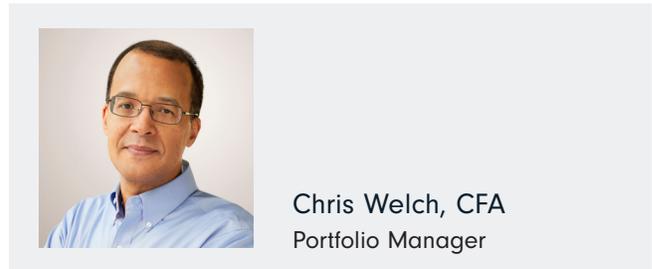


Watching a Bubble Unwind?

Dec 2025

There was a debate in the early 2000s about how transformative the internet would be and how much value it would create over time. Believers thought the internet would change everything and crowded into associated stocks, large and small, to walk the path to golden profits. Skeptics thought that many of the business models seemed unproven and unlikely to succeed, and that the enthusiasm had gotten way ahead of itself. Over the next two and a half decades the internet and its many derivative technologies did prove to be transformative and did create massive value. However, owners of internet-related and many other technology stocks, large and small, in March 2000 lost massive amounts of capital, and they had to wait many years – and had to wait for many new companies to appear in public markets – before they regained the capital lost from the tech bubble, if they ever did, considering how many businesses failed outright.



Over my 30-plus-year investment career, I have seen what I consider to be three investment bubbles: the tech bubble of 2000, the housing bubble that led to the 2008-2009 financial crisis and what can be considered a bond bubble in 2020 during the peak months of the global pandemic. Each of these investment bubbles played out differently, and past bubbles in financial markets have all had their own specific characteristics. However, it is valuable to watch these events closely. Despite all the differences, there are typically some common elements that can also be found in each cycle.

There have been numerous debates about whether we are currently experiencing an AI/data center bubble in investment markets. We remain at a point where the answer to that question is unknowable. However, several developments in recent months share notable similarities with signs that appeared near the peaks of earlier investment bubbles. The following discussion highlights some of these signs and examines how prior bubbles ultimately unwound.

Is this a bubble?

It is nearly impossible to know with certainty that you are in an investment bubble until long after the bubble unwinds. However, there are some observable factors that raise the odds of bubble-like conditions. One of these is to see stocks rising sharply on announcements related to the bubble factor (AI, in the present case) without any clear understanding of the actual financial benefit or underlying metrics. Another is IPOs generating immense market caps and strong aftermarket gains despite having no profits – and in some cases no revenue – a pattern we have observed more than once in recent years. We also tend to see academic studies arguing why stocks are the best, or the only, asset worth investing in, and the academic world has produced such a study on cue.¹

Another characteristic associated with bubbles is the rising prevalence of both new forms of finance, as well as off-balance-sheet financing deals, which can reduce the appearance of risk without necessarily reducing the actual substance of risk. Both trends are evident today, with private credit expected to play an increasingly large role in the buildout of AI data centers and Meta completing a \$30 billion off-balance sheet debt deal in October.

Finally, circular deals tend to accelerate at the later stages of investment bubbles, as major beneficiaries often need to facilitate the flow of affordable funds to their customers to enable continued purchases of their highly profitable products. During the late stages of the tech bubble, telecom equipment makers Lucent Technologies and Nortel both expanded vendor-financing programs for startups – and those efforts ended poorly for both firms. In recent months, we have seen an increasing number of similar deals between AI-related firms such as Nvidia, OpenAI, Oracle, CoreWeave and several others.

Comparison to the tech bubble

The investment bubble most often cited as a potential comparison to the current environment is the tech bubble, which arguably began in 1995 with the IPO of Netscape and ran through March 2000. While some investors remember only the damage done to flimsy startups like Pets.com, there was significant long-term value destruction for some of the largest businesses in the world. Among the perceived beneficiaries of the new technologies during that period were behemoths like Sun Microsystems, Oracle, Lucent Technologies and Cisco Systems (the latter 3 of which were ranked among the top 10 US market caps at the time). Ten years later, server maker Sun Microsystems was acquired by Oracle for a price that was 88% below its early-2000 peak. That was a good outcome relative to telecom equipment maker Lucent, which was bought by Alcatel in 2006 for less than 5% of its peak valuation. Meanwhile, software firm Oracle took more than 17 years to reach a stock price above its 2000 high, while networking equipment provider Cisco Systems – which was briefly the most valuable company in the world in early 2000 – still has not recovered to a new high more than 25 years later.

Some observers point out that if you had exited tech stocks in March of 2000, you would have missed out on significant gains over the next 20 years. That is an obvious straw man argument, as investors do not make a binary decision to invest in a certain stock or industry either for 20 years or not at all. It would clearly have been superior to avoid investing in stocks with massively inflated valuations in early 2000 and instead buy those businesses later when available at much more reasonable prices. For example, that is what the Diamond Hill Large Cap portfolio did by first investing in Microsoft in 2006, when its stock price was more than 50% below its early-2000 peak but its earnings were 50% higher. Many of the biggest winners during the internet era – such as Alphabet (Google), Facebook (Meta) and Tesla – were not even publicly traded until several years after the March 2000 tech bubble peak. Netflix went public in 2002 but did not launch its streaming service until 2007.

Bubble tops are a process

Each market decline from a bubble peak looks different, but a potentially surprising aspect of such declines is that they tend to be more gradual than people might initially think, reflecting the Wall Street adage that “tops are a process; bottoms are an event.” Reflecting on the bubbles we’ve experienced in the past 30 years:

- **Tech bubble (peaked March 2000)**
 - The Nasdaq Composite Index was the primary focus in the tech bubble, plunging nearly 40% in the two months following its 10 March 2000 peak. However, it took 3 weeks for the decline to reach the 10% mark.
 - After hitting a near-term trough on 23 May 2000, the Nasdaq Composite Index rose more than 30% during the next three months – still ending more than 15% below its prior peak.
- **Housing bubble / financial crisis (peaked October 2007)**
 - While the greatest excesses during this period were in debt securities, the S&P 500 Index served as a reasonable proxy for the bubble-like behavior in financial markets; the index dropped nearly 60% from its 31 October 2007 high to its 9 March 2009 low.
 - Following the October 2007 peak, it took more than a month for the S&P 500 Index to decline more than 10%, and despite the need for a rescue of Bear Stearns five months after the peak, the index didn’t drop 20% from its high mark for nine months.
 - As late as June 2008, the S&P 500 Index was still down only 8% from its peak – and the worst was yet to come.

- **Bond bubble (peaked March 2020 and August 2020)**
 - Some might disagree that the rates we saw on 10-year US Treasury bonds in 2020 constituted a bubble, but I believe there is little evidence to dispute that this period marked the end of a 40-year bull market in bonds. During those four decades, rate cycles occurred, but each delivered successively lower highs and lower lows.
 - The 10-year Treasury yield plunged to 0.54% on 9 March 2020. Over the next two weeks, despite ever-lower stock market prices, the Treasury yield rebounded from that all-time low to 0.8% or higher.
 - Ten-year Treasury yields remained below 1% for the remainder of 2020 and even nipped a new low of 0.52% on 4 August 2020.
 - By early January 2021, the 10-year yield had risen above 1% and has not fallen below that level since.

What do all these experiences have in common? It took quite a long time in each case before market participants formed a consensus that the bubble had peaked. Investors have “learned” over the past many years that stock market declines tend to be sharp and brief, with strong recoveries following quickly. That has not always been the case — and, in fact, typically is not the case — in the aftermath of investment bubbles.

What do recoveries tend to look like?

As noted, recoveries following the unwinding of investment bubbles tend to take a long time to begin. It typically takes an even longer time for market participants to recover the value they lost following the prior peak. It took 15 years for the Nasdaq Composite Index to reach a new high following the March 2000 tech bubble peak (and seven years for the S&P 500 Index to surpass its peak, as that benchmark was less of a focus during the bubble). The S&P 500 Index reached a new high only five and a half years after the financial crisis — a relatively short period in the annals of investment bubbles. However, the most extreme activity during that cycle occurred in exotic credit instruments, so it is perhaps not the best model for comparison. Furthermore, it took 13 years for the S&P 500 Index to decisively break through its March 2000 high. We have yet to see 10-year Treasury rates come anywhere near the pandemic lows, and those are levels that we might not see again for generations, if ever.

Going back further in history, the Dow Jones Industrial Average (DJIA) was approximately 1,000 in early 1966 and barely exceeded that level for the next 16 years before breaking out of the range to the upside. Similarly, it took 25 years for the DJIA to reach new highs following the 1929 market peak that preceded the Great Depression. All of these numbers are presented on a price-only basis, excluding dividends, and in nominal terms, without adjusting for inflation.

Another characteristic of secular market turning points is that leadership tends to change in bear markets. While large-cap and internet-related stocks drove the gains during the tech bubble, the leaders following the implosion of that market were smaller-cap and old-economy stocks. If we truly are in the early stages of an AI-related bubble unwinding, it is likely that we will again see a shift in market leadership.

Why we might not be in a bubble after all

While we’ve spent considerable time discussing what past investment bubbles look like and how they have played out, it’s also important that we talk about why we may not be in an investment bubble at all in the present. What would justify the massive increase in capital spending directed toward the buildout of AI data centers today? The main answer to that question lies in whether AI can drive a meaningful increase in productivity. The most plausible source of that increase would be the replacement of human labor with lower-cost AI resources. This is a very real possibility, and the more time we allow it to develop, the more likely we are to see major impacts. Unfortunately for investors in AI-related businesses, the useful life of most of the assets being deployed into data centers is something like five to seven years — or less. That means productivity breakthroughs a decade or two from now may come too late to save today’s AI stocks from major write-offs and declines, similar to what we saw during the tech bubble.

If we do see productivity gains in the next handful of years sufficient to justify today's capital spending, society will also have to address what happens to the people who lose their jobs as a result. The ideal scenario would be for most of those workers to find new, meaningful jobs in emerging areas, contributing to healthy economic growth and consumer discretionary spending levels. We have seen that in the past with certain technological advancements, though there may be no precedent for a technology with the potential scale and speed of impact that AI represents.

Even if we have been in a bubble, it is exceedingly difficult to know when it is over. We can identify some correlation between current indicators and symptoms of prior bubble peaks, but that falls far short of being a reliable predictive tool. One curious sign in today's market is the apparent decrease in speculative fervor among market participants since October 29, when Federal Reserve Chair Jerome Powell cautioned that a December rate cut was "not a foregone conclusion." Past investment bubbles have often peaked not because of disappointing results from a company directly in the path of the investment hype, but rather related to some peripheral event that creates a different mood, and a different tolerance for risk, among investors. Only time will tell whether Chair Powell's October 29 comments played that role in this cycle.

Conclusion

I believe that AI will be a transformative technology over the next several decades, having likely a larger impact on people's lives than the internet did. I also believe that many current AI-related investments will not create wealth for investors over the next several years. These beliefs may appear contradictory on the surface, but studying past investment bubbles clearly shows that they are not.

[¹Should You Just Buy Stocks Until You Die? - WSJ](#)

As of 31 October 2025, Diamond Hill owned shares of Meta Platforms Inc, Microsoft Corp and Alphabet Inc. As of 30 September 2025, Diamond Hill held debt in Oracle Corp and Alphabet Inc.

Securities referenced may not be representative of all portfolio holdings. The reader should not assume that an investment in the securities was or will be profitable.

S&P 500 Index measures the performance of 500 large companies in the US. **Nasdaq Composite Index** measures the performance of more than 3,000 securities and is heavily weighted in technology stocks. **Dow Jones Industrial Average** measures the performance of 30 large, established US companies.

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