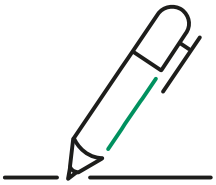
A feeling of déjà vu: Parallels between the dotcom era and today's AI surge



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PARALLELS BETWEEN THE DOTCOM ERA AND TODAY'S AI SURGE

- **Comparing the previous tech booms and busts with today's AI surge highlights some notable patterns**
- **Historically, undervalued stocks with low P/E ratios have outperformed during market downturns, highlighting the importance of focusing on valuation to manage risk**
- **Understanding historical parallels can help inform smarter investment decisions amid market uncertainty**

In August 1995, Microsoft released its operating system Windows 95, the first of a very successful suite of personal computers operating systems. By 2000, together with its successors, they commanded more than 90% of market share[i].

It was a turning point for the technology sector; the company was making its products more appealing to consumers and spearheading the internet era.

Today we face a similar moment with artificial intelligence. This technology has been nurtured by specialist firms for the last 10 to 15 years (Open AI was founded in 2015; Google's DeepMind in 2010) and is now widely available to consumers.

The consequences of its adoption remain unclear, as are investors and markets' ultimate reaction to its potential economic, social and political consequences.

Many investors may well be wondering whether the world is living in a 1995 or 2000 moment. And the question is not trivial. From Windows 95's release, to the dotcom bubble's peak, in March 2000, Microsoft delivered an astonishing 60% average annualized performance[ii].

But when the bubble burst, it took the firm almost 14 years to recover. More precisely, from March 2000 to December 2014 Microsoft grew at an annualised return of 1.3%; the Nasdaq at 0.3%; and the S&P 500 at 4.1%[iii].

In contrast, over the same period, US Treasuries achieved an annualized 5.2% return, while cash managed to 2% per year - both outperforming Microsoft and, generally, the Nasdaq index[3].

NOW AND THEN

Even if today, we live in a world shaped by information technology, the foundations of which were laid down in those years, from an investment perspective, the differences between a 1996 and a 2000 moment are substantial.

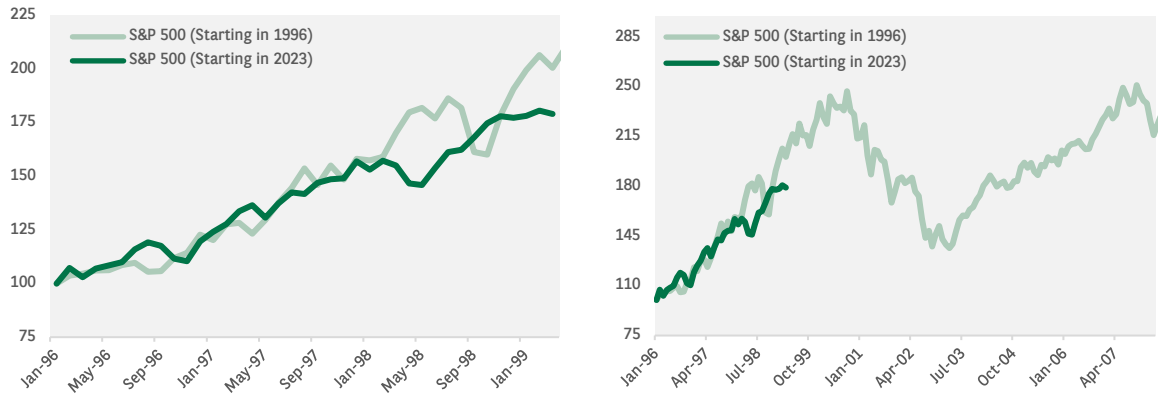
Obviously, history is not a guide for the future, especially when it comes to assess technology's possible impact on the economy and society at large. But given these uncertainties, it at least offers a potential outcome of what could happen.

History therefore is a good place to start if we want to imagine how events could unfold. In Exhibit 1 (left) we show the growth of the S&P 500 since January 1996 (purple) and superpose the index's growth from January 2023, following the release of ChatGPT late 2022.

Exhibit 1 (right) extends the S&P 500 index until March 2008. The similarity is striking, but of course there is nothing that would imply the same path today. History only offers a scenario, although not an attractive one.

Exhibit 1

The S&P 500 index (base 100) starting in January 1996 (and January 2023 in dark green) up to March 1999 (Left) and March 2008 (Right)



Source: BNP Paribas Asset Management, March 2026

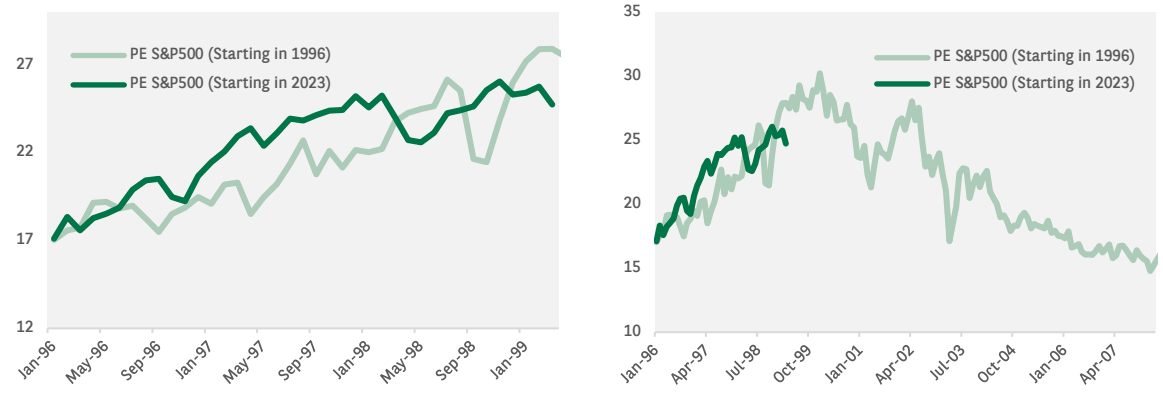
To dig deeper into the similarities between the two events, we look at historical price-to-earnings ratios of the S&P 500 in 1996, and as before, we superpose the valuation levels starting in 2023 (Exhibit 2-left), extending the then PE levels up to March 2008 (Exhibit 2-right).

Here again the similarity between the US market in 1996, and the one the US market subsequently experienced over the last few years are striking: PE levels have increased steadily, reaching around 25 times, a relatively high value if we compare with the long-term average of the US market (typically at around 15 times).

After early 2000's peak, the US market's PE level embarked on a downward trend that reversed only at the end of the global financial crisis. As noted, past performance is not a guide for the future, but in 2000 the market became so expensive that it took it nearly a decade to clear the excesses, at least from a valuation perspective. In our view, the notion of PE levels continuing to rise, from an historical perspective, is an unlikely scenario.

Exhibit 2

The PE ratio for the S&P 500 index starting in January 1996 (and January 2023 in dark green) up to March 1999 (Left) and March 2008 (Right)



Source: BNP Paribas Asset Management, March 2026

REAL COMPANIES, REAL PROFITS

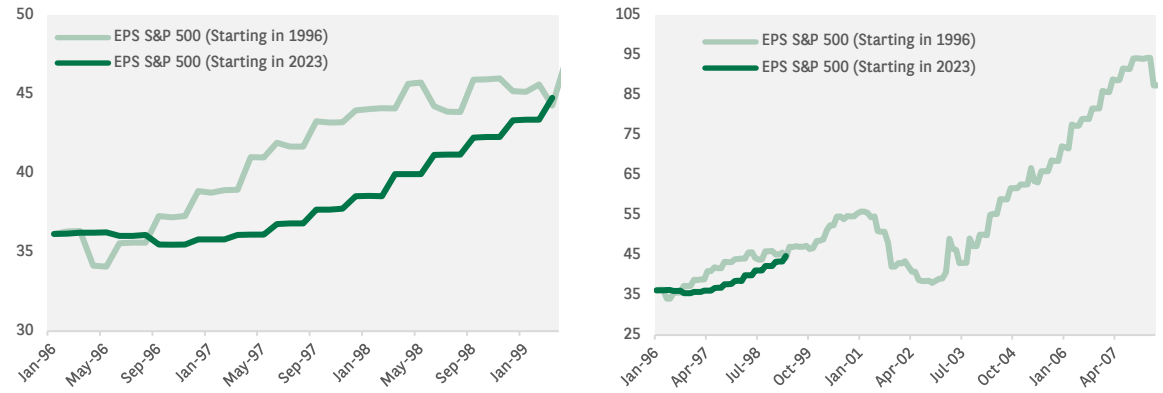
One of the major differences between now and then, is the idea that 2000's bubble was fuelled by excesses in profitless companies, while today's rise is backed by solid earnings growth for highly profitable companies.

The belief that today's conditions are different from the past has some element of truth. Large US technological companies have substantial revenues and profits that can be used to finance the AI roll-out. But back in 1996, the earnings at an index level were comparable if not better than today's (Exhibit 3-left).

Moreover, earnings per share kept growing at a steady pace, interrupted only by the repercussions of the IT bubble bursting. Therefore, the idea that today's growth is healthier than in the past is not clearly visible from the data: the S&P 500's EPS was at par if not better than today's.

Exhibit 3

Earning-Per-Share for the S&P 500 index starting in January 1996 (and January 2023 in dark green) up to March 1999 (Left) and March 2008 (Right). Current EPS have been scaled to January 1996 levels for comparison.



Source: BNP Paribas Asset Management, March 2026

In 1996, on the back of the internet revolution, the market was growing very fast, with robust growth in both EPS and PE. Swap the 'internet' with 'AI' and the picture looks similar.

MACRO CONDITIONS AND MARKET DYNAMICS

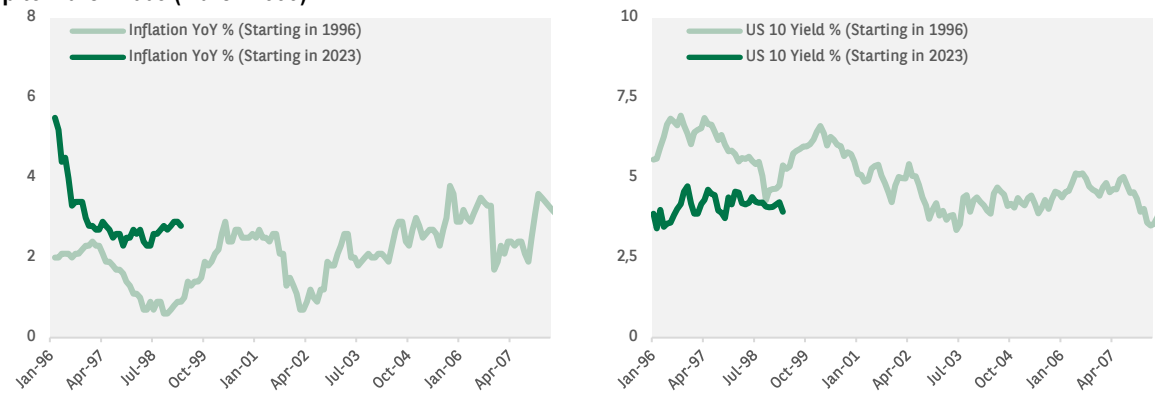
But what about the macroeconomic conditions? Back in 1996, we had lower inflation rates, hovering around 2% as measured by the Personal Consumption Expenditures Price index. Today we measure structurally higher rates, although coming down from the even higher levels that followed the pandemic (Exhibit 4-left).

On the other side (Exhibit 4-right), yields on long US Treasuries are substantially lower than in 1996: close to 4% today, more than one percentage point lower than in 1996. Therefore, from a macroeconomic perspective, today's growth in the equity market has benefited from lower rates than in 1996, although current inflation looks much more persistent and its chances of coming down in the near term are not overly optimistic.

Furthermore, the current US deficit is at record level outside major conflicts, above 5% of the GDP, while it was small in 1996 and, for a few years afterwards, turned to a surplus in 1998 and 1999.

Exhibit 4

YoY PCE inflation changes (Left) and US 10Y Yield (Right) starting in January 1996 (and January 2023 in dark green) up to March 2008 (March 1999)



Source: BNP Paribas Asset Management, March 2026

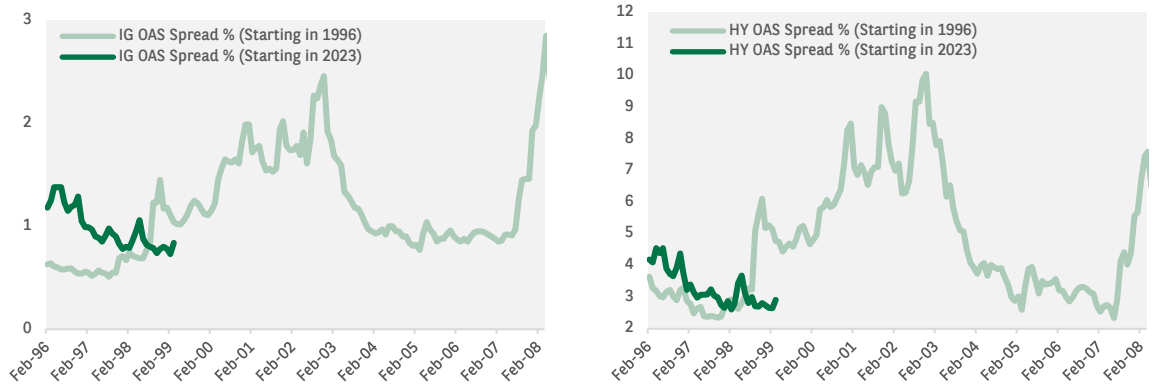
Deciding if the global macro backdrop was better then, than now, is not an easy task. But if anything, it's fair to say that back in 1996 inflation seemed under control and the Federal Reserve had more space to adjust its monetary policy to the events that followed, while the US Government was not increasing its deficit as it is today.

Notwithstanding the more benign macroeconomic environment, the IT bubble did burst, and it took more than a decade for US tech companies to reach their previous peak. This can also be inferred by looking at overall financial conditions for US borrowers in the years concerned: Exhibit 5 shows the investment grade and high yield spreads starting in 1996 (and in 2023 in dark green).

The spreads were stable until the first crack in the IT sector started to appear. They then shot up significantly, with IG peaking at 2.4% and HY at 9.8% in late 2002. Today's levels for both IG and HY borrowers are relatively like the ones prevailing in the years 1996 to1999. Given the sheer amount of debt that is currently in the pipeline to fund the AI infrastructure, and the recent issues in part of the private credit sector, it is very important to keep in mind how conditions may evolve.

Exhibit 5

Investment Grade (Left) and High Yield (Right) spreads starting in January 1996 (and January 2023 in dark green) up to March 2008 (March 1999)



Source: BNP Paribas Asset Management, March 2026

EMERGING 'VALUE'

Investing in the Nasdaq on 1 January 1996 and holding the position up to February 2026 would have delivered a substantial 3.7% annualized outperformance compared to the S&P 500 index (14% versus 10.3%). Buy the Nasdaq in March 2000, and an investor would have done worse than the S&P 500 index by 0.30% per year (7.7% versus 8%).

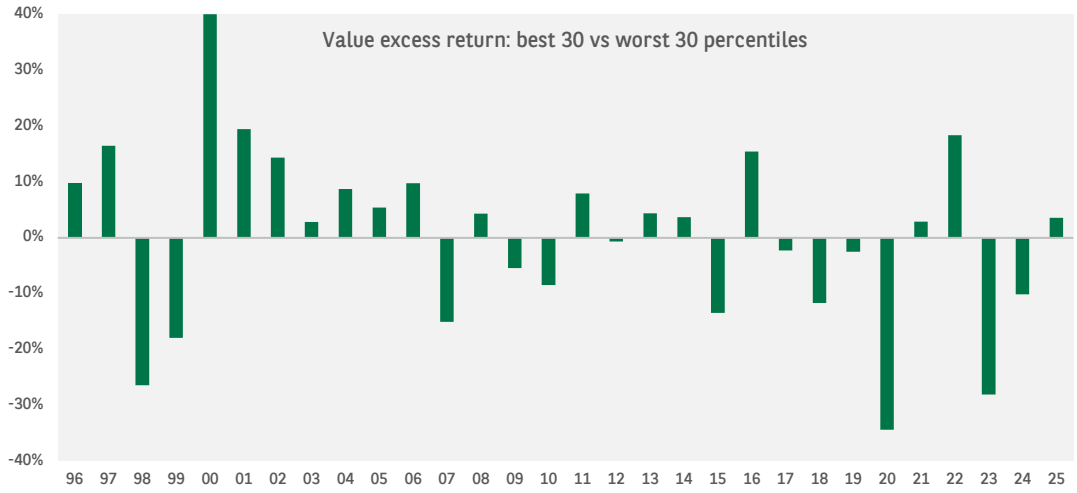
Therefore, knowing if we currently are in a 1996 or a 2000 situation does matter for investment purposes. But not all investors would commit to the same strategy for more than 20 years to see how it unfolds. In hindsight, one would like to buy the tech-heavy index when it was doing nicely and then get out before it crashed.

Obviously, this is not possible, but paying attention to valuations is usually a way to potentially protect a portfolio from sudden crashes while limiting the risk of buying at extreme prices, when it will be difficult to sustain past returns.

To highlight how valuations matter in these conditions, Exhibit 6 shows the annual excess return of a simple portfolio made of US companies in the lowest 30th percentile based on PE ratios (typically Value companies) over the mirror portfolio made of the highest 30th percentile (generally expensive companies).

Exhibit 6

The excess return of the PE lowest 30th percentile vs. highest 30th, based on Prof. Kenneth French database for the US market



Source: BNP Paribas Asset Management, Prof. Kenneth French US Market database, March 2026

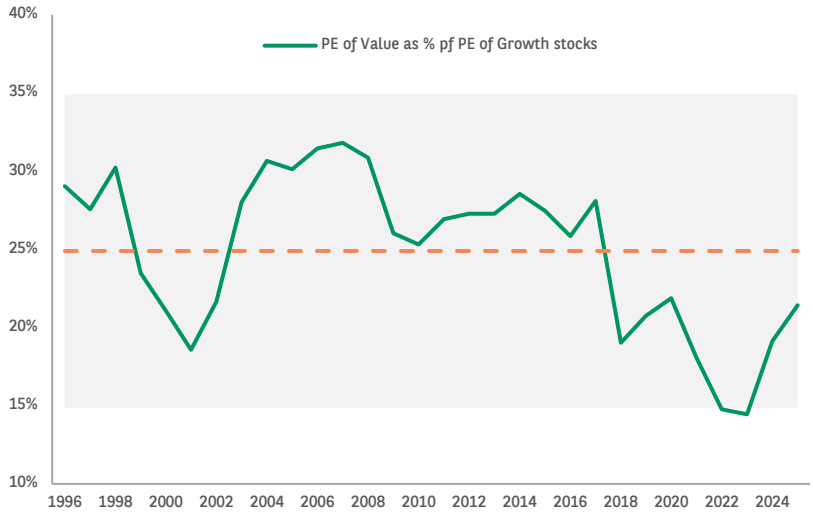
Although the difference is relatively volatile, we can see that after the turn of the century's peak year Value companies consistently outperformed expensive ones for seven consecutive years until 2007. The average outperformance was close to 14% per year, even if this is skewed by the very large gap in 2000, when high PE companies substantially underperformed their value peers, following IT sector's collapse.

Clearly, after the excesses of the years leading up to 2000, especially in the technology sector, valuations went on a downward path toward their long-run average levels and leveraged, high PE companies consistently underperformed low PE ones.

Furthermore, when we measure the average PE level of Value companies, as a percentage of expensive companies PE (Exhibit 7), we find that, on average over the last 30 years, Value companies traded at a PE equal to roughly 25% of the expensive companies' PE, with a two-standard deviation range between 15% and 35%.

Exhibit 7

The average PE ratio of the lowest 30th percentile of US companies, based on PE rankings, as a percentage of the average PE of the highest 30th percentile, based on Prof. Kenneth French database for the US market



Source: BNP Paribas Asset Management, Prof. Kenneth French US Market database, March 2026

After 2000's IT peak, when the ratio came down to 18%, the performance and re-rating of Value companies pushed the valuation ratio above 30% that lasted until 2008. This is relatively similar to what we are recently saw, with Value companies trading as little as 15% of expensive companies in 2024, with some re-rating already visible in 2025. It is not clear how things may evolve in the future, but what we can draw from the past highlights that after a severe downturn in the technology sector, Value companies have consistently outperformed. Whether we live a 1996 or 2000 moment is anyone's guess. But this matters a lot when it comes to investing and positioning equities in portfolios.

THE POSSIBLE PATH AHEAD

For investors, especially those in the US equity market, the feeling of *déjà vu* is palpable. Riding the hype of the internet era, US technology companies delivered tremendous returns and extreme valuations.

When the environment imploded, the effects were severe, and it took the market more than a decade to recover. While an investment in Nasdaq in early 1996 would have resulted, 30 years later, in robust returns, the same investment in 1999 or early 2000 would certainly have not.

Imagining what could happen in the coming years based on what we see happening in the technology industry, namely regarding AI investments, is therefore key to assessing the likely path forward and performing scenario analysis.

History may not repeat itself, but it must be studied: the same thing may not happen, but it has happened in the past, hence it is at least in the realm of possibility. And the past, at least from where we stand, looks perilously more similar to the current situation that we would like to think.

Whether we look at both the PE and EPS trajectory from 1996 to peak 2000, the macroeconomic background as well as credit conditions, the similarities are striking. Such an outcome is clearly not inevitable, but it would be risky to exclude such a scenario from the likely paths going forward.

Does this mean that a 2000-type of crash is the likely scenario? Not necessarily, but one of the main findings of such a scenario is that, should that happen, the losses could be severe and, last time, it took substantial time to recover. Furthermore, in such a scenario, it's worth noting how Value companies, on average, substantially outperformed expensive ones, for many years after the IT bubble burst.

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[i] Antitrust cases EU. https://ec.europa.eu/competition/antitrust/cases/dec_docs/37792/37792_4177_1.pdf
[ii] Source Bloomberg in USD, from August 24th, 1995 to March 30th, 2000
[iii] Source Bloomberg in USD, from March 30th, 2000 to December 31st, 2014.