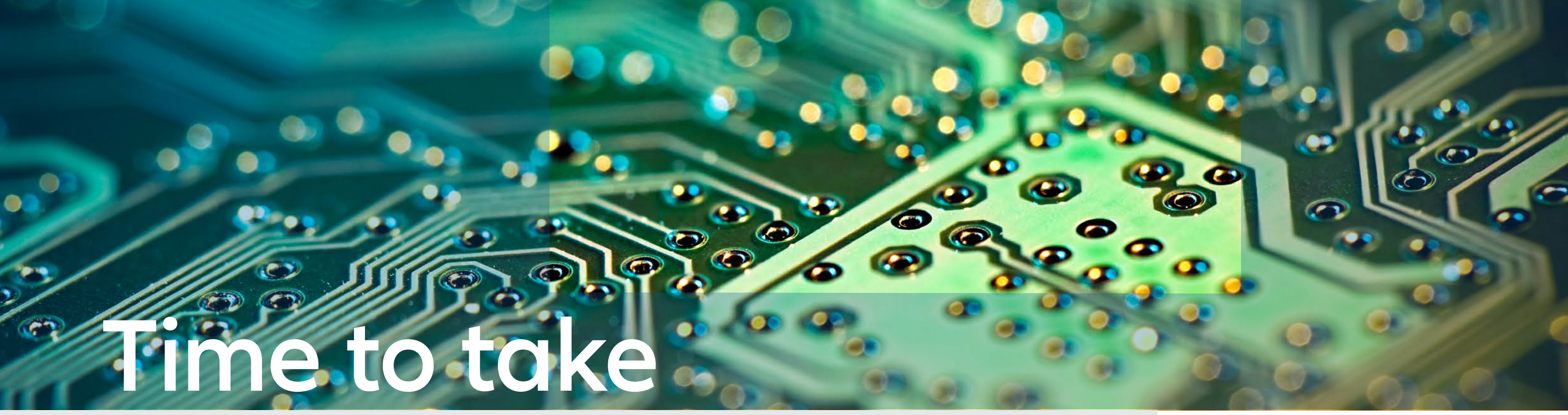


Time to take a fresh look at tech?

March 2023

The past year has been challenging for the technology sector – but what will 2023 bring? Even as fears of a global slowdown depress sentiment, we think opportunities will emerge, particularly for long-term investors focusing on tech-led themes such as artificial intelligence (AI), the metaverse and cybersecurity that are growing increasingly pervasive and transformative.

Virginie Maisonneuve
Global CIO Equity

Whether surging or sinking, technology stocks frequently grab the financial headlines – and in 2022, tech firms had a particularly challenging year. But we think sentiment could start to improve in the latter part of this year. Meanwhile, long-term investors can continue to align their portfolios with transformative technologies – such as artificial intelligence – that are increasingly vital to everyday life.

Despite the long-term strength of the tech sector, investors have felt real pain in the short term. The sector has suffered over the past 12 months due to rising interest rates and concerns about moderating growth. After the stay-at-home boom in technology stocks during the Covid pandemic, the sector has been hit disproportionately by the global "reopening". The technology-heavy Nasdaq 100 index shed around a third of its value in 2022 (see Exhibit 1). Some individual stocks are down even more, and many names are trading at a significant discount.

But if the sector looks "cheap", there are several good reasons why. As long-duration growth assets, tech stocks have been hit hard by rising interest rates in an environment where money has a cost again. In addition, the outlook for corporate spending on IT is uncertain (see guest viewpoint). Such headwinds are unlikely to disappear overnight. And valuations may cheapen further if – as expected – an economic slowdown this year leads to a recession in some parts of the world.

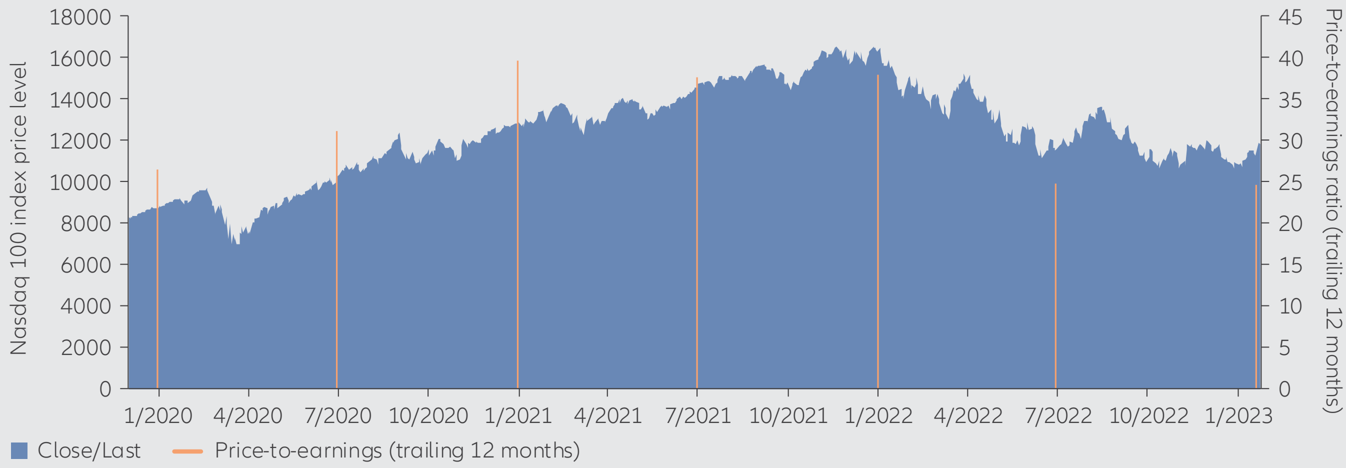
Key takeaways

- After a challenging 2022, the technology sector may be set for a less volatile year once sentiment – and corporate spending on IT – revives.
- The sell-off has already left many stocks trading at a significant discount and select opportunities may emerge among those names that weathered the storm: earnings will become increasingly important in this environment.
- While the immediate outlook may be uncertain, investors may want to continue to position for structural growth trends such as artificial intelligence, the metaverse and cybersecurity.

Embracing Disruption

Allianz Global Investors

Exhibit 1: the price-to-earnings ratio of companies listed in the tech-heavy Nasdaq 100 index



Source: Nasdaq, Siblis Research. Data as at 24 January, 2023

However, we think a prolonged sell-off – as seen during the dot-com bubble – is unlikely as company fundamentals remain robust and companies are increasingly scalable. In addition, aspects of IT spending should stay strong (see **Exhibit 2**). Even if discretionary IT projects fall victim to economic fears, there's a sustainable need for corporates to increase technology spending over each business cycle. This is particularly true for the mission-critical hardware, software and cybersecurity segments.

We increasingly live in a world of "digital Darwinism" – where the ability of companies, whatever their sector, to leverage technologies such as AI will be critical to their competitive advantage. Staying up to speed on technology is a must.

And a potential peaking in interest rates in 2023 may mark the beginning of a turnaround for sector performance – and a possibly attractive entry point for investors.

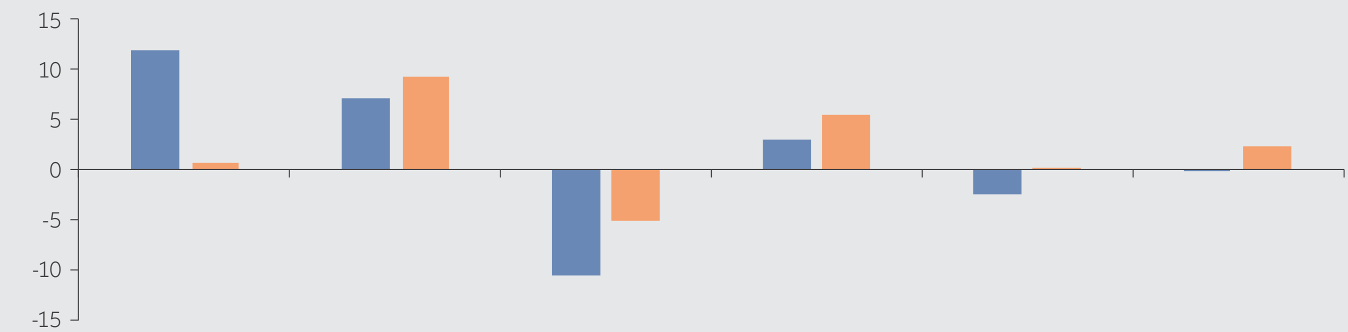
In 2023, the strength and quality of earnings will be increasingly important

In this environment, it pays to be selective as an investor. While painful in the short term, the shift to a "new old normal" of higher interest rates could ultimately be helpful for investors in the sector.

Why? Because companies are no longer rewarded for using limitless cheap debt to pursue growth at all costs. Instead, they are focused on protecting margins and earnings in a world where money has a cost again. This means higher-quality companies with sound management, strong product offerings, and healthy fundamentals should rise to the top. Those could be the names to back.

Overall, we expect more solid underlying earnings for the sector this year, with sentiment potentially improving in the second half. Many tech firms failed to keep pace with their super-charged performance in the wake of Covid-19 – a time when government stimulus fuelled

Exhibit 2: Worldwide IT spending forecast growth (%), according to Gartner



	Data centre systems	Software	Devices	IT services	Communications services	Overall IT
2022	12	7.1	-10.6	3	-2.4	-0.2
2023	0.7	9.3	-5.1	5.5	0.1	2.4

Source: Gartner (January 2023)

a consumer and business spending boom. In 2023, as those base effects roll through, the sector should start to exhibit better fundamentals.

Still, investors should be prepared for some potential weakness in future earnings amid fears for the global economy. Conditions may take a toll on top-line growth and margins. But growth stocks – including technology firms – tend to have more persistent earnings power and stronger profitability than cyclical value names in a cooling economy. In this environment, the ability to identify companies that can grow – or at least maintain – their earnings should be rewarded.

Consider using the coming year to position for three long-term trends

In 2023, investors could also look through the uncertainty to focus on high-conviction, long-term trends that could propel the future of the global economy – and where technology firms play a vital role. Here are three examples.

- AI: Firms outside of the technology sector – from agriculture to healthcare – are increasingly adopting AI, whether for cost reduction, revenue enhancement or improved customer engagement. McKinsey's 2022 Global Survey on AI shows that over the past five years the number of organisations embedding AI into at least one business function has increased from 20% to 50%.[1] As confidence and reliance on AI-related technologies increases, we expect corresponding secular growth across AI infrastructure (big data, cloud, internet of things), AI applications (intelligent automation, deep learning, and social) and AI-enabled industries (agriculture, automotive, manufacturing, healthcare and education). With the advent of tools such as chatbot that can generate fluent text, the real-life applications of AI are becoming more apparent to more people.
- Metaverse: Encompassing everything from online gaming and fitness to video calls and digital currencies, the metaverse represents a new frontier of seamless interconnectivity between digital and physical spheres. We see the move to the metaverse as analogous to past shifts from desktop to mobile computing, or from in-person to virtual applications. Enabling the transition to the metaverse may be Web 3.0, which could provide a more decentralised and immersive version of the internet, with more user-generated content. As more businesses venture into the metaverse, the total aggregate revenues of companies in the sector could reach USD 25-30 trillion. But we're still at the start of the revolution and investors positioned ahead of the transition could stand to capture a durable multi-decade trend. Make no mistake, the metaverse is real – and it is here to stay.
- Cybersecurity: The explosion in digital data, combined with the need to deter and prevent attacks across multiple layers of security, has made cybersecurity an increasingly pressing topic – not just for individuals and businesses, but for governments as well. Our "age of connectivity" brings an urgent need to safeguard networks and data. The move to flexible working after the pandemic and the spread of the internet of things to a greater range of devices – from smartphones to smart grids – has created more vulnerabilities, and the consequences of cyber breaches can be costly and potentially debilitating. In response, organisations spent around USD 150 billion on cybersecurity in 2021, according to McKinsey. But the global market could grow to around 10 times that amount.[2]

Look beyond the tech titans for long-term opportunities

Investors often associate tech with the superstar names that have become part of our everyday lives. But the opportunities within the sector are far deeper and broader, extending into areas like healthcare and industry. Tech stocks remain a fundamental part of major global indices and can play an integral role within a diversified long-term portfolio. And China is focused on technology innovation as part of its drive for self-sufficiency, potentially creating long-term opportunities for investors.

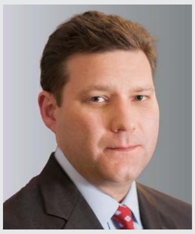
There may be further market volatility in 2023, but investors may choose to use the year as a time to position for revolutionary structural trends that are set to benefit the economy and society in the long-term.

[1] Source: McKinsey, December 2022 – The state of AI in 2022--and a half decade in review | McKinsey

[2] Source: McKinsey, October 2022 - New survey reveals $2 trillion market opportunity for cybersecurity technology and service providers | McKinsey

Guest viewpoint: Voya Investment Management

Signals to watch to time tech re-entry



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Technology investors feeling disillusioned after a challenging period for the sector may want to consider the following signals that may accompany a brighter picture:

1 Keep an eye on IT spending levels

Some estimates for corporate spending on IT show growth of nearly 5% in 2023.[3] We think such numbers are unrealistic in the near term. Amid economic uncertainty, discretionary IT projects are coming under greater scrutiny and being delayed or cancelled as firms choose to focus on mission-critical IT assets. We expect this trend to continue through the first half of 2023 before a potentially improving outlook emerges in the latter part of the year. A good signpost for investor sentiment could be to assess expectations for IT spending alongside the corresponding outlook for a stock's earnings performance relative to history.

2 More M&A may help kickstart interest

A pick-up in merger and acquisition activity may be the start of a broader revival in the technology sector and signal an attractive re-entry point. With valuations falling from historical highs to below-median levels, private equity firms and cash-rich players may look to pick up strong business models at a discount. A survey by Morrison Foerster and Mergermarket found most private equity firms and corporates expect deal volumes to grow in 2023.[4] More M&A activity may have a ripple effect on sentiment and kickstart a potential cycle of earnings growing at increasing multiples.

3 Look for stable cash flow generators

In the near-term, given the uncertain spending environment, we favour companies where earnings multiples are more likely to be rewarded, either in terms of a discount relative to industry peers or those where investors are willing to pay a premium given their long-term secular demand drivers. These might include legacy software companies with already depressed future growth expectations: many have been among the best relative performers in the sector. Other potential winners? Cybersecurity and cloud-based companies may be in favour because of the strength of their business models, valuations that tend to be below historical averages, and secular growth tailwinds.

In summary, we think this environment calls for an active investing approach. Active managers can seek to structure portfolios through a combination of top-down thematic trends and bottom-up, fundamentals-based investing. They can also adjust to different market climates and provide diversification at the individual stock level – all of which can be essential in a shifting environment.

Allianz Global Investors (AllianzGI) and Voya Investment Management (Voya IM) have entered into a long-term strategic partnership, and as such, as of 25 July 2022. AllianzGI continues to provide information and services to Voya IM for this investment through a transitional service agreement. None of the composition of the team's investment professionals, the investment philosophy nor the investment process have changed as a result of these events. .

3. Source: Piper Sandler 2023 CIO Survey, based on a survey of 128 IT decision makers based primarily in North America, December 2022
4. Source: Morrison Foerster/Mergermarket Tech M&A Survey - MoFo Survey: Tech M&A Marches On; Dealmakers Navigate Market Uncertainty by Targeting New Sectors | Morrison Foerster

Diversification does not guarantee a profit or protect against losses.

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