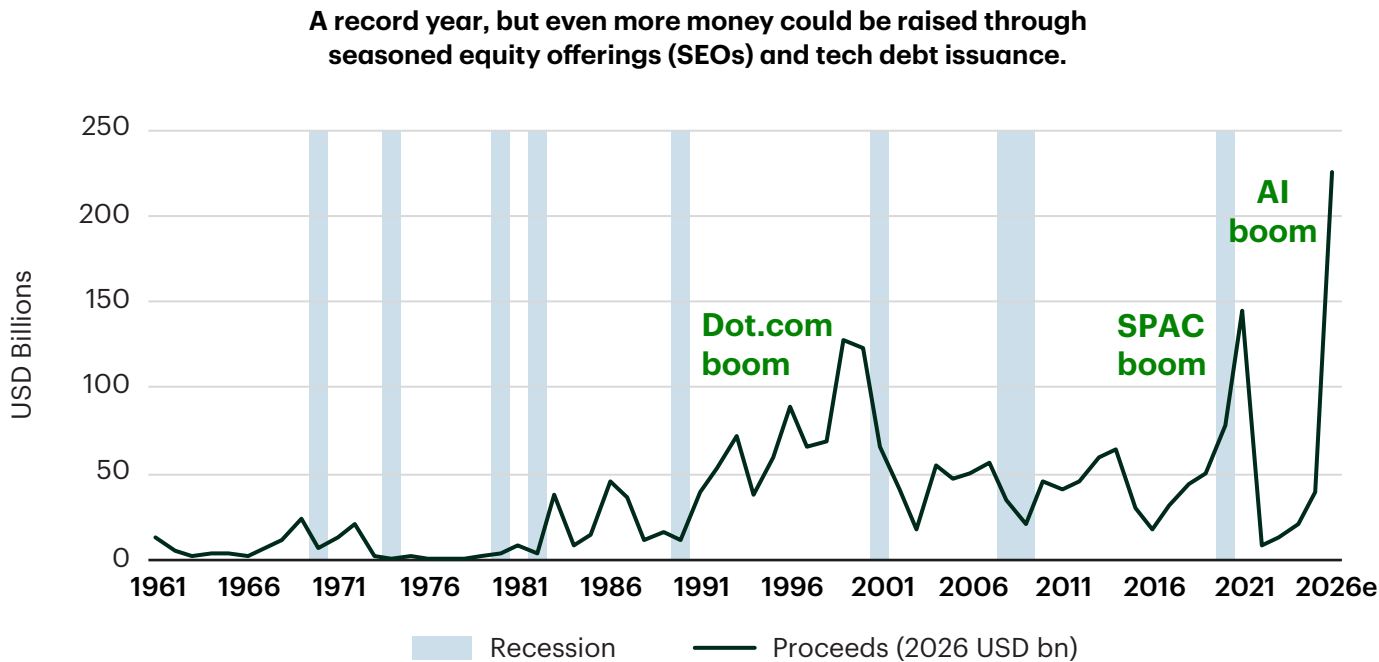
Source: TD Epoch. For Illustrative Purposes Only.
Note: Darker shading = More exposure. Table uses Jensen Huang’s 5 layers of AI stack + physical AI.

Unicorns: Cranking Up the IPO Money Cannon

The AI capex boom is being funded through lots of channels, with IPOs at the center of the storm. Proceeds are set to hit record highs in 2026 and 2027, after remaining relatively subdued from 2022 to 2025 (Figure Six). Prediction markets provide some guidance regarding additional IPOs in the second

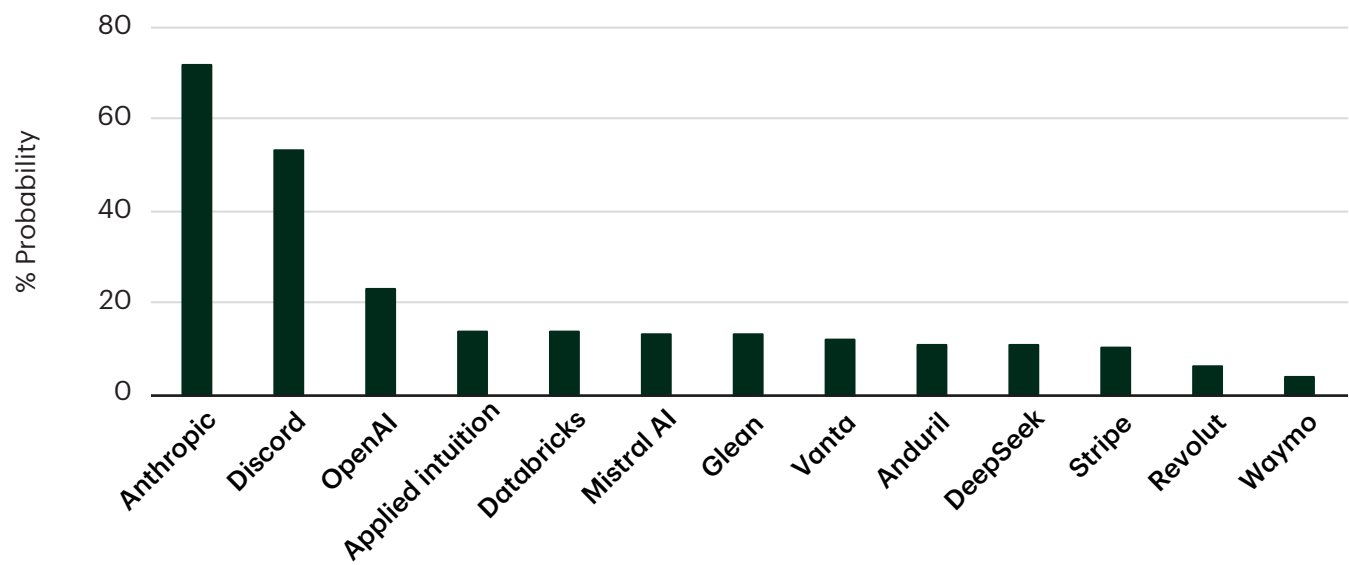
half 2026 and into 2027 (Figure Seven). It is also striking to see the size of recent and forthcoming IPOs (such as SpaceX, likely followed by Anthropic and OpenAI), especially compared to listings over the previous three decades (Figure Eight).

Figure Six: Gross proceeds from U.S. IPOs (2026 US\$ billions)



Source: Bloomberg Finance L.P. Data as of July 17, 2026.

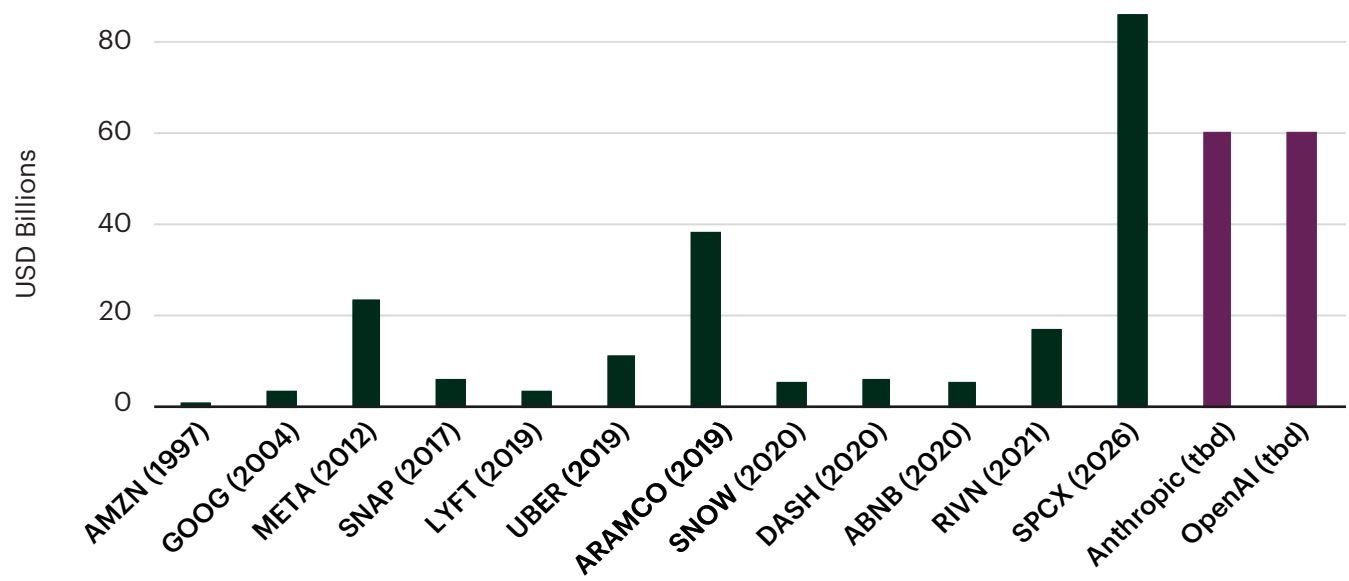
Figure Seven: Which companies will IPO before 2027 (% probability)?



Source: Bloomberg Finance L.P. Polymarket, as of July 11, 2026.

Figure Eight: Select companies, IPO proceeds (2026 US\$ billions)

SpaceX was by far the largest ever, with Anthropic and OpenAI likely to fill in the #2 and #3 slots.



Source: Bloomberg Finance L.P. Data as of July 17, 2026.

Even after an IPO, public companies can issue additional shares (as Google did in June 2026 with its massive US\$90 billion equity raise). Further, SEOs and expired lockups are typically a bigger driver of equity supply than IPOs, on average by roughly three times. This will be especially important in 2027 as lockups

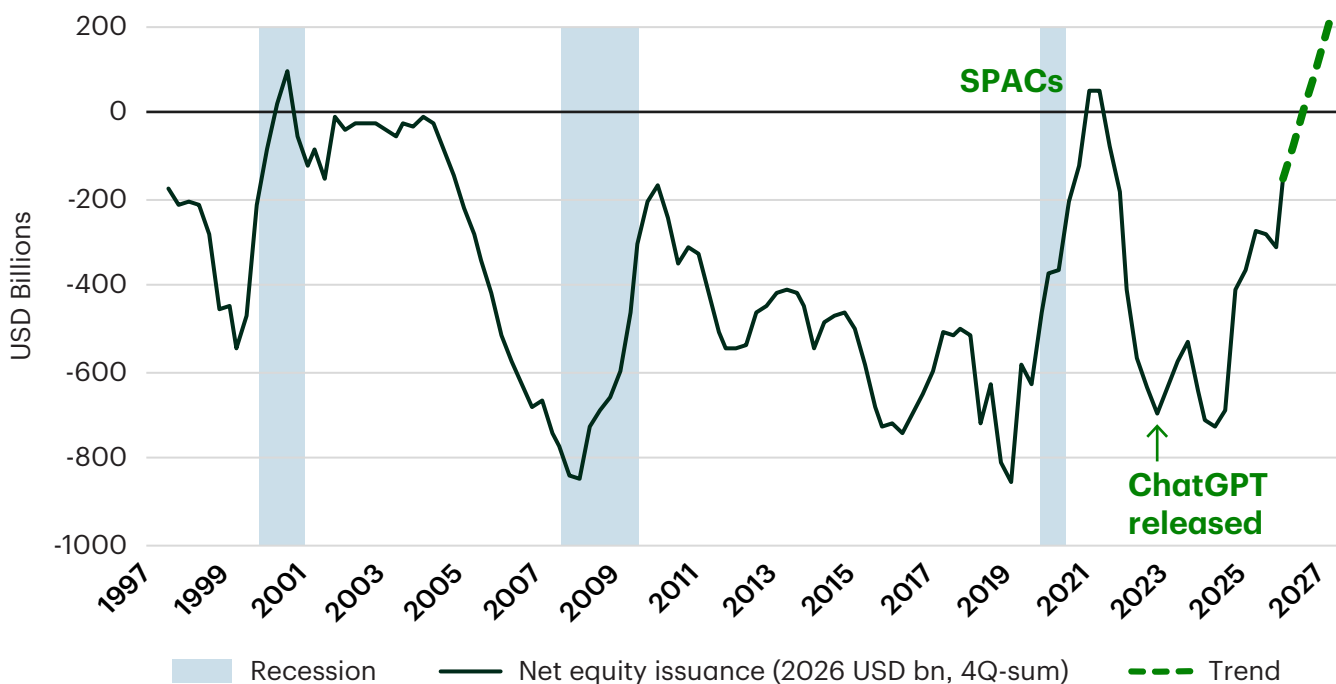
expire for SpaceX, and possibly Anthropic and OpenAI. Over recent decades the average float at IPO has declined to around 22% (as issuing companies are older and bigger, with more insiders and multiple VC funding rounds). However, the public float almost always rises above 90% within two years.

Buybacks: Shrinking Equity Supply for Decades

A lot of equity is hitting the market this year, but net equity issuance has actually been negative for decades, as buybacks soared while IPO activity was muted. Such de-equitization lowered the cost of capital and provided a nice tailwind for equities. However, with the AI capex boom likely still in its early innings, that favourable backdrop has reversed (**Figure Nine**).

Figure Nine: U.S. net equity issuance likely to hit record highs in 2026 and 2027

For the last two or three decades, net equity issuance has typically been negative (few IPOs, lots of buybacks). Such de-equitization lowered the cost of capital and provided a nice tailwind for equities. However, that favourable era is now officially over.



Source: Federal Reserve Board. Note: Net issuance of U.S. non-financial companies. Net issuance = gross equity issuance (IPOs + SEOs) less gross retirements (existing equity retired due to share repurchases and Mergers & Acquisitions). Data as of July 17, 2026.

Bond Issuance Also Heading Higher: Will Bond Market Vigilantes Crash the Party?

In addition to equity issuance, the onslaught of AI bonds is beginning to test investors' limits. Total US\$ investment grade (IG) supply is up 15% year-over-year and has risen by 58% since the trough in 2023. Further, Tech's share of total US\$ IG supply has soared to 20% this year, up 2.5 times from its

historical average.³ Global bond issuance by the big tech companies (GOOG, AMZN, META, MSFT, ORCL) had never exceeded \$50 billion prior to 2025 but is expected to come in at US\$250 billion this year. As a result, spreads have widened, but not by enough to remove the punch bowl.³

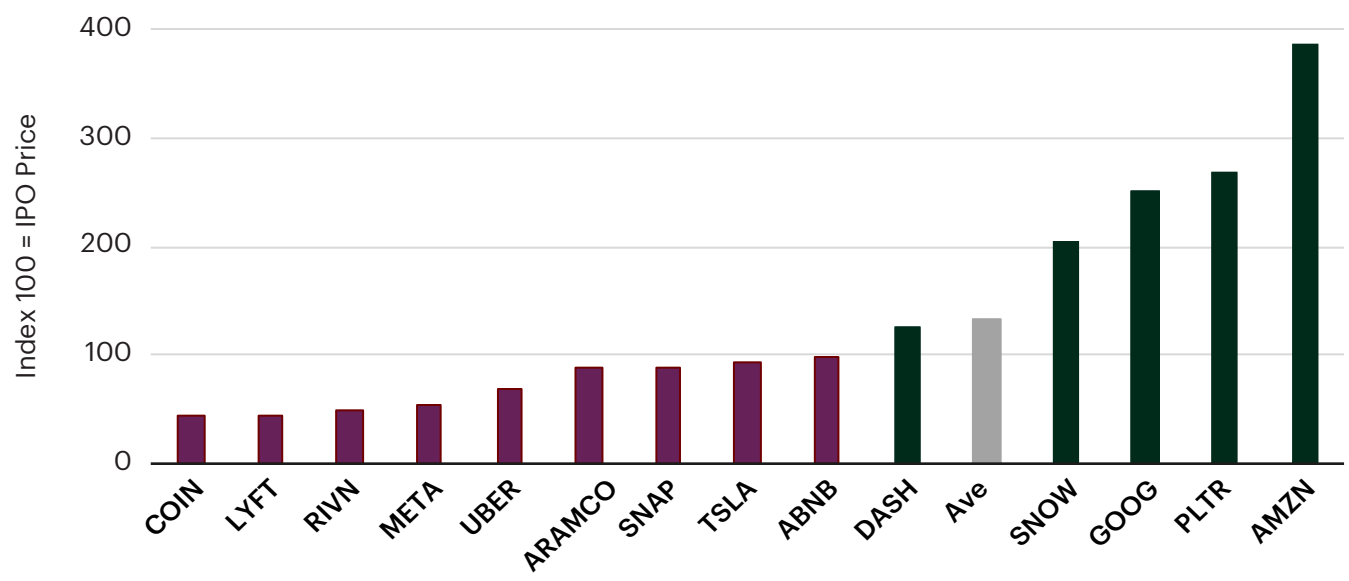
Analyzing the Historical Performance of IPOs: Where the Rubber Meets the Road

Having discussed the market backdrop for record high issuance, we now examine IPO performance over the last few decades (**Figure Ten**). This is critically important given their essential role in price

discovery and capital allocation. Moreover, IPOs are likely to remain a key market theme for several years, after an extended period in which activity was fairly dormant.

Figure Ten: Performance of fourteen high profile IPOs in the 1st year after listing (relative to the S&P 500 Index).

The wide dispersion in performance suggests an opportunity for active management to add value. On average, the IPOs outperformed the S&P 500 Index, but the distribution covers a wide range and is right-skewed.



Source: Bloomberg Finance L.P. Data as of July 17, 2026.

³Bloomberg Finance L.P. July 17, 2026.

The remainder of this section examines the performance of IPOs over the last few decades (**Figure Eleven, panels A through E**). We analyze 1st day returns as well as 3-year buy-and-hold returns (BHRs), with the latter measured from the closing price on day one and is relative to the overall equity market. **Panel A** shows that larger companies (sales over \$100 million) have tended to do better than smaller, more speculative issues. Next, **Panel B** illustrates that VC-backed IPOs outperformed on average. Neither of these results is terribly surprising.

Panel C focuses on larger companies and demonstrates two points. First, that tech IPOs have tended to perform better than ex-tech IPOs. Second, on average there has been little difference between profitable and unprofitable tech companies. The latter observation suggests index providers should deemphasize profitability when deciding whether a new issue should be included or not.

Panel D provides an even more surprising result, that dual class share IPOs have tended to perform better. Founders choose to go public primarily because IPOs provide financing optionality, allowing them to step off the fundraising treadmill. However, they dislike the governance implications and are often terrified of losing control. Luckily for founders, markets have displayed greater openness to dual class shares. Over the coming years, we expect the vast majority of IPOs, especially when measured on a cap-weighted basis, to feature dual classes.²

Finally, **Panel E** demonstrates that more expensive IPOs have tended to experience a higher first day pop, but lower three year returns thereafter, on average. In particular, the dreadful mean return to IPOs with a Price to Sales over 40 times could help explain the weak performance of SpaceX and Cerebras Systems. For expensive IPOs, with so much good news already priced in, an awful lot has to go right.

Figure Eleven: Performance of IPOs

Panel A:
Smaller companies (lower sales) tend to be younger and more speculative and typically underperform.

LTM Sales (2025 USD mn)	# of IPOs	First-day return (%)	3Y BHR (%), rel to mkt
< \$100 mn	5,143	23.2	-34.3
> \$100 mn	4,110	13.6	-3.2
Total	9,253	18.9	-20.5

Panel B:
For IPOs by VC-backed companies, the mean return is significantly higher.

LTM sales > \$100mn (2025 USD)	# of IPOs	First-day return (%)	3Y BHR (%), rel to mkt
VC-backed	1,078	23.4	11.0
Non VC-backed	3,032	10.1	-8.3
All	4,110	13.6	-3.2

² Initial Public Offerings: Updated Statistics, Jay R. Ritter, Eugene F. Brigham Department of Finance, Insurance, and Real Estate, Warrington College of Business, University of Florida, July 7, 2026.

Panel C:

Tech companies tend to outperform ex-tech companies. Also, there is little difference between profitable and unprofitable tech companies, on average.

LTM sales > \$100mn (2025 USD)	# of IPOs	First-day return (%)	3Y BHR (%), rel to mkt
Tech	963	19.6	13.7
Ex-tech	3,147	11.8	-8.4
Tech: Unprofitable	417	23.7	11.1
Tech: Profitable	546	16.5	15.6

Panel D:

Dual class share IPOs tend to perform better, despite their many critics. This helps explain why the proportion of IPOs issuing dual classes has increased from 8% to 50% over the last decade.

Tech stocks	# of IPOs	First-day return (%)	3Y BHR (%), rel to mkt
Dual class	309	33.1	13.8
Single class	3,025	31.0	-15.4

Panel E:

The more expensive the IPO, the higher the first day pop, but the lower the 3Y BHR, on average. Note how dreadful the average 3Y BHR is for IPOs with a Price to Sales over 40 times.

Price-to-sale ratio (x)	# of IPOs	First-day return (%)	3Y BHR (%), rel to mkt
< 5	3,384	8.9	-1.3
5-20x	593	27.2	-7.9
20-40x	87	55.9	-16.3
> 40x	46	93.6	-58.5
All	4,110	13.6	-3.2

Source: Ritter. <https://site.warrington.ufl.edu/ritter/files/IPO-Statistics.pdf>

Notes: 1980-2025. Market-adjusted: Morningstar U.S. total market index. BHR: Buy-and-hold return from the first closing market price, LTM: Last twelve months.

The bottom line from **Figure Eleven** is as follows: Larger companies in the tech sector that are VC-backed and issue dual class shares have outperformed on average, while smaller companies and those with Price to Sales over 40 times have tended to underperform. Whether a tech company going public is profitable or not hasn't been a significant factor.

Performance

The AI Capex and IPO Boom: Implications for Investors

GPTs like AI historically feature an extended capex expansion, a Cambrian explosion of startups, and a boom-and-bust cycle. To fund the capex boom, net equity issuance is likely to hit record highs in 2026 and 2027. This is a lot for markets to digest and could result in greater volatility, a somewhat higher cost of capital and a modest headwind to further equity appreciation.

Historically, high profile IPOs have outperformed the overall equity market, representing a type of risk premium. However, this average masks a wide range of outcomes and a right-skewed distribution. Regardless, larger companies in the tech sector that are VC-backed and issue dual class shares have tended to outperform, while smaller companies and those with Price to Sales over 40 times have disappointed. This last observation might explain the weak performance of two recent IPOs, SpaceX and Cerebras Systems. For expensive IPOs, much good news has already been priced in, suggesting an awful lot has to go right.

We believe the wide dispersion of returns associated with IPOs creates an opportunity for active management to add value. However, diversification remains critical as even the most successful VC firms find it challenging to separate the wheat from the chaff. Diversification spans the entire AI stack as well as real assets.

Will today's boom experience a bear market correction? Likely yes, at some point, but we emphasize the challenges associated with precisely calling both the top and the subsequent bottom. This suggests staying invested, to reap the benefits of compounding, and remaining broadly diversified. Finally, potential catalysts for a correction include: (a) tighter liquidity (e.g., markets pricing in U.S. Federal Reserve hikes due to oil market dislocations); and (b) elevated earnings expectations succumb to disappointment (e.g., because open source models gain share and monetizing AI capex proves harder and takes longer than has been priced in).³ ■

³ Bloomberg Finance L.P. July 17, 2026.

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Strategy