May 2026


RAMIREZ
LAS VEGAS REVIEW-JOURNAL for THE WASHINGTON POST
2026©
WELL, HE WANTED A MONUMENT to HIMSELF...
WHAT is it MADE of?
DEBT.

Two from WSJ. Last weekend's:

Oil Declines Lift Stocks to Fresh Records

Brent crude falls 19% in May, its sharpest monthly drop since 2020

BY VICKY GE HUANG AND CAITLIN MCCABE

A steep drop in oil prices propelled stocks to fresh records, buoyed by investor optimism over a possible peace deal between the U.S. and Iran.

Brent crude futures, the international benchmark, experienced their biggest monthly slump since March 2020 after falling 11% in the past week. For the month, Brent was down 19%. West Texas Intermediate crude, the U.S. oil benchmark, fell 17% during May.

In a Truth Social post Friday morning, President Trump wrote that he would be meeting with his team "to make a final determination" about a peace deal with Iran. Treasury Secretary Scott Bessent said Thursday that Washington and Tehran are within reach of an agreement to wind down the war, though the president hasn't signed off yet (No deal, which shouldn't have been a surprise. Zeihan on Geopolitics: https://www.youtube.com/watch?v=ZS5Q7nABaxg >9 min.). …

Investors are betting the corporate earnings will keep fueling higher stock returns. In the first quarter, the year-over-year earnings growth rate for companies in the S&P 500 is 28.6%, according to FactSet calculations based on actual results and analyst estimates. If maintained, the index will lock in its highest earnings growth rate since the fourth quarter of 2021.

Artificial-intelligence advances have been a primary catalyst for this corporate profit boom. …

"I view the market as exuberant, and I've seen this before," JPMorgan Chase CEO Jamie Dimon said at a conference Friday. "Of course, exuberance can go on a long time." … (In a December 1996 speech then Federal Reserve Chairman Alan Greenspan, celebrated as the "maestro", famously warned of "irrational exuberance" as the dot-com bubble was inflating. That bubble didn't burst until March 2000 after which the NASDAQ plunged 78%.)

The Dangerous Brew That's Rattling Bond Markets

A mix of debt, inflation and populism has changed the interest rate landscape since 2020

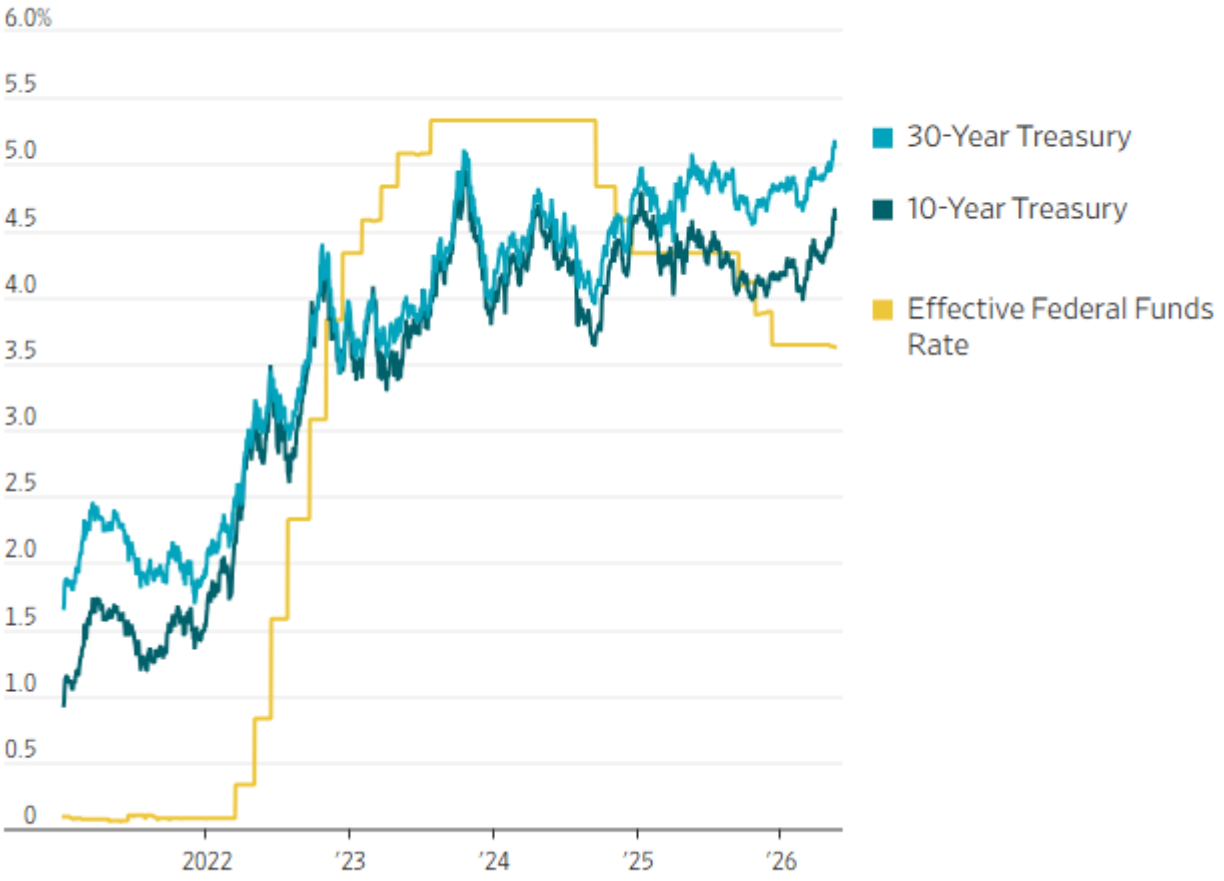
By Greg Ip
May 21, 2026

The question for bond markets isn't why yields rose so much in the past week, but why this didn't happen sooner.

Government borrowing—everywhere, and especially in the U.S.—has been out of control for years. Inflation in the U.S. has been stuck above the Federal Reserve's 2% target since 2022. Add in heavy corporate borrowing to fund the AI build-out, and you wonder why long-term interest rates aren't higher.

To be sure, the selloff (when bond yields go up, their prices go down) has been mild in the scheme of things. The 30-year Treasury yield hit a 19-year high of 5.18% Tuesday. Yet the more closely watched 10-year yield, at 4.67%, was lower than in October 2023. Both dropped back Wednesday on hopes oil will resume flowing through the Strait of Hormuz.

Treasury yields and interest rates



Source: Federal Reserve

Yields reached 5% in 2023 in great part because the Fed's short-term interest rate target was even higher, at 5.25% to 5.5%. Today, the Fed's rate target is 1.75 percentage points lower. Fading hopes of more Fed cuts drove the recent surge in yields. But the bigger driver over the past year is that investors want more compensation for lending over many years instead of a few months.

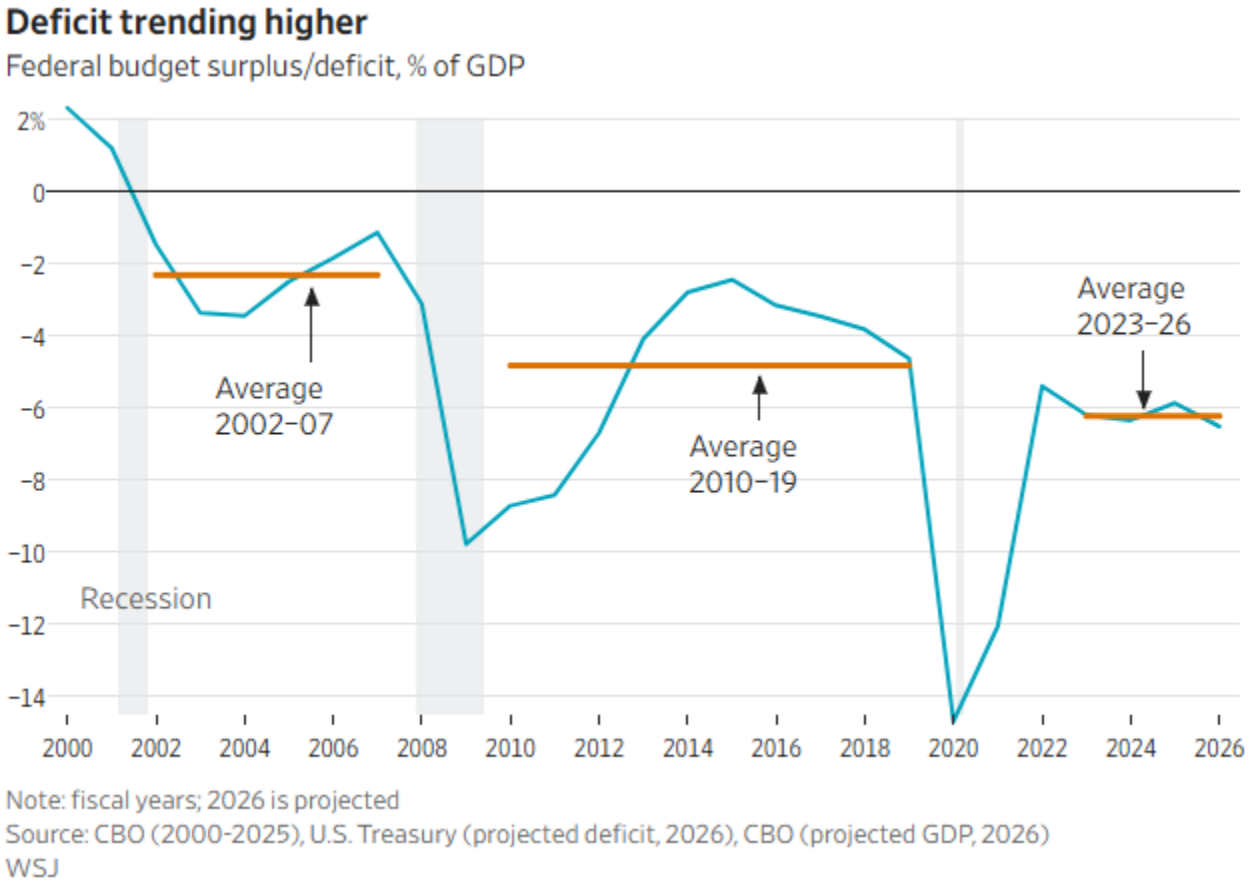
That reflects a judgment that debt, inflation and populism—all prominently at work in the past week—are going to be around for a while. They don't mean a bond market crisis in the offing. But together they are likely to put upward pressure on interest rates for years to come.

The story of debt

Before 2020, elected leaders usually preached the virtues of austerity even if they didn't practice it much. Since then, they have responded to almost every shock by borrowing more.

President Joe Biden's 2021 stimulus was followed by President Trump's 2025 tax cuts. His administration projects the budget deficit rising 16% this fiscal year to $2.1 trillion. Trump has requested a record $1.5 trillion for the Pentagon for next year. That is a lot of debt for investors to absorb.

From 2023 through 2026, U.S. deficits will have averaged 6.2% of gross domestic product, unprecedented outside war, recessions or emergencies. That's up from the 4.8% average from 2010 to 2019, and 2.3% from 2002 to 2007.



The response to the inflation increase from the war with Iran may bring about yet more borrowing. Sanae Takaichi was elected prime minister of Japan last year with a formidable majority but hasn't used the resulting political capital to shrink Japan's massive debt. Indeed, in the past week she said a new budget might be in order, to extend relief to families hit by higher energy prices, which sent Japanese bond yields up sharply.

In the U.S., Trump has proposed suspending the federal gasoline tax, which would cost $3.5 billion a month according to the Committee for a Responsible Federal Budget.

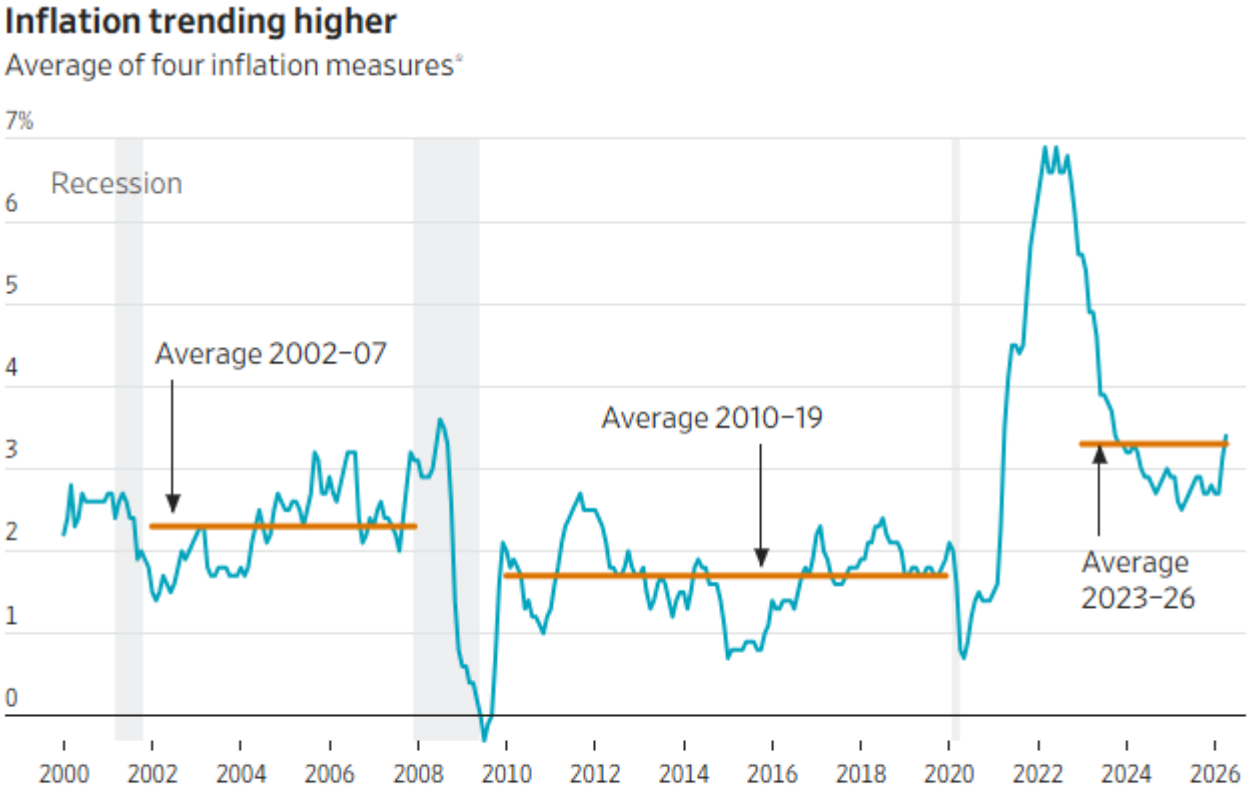
The rise of populists on the left and right makes any serious attempt to reduce deficits even more remote. Despite a huge parliamentary majority, British Prime Minister Keir Starmer faces stiff resistance to spending cuts from his Labour Party's left wing. His leadership may soon be challenged by Greater Manchester Mayor Andy Burnham, a socialist who has said Britain should not be "in hock to the bond market." That prospect fed the recent rise in British yields.

Inflationary 'one-offs' keep coming

Until 2020, big economic shocks tended to push inflation lower: China's entry into the World Trade Organization, the U.S. mortgage crisis, the euro crisis, the shale oil revolution, the initial wave of Covid-19.

Central banks often fought to keep inflation from slipping below their 2% targets by keeping short-term rates near zero and buying bonds. Investors accepted low returns on bonds because bonds acted like insurance, rising in price when stocks fell and central banks intervened.

Since then, shocks have tended to push inflation higher: the supply-chain disruptions following Covid, Russia's invasion of Ukraine, Trump's tariffs, and the closure of the Strait of Hormuz.



*Consumer price index, total and core (excluding food and energy); Personal consumption expenditures price index, total and core.
Commerce Dept., Labor Dept. via Federal Reserve Bank of St. Louis, Inflation Insights (estimated total and core PCE inflation, April, 2026)
WSJ

We think of these as "one-off" events after which inflation will naturally return to 2%.

But what if they are symptoms of a world more prone to supply shocks because of war, geopolitical rivalry, protectionism, populism and extreme weather? As the shocks accumulate, the public may expect higher inflation indefinitely.

In the latter scenario, central banks will regularly need to raise rates to return inflation to 2%, the opposite of before 2020. Bonds won't insure against falling stocks, so investors will demand higher yields.

A debt-inflation doom loop?

Deficits and inflation, treated so far as separate and distinct, may feed off each other. Anxiety about the cost of living has eroded politicians' popularity everywhere, making them even less willing to propose cuts to government benefits or higher taxes.

If the Fed must repeatedly raise rates, that adds to deficits. The Committee for a Responsible Federal Budget estimates the recent rise in rates, if sustained for a year, would add $200 billion to deficits over a decade. Leaders might pressure central banks against raising rates, which would also lead to higher inflation.

Kevin Warsh, to be sworn in as Fed chair Friday, thought he could cut rates as AI boosted productivity and cut costs. And he might yet. One supportive sign: There is no cost pressure coming from the labor market.

Remarkably, despite debt, tariffs, oil and Trump's attacks on Fed independence, bond investors remain sanguine about inflation. Beyond the next few years, they see it returning to around 2%.

That's a comforting vote of confidence in Warsh. But earning that confidence may mean overseeing higher rates than either he or Trump thought likely. Which a mixture of debt, populism and inflation just might require.

From Thursday's Global Investment Strategy:

Earnings Bubbles Are Still Bubbles

Bubbles in E, Not in P/E

Most stock market bubbles feature an unsustainable increase in share prices in relation to earnings. That was certainly the case during the dotcom bubble when the growth in earnings was dwarfed by the rise in share prices. Sometimes, however, an unsustainable increase in earnings is the source of the bubble.

This happened to banks and homebuilders in the lead-up to the 2008 financial crisis **(Chart 1)**. The forward P/E ratio for banks stayed within a fairly tight range of 11 to 13 between 2004 and 2006. It then declined in 2007 and the first half of 2008 as investors increasingly soured on the sector, even as earnings estimates remained elevated. The P/E ratio then spiked in late 2008/early 2009 once analysts finally began to aggressively cut earnings forecasts. The bank index ended up falling 80% from peak to trough.

Similarly, homebuilders consistently traded below 10-times forward earnings during most of the housing bubble as rising earnings offset the impact of higher share prices. The forward P/E for the sector bottomed in mid-2006 at about five, by which time share prices had already fallen by about 40%. As with the banks, the sector ended up suffering a peak-to-trough price decline of 80%.

Boom-Bust Industries Prone to Earnings Bubbles

Earnings bubbles are common in industries that experience boom-bust cycles. Commodities are a classic example. Earnings estimates for a variety of companies within the energy and materials complex grew rapidly during the 2000s, helping to keep their P/E ratios in check. This did not insulate them from a painful bear market during the Great Recession.

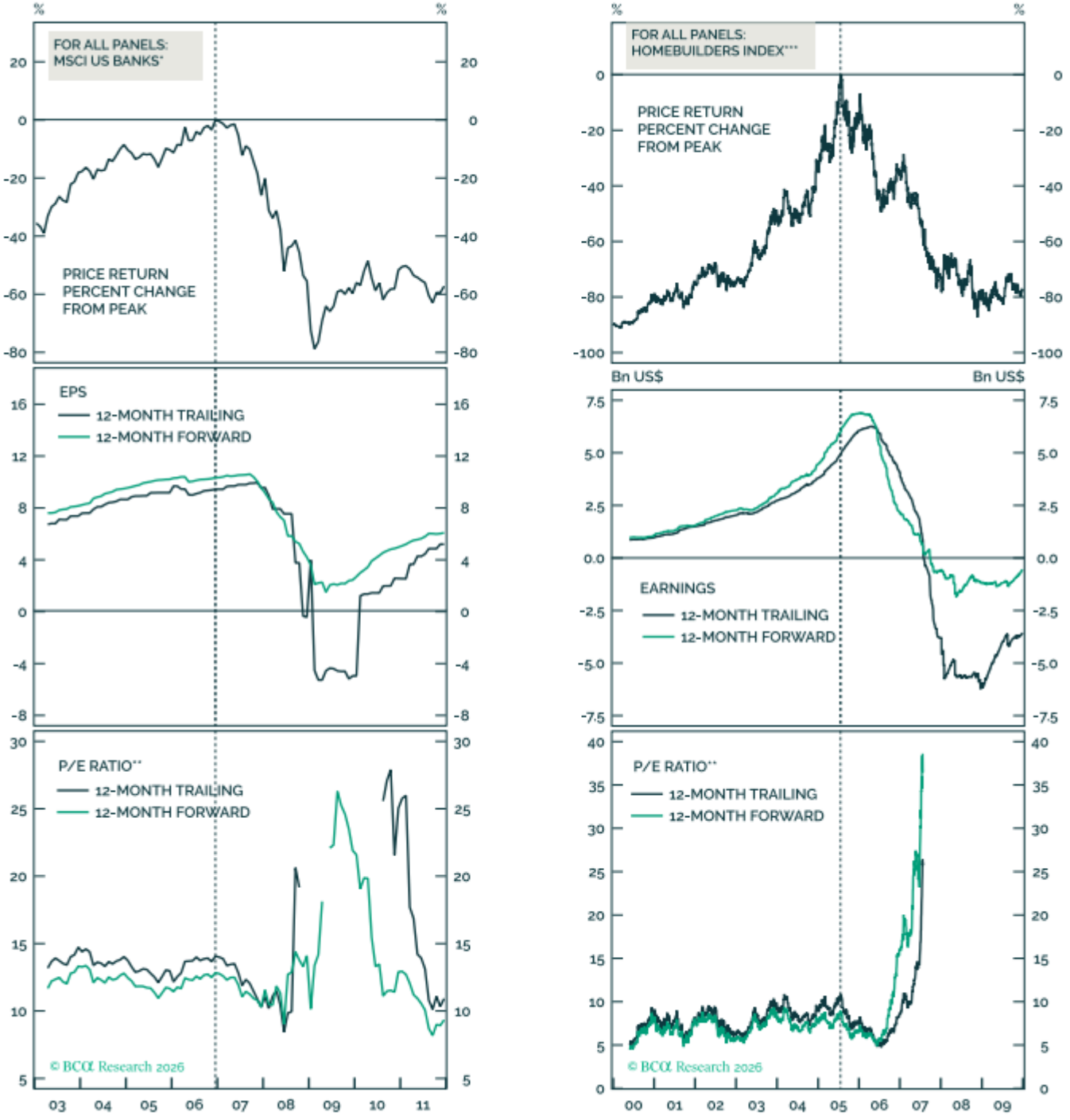
The pandemic fueled an earnings bubble in work-from-home stocks and other COVID beneficiaries in 2020-21, which largely unwound over the following years. Stronger demand for manufactured goods during the pandemic also caused profits for shipping companies to surge. At the peak of the cycle in 2022, they traded at a meager 4-times forward earnings.

Russia's invasion of Ukraine led to a variety of shortages. Coal and fertilizer stocks benefited from significant earnings upgrades, which then turned to downgrades in 2023.

Airlines are another classic boom-bust industry. The collapse of oil prices in the second half of 2014 lifted airline profits. This prompted the airlines to increase capacity, which ultimately put downward pressure on fares.

CHART 1

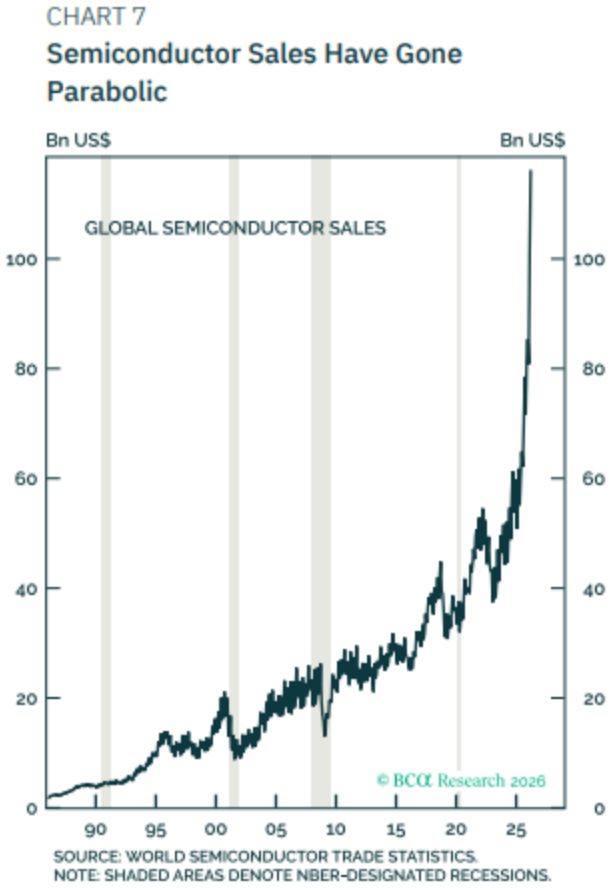
Unsustainable Earnings Growth Fueled The Housing And Banking Bubbles In The Lead-Up To The GFC



* SOURCE: MSCI INC. (SEE COPYRIGHT DECLARATION).
** ONLY INCLUDES POSITIVE VALUES BELOW 40.
*** HOMEBUILDERS SAMPLE INCLUDES LEN, BZH, DHI, PHM, AND TOL. SOURCE: FACTSET.

Semiconductor Cycles

Importantly for today's environment, semiconductor companies have frequently experienced earnings bubbles. Looking back over the past 30 years, the following episodes stand out:



• 1993–96 memory cycle: Micron's net income jumped from $104 million in FY1993 to $844 million in FY1995. Net income then began to trend lower. With the exception of a brief period of profitability in FY2000, the company lost money every year between 1998 and 2003. Hyundai Electronics (later renamed SK Hynix), and to a lesser extent Samsung, also struggled during that period.

• 1999–2001 dotcom/telecom cycle: Intel's sales rose nearly tenfold over the course of the 1990s, reaching $33.7 billion in 2000. Sales then dropped 21% in 2001, temporarily pushing net margins from 31% to just 5%. Globally, semiconductor sales fell 32% in 2001 **(Chart 7)**.

• 2016–20 GPU crypto mining boom: Nvidia's net income rose from $614 million in FY2016 to $4.14 billion in FY2019 but then fell to $2.80 billion in FY2020. Nvidia later admitted it had produced too many chips relative to end-user demand and needed to work down inventories.

• 2017–19 memory cycle: Micron swung from a loss in 2016 to a profit of $14.1 billion in 2018. Profits then plunged to $2.7 billion in 2020. Samsung and SK Hynix experienced a similar roundtrip in earnings.

• 2021–23 COVID cycle: Demand for electronics soared during the pandemic as schools were shuttered, remote work became commonplace, and consumer spending shifted away from services to goods. Semiconductor sales surged in 2021-22 but then dropped in 2023 after PC, smartphone, and cloud computing customers began to cut orders.

• 2024 – ?: We are arguably in the middle of the mother of all semiconductor cycles. In the first quarter of this year, global semiconductor sales were double what they were just two years ago.

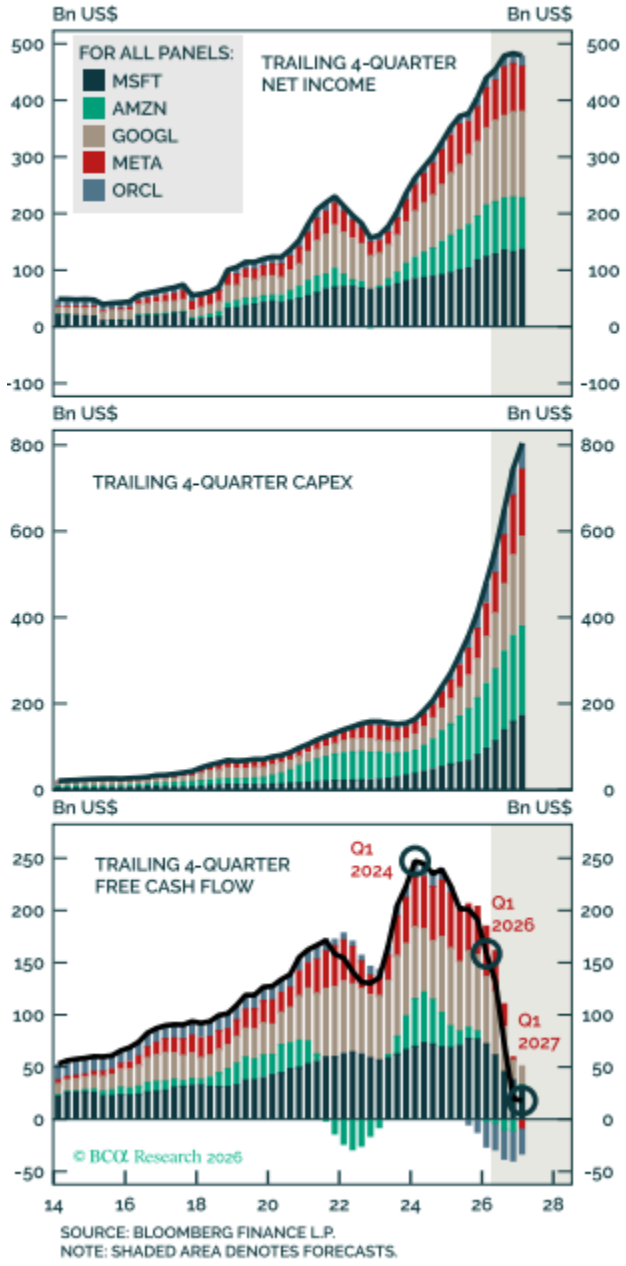
For Now, Shortages Are Propping Up AI Profits

There is an old adage on Wall Street: "The cure for high prices is high prices." Shortages lead to higher prices, which in turn lead to fatter profit margins. Higher profits incentivize investment in new capacity. Supply eventually catches up to demand, causing prices and profits to plunge. This is what ended all the earnings bubbles discussed in this report.

As we highlighted in our report Scarcity: The Ultimate Source of Profits, shortages are propping up S&P 500 earnings. Most notably, AI hardware producers are booking huge profits on their sales, whereas their customers are largely treating the purchases as capex. Such transactions leave aggregate cash flows unchanged but still lift reported earnings.

CHART 8

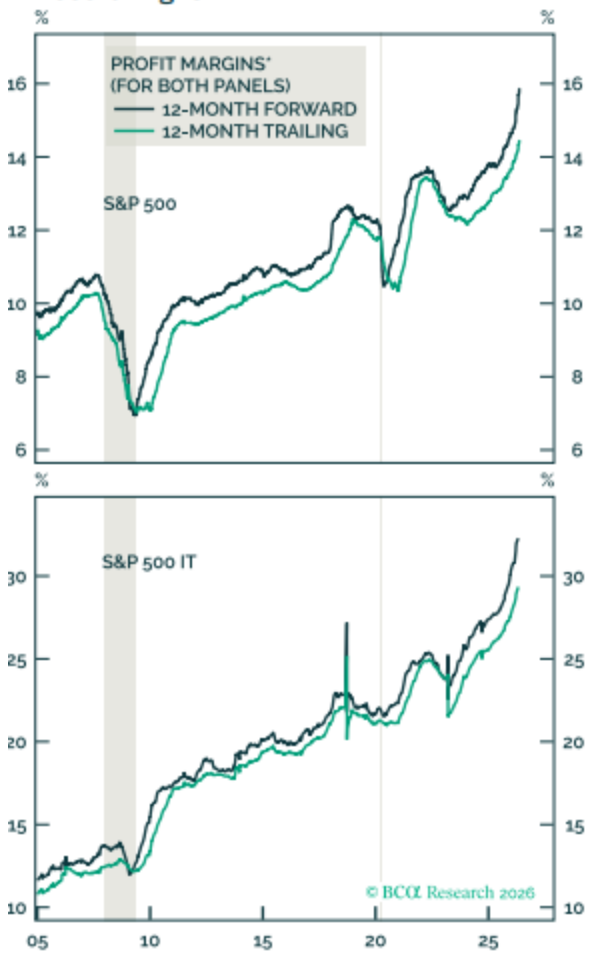
Increased Capex Has Caused Hyperscalers' Free Cash Flow To Crash



SOURCE: BLOOMBERG FINANCE L.P.
NOTE: SHADED AREA DENOTES FORECASTS.

CHART 9

Tech Has Lifted S&P 500 Margins To Record Highs



* CALCULATED AS EPS / SPS. SOURCE: FACTSET.
NOTE: SHADED AREAS DENOTE NBER-DESIGNATED RECESSIONS.

This has resulted in a paradoxical situation: Aggregate free cash flow among the hyperscalers is crashing and could turn negative in 2027 **(Chart 8)**. Yet, reported profits are going through the roof. The surge in tech profits has, in turn, propelled S&P margins to record highs **(Chart 9)**.

Based on consensus analyst projections, we estimate that the hyperscalers will hold roughly $2.5 trillion in AI assets by 2030. Assuming a depreciation rate of 20%, this implies that they will face $500 billion in annual depreciation expenses by the end of this decade. For comparison, the hyperscalers generated $405 billion in aggregate earnings in 2025.

Opposition to Data Centers May Benefit the Hyperscalers

Public opposition to data centers has grown. According to a recent Gallup poll, 7 in 10 Americans oppose the construction of data centers in their local area, with nearly 50% saying they are "strongly opposed".

Ironically, this opposition may work in the hyperscalers' favor. On the cost side, slower data center construction will mitigate the arms race that is now bidding up the prices of everything from memory chips to electrical equipment.

On the revenue side, just as oil companies benefit from a shortage of oil, the hyperscalers benefit from a shortage of compute because it allows them to charge premium prices for access to the cloud.

AI May End Up Being Like Electricity

The conventional wisdom is that AI will strengthen the tech monopolies. However, as we have argued in the past, this might not happen.

Tech monopolies usually require some combination of network effects, economies of scale, or proprietary technology. AI does not clearly lend itself to any of these. Network effects are minimal because the users of AI systems interact with the AI rather than with other users. Economies of scale are also blunted by the fact that expanding AI usage requires greater spending on data centers. Proprietary technology is limited given the plethora of open-source AI models.

The risk for investors is that AI ends up being a lot like electricity: extremely useful but not a clear source of monopoly power when every other firm also has access to it.

Bursting Earnings Bubbles Can Cause Economic Trouble

Earnings bubbles can be more toxic for the economy than valuation bubbles if they leave an overhang of excess capacity in their wake. As a share of GDP, investment in software and hardware in the US hit a record high of 4.9% in Q1 2026 **(Chart 11)**. A decline in tech investment could significantly reduce aggregate demand.

CHART 11

As A Share Of GDP, Investment In IT Hardware And Software Are At Record Highs In The US

SOURCE: BUREAU OF ECONOMIC ANALYSIS (BEA).

CHART 12

The Bursting Of The AI Bubble Will Lead To A Negative Wealth Effect

* DATA INCLUDES DIRECTLY AND INDIRECTLY HELD CORPORATE EQUITIES BY HOUSEHOLDS & NONPROFIT ORGANIZATIONS. INCLUDES BCA FORECAST FOR Q1 AND Q2 2026. SOURCE: FEDERAL RESERVE.

** INCLUDES INFORMATION TECHNOLOGY, BROADLINE RETAIL, AND INTERACTIVE MEDIA & SERVICES. SOURCE: S&P GLOBAL, MSCI INC (SEE COPYRIGHT DECLARATION), AND BCA CALCULATIONS.

NOTE: SHADED AREAS DENOTE NBER-DESIGNATED RECESSIONS.

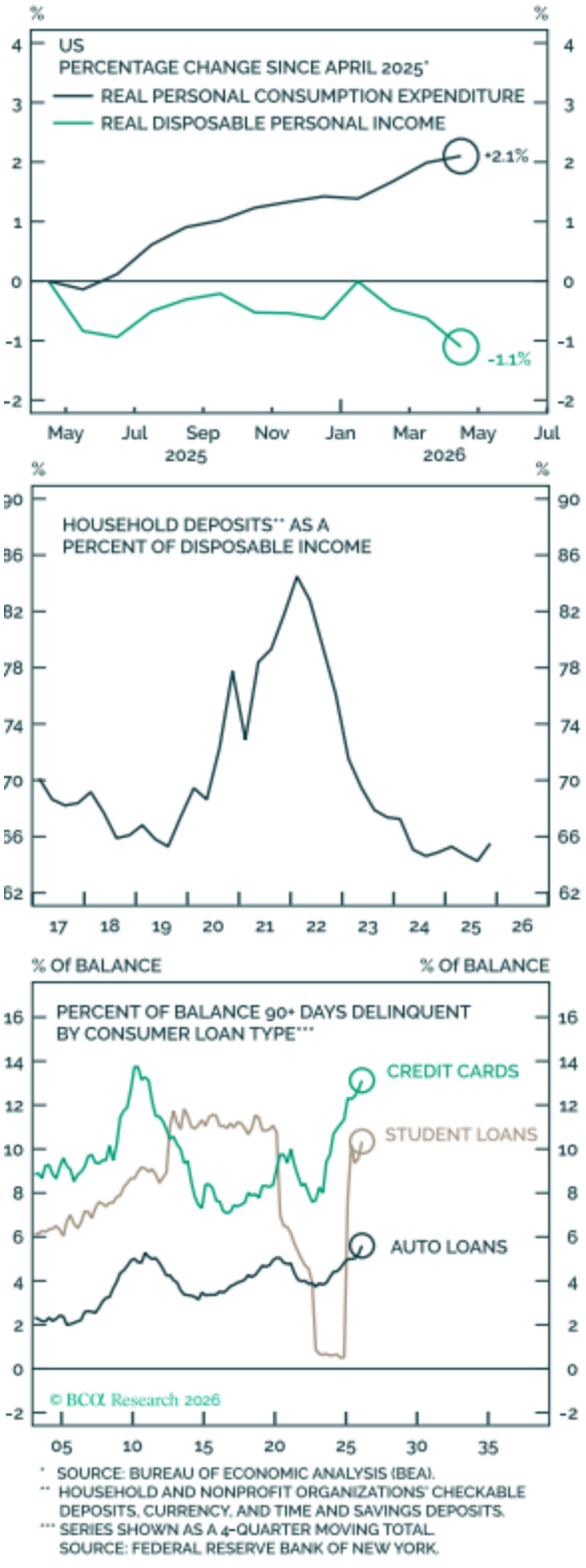
Perhaps more worrying, the bursting of the AI earnings bubble could drive down stock prices, leading to a negative wealth effect. We estimate that US households currently hold $74 trillion (200% of GDP) in equity wealth, nearly half of which is in tech stocks **(Chart 12)**. For comparison, equity wealth only hit about $13 trillion (130% of GDP) at the peak of the dotcom bubble in 2000.

As a rule of thumb, every $1 decline in equity wealth, if sustained, leads to a four-cent drop in consumer spending. Thus, a 20% decline in stock market wealth could reduce US consumption by 2.7% (1.9% of GDP). This would represent a major negative shock to spending among relatively affluent stockholders, arriving at a time when poorer households are already contending with stagnant real income growth, depleted bank balances, and rising delinquency rates **(Chart 13)**.

Higher gasoline prices have only made the situation worse for the poor. A recent New York Fed study documented that the volume of gasoline purchased by richer households has barely budged over the past few months, but has fallen significantly for less affluent families.

CHART 13

Lower-Income Households Are Already Constrained



* SOURCE: BUREAU OF ECONOMIC ANALYSIS (BEA).
** HOUSEHOLD AND NONPROFIT ORGANIZATIONS' CHECKABLE DEPOSITS, CURRENCY, AND TIME AND SAVINGS DEPOSITS.
*** SERIES SHOWN AS A 4-QUARTER MOVING TOTAL.
SOURCE: FEDERAL RESERVE BANK OF NEW YORK.

Don't Trust the Analysts

Investors hoping that Wall Street analysts will tell them when an earnings bubble is about to deflate are likely to be disappointed. In almost all the earnings bubbles we studied, share prices began to fall well before analysts started revising down earnings estimates.

The tech sector was not immune from this trend. Looking at the last three major earnings cycles for the IT sector, share prices peaked between 6 to 10 months before forward earnings peaked. By the time investors would have known that earnings estimates were falling, IT stocks had declined by an average of nearly 30%. The decline for individual semiconductor stocks such as Intel, Nvidia, and Micron was even greater.

Indicators to Monitor

Rather than relying on analysts, whose views lag the stock market, investors would be better off tracking a variety of leading indicators. …

We are also tracking AI-specific indicators to gauge when the AI boom might turn to bust. These include:

• AI adoption measures. For now, they continue to trend upward.

• GPU rental rates. These also remain firm.

• Memory chip prices. Prices for the more AI-adjacent categories continue to rise, although there has been some weakening in spot prices for the less AI-adjacent categories.

• Token spending. The growth of agentic AI has caused token spending to reaccelerate.

• Installations of coding assistants. These have stabilized following a period of rapid growth, with companies such as Uber highlighting the need to rein in AI costs.

The broad conclusion from today's report is that the AI sector is almost certainly in the midst of an earnings bubble. However, despite a few areas of concern, for now the bubble is not at imminent risk of bursting. …

Three from WSJ's Markets A.M. May 29th:

Emerging Markets Won't Protect You From AI Mania

By Spencer Jakab

Home of the Whopper

A Nobel Prize-winning economist called it "the only free lunch in investing," but read the nutritional label carefully: One of the most obvious ways to diversify your portfolio—investing in markets outside the U.S.—suddenly looks like swapping McDonald's for Burger King.

There's a healthier alternative.

Before foreign stocks emerged from their coma last year, calls to look abroad mostly fell on deaf ears. That was especially so when it came to struggling emerging markets, where most of the world's people live. The category made up about 5% of typical U.S. investment portfolios and barely a tenth of MSCI's All Country World Index.

Nothing changes attitudes like results, though. Led by South Korea and Taiwan—yes, they're technically emerging markets according to that index provider—U.S. investors have embraced their charms through exchange-traded funds.

Some investors are doing it without realizing what they bought. Nearly half of the booming Roundhill Memory ETF, the fastest-ever to reach $10 billion in assets, is made up of two South Korean chip makers, SK Hynix and Samsung Electronics.

But even investors actively seeking emerging-markets exposure are now getting a basket of stocks that looks similar. About 28% of the widely-followed MSCI Emerging Markets Index is made up of those two companies plus Taiwanese chip behemoth TSMC. Nine of the index's top 10 constituents are now tech stocks.

Emerging-market exchanges typically have been dominated by financial, utility and resource companies—one reason they usually fetched low price/earnings multiples. The other reasons were instability and corruption.

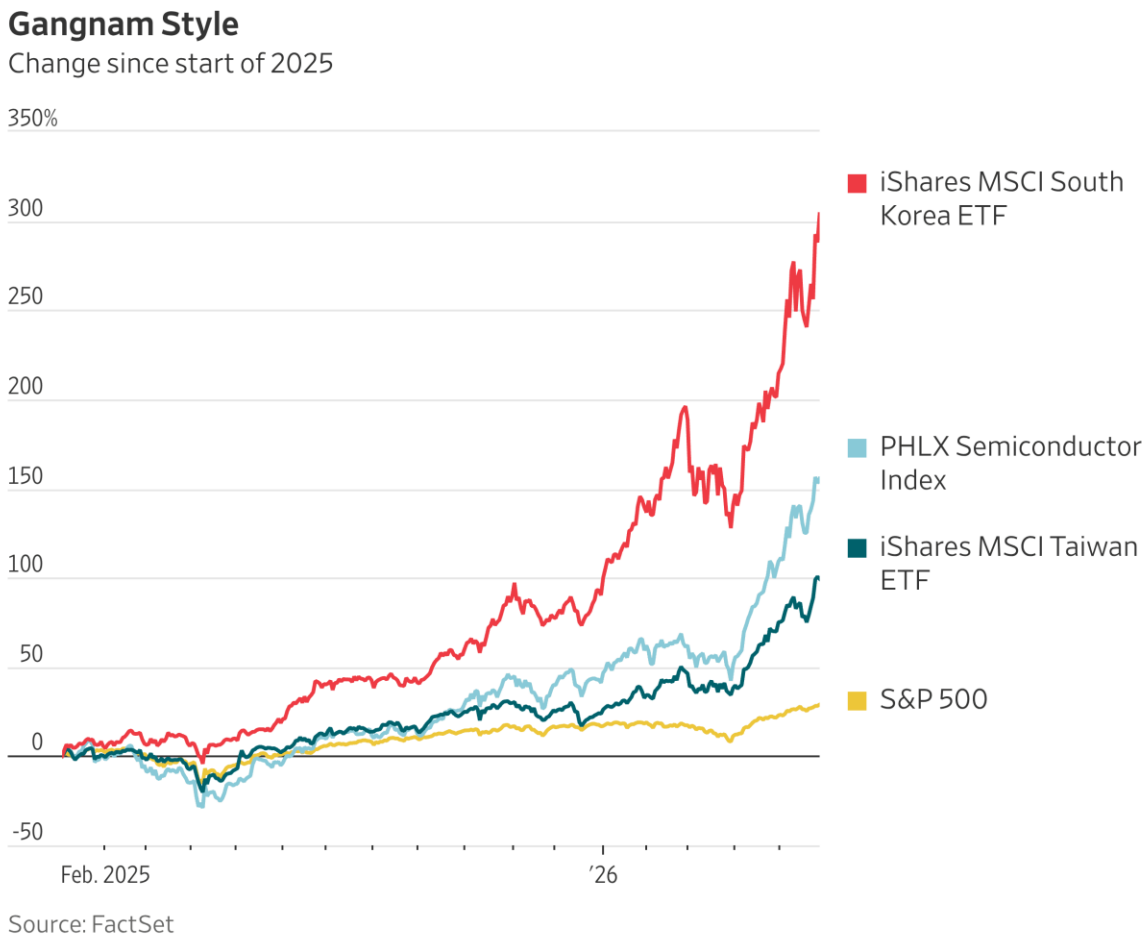
At first glance, modern, prosperous South Korea looks like it's been wrongly tarred with the same brush. It fetches the same single-digit forward P/E multiple as Turkey, Brazil or South Africa. It's much "cheaper" than India, Thailand or Mexico.

But, after rallying 306% since the start of 2025, it only looks like a bargain because of temporarily chunky profit margins for memory chips. Maybe the price is still reasonable, just as it could be for red-hot U.S. semiconductor stocks. The problem is that their fortunes are hitched to the same AI trend.

Investors used to be able to diversify by buying a single fund like the iShares Emerging Markets ETF and call it a day. Now they might be better off doing a little extra work and spreading those bets.

Deep knowledge of Mexican, Thai, Indian or Turkish politics isn't necessary to grasp that things in those countries are very different. That's much of the beauty of investing there. Using ETFs, a modest allocation to markets not dominated by AI plays is now simple and affordable.

Are they risky? Sure, but at least it's a different kind of risk.



May 11th:

Leading Stocks Are Losing Their Low-Asset Edge

By Spencer Jakab

Less Is More

It's business lesson number one: "You've got to spend money to make money."

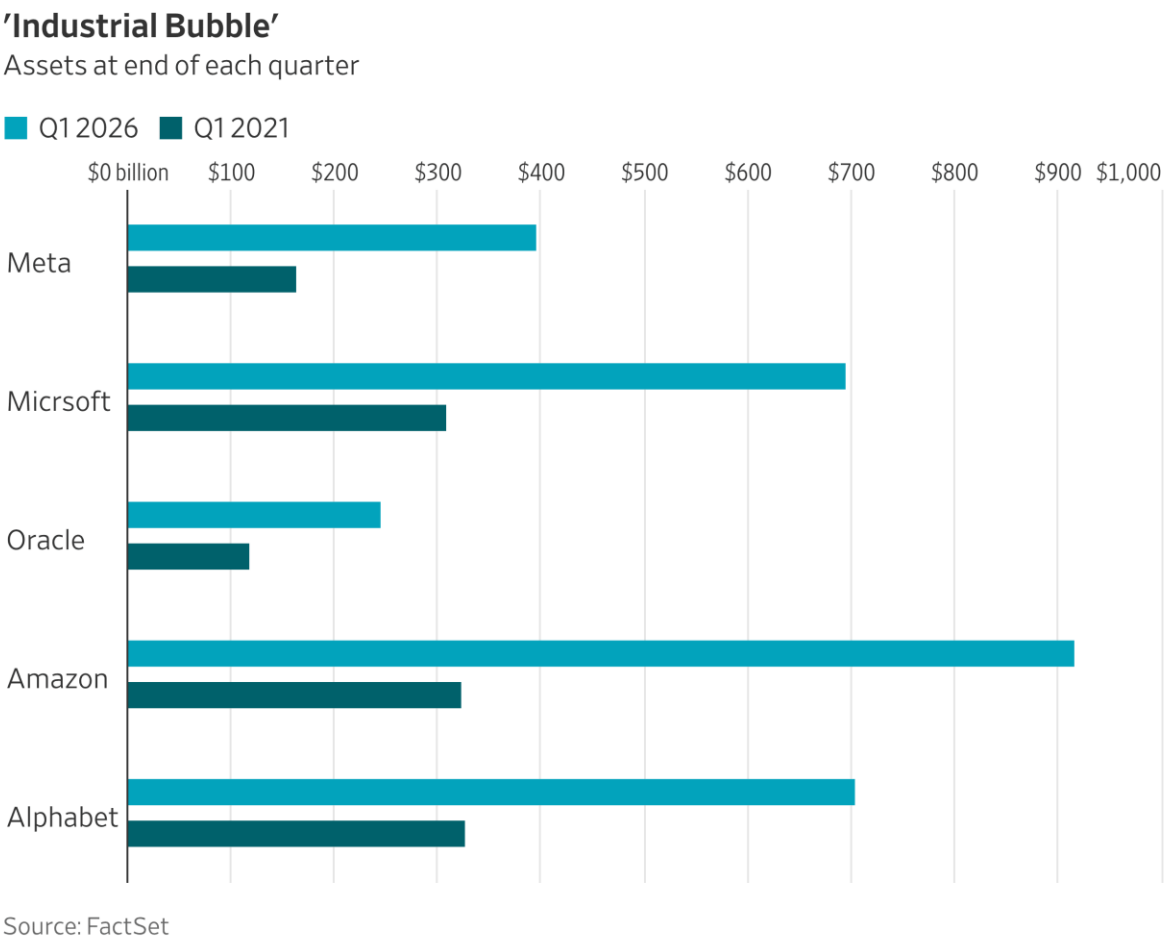
Up to a point, though. Now that we have details of a full century of detailed U.S. stock returns, investors who study it for an edge can confidently say that asset-light companies did much better.

“We know from this 100 years of data that capex is bad,” says Gregg Fisher, a pioneer of factor-based investing and portfolio manager at Quent Capital.

That lesson has implications for the hottest stocks on the market right now—AI plays. The Mag Seven became magnificent because they made huge returns on relatively modest capital expenditures.

If Ford came out with a great car design or Boeing with a superb airliner, they needed to invest in factories to keep up with demand. Once Microsoft released Windows, Alphabet devised its Google search algorithm or Meta created Facebook, the cost of every additional user was tiny. Even Nvidia, which sells physical objects, outsources the actual manufacturing.

A basket of the Mag Seven hit an all-time high on Friday, but the AI “hyperscalers” among them no longer resemble their formerly lean selves. They’re investing a whopping $755 billion just this year, according to Goldman Sachs—basically all of their cash flow from operations. Hyperscalers’ assets have grown by 138% in five years.



There have been times when investing like there's no tomorrow seemed smart. It's been a feature of booms that asset-heavy companies' shares were all the rage as they inflated. Then they gave up all those gains when the tide went out (see the chart below of the tech boom and bust).

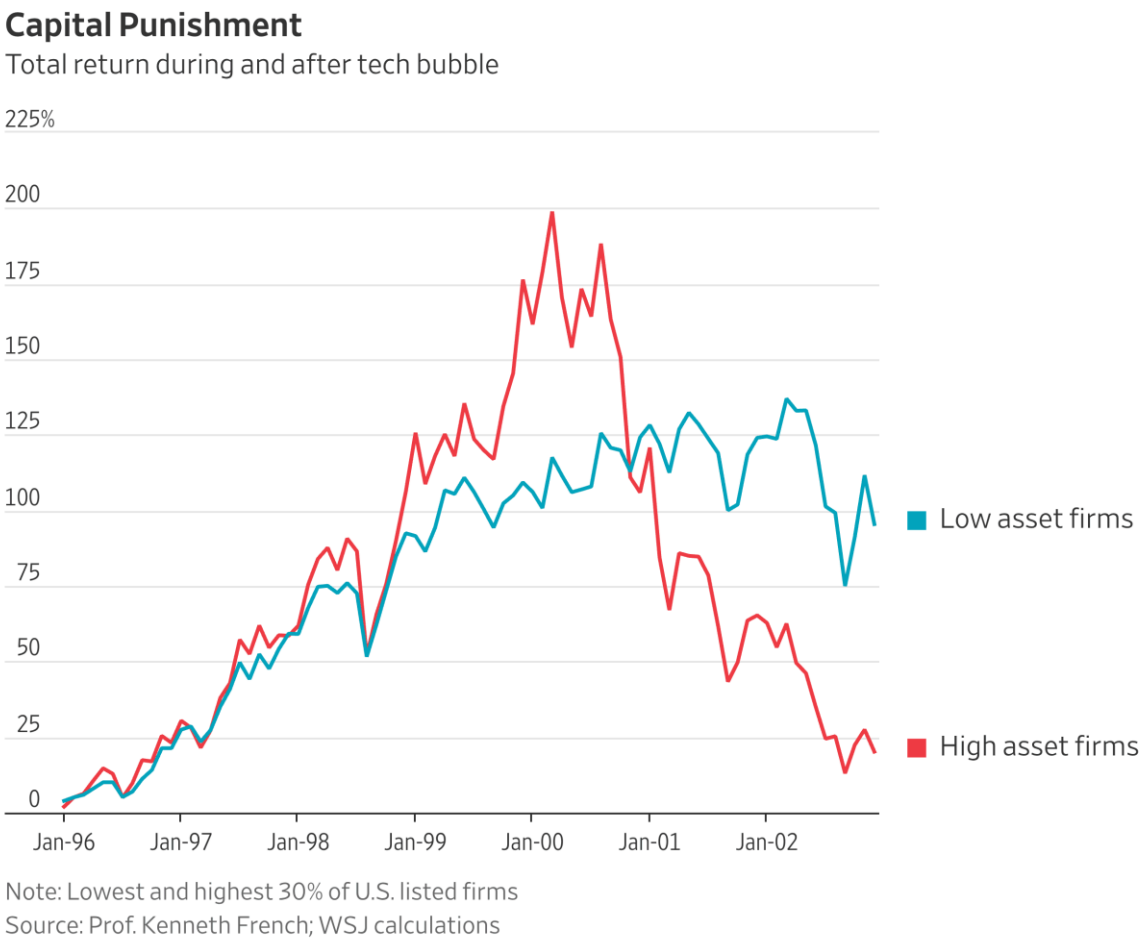
Hyperscaler CEOs are smart enough to grasp that they're ditching what made them so rich. So why are they racing to outspend one another?

"They're afraid not to do it," says Fisher. AI is so transformational that being number one is vastly better than being number two or three. And tech leaders are confident that they, not their competitors, will prevail.

Amazon founder Jeff Bezos caused a stir by calling AI an "industrial bubble." The winners will win big and society will benefit, he said, but the overall return on all the money being spent today probably won't be great.

The mistake starry-eyed investors make at times like this is betting on every horse, or in thinking that they can handicap AI thoroughbreds.

Good luck with that. We do have enough stock market-history to know that the companies bulking up their assets probably will trail the market as a group.



May 8th:

It's Looking an Awful Lot Like the Tech Bubble

By Spencer Jakab

History Rhymes

What a rally! Qualcomm is up 1,200% in the past year, Sandisk 915%, Nvidia 390%, Lam Research 460% and MicroStrategy 1,260%.

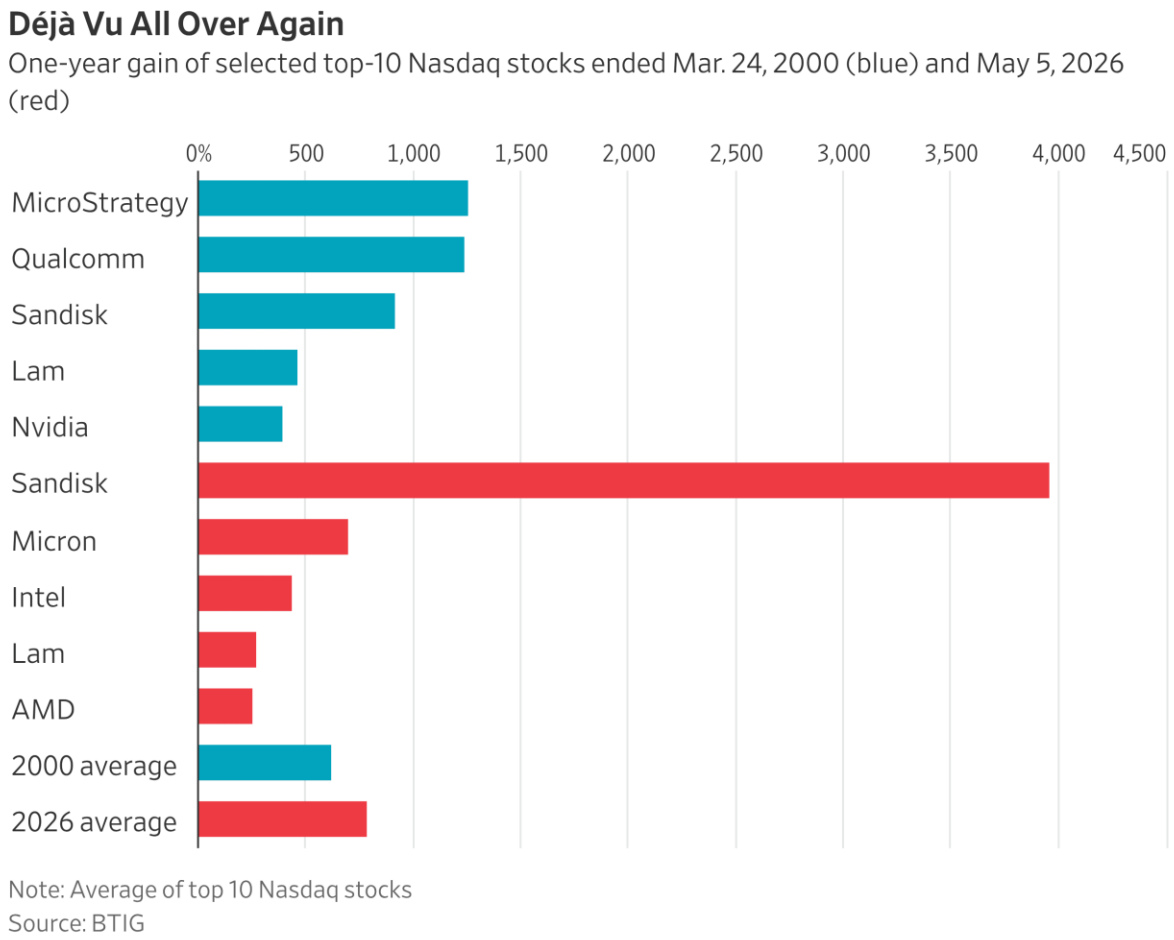
Hold on a minute, didn't they change their name to "Strategy?" Sorry, we were looking at a table of stock performance ending in March 2000, not today. As Jonathan Krinsky and his team at BTIG point out, many of today's marquee companies also were top performers back then.

Comparing today's action to the peak of the greatest American stock bubble ever is always going to invite pushback. It's also unoriginal: Pundits have overlaid charts showing recent gains for the Magnificent Seven with dot-coms, the Roaring '20s, railroad fever, Japanese property and tulip bulbs.

But echoes of the tech wreck are getting hard to ignore. In some ways the recent surge has pushed the AI boom past that episode's heyday. Through the third week of March 2000, for example, the top-performing 10 stocks in the Nasdaq Composite were up an average of 622%. Through this Tuesday, BTIG points out they were up 784%.

One difference that AI optimists point to is that price/earnings ratios for the hottest stocks back then were loftier than the likes of very profitable Nvidia, Alphabet or Microsoft today.

Yet the S&P 500's trailing and cyclically adjusted P/E multiples are almost as high. That's because AI-related stocks make up a larger share of the index than "TMT" (technology, media & telecoms) did 26 years ago. And since what most investors own is the S&P 500, or baskets of stocks that look similar to it, descending to a more



typical valuation would be just as unpleasant.

Some are reassured that today's hand-wringing actually gives the rally legs because the market loves to "climb a wall of worry." Everyone on Wall Street supposedly was wearing rose-colored glasses back in early 2000.

But that isn't quite true. Look at this paper's coverage during the heady weeks before the peak and there was plenty of guessing about when and where it would stop. On the day the Nasdaq Composite peaked above 5000 points, one strategist cautioned that Fed tightening eventually would end the party.

"Will the index be at 6000 when that happens? 5200? It's impossible to say."

And it's still impossible. Valuation is useless as a timing tool and recent earnings from tech giants have mostly been good or great.

Manias often peak on good news, though, and they generally go out with a bang, not a whimper. Technical indicators paint a picture that's similar to tech's last hurrah.

Even the names ring a bell.

Three more from WSJ:

How Weird Are ETFs Getting? Try UFO and Midnight-Bitcoin Funds

Many exotic new offerings are like high-price investment junk food

By **Jason Zweig**
May 22, 2026

Cheap, reliable exchange-traded funds are a basic building block of investing. Increasingly, however, ETFs are becoming a high-cost conduit for concentrated, risky or weird strategies.

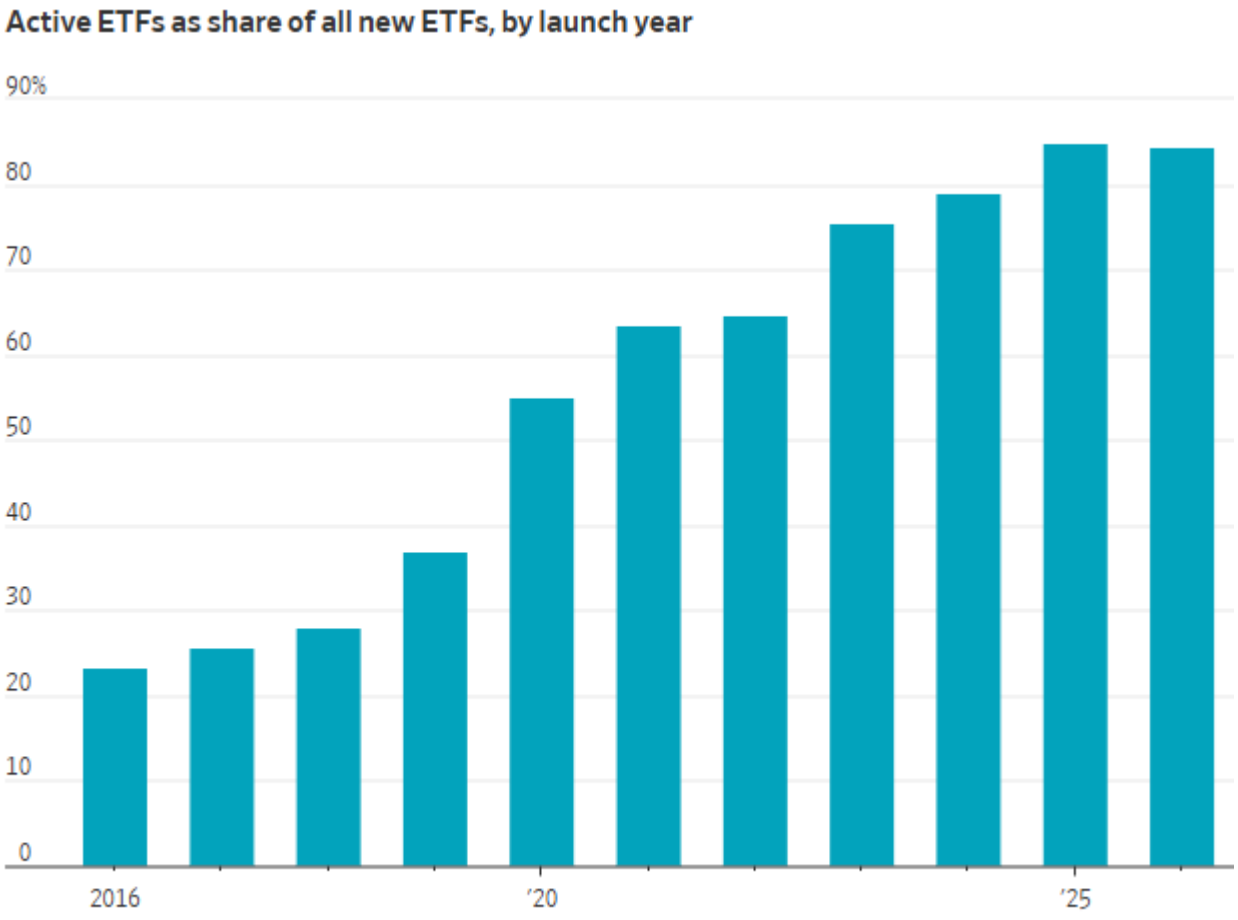
So investors need to start approaching ETFs with caution. All too many of the newer ones are investment junk food. And, just as with candy, cookies or french fries, filling up on them can be bad for you.

This year, 466 ETFs have been launched through mid-May, amassing $62.3 billion in assets, according to Morningstar. Their annual expenses average 0.69%.

That's more than 20 times those of many traditional index funds. Six out of every 10 new ETFs carry annual expenses of at least 0.5%, and a fifth charge at least 1% annually.

Only 16% of the newest ETFs are index funds. At more than a quarter of this year's launches, results depend on the performance of a single stock, commodity or other asset—the opposite of diversification, or what I've called deversification. Dozens specialize in cryptocurrencies, often seeking to double the daily return of digital assets.

To see just how far ETFs have drifted from the investment mainstream, look at the Tuttle Capital UFO Disclosure ETF. It was launched—and I do mean "launched"—in February.



Note: 2026 through May 20
Source: Morningstar Direct

The fund seeks to buy stocks that could benefit from "government disclosure, confirmation, or exploitation of advanced technologies" related to "non-human intelligence."

Is it worth paying 0.99% a year for an ETF tailor-made for E.T.? Portfolio manager Matthew Tuttle says he was inspired to create the fund by videos that purport to show alien spacecraft moving across the skies in anomalous ways.

The fund, he says, is based on "the secret gap," a belief that "elements of the government are always 20 to 30 years ahead on technologies." Its holdings could benefit by commercializing "free energy" or other novel forms of propulsion seemingly used by UFOs, says Tuttle.

"If this technology exists and becomes public, it is a gamechanger more than the internet or AI," he adds. "I don't need aliens to be real for my thesis to work, but it's a lot more fun if they are."

So far, the fund has only $2 million in assets, but "I am way early on this idea," says Tuttle.

Another unorthodox fund is the Nicholas Bitcoin and Treasuries AfterDark ETF, which began trading in April. With $30 million in assets, it charges 0.97% annually. For that, you get exposure to bitcoin's returns—but only when the stock market is closed.

Each day from Monday through Friday, the fund starts out exposed to bitcoin, flips to Treasury bills or cash at 9:30 a.m. Eastern time, then darts back into bitcoin at 4 p.m. (It stays in bitcoin over the weekends and on holidays.)

The ETF's strategy, says David Nicholas, one of the portfolio managers, is based on data indicating that bitcoin earns higher returns outside the U.S. stock market's trading hours.

According to Bespoke Investment Group, bitcoin (as measured by the iShares Bitcoin Trust ETF) returned 65.2% from January 2024 through this week, if you held it continuously. If, however, you held it only overnight, you would have earned 213.8%. Both figures ignore trading costs and taxes.

"Basically, all of the returns have come in the overnight hours," says Nicholas. So the fund will overhaul its entire portfolio twice each trading day.

In the six weeks since its inception, the AfterDark fund's return is nearly 11 percentage points lower than what you would have earned by just buying and holding the iShares bitcoin fund around the clock. Of course, that's way too short a period to judge the strategy—but so is data that begins only in January 2024.

Among this year's new ETFs, one seeks to double the daily gains or losses of palladium; one combines options trading and space-related stocks; and another seeks to generate 15% annual income by layering option contracts on the top-20 most recently disclosed stock picks of investor David Tepper's hedge fund. They all charge 0.95% or more annually, or at least $95 on a $10,000 investment.

All this is a far cry from ETFs that buy and hold hundreds of stocks or bonds for fees as low as $2 or $3 a year on a $10,000 investment.

This generation of ETFs isn't just more expensive and risky than its forebears. It's also much less tax-efficient.

You could hold an old-fashioned, broad-based stock-index ETF for years and never incur any capital-gains tax. On the other hand, some ETFs that use options to juice income, or that seek to double the daily returns of stocks and other assets, can smack investors with big tax bills.

All this means you can no longer take a fund's quality for granted simply because it's an ETF.

"As product proliferation occurs in the edgier parts of the market," says Dave Mazza, chief executive of ETF manager Roundhill Investments, "it's incumbent on investors to do more homework."

Last year, almost a third of all new money flowing into ETFs went into nonindex funds, says Elisabeth Kashner, director of ETF research and analytics at FactSet. Yet, she says, "this is a 'yes and' market." Yes, active ETFs with high expenses and flashy strategies are attracting much of the attention—*and* traditional, low-cost, well-diversified ETFs continue to form the core of most investors' portfolios.

Snacking on junk food is occasionally acceptable. Frequent indulgence is potentially addictive—and hazardous to your wealth.

How These New Funds Squeeze 14% Yields Out of Stocks

You can get high income from the stock market, but not without complexity and risk

By Jason Zweig
May 1, 2026

You know it's late in a bull market when financial professionals start talking about stocks as if they were bonds.

The latest example: exchange-traded funds that offer "bondlike" payouts.

Most income-oriented investors should be risk-averse. The high yields offered by these new ETFs come with complex, unfamiliar risks.

And they aren't magic. These funds don't offer higher returns than the stock market; they just transform stock returns into regular income payments. But in doing so, they expose you to the risk that your high yields—and even your principal—could shrink just when you need them the most.

These ETFs, called autocallable funds, are multiplying fast. At least a dozen have made their debuts since last summer, with combined assets of more than $1.5 billion. Dozens more will roll out soon.

Their strategies vary widely. But one way or another these "bondlike" ETFs depend on the stock market and financial derivatives to generate returns.

Here's why. Autocallables are a type of structured note, a form of debt usually issued by a major bank. Their return is typically tied to the performance of at least one stock or market index.

They pay their stated rate of income so long as the underlying asset doesn't fall more than a predetermined percentage by certain dates. They also return their full principal value if the target asset is at or above a prespecified level at maturity.

These notes commonly mature in five years and can be called, or redeemed by the issuer, after one year if the price of the underlying asset is at or above its initial level.

What if the underlying stock or index goes down by more than the predetermined amount (often 40%)? Then you might not get your regular income payment, and you could even lose a hefty chunk of your principal value.

By diversifying its exposure across many autocallables and a range of maturity dates, an ETF can mitigate most of the risks of shrinking income or shriveling principal. That's better than owning just one or a few autocallable notes, as many brokers and financial advisers have gotten clients to do in recent years.

But an ETF can't eliminate the risks of sudden declines in income or principal value.

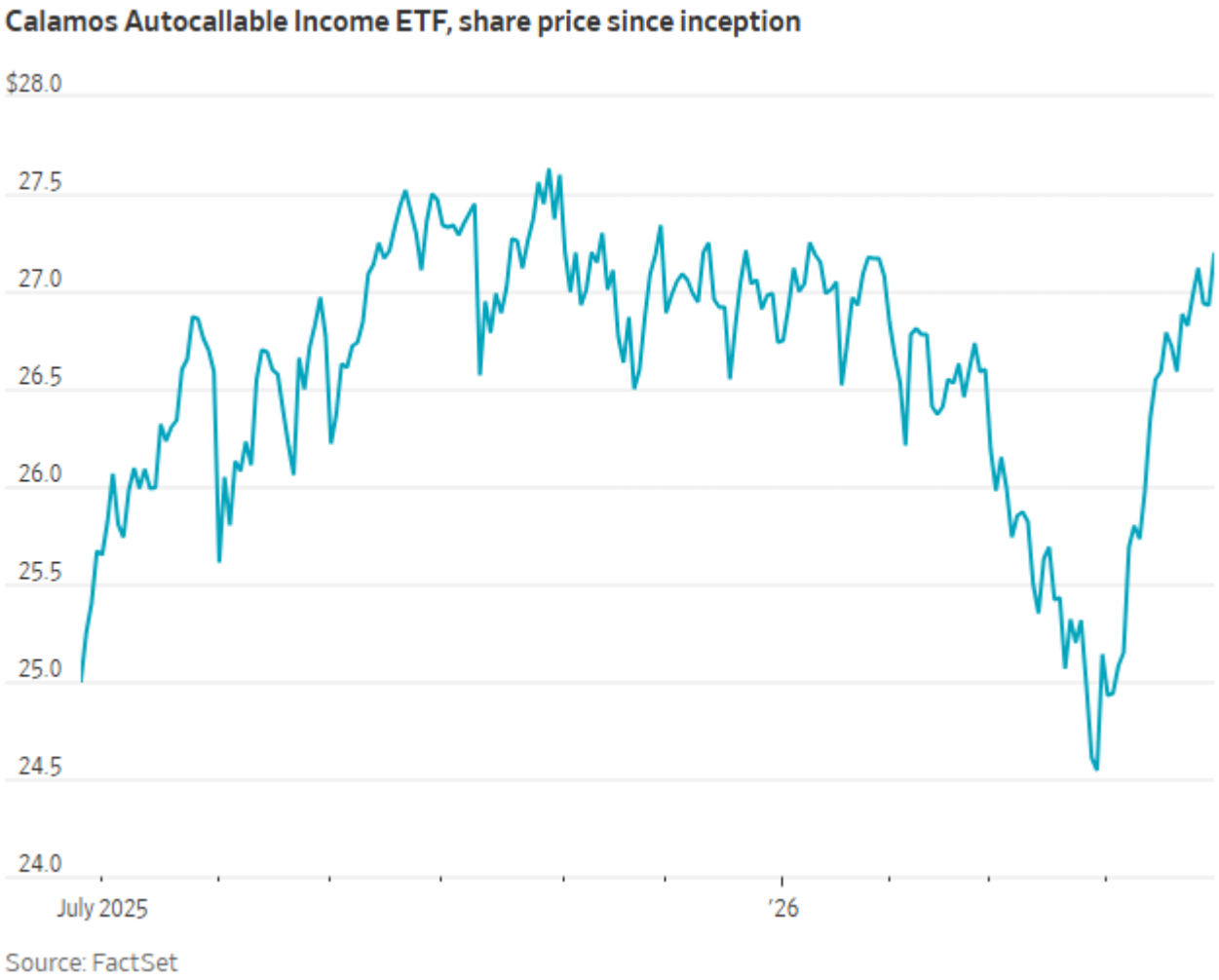
Owning one of these funds puts you in the position of insuring against a moderate-to-severe decline in stock prices. Like an insurance company, you get to earn a premium for providing that coverage.

That's why these funds can offer regular monthly payouts at 12%, 14% or even 19% annualized rates. But those yields aren't fixed. So the payout rate can change over time.
Is there a catch? Yep. You assume 100% of the risk that the underlying stock or index might go down—and stay down—by a lot.

The net result of all this complexity is that losses tend to be infrequent, but when they come they can be severe.

These funds, and the indexes some of them are based on, have short histories. But if the index used by the Calamos Autocallable Income ETF *had* existed during the global financial crisis, it would have lost 63.8% from Oct. 9, 2007, through March 9, 2009, according to MerQube, which calculates the index. Over the same period, the S&P 500 lost 55.3%, with reinvested dividends.

A 63.8% loss isn't very "bondlike."



Over the 20 years through mid-2025, the underlying index for the Calamos Autocallable Income ETF would have delivered a cumulative return almost identical to that of the S&P 500 before expenses. Most of that track record is "backtested," or simulated, as the index didn't go live until mid-2025.

"The ultimate goal is to deliver an S&P-like experience that delivers a high, stable income," says Matt Kaufman, head of ETFs at Calamos. "You're going to get paid 14% on a monthly basis as long as [the reference index tied to the S&P 500] doesn't go down 40% or more."

He adds, "That's not to say it couldn't happen. I don't think we should rule out any scenario."

The S&P 500 has lost more than 40% only five times in the past century. But rare events in the stock market have a nasty habit of recurring just when investors are convinced they won't.

If your financial adviser recommends an autocallable ETF, simply ask: What happens to my income and principal if the underlying stock or index falls by 50% and stays down?

The answer needs to have numbers in it, and if the numbers don't have minus signs in front of them, your adviser is misinformed.

Then ask why you would want to pay up for a ball of complexity. Annual expenses at these funds aren't cheap, running 0.6% or higher.

With autocallable funds, “you’re getting that high yield, but you’re taking on the risk of the stock market, in a very complicated way, to get it,” says Brian Jacobs, a portfolio manager at Aptus Capital Advisors in Fairhope, Ala. “A lot of investors or financial advisers might not understand that.”

Whenever there’s a choice between simple and complicated, Wall Street goes for complicated. Investors should favor simple.

You’re Probably Overinvested in Bonds

The usual advice is to hold only 60% of your assets in stock. If you’re wealthy, a 90/10 split is far better.

By Robert C. Pozen
May 21, 2026

Most financial advisers tell their clients to hold a 60-40 portfolio—60% in stocks and 40% in bonds. Stocks are volatile, and bonds can provide a counterweight when share prices fall. But after more than 20 years in the money-management business, I’ve concluded that many investors hold too much in bonds and not enough in equities.

Plenty of people should hold bonds. If you are retired and subsisting on your investment income, or if you would have to sell a significant chunk of your investments to cover living expenses in a bad year, you should have more in high-quality bonds. But that probably isn’t true for two large groups: The six million to seven million Americans with $1 million or more in investable assets and other households with more than $100,000 in investable assets whose noninvestment income covers their cost of living. (Investable assets include retirement accounts but not homes.)

For these affluent investors, a 60-40 portfolio means sacrificing the tremendous upside potential of stocks to avoid temporary losses. Over any long period, they will likely be better off with a 90-10 portfolio—90% in a low-cost stock index and 10% in a money-market fund to pay unanticipated expenses.

Stock declines are relatively infrequent and typically are followed by increases—a recurring pattern over the past 60 years. It happened again this year. The S&P 500 was down 7.33% year to date as of March 30, largely because of the Iran war. The index bounced back to plus-5.62% for the year by May 1.

Moreover, the 90-10 portfolio eliminates fees to financial advisers, who charge an average of 1% of assets under management. You can build the 90-10 portfolio yourself simply by buying an index fund and a money-market fund, and rebalancing at the start of each year if stocks have gone up or down.

The argument for the 90-10 portfolio is based on many decades of stock prices. During the 10 years ending Dec. 31, 2025, the average annual total return (with income reinvested annually) of the S&P 500 trounced that of 10-year U.S. Treasury bonds, 14.68% to 0.89%. Although the difference was especially large in the past decade, stocks also beat bonds handily over all time periods of 20, 30, 40, 50 and 60 years ending with 2025. If you invested $100,000 in a 90-10 portfolio for the 10 years ending on Dec. 31, 2025, you would have accumulated almost $356,000, compared with around $243,000 if you had a 60-40 portfolio. For 40 years, the figures were $5.8 million and $2.5 million.

The return on the S&P 500 isn't based on picking winners or ascertaining market sentiment. It reflects the aggregate fundamental strengths of publicly traded U.S. companies. By contrast, bond returns are driven by interest rates, which fluctuate due to macroeconomic conditions and government policies.

Notably, stocks have outperformed bonds during the two most recent bouts of high inflation. In 1972 to 1982, when annual inflation averaged over 8%, the average annual nominal total returns of the S&P 500 were 7.74%, while the figure for 10-year U.S. Treasurys were 5.71%. From 2021 to 2024, when annual inflation averaged almost 5%, the figures were 13.47% and negative 5.35%.

For more than a decade after the 2008 financial crisis, there was a bull run in bonds because interest rates fell and remained low. But that scenario is unlikely to recur soon as interest rates normalize, inflationary pressures build, and neither political party seems to have the will to reform Medicare or Social Security, which the government will have to bail out by issuing more debt at higher rates.

Higher interest rates will also adversely affect stocks, but successful companies can raise prices, increase revenue and control costs, which will lead to higher nominal stock prices. And stocks represent claims on the assets of publicly traded companies—plant, equipment and land—whose nominal replacement costs rise in inflationary terms.

Stocks also win over most bonds in terms of taxation. Interest on bonds is taxed as ordinary income, at a top federal rate of 37% (though there are tax exemptions for municipal and Treasury bonds). Dividends and long-term capital gains are taxed at a top rate of 23.8%.

There are two main arguments against the 90-10 portfolio. First, that the stock market has frequent crashes. The total annual return of the S&P 500 was negative for 13 of the past 60 years. The years with the worst total returns were 2008, 2002 and 1974. But each time, the S&P 500 posted strongly positive returns in the next two years.

In the past six decades, the S&P 500 has been negative for three consecutive years only once—in 2000-02, as the dot-com bubble burst. The S&P 500 was down a total of 37.43%, but those losses were more than recouped by the end of 2006. The S&P 500 was also down in both 1973 and 1974, by a total of 37.25%, due to the oil embargo. Those losses were more than recouped by the end of 1976.

Second, that bonds can offset stock losses. But bond returns were positive in only 10 of the 13 years when the S&P 500 was negative. In 2022, when the S&P 500's total return was minus 18.04%, U.S. Treasurys were down nearly as much.

Conventional wisdom has it that as investors approach or pass retirement age, they should hold less in stock and more in bonds. But rising life expectancy expands their time horizon, and many households with $1 million or more in investable assets intend to bequeath a substantial portion of their assets. Because of the step-up in basis at death, if your children inherit assets that aren't in retirement accounts, they won't be liable for taxes on capital gains earned during your lifetime.

If you are going to hold a 90-10 portfolio, you'll need a plan for staying calm during market drops. First, remind yourself that the stock market's best days often follow its worst years. Second, focus on how small one year's drop in stock prices is relative to 30 years of returns, and see sharp declines in stock prices as buying opportunities. Finally, think of the 10% in your money market fund as an insurance policy in the unlikely event that the S&P 500 stays down for more than a year.

Don’t miss out on the growth opportunity of a lifetime if you have a lot of investable assets. Buy and hold a portfolio composed mainly of a stock index fund with a money-market fund as an insurance policy.

Mr. Pozen is a distinguished senior lecturer at MIT Sloan School of Management and a former president of Fidelity Investments.

Follow-ups

The Curious Case of “Dead” Factors

Larry Swedroe
May 22, 2026

Much has been written about the supposed death of the value and size premiums. The narrative has become familiar: value has underperformed for more than a decade, small caps have disappointed, and structural changes in markets have rendered traditional factors obsolete.

The problem with this story is simple—it is not consistent with the data.

Consider the period beginning in October 2020, which marked a widely recognized inflection point following the COVID-driven growth surge. From October 2020 through March 2026, the Fama-French U.S. small value index returned 19.7% annually. Over the same period, the total U.S. market delivered 13.8%. Dimensional’s U.S. Small Value Fund (DFSVX) returned 19.8%, an outperformance of 6% over a benchmark without any expenses. Vanguard’s VTSMX returned 13.7%. That is not just outperformance—it is a substantial premium of 6% per year. (Note: Bridgeway’s Omni Small Value Fund BOSVX, which has greater exposure to the size and value factors than does DFSVX, returned an even higher 20.5% per annum, as did Avantis’s US Small Cap Value ETF AVUV which returned 20.8%)

The same pattern appears in international markets. From October 2020 through April 2026, Dimensional’s International Small Value index returned 19.1% annually, compared to 12.9% for the broader international market. Again, a premium of roughly 6% per year. Comparing live funds, Dimensional’s DISVX returned 18.8% versus the 13.2% return of Vanguard’s Developed Markets Fund. That’s an outperformance of 5.6% per annum. (Avantis’s International Small Cap Value ETF AVDV, which has greater exposure to the size and value factors than does DISVX returned and even higher 19.4% per annum).

These are not marginal differences. They are economically large, persistent, and—perhaps most strikingly—largely ignored.

The Narrative Lag Problem

Why has this gone virtually unnoticed?

One explanation is that financial narratives tend to lag reality. The “death of value” story was born during a historically unusual period—roughly 2014 through 2020—when growth stocks dramatically outperformed. That decade coincided with falling interest rates, the rise of intangible-heavy firms, and increasing market concentration.

But investors often make a critical mistake: they extrapolate recent history indefinitely. When a premium underperforms for an extended period, it is declared dead. When it rebounds, the shift is often dismissed as temporary or overlooked entirely.

Premiums Do Not Move in Straight Lines

Factor premiums are not constants; they are long-term expectations that can experience extended cycles of under- and outperformance. The value premium, in particular, has historically been episodic, with large portions of its excess return arriving in relatively short bursts.

The period since late 2020 is a textbook example. Following a decade of underperformance, value—and especially small value—experienced a sharp and sustained rebound. Importantly, this rebound has not been a brief snapback; it has persisted for more than five years.

This persistence challenges the idea that the premiums are structurally impaired.

If Premiums Are "Dead," Why Are They Elevated?

This raises an obvious question: if value and size premiums are supposed to be shrinking—or disappearing altogether—why have they recently been higher than their historical averages?

There are several plausible explanations:

First, risk-based explanations remain intact. Small value stocks are still riskier—they are more sensitive to economic cycles, have less stable earnings, and often face tighter financing conditions. When investors demand compensation for bearing these risks, premiums emerge.

Exhibit 2: Value Spreads for Hypothetical Industry-and-Dollar-Neutral Value Portfolios*

January 1, 1990 - September 30, 2022

* Spreads are constructed using the Hypothetical Value portfolio as described below, and are adjusted to be dollar-neutral, but not necessarily beta-neutral through time.
Source: AQR. Hypothetical value composite includes five value measures: book-to-price, earnings-to-price, forecast earnings-to-price, sales-to-enterprise value, and cash flow-to-enterprise value; spreads are measured based on ratios. To construct industry-neutrality, the value spreads are constructed by comparing the aforementioned value measures within each industry, which are then aggregated up to represent an entire portfolio. Hypothetical data has inherent limitations, some of which are disclosed in the Appendix. Please see the Hypothetical Global Developed and Emerging Value Factor Description in the Appendix. For illustrative purposes only and not representative of an actual portfolio AQR currently manages. Please read the Appendix for important disclosures.

Second, behavioral explanations have not gone away. Investors continue to chase past winners, overpay for growth, and underweight less glamorous segments of the market. These biases can lead to mispricing that disciplined strategies exploit.

Third, the very narrative of "death" may have reinforced the opportunity. As capital flowed away from value and small caps during the 2014–2020 period, valuations became more attractive as the spread in valuations between growth and value stocks widened to near the 100% percentile. The chart above is from an article I wrote in early 2023 for Alpha Architect.

Just as valuations are the best predictor we have of the equity risk premium, valuation spreads are the best predictor we have of factor premiums. Thus, the widening of the spread in valuations set the stage for higher subsequent returns.

The Real Lesson for Investors

The practical implication is straightforward, though not easy. The investors who stayed the course through the very painful stretch from 2017 to 2020 — who did not capitulate to the "factors are dead" narrative — have been richly rewarded. The annualized premium of nearly 6 percentage points over five-plus years, compounded, represents a substantial wealth difference relative to simply owning the total market.

Going forward, small value stocks remain cheap relative to large cap growth on almost every valuation measure. The value-growth spread, by some measures, has not been this wide since the late 1990s — the precise moment that preceded more than a decade of small value dominance following the dot-com collapse. History does not repeat mechanically, but the conditions that have historically preceded extended periods of small value outperformance are still firmly in place.

The lesson is not that small value will always outperform, or that the premium arrives on schedule, or that factor investing is painless. It is something more modest and more important: the evidence for these premiums has not eroded. If anything, the events of the last five years have strengthened it. And the investors best positioned to capture them going forward are those who understand both the evidence and the psychology well enough not to abandon the strategy the next time the financial press declares it dead.

The Bottom Line

Factor investing requires patience and discipline. Declaring a premium "dead" after a period of underperformance is often the worst possible moment to abandon it. Similarly, ignoring strong performance because it contradicts a prevailing narrative can lead to missed opportunities.

Markets do not eliminate well-documented sources of return simply because they become unpopular. If anything, unpopularity is often a necessary condition for their persistence.

Conclusion

The evidence from the past five-plus years is clear: value and size premiums have not only survived—they have delivered strong, above-historical returns in both U.S. and international markets.

Reports of their death were not just premature; they were wrong.

From VERDAD on May 18th:

Priced for Perfection

AI speculative mania is in full swing

By: Daniel Rasmussen & Chris Satterthwaite

Investing isn't a game of analysis; it's a game of meta-analysis. We can't predict the future with any degree of accuracy. But market valuations reveal the distribution of other people's forecasts, and we look for places where optimism or pessimism have become extreme. Mordecai Kurz calls these "correlated beliefs," places where everyone thinks the same way, causing prices to move into excesses of speculative mania or depressed hopelessness.

Markets are mostly efficient, but we have nevertheless observed several of these "correlated beliefs" emerge over the past decade since Verdad began.

Not long ago, every institutional allocator believed private equity would magically outperform every other asset class and thus merited sometimes a 40% or greater allocation. We were one of the only skeptics, willing to call BS on this growing enthusiasm (see our major article in 2018). Our understanding of private markets led us then to be early in warning of the risks in private credit in 2020.

When others were running for the exits during COVID, we declared in March 2020 on Patrick O'Shaughnessy's podcast, *Invest Like the Best*, that this represented the best buying opportunity in public markets since the great financial crisis. The market had formed a correlated belief about an impending depression, and we took the other side.

Sometimes entire countries can be effectively abandoned by investors. After the lost decades, Japan was thought to be dead money. In article after article, we wrote about the pessimism baked into share prices and the real structural reforms that were coming into play.

Our goal at Verdad is to identify these big structural mispricings and take the other side of the consensus, using deep empirical research to lay out the contrarian case.

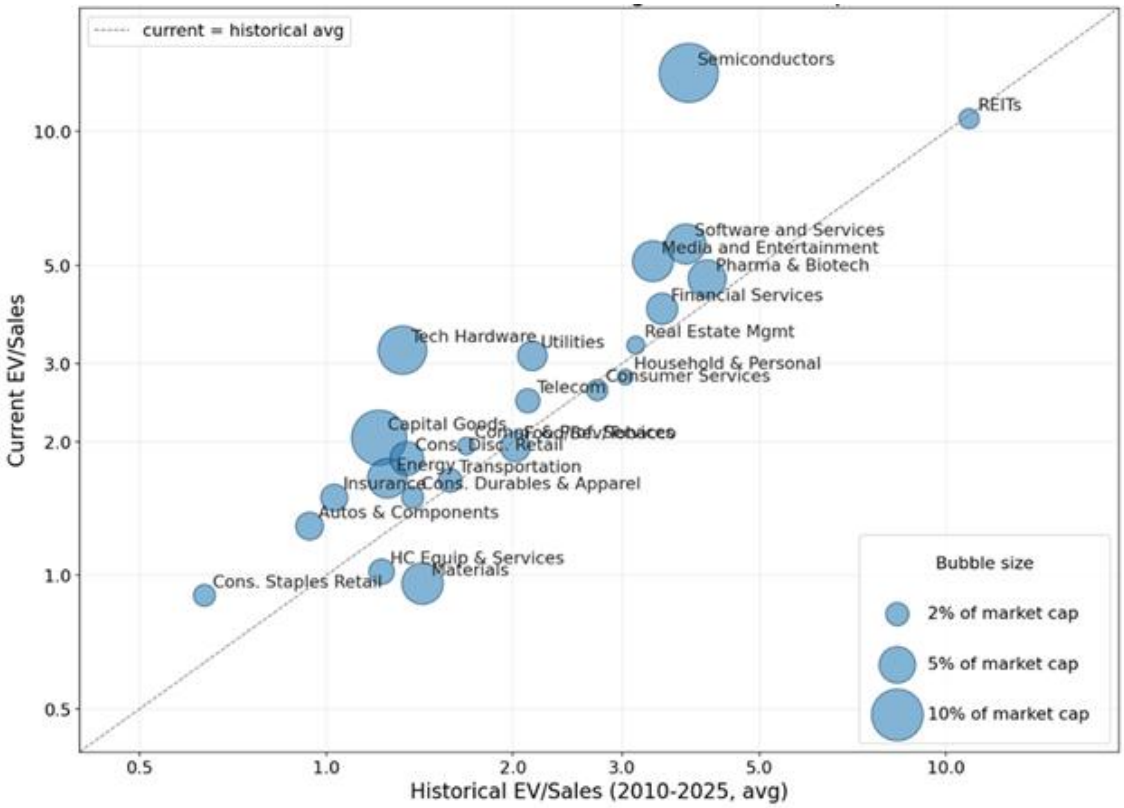
Today, the market is yet again pricing in an extreme consensus belief, this time around AI and semiconductors. There's an old saying that, on Wall Street, there are no bad ideas, only good ideas taken too far. That's exactly what we are seeing today with the AI trade.

Valuations paint a clear picture of an industry where consensus has passed from optimism to mania. The chart below shows valuations by industry today versus the 2010–2025 average, where the bubble size is share of global market capitalization.

We are in probably the best market ever for semiconductor stocks, so a premium to the last 15 years is, of course, merited. But this good idea has been taken too far. Investors seem to have forgotten that semiconductors are one of the most cyclical products in our economy. AI has turned tech into a capital-intensive industries,

where competition neglect is likely to cycles of capacity overbuilding and subsequent crashes.

Figure 1: Current EV/Sales vs. Historical Avg. by Industry (2010–2025)



Sources: Capital IQ, Verdad analysis

The market consensus story is that this time is different. "AI is behaving more like foundational infrastructure," writes one major investment bank in an attempt to address bubble concerns. "AI breaks that template. It is not a discretionary upgrade or a consumer gadget cycle. It is infrastructure, embedding itself directly into the productive capacity of the economy in a manner closer to electricity than consumer hardware."

Investors are taking a massive bet that this theme is right. But we won't know for years what the return on investment of this AI spend will be. Return on capex spend is every bit as unpredictable as growth rates. And the risk is that, even if the technology fulfills the promise of the optimists, the amount of spending today could yet overbuild, just as internet companies overspent and overbid in the late 1990s and early 2000s. When Alphabet, Amazon, Microsoft, Meta, and Oracle combined are guiding for $775 billion of capital expenditures in 2026 alone (a little over $2b per day), it doesn't seem difficult to identify a correlated belief system.

The challenge with bubbles is not that they overstate the ultimate transformative benefits of a technology but rather that they price in many of those uncertain transformative benefits as if they are a given *today*. As a result, valuations expand, with much of the present value of equities embedding discounted cash flows far into the

future, where they are clouded in uncertainty.

This is especially delicate, considering that the half-life of this spend is quite short relative to previous technological capex cycles. On its Q1 2026 call, Microsoft noted that two-thirds of the capital expenditures went to short-lived assets like CPUs and GPUs, which have a useful life of 3–5 years. The global stock market is now running on a very fast hamster wheel, with no margin for error. In a few years, only a small portion of the capex will go toward new assets. The balance will simply go toward replacing the obsolete chips from 3–5 years ago.

The global semiconductor industry currently trades at ~55x P/E in aggregate. Instead of asking what the industry should trade at, we can turn the question on its head: What does a 55x multiple imply about future expectations? Courtesy of Michael Mauboussin and Alfred Rappaport's Expectations Investing framework, at 55x we can infer the following about the long-term growth priced into the future of the semiconductor industry.

Figure 2: Implied Growth and Value Expectations at 55x P/E

Assumptions	
Cost of equity (r)	9.0%
Terminal growth rate (g2)	4.0%
Payout ratio	100.0%

Scenario	P/E	Implied EPS growth (10 yrs)	% of value Years 1-10	% of value Year 11+
Long-run S&P 500 average	15.5x	0.2%	42%	58%
Industry at 55x (AI/semis today)	55.0x	16.5%	27%	73%
Nasdaq peak (March 2000)	75.0x	20.5%	24%	76%

Source: Goldman Sachs

Roughly 75% of the current value of the global semiconductor industry (13% of global market cap and ~17% of US market cap) is derived from cash flow projections that are more than 10 years in the future (after first compounding at 16.5% for 10 years). A decade ago, OpenAI and Anthropic didn't even exist. Who is to say what the world will look like in another 10 years? Consider some hypotheticals:

- Perhaps AI will design new semiconductors and chips for itself, making the current generation of spend obsolete faster than expected.
- Perhaps the race for semiconductors will force enterprising entrepreneurs to come up with clever innovations that invalidate existing supply chains and bottlenecks.
- Perhaps software improvements will dramatically reduce the compute required for training and inference of new models.
- Perhaps Chinese open-source models will eat away at the competitive advantage of large frontier models in the US, without all the massive compute spend.

- Perhaps San Francisco will be hit by the “Big One” and much of the world's AI talent will fall into the sea.
- Perhaps datacenters in space will solve everything.

Most of these outcomes may be unlikely, but that is beside the point. The point is that current valuations embed a *certainty* that the world will unfold according to the most rosy projections that analysts can conjure for an exciting new technology, precisely at a time when uncertainty is highest.

The biggest bulls in a bubble create a false dichotomy, accusing skeptics of lacking imagination or being blind to the transformative power of new technologies. Bears often spend too much time trying to draw specific analogies to historical crises or looking for the eventual catalyst, which often arrives in the form of an otherwise innocuous update, like the lowering of capex guidance. But timing the burst of a bubble is exceptionally hard. Bubbles can continue to grind higher for an indefinite period of time before ultimately bursting.

Put simply, bubbles have consistent hallmarks, and they often occur around transformative new technologies. That is precisely where we sit today. With the Shiller P/E Ratio (CAPE) sitting at 42x, on par with the highs of late 1999 (44x), investors are unlikely to be rewarded for taking the risk of underwriting an uncertain future.

Figure 3: Shiller P/E Ratio (Cyclically Adjusted P/E)

Source: Robert Shiller

As we wrote here, those who underwrite the capex (i.e., asset growth) of new technologies tend not to be the ones who benefit most. In general, they overspend, and the benefits accrue to those who come along later and can feast on the bones of the first movers. For investors who are patient, and who believe the

world is uncertain, there will be an opportunity to invest in the transformative technology of AI at a fair price at some point in the future. Likely when those who stepped up to fund the first $5–10 trillion of the initial wave of capital expenditures have been steamrolled by some unforeseen development.

The future is too uncertain and unpredictable to make high-certainty bets. Yet today's market—and today's largest tech companies—are taking one of the largest bets in the history of economics on the future of a new technology. One does not need to be a bear on the technology itself—we are power users and love AI—to identify that this moment in market history is likely to be characterized by over-investment, over-spending, excessive valuations, and inevitable disappointment as an uncertain future surprises a consensus narrative that is too specific and too confident relative to the pace of change.