

October 2025

From the front page of last weekend's WSJ:

Nasdaq Winning Streak Reaches 7 Months

Tech earnings drive longest stretch of gains since 2018; new high for Amazon

BY OYIN ADEDOYIN

Upbeat earnings from technology giants and a flurry of artificial-intelligence deals powered the Nasdaq composite higher for a seventh consecutive month, its longest stretch of monthly gains since 2018.

It was quite a week for big tech. Nvidia became the world's first \$5 trillion company. Apple and Microsoft topped \$4 trillion. And despite occasional disappointments, a spate of earnings from the so-called Magnificent Seven—which also includes Alphabet, Amazon.com, Meta Platforms and Tesla—helped the Nasdaq finish October 4.7% higher.

The latest boost came from Amazon, which on Friday surged 9.6% to its first new all-time high since February after the e-commerce giant reported faster than expected increases in AI-related revenue and aggressive plans to grow data-center capacity. Amazon closed at a record market capitalization of \$2.61 trillion.

The group's market capitalization now makes up about 38% of the entire S&P 500, according to Dow Jones Market Data. Their climb has helped carry stocks to record after record in the months since April's tariff-fueled market meltdown. And as tech companies continue to pump money into artificial intelligence, investors parse their reports for signs the rally can keep going. ...

Other indexes are doing well, too. The Dow Jones Industrial Average is on a six month streak of gains, its longest in seven years. So far this year, the Nasdaq and S&P have had 36 record closes, and the Dow has had 15.

Not all tech stocks outperformed this past week.

Apple is betting that consumers will line up to buy the latest iPhone 17. The company expects revenue to increase 10% to 12% over the holidays, above Wall Street analyst expectations. Apple also plans to increase investments in AI, adding a major bump in spending. Microsoft also reported a \$4.1 billion hit on its investment in OpenAI, up 490% from a year earlier.

Some companies reported weakened spending from younger and lower income consumers. Chipotle Mexican Grill's shares plunged on Thursday after it said customers were pulling back on spending, particularly younger consumers. The fast-casual restaurant chain was down 2.6% on Friday. ...

Amazon.com announced Tuesday that it was laying off thousands of workers, kickstarting a plan to cut up to 30,000 jobs. This followed Meta Platforms, which recently cut 600 jobs in its AI division. UPS, Target, and General Motors also announced large-scale job cuts.

As companies continue to pump money into AI and shed workers, investors have looked to earnings reports to give them the confidence to continue participating in the market. ...

The Federal Reserve cut rates by a quarter-point this past week, but investors grew weary after Chair Jerome Powell cast doubts about whether there would be another rate cut in December. Powell said that central bankers have “strongly differing views” on what to do next. The decision has been complicated by a data blackout caused by the government shutdown.

The Fed approved the rate cut on a 10-2 vote. Kansas City Fed President Jeffrey Schmid voted against the decision because he favored no change in rates, while Fed governor Stephen Miran dissented in favor of a larger, half-point cut.

Economists and investment analysts anticipate that, once more jobs data become available, it might reveal a more sobering picture of the labor market. ...

From Global Investment Strategy on 10/28:

First-Mover Non-Advantage: The Achilles’ Heel of The AI Trade

28 Oct 2025 by Peter Berezin, Chief Strategist

A Trillion Here, a Trillion There

The desire to gain “first-mover advantage” has been a major driving force behind the rapid increase in AI-related capex in recent years. But is this a legitimate reason for ploughing trillions of dollars into the nascent technology?

Economists may not be useful at most things, but one thing that we are useful at is figuring out how market structure affects business behavior. And in this case, economic theory casts serious doubt on the often-heard narrative that being first provides a huge advantage in the AI space.

First-mover advantage can be valuable if an industry is subject to network effects, economies of scale, or legal protections. However, none of these three clearly apply to AI.

Network effects describe situations where certain technologies become more useful if more people use them. Social media platforms are a classic example. People use Facebook and Instagram simply because that is what most other people use. The first-mover advantage from network effects is not insurmountable (just ask MySpace) but it does give companies such as Meta a valuable moat.

Economies of scale accrue when a company can spread its fixed costs over an ever-larger user base. This drives down average costs, making it difficult for new entrants to compete.

While there are some economies of scale with AI, they are smaller than for software, where the marginal cost of selling one more copy is negligible. With AI, you must build data centers and equip them with pricey and energy-intensive GPUs. The marginal cost of adding users is far from zero.

If anything, the AI industry looks a lot like the airline industry. Similar to airlines, AI companies have high capex requirements and produce a fairly commoditized product (all AI models use the same underlying neural net, transformer architecture).

Airlines are indispensable to the smooth functioning of the global economy, but they rarely make money outside of times when the demand for travel is unusually high. That is the situation with cloud computing today, where the demand for “compute” exceeds supply. However, given all the investment in data centers, this will change. Investors are confusing cyclical profits with structural ones.

As for legal protections, the AI industry enjoys far fewer moats than say, the pharmaceutical industry. Perhaps because of its academic roots, most models are open source and are often published online. This is probably just as well, since most AI companies are not that keen to compensate others for their creative work. Fortunately, the [courts are catching on](#).

Monetizing AI May Be More Difficult Than Widely Believed

Even if AI companies figure out how to create monopoly power, there will still be the question of how to monetize it.

The irony of traditional internet search is that it works well, but not too well. At the end of the search process, there is still a link that the user must click. And it is that link that provides companies such as Google with most of their revenue.

The defining advantage of AI is that there is no link to click. Yes, money could still be made through “agentic AI,” where the AI scours the web and does the clicking for you. But even there, it is not so obvious how profitable this business model will be. If an AI agent does what it is supposed to do, it will provide you with the best results, period. If you ask an AI agent to book you the cheapest flight from New York to Miami next Saturday around 9am, and it says “United Airlines at 9:30am, departing from LaGuardia,” what incentive does United have to advertise? The AI will have already selected that particular United flight because it offers the lowest fare at the best time.

The Benefits to AI Users: The “Rising Tide” Effect

If AI companies fail to monetize their models, does this mean that the users of AI systems will gain the most?

The answer is yes, but with some caveats. The first caveat is that we do not know how large the productivity gains from generative AI will be. A [recent study](#) by METR, a nonprofit research organization that studies AI capabilities, found that experienced software developers who used AI tools took 19% longer to complete their tasks than those who did not.

This is consistent with a [study by McKinsey](#), which concluded that while nearly 80% of companies are now using generative AI, the same fraction has derived no benefit to their bottom line from it. It is

Chart 3
Profit Margins Are Already At Record Highs



also consistent with a [study by researchers at MIT](#), which found that 95% of companies had seen no gains from their AI investments. Although most companies say they expect to increase AI usage over time, adoption rates already show signs of plateauing.

It is possible that all this simply reflects teething pains in AI adoption, and that ultimately, generative AI will produce meaningful productivity gains. I am quite sympathetic to that view, but even then, it is far from clear that businesses will see higher profit margins.

The reason has to do with the “rising tide” effect. If a rising tide lifts all boats, then no boat ends up higher than the other. Consider the case of electricity. Do manufacturing firms have higher profit margins because they have access to electricity? The answer is no, because every manufacturing firm has access to electricity. The benefits of electricity ultimately accrue to consumers in the form of lower prices and higher real incomes. The same could be true for AI: AI could end up boosting profits by raising overall GDP, but it might do little to lift profit margins. This is a problem in the current environment where profit margins are already at record highs and are expected to go higher (**Chart 3**).

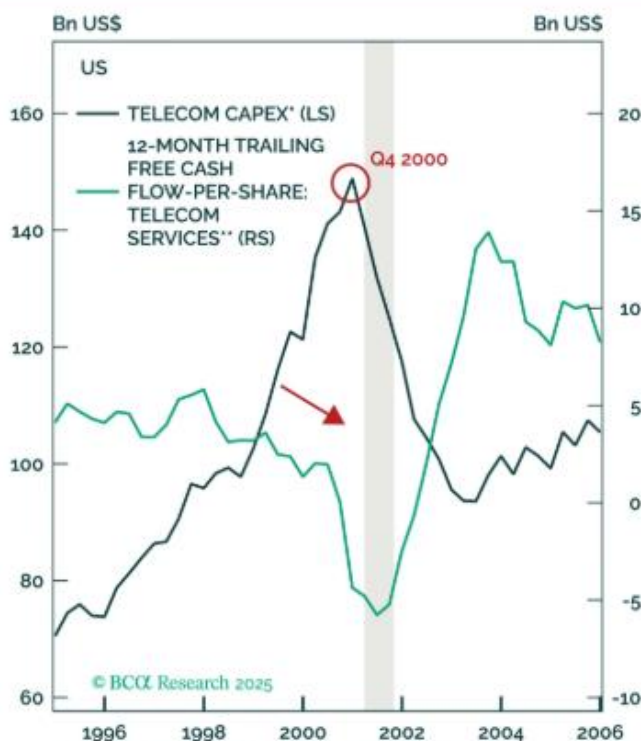
Timing Is Everything

In the financial industry, being early on a call can be tantamount to being wrong on a call. With that in mind, it is useful to have a checklist of things to monitor to determine when to turn more bearish on the AI trade.

... deteriorating free cash flow among telecom providers was a red flag during the dotcom period (**Chart 4**). The fact that hyperscaler free cash flow is currently deteriorating is thus concerning (**Chart 5**).

Chart 4

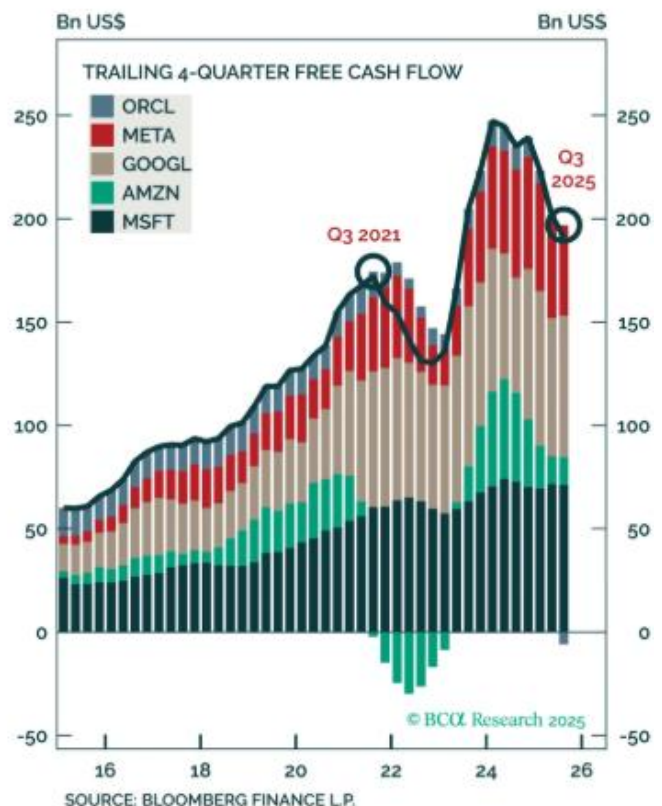
A Deterioration In Free Cash Flow Among Telecom Providers Foreshadowed The Bursting Of The Internet Bubble



* SOURCE: BUREAU OF ECONOMIC ANALYSIS (BEA).
** SOURCE: BLOOMBERG FINANCE L.P.
NOTE: SHADED AREA DENOTES NBER-DESIGNATED RECESSION.

Chart 5

Free Cash Flow Among The Hyperscalers Is Falling



SOURCE: BLOOMBERG FINANCE L.P.

A speculative boom/bust episode in small cap tech stocks also preceded the bursting of the dotcom bubble. Recently, we have seen such an episode among some smaller AI companies along with rare earth, nuclear, and quantum computing stocks (Chart 6).

What we have not seen so far, however, is a “metaverse moment” – a situation where a big AI company announces even more capex and its stock goes down. If that were to happen, it would be time to run for the hills. ...

Why the AI Spending Spree Could Spell Trouble for Investors

As Big Tech pours trillions into AI infrastructure, history warns of overinvestment, shrinking returns, and rising risks.

[Larry Swedroe](#) Oct 30, 2025

The artificial intelligence revolution has triggered unprecedented capital spending, with Big Tech firms planning to invest \$5.2 trillion over five years. While markets have rewarded this spending so far, historical analysis reveals a concerning pattern: Infrastructure booms typically result in overinvestment, excess competition, and poor stock returns.

Kai Wu, author of the October 2025 research paper “[Surviving the AI Capex Boom](#),” conducted a comprehensive historical analysis spanning multiple dimensions.

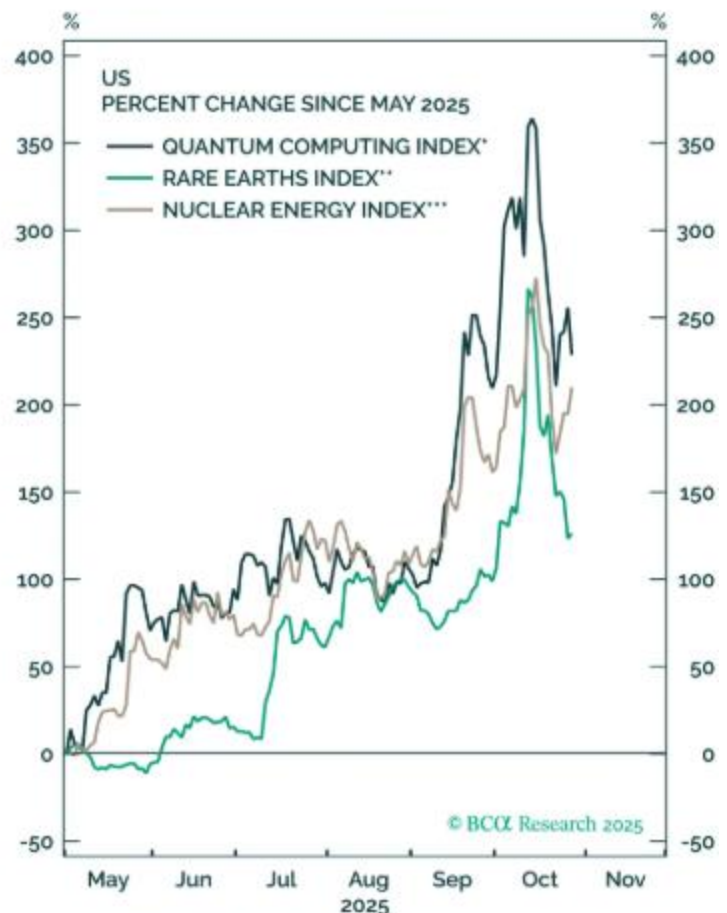
Historical Infrastructure Booms

Wu, the founder and chief investment officer of Sparkline Capital, examined major capital expenditure cycles throughout history, including:

- Railroad expansion in the 1860s-1890s
- Telecom fiber optic buildout in the late 1990s
- Current AI infrastructure spending (2023-present)

Chart 6

The Recent Selloff In Speculative Tech Is A Warning Sign



* INCLUDES QBTS, RGTI, IONQ, AND QUBT.
** INCLUDES MP, USAR, IPX, REEMF, AND ARRF.
*** INCLUDES OKLO, UEC, NNE, AND SMR.
SOURCE: BLOOMBERG FINANCE L.P.
NOTE: ALL INDICES ARE EQUAL-WEIGHTED.

He compared the scale of these investments relative to the gross domestic product and analyzed how shareholders in infrastructure-building companies fared during and after each boom.

Firm-Level Stock Performance

Using decades of market data from 1963 to 2025, Wu analyzed the:

- Returns of companies with high asset growth versus low asset growth
- Performance of firms rapidly increasing capital expenditures
- Results across all 10 market sectors and major geographic regions
- Relationship between capital intensity and stock returns

The Magnificent Seven's Transformation

The study specifically tracked how Apple [AAPL](#), Microsoft [MSFT](#), Amazon.com [AMZN](#), Meta Platforms [META](#), Google [GOOGL](#), Nvidia [NVDA](#), and Tesla [TSLA](#) are transitioning from asset-light business models to capital-intensive operations. It examines:

- Historical capital expenditure trends
- Changes in return on invested capital
- Free cash flow deterioration
- Rising debt levels and circular financing arrangements

Key Findings

1. High Capital Spending Predicts Poor Returns

The research uncovered a stark pattern: Companies aggressively growing their balance sheets underperformed conservative peers by 8.4% annually from 1963 to 2025. This “asset-growth anomaly” held true across:

- All 10 market sectors
- Multiple geographic regions (US, Europe, Asia)
- Both boom and bust periods
- Different types of capital spending

Firms rapidly increasing capital expenditures showed similar underperformance, with the effect accelerating during the dot-com bust but remaining consistent even outside bubble periods.

2. The AI Boom Is Historically Massive

Current AI spending already exceeds the internet boom's peak relative to GDP. When adjusted for the shorter useful life of AI chips versus physical infrastructure:

- AI spending surpasses even the railroad buildout of the 1860s-1870s.

- Big Tech firms are on track to spend nearly \$400 billion in 2025 alone.
- AI capital spending accounts for an estimated half of US GDP growth.

This scale of investment requires generating \$2 trillion in annual revenue by 2030 to justify costs, yet current AI revenues stand at only \$20 billion—requiring a 100-fold increase.

3. The Magnificent Seven Face Unique Risks

These companies succeeded through asset-light models leveraging intangible assets, achieving 22.5% returns on invested capital. However, they're now becoming asset-heavy:

- Capital expenditures have surged from 4% to 15% of revenue since 2012.
- Meta, Microsoft, and Alphabet each plan to spend 21% to 35% of revenue on capital expenditure.
- This exceeds both current global utility sector averages and the spending of AT&T [T](#) at the peak of the telecom bubble.

The research shows asset-heavy firms have consistently underperformed asset-light ones. This effect also exists within sectors, with asset-heavy firms lagging their asset-light sector peers.

4. Deteriorating Fundamentals Signal Trouble

Several concerning trends emerged:

- Free cash flow is declining as capital spending accelerates.
- Circular financing deals mirror dot-com era practices (that is, Nvidia investing \$100 billion in OpenAI, which then buys Nvidia chips).
- Debt levels are rising, including Meta's \$27 billion off-balance-sheet financing.
- Depreciation charges could climb from \$150 billion to \$400 billion annually over five years.
- Useful life assumptions may be overly optimistic given rapid GPU replacement cycles.

5. The AI Prisoner's Dilemma

Big Tech faces a game theory problem. While the optimal strategy would be moderate, coordinated investment, each company fears being left behind. This forces all players into aggressive spending, potentially destroying the collective profit pool even if individual firms succeed technologically.

The AI race collapses previously separate markets (search, social media, shopping) into one winner-take-all competition, eliminating the comfortable oligopoly structure that made these companies so profitable.

6. Past Boom Winners Were Often Not the Infrastructure Builders

Historical analysis revealed:

- Railroad companies suffered through multiple panics and bankruptcies before stabilizing decades later.
- Telecom stocks crashed 92% after the dot-com bust and remain 60% below their peak 25 years later.

- Railroad builders captured only a tiny fraction of the economic value they created.

The real winners were often the customers who benefited from subsidized infrastructure. Excess capacity drove bandwidth costs down 90% after the dot-com bust, fueling the rise of Netflix [NFLX](#) and Facebook.

7. Valuation Risk Extends Beyond Infrastructure

Even asset-light early adopters face danger from excessive valuations. An analysis of the performance of “dot-com darlings” from 2000 to 2019 showed:

- Despite achieving 12% annual sales growth as promised, these companies lost 80% of their value from 2000 to 2002.
- The problem was starting valuations of 33 times sales that compressed to 5 times.
- It took 18 agonizing years for investors to break even despite strong fundamental performance. ...

Key Investor Takeaways

1. Don't Confuse Technology Potential With Investment Returns

AI will likely prove transformative, but that doesn't guarantee good returns for infrastructure builders. As the railroad and internet examples show, AI can revolutionize society while still delivering poor returns for investors in the companies building it. Thus, it is important to separate your belief in AI as a technology from your investment thesis.

2. Watch Capital Intensity, Not Just Growth

The Magnificent Seven's (Alphabet, Amazon.com, Apple, Meta Platforms, Microsoft, Nvidia, and Tesla) transition to capital-intensive models is concerning, as this model is historically associated with lower returns. Asset-heavy firms require constant reinvestment just to maintain their competitive position and face easier competitive replication. ...

6. Monitor Free Cash Flow and Balance Sheets

As capital spending accelerates, watch for deteriorating fundamentals: declining free cash flow, rising debt levels, circular financing arrangements, and aggressive useful life assumptions that mask true depreciation costs. Be wary of companies whose capital spending is growing faster than revenue, especially if they're issuing debt to finance expansion or entering into circular investment deals with customers and suppliers.

8. Remember the 100-Fold Revenue Gap

For the current spending to make economic sense, AI revenues must grow from \$20 billion to \$2 trillion annually by 2030. This enormous gap suggests either spending will slow, revenues will disappoint, or margins will compress from competition. Maintain skepticism about infrastructure builders' ability to monetize investments at current valuations. The math simply doesn't work without unprecedented revenue growth or exceptional pricing power. ...

Conclusion

The AI revolution is real and will likely transform the economy. However, history teaches us that the path from technological promise to investor profits is often punctuated by overinvestment, excess capacity, and disappointing returns for infrastructure builders.

With the Magnificent Seven embarking on history's largest capital spending spree while accounting for about 35% of the S&P 500, investors face concentrated exposure to companies transitioning from winning asset-light models to historically challenged asset-heavy operations. ...

Larry Swedroe is the author or co-author of 18 books on investing He is also a consultant to RIAs as an educator on investment strategies.

From WSJ on Oct. 21:

Is It Just Me, or Is It Hot in Here?

By Jason Zweig

Fellow investors,

With the year starting to wind down, markets are heating up.

SPACs are back. In 2025, more than 100 special-purpose acquisition companies have raised \$21.9 billion combined. That's the biggest crop of speculative "blank-check" companies since the SPAC boom of 2021, according to SPACInsider. [That boom ended in a bust, incinerating more than \\$100 billion](#). But, hey, that was almost *three whole years ago*. [Amnesia is Wall Street's ambrosia](#).

Meme stocks are back. Opendoor Technologies, the struggling online real-estate flipper, is up more than 360% this year, driven by [an army of individuals buying the stock](#).

On Oct. 8, the Roundhill Meme Stock ETF, which buys stocks with "elevated trading volumes" and "social media momentum," [launched](#). It shot up almost 15% in its first six trading days (although it has since given up those gains).

AI mania is mushrooming. Companies like Oklo and Fermi that are hoping to provide nuclear power to AI data centers are [some of this year's hottest stocks](#)—without any earnings and often without any revenue either.

Gold is white-hot. The yellow metal is up 12.9% so far in October and a glittering 64.9% for the year to date.

Maybe it isn't [completely crazy](#), but it is unusual for [the pet rock](#) to turn into a moon rocket . This time [might be different](#), but in the past gravity has always pulled gold back to the ground.

Leverage is all the rage. In the burgeoning market for perpetual futures, cryptocurrency traders can [magnify their gains 10-fold, 20-fold, even 100-fold](#)—or, of course, be wiped out.

You thought ETFs that double or triple the daily gains or losses on single stocks and cryptocurrencies were extreme? [A spate of new filings](#) seeking Securities and Exchange Approval would *quintuple* the daily gains or losses on such stocks as Coinbase, Nvidia, Palantir and Tesla—and cryptocurrencies like bitcoin, Solana and XRP. If any of those assets fall sharply in a single day, the ETF could go to zero.

Playing with fire is fun—until it's not. In the short run, a lot of people will make a lot of money. But most of them probably won't keep it. In the long run, as the computer says at the end of the classic movie *WarGames*, “the only winning move is not to play.”

From The Economist:

Gita Gopinath on the crash that could torch \$35trn of wealth

The world has become dangerously dependent on American stocks, writes the former IMF chief economist

Oct 15th, 2025

THE AMERICAN stockmarket has see-sawed lately amid a flare-up in trade tensions, but remains near its all-time high. The surge, fuelled by enthusiasm around artificial intelligence, has drawn comparisons to the exuberance of the late 1990s that culminated in the dotcom crash of 2000. Though technological innovation is undeniably reshaping industries and increasing productivity, there are good reasons to worry that the current rally may be setting the stage for another painful market correction. The consequences of such a crash, however, could be far more severe and global in scope than those felt a quarter of a century ago.

At the heart of this concern is the sheer scale of exposure, both domestic and international, to American equities. Over the past decade and a half, American households have significantly increased their holdings in the stockmarket, encouraged by strong returns and the dominance of American tech firms. Foreign investors, particularly from Europe, have for the same reasons poured capital into American stocks, while simultaneously benefiting from the dollar's strength. This growing interconnectedness means that any sharp downturn in American markets will reverberate around the world.

To put the potential impact in perspective, I calculate that a market correction of the same magnitude as the dotcom crash could wipe out over \$20trn in wealth for American households, equivalent to roughly 70% of American GDP in 2024. This is several times larger than the losses incurred during the crash of the early 2000s. The implications for consumption would be grave. Consumption growth is already weaker than it was preceding the dotcom crash. A shock of this magnitude could cut it by 3.5 percentage points, translating into a two-percentage-point hit to overall GDP growth, even before accounting for declines in investment.

The global fallout would be similarly severe. Foreign investors could face wealth losses exceeding \$15trn, or about 20% of the rest of the world's GDP. For comparison, the dotcom crash resulted in foreign losses of around \$2trn, roughly \$4trn in today's money and less than 10% of rest-of-world GDP at the time. This stark increase in spillovers underscores how vulnerable global demand is to shocks originating in America.

Historically, the rest of the world has found some cushion in the dollar's tendency to rise during crises. This “flight to safety” has helped mitigate the impact of lost dollar-denominated wealth on foreign consumption. The greenback's strength has long provided global insurance, often appreciating even when the crisis originates in America, as investors seek refuge in dollar assets.

There are, though, reasons to believe that this dynamic may not hold in the next crisis. Despite well-founded expectations that American tariffs and expansionary fiscal policy would bolster the dollar, it has instead fallen against most major currencies. Although this does not mark the end of the dollar's dominance, it does reflect

growing unease among foreign investors about the currency's trajectory. Increasingly, they are hedging against dollar risk—a sign of waning confidence.

This nervousness is not unfounded. Perceptions of the strength and independence of American institutions, particularly the Federal Reserve, play a crucial role in maintaining investor confidence. Yet recent legal and political challenges have cast doubt on the Fed's ability to operate free from external pressures. If these concerns deepen, they could further erode trust in the dollar and American financial assets more broadly.

Moreover, unlike in 2000, there are serious headwinds to growth, whipped up by America's tariffs, Chinese critical-mineral export controls and growing uncertainty about where the global economic order is heading. With government debt levels at record highs the ability to use fiscal stimulus, as was done in 2000 to support the economy, would be limited.

Compounding the situation, and adding to the overall risk, is the escalation of the tariff wars. Further tit-for-tat tariffs between America and China would damage not just their bilateral trade but global trade too, as almost all countries are exposed to the world's two largest economies via complex supply chains. More generally, avoiding chaotic or unpredictable policy decisions, including those that threaten central-bank independence, is critical to prevent a market collapse.

Meanwhile, it is important for the rest of the world to generate growth. The problem is not so much unbalanced trade as unbalanced growth. Over the past 15 years productivity growth and strong returns have been concentrated in a few regions, primarily America. As a result, the foundations of asset prices and capital flows have become increasingly narrow and fragile.

If other countries were able to strengthen growth, that would help redress the imbalance—and place global markets on a firmer footing. In Europe, for instance, completing the single market and deepening integration could unlock new opportunities and attract investment. This year's Nobel laureates in economics provide a valuable recipe for innovation-led growth. There are encouraging signs that capital is beginning to flow back into emerging markets and other regions. However, this trend may stall unless those economies can show they are able to generate consistent growth.

In sum, a market crash today is unlikely to result in the brief and relatively benign economic downturn that followed the dotcom bust. There is a lot more wealth on the line now—and much less policy space to soften the blow of a correction. The structural vulnerabilities and macroeconomic context are more perilous. We should prepare for more severe global consequences.

Gita Gopinath is the Gregory and Ania Coffey Professor of Economics at Harvard University. She was the first deputy managing director of the IMF from 2022 to 2025 and its chief economist from 2019 to 2022.

From NYT:

Warning: Our Stock Market Is Looking Like a Bubble

Oct. 14, 2025

By Jared Bernstein and Ryan Cummings

Mr. Bernstein was the chair of President Joe Biden's Council of Economic Advisers from 2023 to 2025. Mr. Cummings served the council as an economist from 2021 to 2023.

You may remember the recession that followed the collapse of dot-com stocks in 2001. Or, worse, the housing crisis of 2008. Both times, a new idea — the internet, mortgage-backed securities and the arcane derivatives they unleashed — convinced investors to plunge so much money into the stock market that it inflated two speculative bubbles whose inevitable bursting created much economic pain.

We believe it's time to call the third bubble of our century: the A.I. bubble.

While no one can be certain, we believe this is more likely the case than not. Investment in artificial intelligence has been so huge — with venture capitalists investing [nearly \\$200](#) billion in the sector this year alone. Additionally, data-center investment has tripled since 2022. Together, these investments are driving growth across the entire economy, pumping up the stock market and generating increasingly eye-popping valuations of the technology firms driving the A.I. revolution.

In financial markets, a bubble occurs when the level of investment in an asset becomes persistently detached from the amount of profit that asset could plausibly generate. While investors are always making bets on an unknown future, bubbles form when large swaths of investors continuously pour ever more into an asset, with seemingly little regard for how much it could earn and when.

A.I. investment fits that pattern. OpenAI [says it needs](#) at least \$1 trillion to invest in data centers that provide the electricity, computing power and storage to train and run A.I., yet the company's revenues are expected to amount to a mere \$13 billion this year. And since the debut of ChatGPT, an easily accessible A.I. chatbot, in late 2022, the S&P 500 has swelled by nearly two-thirds, with just seven firms — all of whom have invested heavily in A.I. — driving more than half of that growth.

Or take a look at the price-to-earnings ratio — a common measure of how much the future profits of a company are valued over current ones — of the stocks of companies heavily invested in A.I. They are at levels not seen since the dot-com bubble of 2000. Shares of the A.I. chipmaker Nvidia are trading at roughly 55 times earnings, nearly double what they were a decade ago. And by our own estimates, the share of the economy devoted to A.I. investment is nearly a third greater than the share of the economy devoted to internet-related investments back then. All this points to one conclusion: Should lackluster A.I. performance or sluggish adoption cause investors to doubt these lofty profit expectations, this probably-a-bubble will pop. And a lot of people, not just wealthy investors, will get hurt. Adoption, both by firms and individuals, is clearly growing, but whether this adoption is generating massive productivity benefits or profits [remains to be seen](#).

Of course, we cannot rule out the possibility that this time is different, and unlike the railroad and internet bubbles, A.I. is an epoch-shifting technology that generates its promised economic benefits relatively quickly. If that occurs, say, over the next five to 10 years, the future profits generated by A.I. could justify the levels of investment we're observing today (it was in this spirit that Microsoft's chief executive, Satya Nadella, recently said, "I hope we don't take 50 years"). It is also impossible to know when we're at the top of a bubble, which is one reason investors tend to keep piling in.

But we're skeptical. Look at what happened with the internet. In the dot-com bubble of the late 1990s, hype around that revolution allowed companies like [pets.com](#) to raise over \$80 million in an initial public offering, despite the fact that its business model, which involved spending too much money to sell unprofitable pet supplies, was questionable at best. Less than nine months after their I.P.O., the firm went bankrupt — and many

other busts soon followed. The belief that the internet would become a transformative technology was eventually correct, but investors during the dot-com bubble were wrong about the winners and their timing.

The economic impact generated by a bursting of the A.I. bubble would be greater than the loss of the trillions currently being invested to build the technology itself. The stock market, one of the brightest parts of the current economy and heavily dependent on A.I. ebullience, would also tumble. That, in turn, will diminish the “wealth effect,” or the way that stock market gains support consumer spending.

Using [data](#) from the economist Mark Zandi, we found that over the past two years, real consumer spending is up 17 percent for the wealthiest households, who disproportionately hold stocks, but flat for the middle class. Mr. Zandi estimates that the A.I. wealth effect is boosting current real gross domestic product growth by about 0.4 percentage points (just under \$100 billion), comparable to the peak of the dot-com bubble, when the wealth effect was 0.6 percentage points.

There is a bit of a silver lining. As best we can tell, the damage of a potential A.I. bubble would not approach the carnage that resulted from the burst of the housing bubble and the financial crisis of 2007 and 2008. While [banks](#), [private credit](#) and [private equity](#) are all lending heavily to companies that are building and leasing A.I. data centers, this debt appears less distributed and embedded in global finance than it was back then. Plus, the risks are not obviously or systemically underpriced, a factor that played a key role in spreading the contagion across the globe during the housing bubble. Prominent borrowers in this space, like CoreWeave, are paying [9 percent](#) on their debt, well above the current risk-free rate on 10-year Treasuries of around 4 percent.

Our economy faces real risks. If A.I. is in a bubble, and its valuations relative to its expected payouts start to alarm investors, the bubble will burst. The ensuing wealth losses and consumer spending impact could, once again, be recessionary, though there’s a good chance the impact won’t be nearly as bad as the last bubble. Granted, that’s not good news. But it could be worse.

Three from WSJ’s Markets A.M., the first dated Oct. 30th:

Stocks Are Up, but Maybe Not Your Stocks

By Spencer Jakab

When someone tells you that “the stock market is up,” what do they mean exactly?

It’s almost always shorthand for the performance of an index meant to represent them in general. For many Americans, that’s still [the clunky, 30-member Dow Jones Industrial Average](#). Money managers and financial journalists generally mean the broader S&P 500, which takes big stocks and weights them according to their market value.

But how likely is it that stocks you own didn’t join the party? It’s happening more and more with the Magnificent Seven [making up an incredible one-third](#) of the S&P 500’s weight. On Tuesday that divergence hit an extreme. It isn’t a great sign for the market’s overall health.

Say you had written every S&P 500 ticker symbol onto a card and picked one at random from a hat. There would have been only a one-in-five chance of it being a winner Tuesday, even though the index had a decent gain that day.

Nvidia jumped nearly 5% and the Magnificent Seven by 1.3% on average. Microsoft ended the day with a market value above \$4 trillion and Apple briefly crossed the mark for the first time.

Never before have so few stocks risen on a day when the overall index gained, according to Charles Schwab strategist Liz Ann Sonders, whose data goes back to 1990. There were 294 more losing stocks than those that rose.

Such “bad breadth” when the index rises has been inauspicious, according to Bespoke Investment Group. On average, the S&P 500 has had an 80% chance of rising in any given 12-month period. The likelihood fell below 55% when breadth was minus 250 or worse on an up day.

That probably isn’t a coincidence. Periods of high concentration on a limited number of highfliers—like the late 1960s and early 1970s when the “Nifty Fifty” were in vogue, or the late 1990s tech boom—have preceded severe bear markets.

Happily, it means an alternate way to own shares of large American companies might soon provide a refuge. An index of the same 500 or so stocks that is equal-weighted, owning the same proportion of the largest and the smallest companies, rebalanced regularly, [could be poised to shine](#).

Since the beginning of 2023, when the Magnificent Seven began to suck the oxygen out of the room, that equal-weighted index has lagged the regular, capitalization-weighted S&P 500 by 47 percentage points. But it has had long periods of outperformance.

From the inception of the first equal-weight S&P 500 ETF through 2022, the equal-weighted gained 453% or 134 percentage points more than the traditional index. Analysts at S&P Global [wrote in early 2023](#), when the equal-weighted S&P 500 turned 20, that its performance had beaten 99.8% of large-cap stock funds over that period.

Is your portfolio lagging? Take a deep breath.

Performance of equal and capitalization-weighted S&P 500 funds since 2023



Source: FactSet

dated Oct. 14th:

Sleep Soundly, Earn More

By Spencer Jakab

No risk, no reward? Not necessarily.

Friday's [Trash Crash](#) was a reminder of one of the weirder and more-rewarding investing hacks: Stocks that help you sleep at night can also make you wealthier in the long run.

It seems like common sense that the greatest stock-market riches are reaped by those who throw caution to the wind by investing in the sort of companies avoided by widows and orphans—think Amazon, Netflix or Nvidia before they became blue-chips.

That common sense conclusion also forms the bedrock of academic-finance theory. The capital asset pricing model predicts a direct relationship between risk and reward.

But real world results show that often isn't true. According to the findings of the low-volatility anomaly, dull stocks [have beaten the market in the long run](#), and with less choppiness.

Just not during exuberant stretches like the six months between April's Liberation Day low and last Thursday. A basket of meme stocks tracked by Goldman Sachs rallied 124% and one of speculative quantum-computing stocks gained 316%. On the opposite end of the performance spectrum, boring consumer-staples stocks rose just 1.3%.

During Friday's market tumble, though, the first were last and the last first. Palantir, up 140% during the preceding stretch, retreated 7%. Rigetti Computing, which had surged 510%, fell by almost 7%. Meanwhile, Colgate-Palmolive, Altria, Campbell's and General Mills shares all rose.

The S&P 500 High Beta Index, made up of the benchmark's most-volatile stocks, had risen nearly 70% during the six-month span and fell almost 5% on Friday. The S&P 500 Low Volatility Index, the yin to high-beta's yang, had barely managed a 7% gain during the preceding six months but rose slightly amid Friday's carnage.

A single day's reversal proves nothing, but the impressive long-term performance of those dull stocks might. And fewer white-knuckle moments also result in higher real-world returns since investors are less likely to get spooked into panic selling.

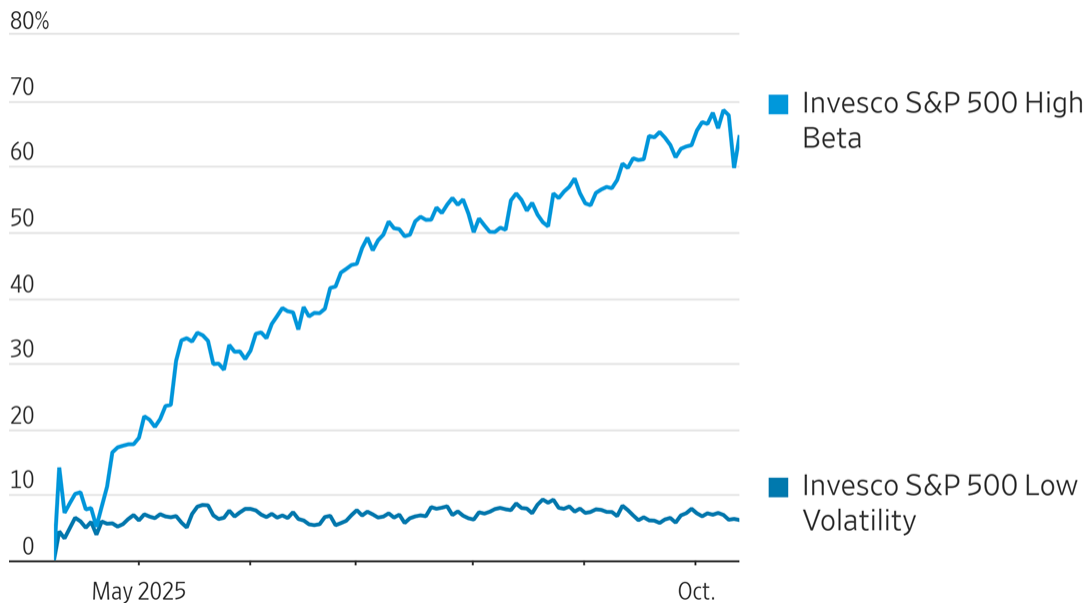
The problem is that low-volatility stocks [tend to attract investors during downturns](#). High beta was a huge winner during the tech bubble and also has been during much of the retail investing boom since the pandemic.

One reason the raciest stocks get more appealing right when they get more expensive, like now, is that savers have an irrational preference for lottery tickets. Seeing huge payoffs, they overpay for the possibility of it happening again.

The Nobel Prize-winning economists who said decades ago that risk equals reward missed such psychological factors and also never accounted for trading frictions. Actively betting against stocks with nosebleed valuations like Rigetti or Palantir by selling them short is risky and expensive. That helps them keep rising for a surprisingly long time.

For investors wary of market froth who want to stay invested, this might be one of those times when boring is beautiful.

Performance since Liberation Day low



Source: FactSet

dated Oct. 13th:

These Funds Can Go to Zero

By Spencer Jakab

Early this decade some investing pundits were predicting a new “[roaring twenties](#).”

The one a century ago also started with a pandemic followed by a wave of innovation, risk-taking and enormous stock-market wealth. So far, so good.

Now another echo of that boom is giving exuberant investors enough rope to hang themselves: investments that can go to zero.

Of course any stock could do that, but you’d have to be truly reckless to lose every penny in a diversified portfolio. And when it comes to funds, mainly rich people allowed to invest in ones that occasionally go bust.

But a coming wave of leveraged products make that possible for the little guy by focusing on individual, usually volatile companies. We just got a preview from London.

Remember how shareholders of Advanced Micro Devices [celebrated a week ago](#) following its deal with OpenAI? Well it was awful news for owners of a GraniteShares exchange traded product that was three-times short the stock. [Their announcement](#):

“As a result, and in accordance with the Terms and Conditions of the ETP, an Early Redemption Event has occurred. The Value per ETP Security has been determined as USD 0.0000.”

Four decimal places was a nice touch. GraniteShares [recently filed to list similar U.S. products](#).

Funds that represent similarly leveraged returns on a basket of stocks have been available stateside for a while. For example, [a triple inverse semiconductor index fund](#) also fell sharply that day and is down by a whopping 99.99999% since inception. That still isn't zero, and it took years.

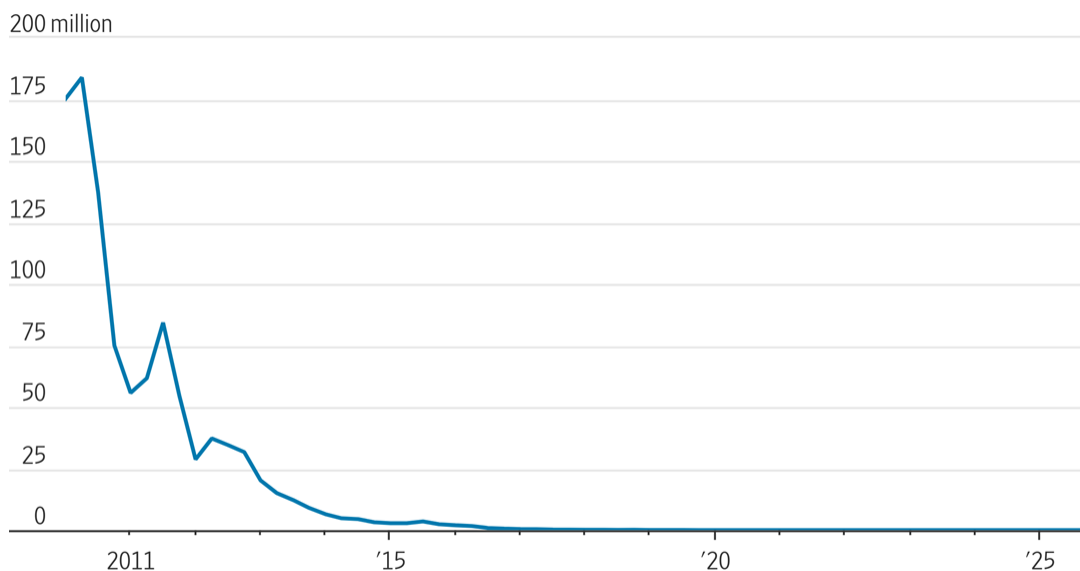
When stocks crashed in 1929, many investors were ruined because they were allowed to buy on 10% margin—putting down a tenth of a stock's price with the rest borrowed. And highflying funds from that era known as investment trusts [had significant borrowings too](#), often buying other trusts that had their own borrowings. Owners were wiped out by what seemed like diversified funds.

Americans [already lose lots of money](#) with leveraged products these days because of decay and hidden costs. Basing them on more volatile individual stocks means more zeroes in investors' future.

Other products are coming that frequently end in a goose egg: U.S. investors are getting access to [perpetual futures](#) for cryptocurrencies that could have as much as 100 times leverage. Friday's bitcoin "perp" meltdown saw accounts wiped out [and even winning traders picking up part of the tab](#).

But that's crypto. Inserting the possibility of total loss into something that looks like a stock mutual fund at a time of maximum retail-investor excitement is taking the 1920s parallels to a new level.

Direxion Daily Semiconductor Bear 3X Shares



Note: Because of numerous reverse splits, original price is above \$175 million.

Source: FactSet

Follow-ups

We continue to view Crypto as a speculative vehicle, being used by Trump to enrich himself and his family, and rife with fraud. The latest from Oct.30th:



Another example: <https://www.youtube.com/watch?v=5fTv9ThJg6U> (7 min.)

From WSJ:

A Historic Crypto Selloff Erased Over \$19 Billion, but Two Accounts Made \$160 Million

A timely bet raises eyebrows amid record crypto selloff

By [Sam Kessler](#), [Shane Shifflett](#) and [Caitlin Ostroff](#)

Oct. 13, 2025

President Trump's [surprise announcement of 100% tariffs against China](#) on Friday triggered a cryptocurrency selloff that wiped out more than \$19 billion in leveraged positions. Two accounts that placed bets against the market minutes before the news broke scored a \$160 million windfall.

Bitcoin dropped 12%, forcing liquidations that triggered even more selling, pushing prices lower. Less popular tokens saw declines as steep as 80%. CoinGlass, a crypto data platform, noted that the scale of the selloff is likely underreported, as many platforms don't publish liquidation data.

While crypto has fallen before, analysts said the sharp downturn exposed the extreme leverage that had fueled a monthslong rally, which began after the election of an administration seen as friendly to the industry.

Last week's plunge also highlights how closely these markets are now intertwined with geopolitics—and how their prices respond to policy decisions from an administration whose members hold large stakes in the very assets they are affecting. The token for World Liberty Financial, a crypto project backed by President [Trump](#) and his three sons, fell by more than 30% on Friday.

Ahead of the selloff, two accounts on Hyperliquid, a decentralized exchange that allows investors to make leveraged bets on future crypto prices, placed massive bets that bitcoin and ether would fall. By day's end Friday, the positions were closed for \$160 million in profit.

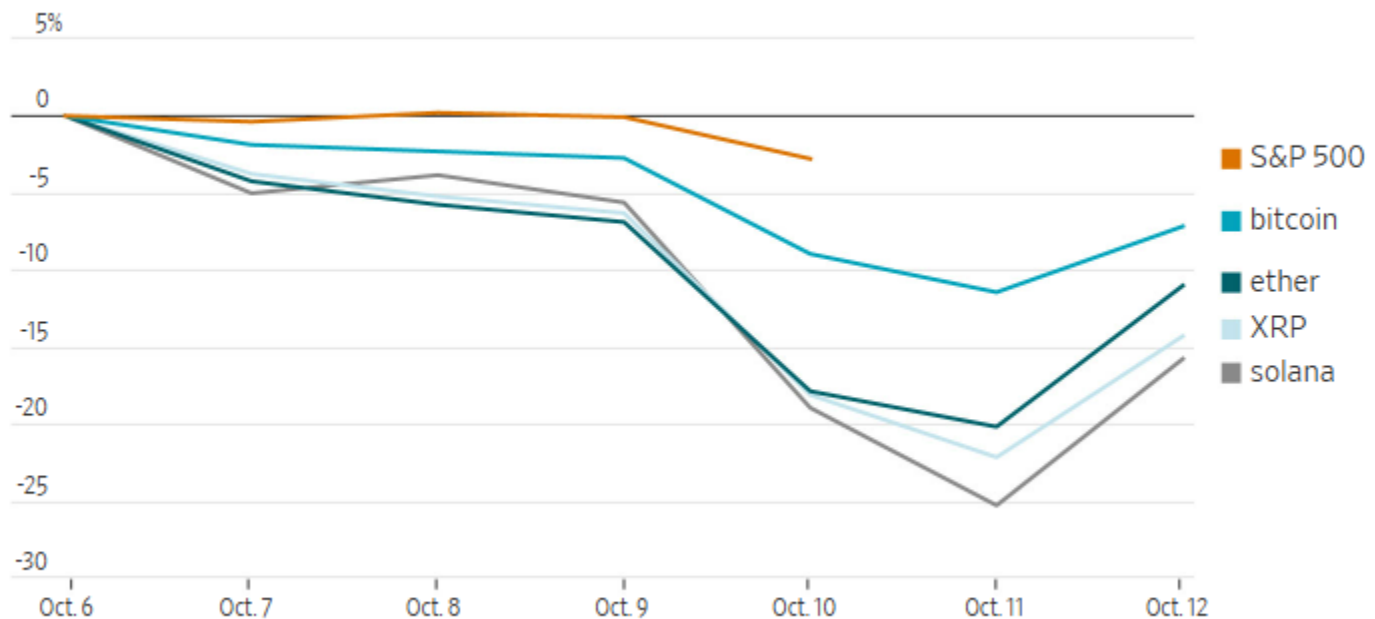
Total liquidations on crypto-derivatives exchanges, daily



Note: Data since June 1, 2021

Source: CoinGlass

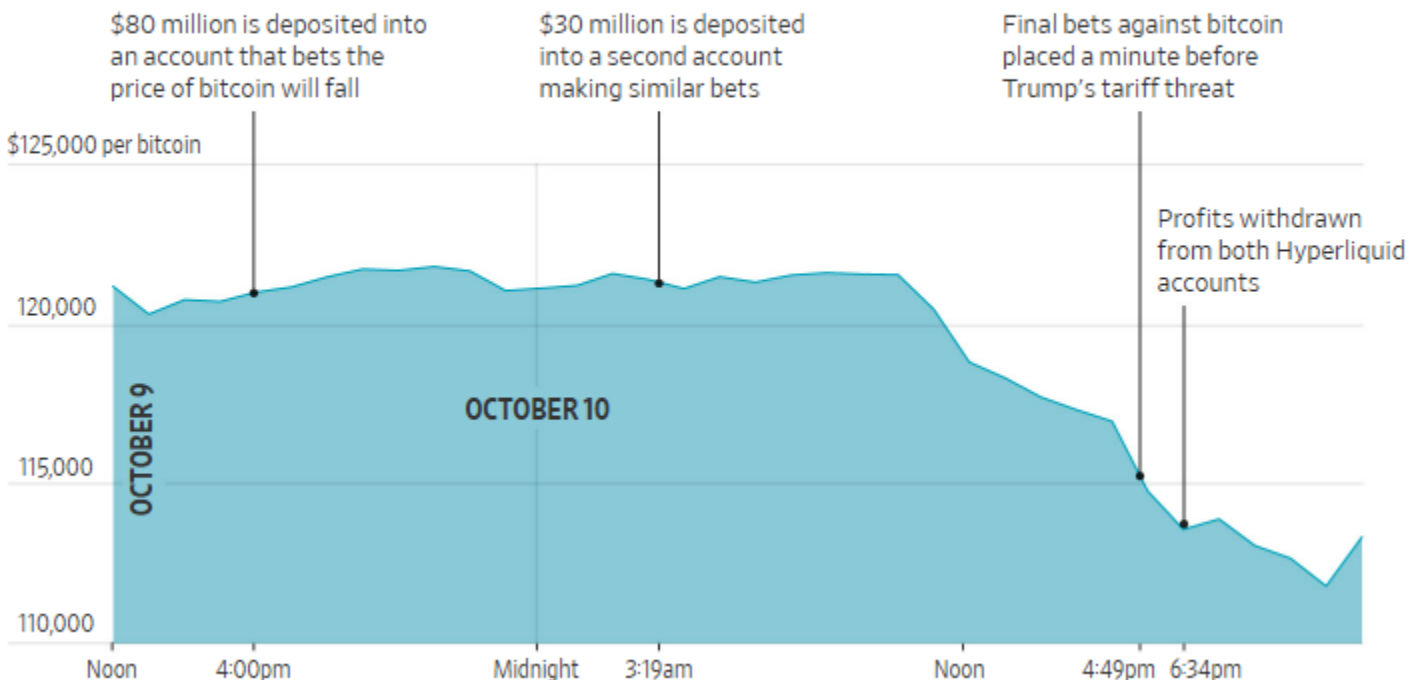
S&P 500 and various crypto tokens percentage change since October 6, 2025



Source: CoinGecko, FactSet

Betting bitcoin will fall

Recent trading activity by two Hyperliquid accounts show at least one trader made millions betting the price of bitcoin would decline.



Source: CoinGecko (bitcoin price); Arbiscan (deposits and withdrawals); Hyperliquid (trades)

The timing of the trades—the last of which was placed just a minute before Trump’s tariff announcement—sparked speculation on social media that they may have been informed by insider information. However, the bets were placed after Beijing announced [new restrictions on the export of rare-earth minerals](#)—a move that ultimately prompted Trump’s tariff response.

The identity of the trader or traders remains unknown. Hyperliquid didn't respond to a request for comment.

From Verdad on Oct. 6th:

Where Factors Speak Loudest

Size modulates factor potency in global equities

By: [Lionel Smoler Schatz](#)

The “size effect” entered the academic lexicon with [Rolf Banz's 1981](#) observation that smaller firms tended to outperform larger ones. [Eugene Fama and Kenneth French \(1992\)](#) cemented the idea in their seminal three-factor model, one of the first systematic challenges to the CAPM. The model embedded what became known as the “small-cap premium”: the tendency of small stocks to deliver higher average returns than large stocks.

Subsequent research, however, complicated the story. Fama and French's own 2012 global update, along with [Hou, Xue, and Zhang's q-factor model](#), showed that, once you control for characteristics like investment and profitability, the size premium largely vanishes. In the decades since, “size” on its own has proven elusive as a persistent source of excess return.

Still, we believe size matters—not as a standalone source of return, but as a modulator of other factors. In our research, we have found factor premia are strongest in microcaps and fade gradually as market cap increases. Small size amplifies factors, while large caps dilute them.

Figure 1: Annualized L/S Factor Premia by Market Cap Decile

L/S Factor Premia					
Size Decile	Avg Market Cap (millions, USD)	Value	Profitability	Earnings Vol	
1	81	9.30%	5.63%	-5.23%	
2	182	9.94%	5.35%	-3.04%	
3	285	8.15%	4.59%	-1.95%	
4	425	7.73%	4.92%	-2.03%	
5	643	8.07%	4.38%	-1.40%	
6	1002	6.78%	3.52%	0.11%	
7	1649	5.72%	3.47%	-0.46%	
8	2947	4.71%	1.89%	0.57%	
9	6324	3.60%	2.33%	1.09%	
10	44006	2.48%	2.18%	1.35%	

Source: Global Equity Universe, 1996-2025. Note: Fama-French portfolios are formed within each size group by going long the top factor decile and short the bottom factor decile. Factor returns are aggregated monthly but annualized in the table above.

One way we can show this effect is to run classic Fama-French long/short portfolio sorts within size-sorted subsets of the global equity universe. We divided a universe of around 10K global equities into deciles by market cap, from microcaps (decile 1) through mega caps (decile 10). Within each size decile, we formed simple long/short factor portfolios for value, profitability, and earnings volatility.

Factor performance appears to be strongest in small and microcap universes, and more muted in large and mega caps. For value, cheap companies outperform expensive companies by nearly 10% per year in microcap land, whereas the premium is closer to 2-3% in large caps. Similarly, profitable companies outperform unprofitable across size deciles, but the magnitude of outperformance is more than twice as powerful in the smallest decile compared to the largest (5.6% vs. 2.2%). Earnings volatility goes one step further: its sign flips from negative in microcaps to positive in the largest caps. Small companies with volatile earnings tend to exhibit negative

Figure 2: Factor Sharpe Ratios Across Weighting Schemes

Annualized Sharpe Ratios			
Factor	Mkt Cap	Sqrt Mkt	Equal
Equity Intercept	0.46	0.48	0.52
Div Yield	0.13	0.23	0.27
Earnings Vol	0.19	0.02	-0.18
Growth	-0.10	-0.17	-0.35
Investment	-0.06	-0.53	-0.76
Leverage	-0.37	-0.26	-0.55
Momentum	0.35	0.63	0.74
Profitability	0.39	0.39	0.20
Quality	0.58	0.95	1.18
Short Squeeze	-0.72	-0.63	-0.64
Size	-0.03	-0.01	0.12
Trading Activity	0.12	-0.22	-0.61
Value	0.84	1.31	1.75
Volatility	0.09	0.07	0.03

Large cap tilt ←————→ Small cap tilt

Source: Verdad analysis. Note: Factor returns are generated via cross-sectional regressions of fundamental factor exposure (z-scored -3 to 3) against forward 30-day local excess returns. Universe of 11K global equities (as of 2025). Premia aggregated from 1996 to 2025. Region and sector binary flags were included as controls in each weighting scheme.

returns, while larger companies with volatile earnings have exhibited positive returns compared to their less volatile peers.

Another way to see the “watering down” effect of large caps is to compare different weighting schemes in a cross-sectional regression framework, sometimes referred to as Fama-MacBeth regressions. This enables us to assess factor premia after controlling for coincident factor exposures. Coefficients from these regressions yield factor premia associated with being exposed to each style factor (specifically one standard deviation more exposed than the market as a whole).

In **Figure 2**, market-cap weighting gives more weight to large caps, while equal-weighted regression tilts more heavily toward smaller companies, and square-root weighting falls in between.

Equal-weight regressions, which tilt most heavily toward smaller firms, show consistently stronger factor Sharpe ratios. Market cap–weighted regressions, by contrast, show weaker premia across almost every factor. The dilution is especially striking for value, quality, and momentum—three of the most well-established factors.

Of course, stronger premia in small caps do not translate directly into investable returns. Thin liquidity, wider spreads, and higher trading costs can erode much of the apparent factor premia, especially for more active strategies. Large caps, by contrast, come with lower costs and greater scalability, but more muted factor premia.

In our view, size is less a standalone source of return than an amplifier that determines how loudly factors speak.