August 2022

# THE CASE FOR TECHNOLOGY EQUITIES

# BREADTH OF EXPERTISE

The Global Technology Leaders Team are sector specialists with more than 90 years' combined industry experience.

Janus Henderson has managed specialist technology equities since 1983 and is one of the largest technology managers in Europe with US$8.3bn* in AUM.

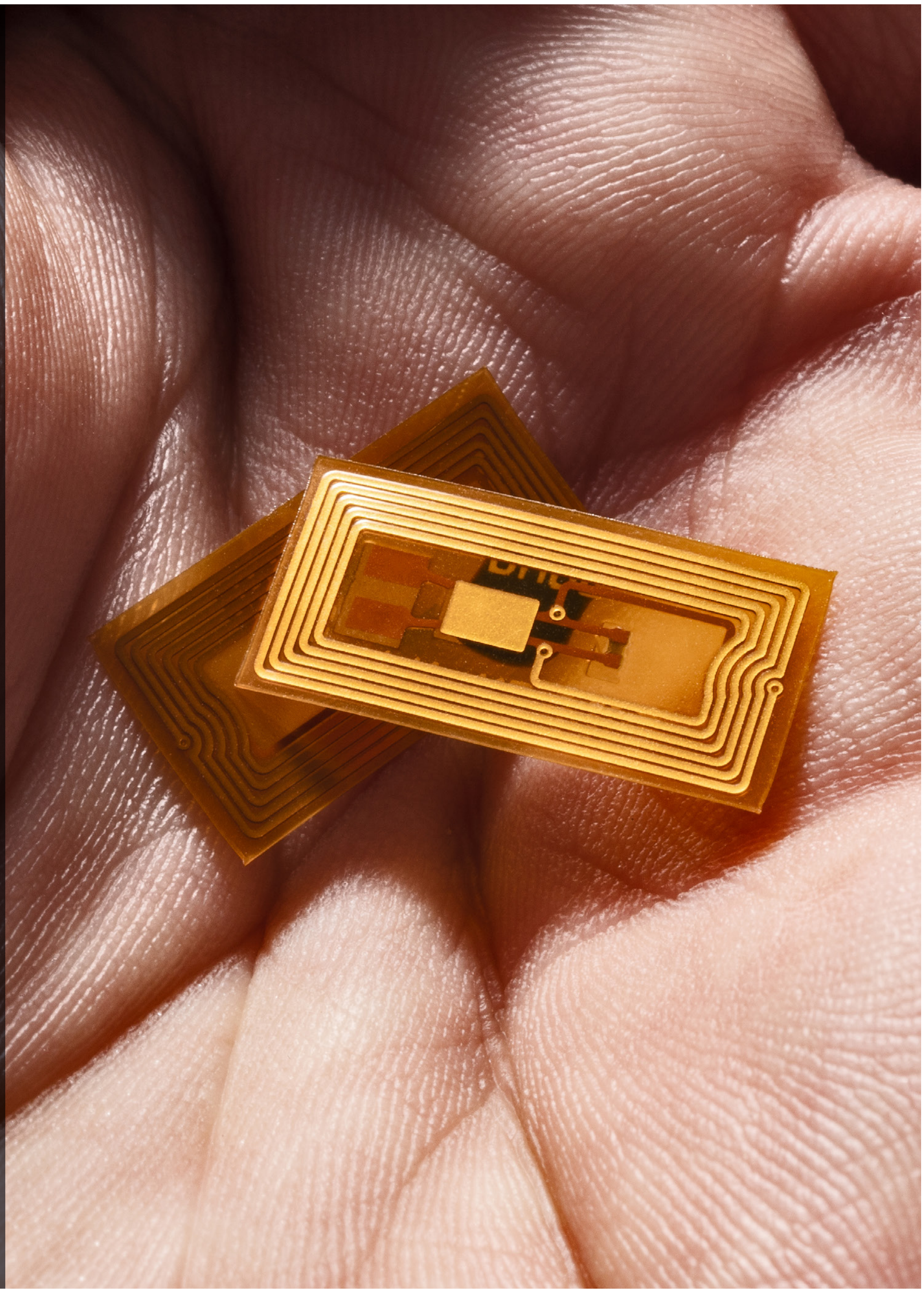
*Assets managed by the UK-based Global Technology Leaders Team as at 31 March 2022.
Source: Janus Henderson as at 30 June 2022.

## WHY TECHNOLOGY EQUITIES NOW?

While many tech companies have found themselves on the wrong side of the disruption cycle today and the sector will likely experience more volatility as rates and inflation levels remain higher in comparison to the past decade, an allocation to tech equities can be rewarding over the longer term.

Technology by nature is an innovative, disruptive and deflationary force, making things faster, cheaper, and more efficient. This means it can offer a solution to inflation, combatting higher input and labour costs given its capability to enable automation and create more efficient products and services. Technology companies also play a key role in sustainability. The major challenges faced by the world today such as climate change, resource constraints and poverty & inequality are all leveraging on innovative new technology for solutions.

Although the sector is characteristically volatile by nature, multiple secular growth themes that are driving technology demand give rise to some undeniably attractive opportunities for investors.



# TECHNOLOGY PROVIDES SOLUTIONS

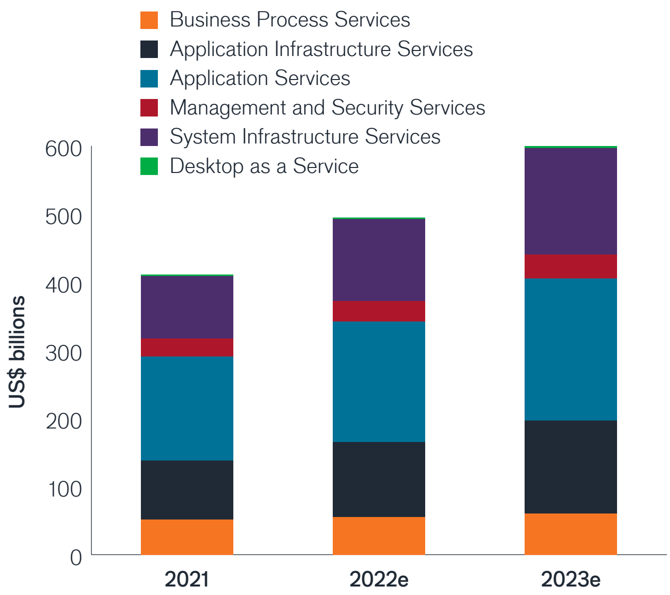
## Tech is synonymous with innovation

Technology is a positive force for both innovation and disruption. Three powerful factors explain why technology will continue to be a disruptive force in the global economy. First, demographics; children are now 'digital natives' – their culture is defined as digital. Over time, technology adoption will only increase. Second, technology grows exponentially; ie, the growth rate becomes more rapid in proportion to its size as more tech is consumed and utilised. And third, technology continues to become faster, cheaper and more efficient.

Recessions and crises cause disruption. But on the flip slide they are also a catalyst for technology adoption, creating investment opportunities as businesses find new ways to operate and consumers change their behaviours and preferences. The COVID-19 pandemic has demonstrated the benefits of technology adoption on a massive scale, with the acceleration of many secular trends, including internet transformation (the digital shift of many aspects of our lives and increasing accessibility); next-generation infrastructure (broader tech adoption driving the need for low carbon, low latency, high reliability and secure infrastructure) and payment digitisation.

**Figure 1: Novel technologies are creating new markets across a host of industries**

Projected global cloud spending by application




Source: Janus Henderson Investors, ISI Research, Gartner, as at 30 April 2022. There is no guarantee that past trends will continue, or forecasts will be realised.

## Tech is the answer to inflation

The ability to make things faster, cheaper and more efficient means technology by nature is a deflationary force. It can offer a solution to inflation, combatting higher input and labour costs given its ability to create novel and more efficient products and services, and automate production processes. Businesses are less likely to cut their IT budgets given the overarching need to accelerate digital transformation for survival.

Should inflation levels remain elevated, technology firms could see increased demand. Looking at higher energy and input costs, wage inflation and worker shortages, we can turn to resource & productivity optimisation and process automation for solutions. Artificial intelligence (AI) – leveraging on the advancement of machine learning and self-learning software; productivity optimisation, enhancing technologies in the enterprise as well as robotics, are applicable solutions across all industries to counter the effects of higher prices and resource constraints.

## Tech is enabling sustainability

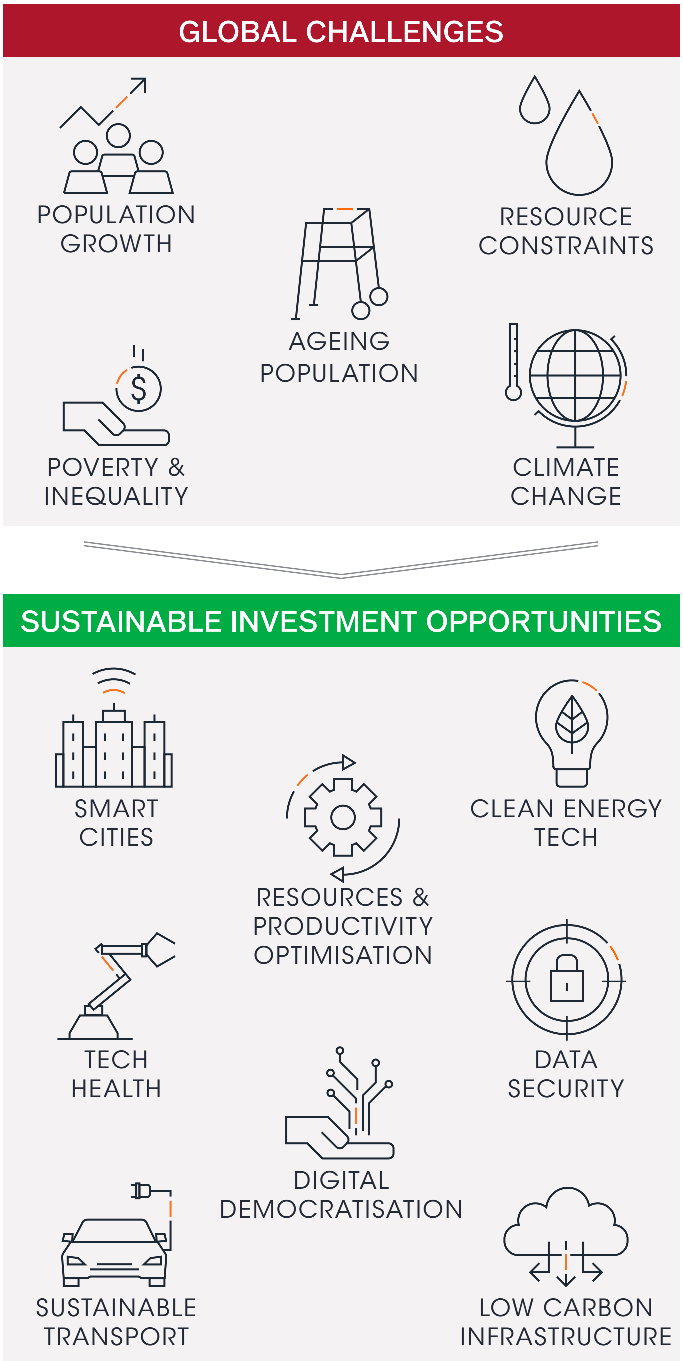
Investing in sustainable technologies can offer solutions to key global challenges and provides investors with an avenue to drive positive change in both environmental and social issues. Technology naturally avoids the most carbon intensive sectors of the economy and other negative externalities such as environmental pollution, violence & armed conflict, and smoking. As the focus on sustainability grows, this gives rise to a broad set of attractive opportunities within the technology sector.

The acceleration of sustainability trends brought on by the COVID-19 pandemic has seen interest in environmental, social and governance (ESG) grow significantly. It has also marked a significant shift in long-term investor attitudes, as well as increasing political and regulatory scrutiny on disruptive tech companies.

Technology has a key role in the battle against climate change. Among others, tech is providing sustainable transport solutions via zero emission vehicles, electrification, as well as migrating to low carbon infrastructure. Technology is helping make progress towards social goals as well, for example through the digital democratisation of healthcare, financial services and education, by improving accessibility and lowering costs for all to reduce inequalities and alleviate poverty.

Active management allows for direct engagement with senior management on ESG issues. These efforts can lead to positive changes in corporate behaviour and improve ESG standards, which is crucial for tech, a sector that is linked to industry disruption and regulatory oversight due to its innovative nature.

**Figure 2: By solving global challenges, technology is also creating investment opportunities**

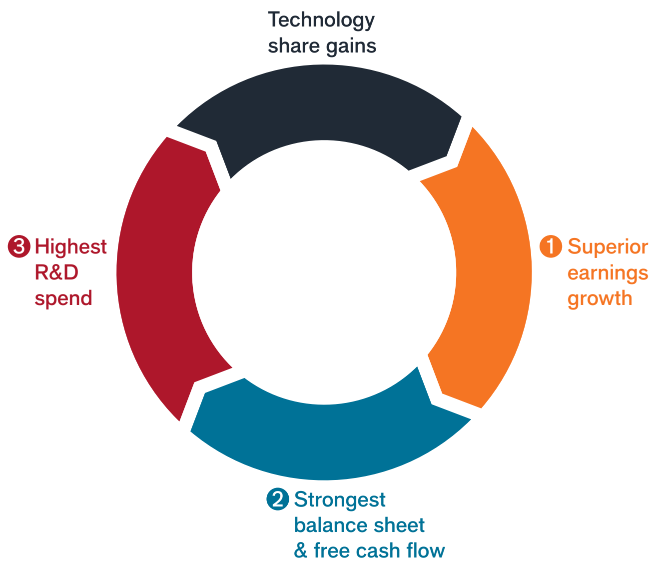


# TECHNOLOGY FLYWHEEL DRIVES CONTINUED SHARE GAINS

## A virtuous cycle

Technology is enabled by a virtuous cycle or 'flywheel', where companies reinvest earnings to continue driving growth and capture market share. Successful, profitable tech companies are those that can largely self-fund via their own profits rather than rely on external capital. Additionally, these companies tend to have less debt, meaning rate rises are less likely to have a detrimental impact on cashflows and restrict growth. Companies without a clear path to profitability risk running out of cash if they keep up their cash burn ratios.

### Figure 3: The technology flywheel

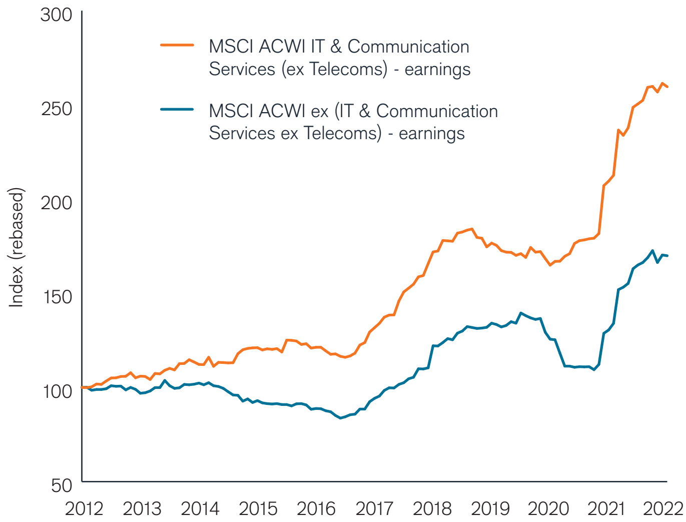



Source: Janus Henderson Investors. For illustrative purposes only.

## Tech can offer superior earnings growth

Over the long term, returns reflect a company's profitability and the growth in its earnings. Technology is a sector that has been able to grow earnings at a faster pace than many others (figure 4).

### Figure 4: Tech vs non-tech earnings growth




Source: Janus Henderson Investors, Bernstein, as at 30 June 2022.

Note: Rebased to 100 at 30 June 2012. Chart compares earnings in the MSCI ACWI IT & Communication Services (ex Telecoms) Index and the MSCI ACWI ex (IT & Communication Services ex Telecoms) Index. Prior to December 2018, the custom index of MSCI ACWI IT & Communication Services includes companies that were originally in the Technology sector and companies that are currently in the Communication Services sector. **Past performance does not predict future returns.**

## Tech companies benefit from their strong financial position

Companies with stronger earnings typically have stronger balance sheets and free cash flow, which holds true for technology stocks (figure 5). Net cash as a percentage of market cap shows that companies within the sector are the least indebted among all other sectors. A lower Enterprise Value (EV) versus Free Cash Flow (FCF) ratio is preferred, as this means that a company can generate cash to reinvest in the business at a faster rate and recover its research & development costs (R&D).

The negative impact to the bottom line for companies with net debt instead of net cash will likely be magnified as rates increase. A rise in rates increases interest payments, which lowers indebted companies' earnings, and ultimately reduces the rate of earnings growth.

### Figure 5: Tech demonstrates balance sheet strength

| Sector | Net cash as % of market cap | EV/FCF ratio x |
|---|---|---|
| Information Technology | **-1%** | **3** |
| Health Care | -9% | 5 |
| Consumer Staples | -13% | 4 |
| Consumer Discretionary | -15% | 4 |
| Materials | -16% | 6 |
| Energy | -17% | 9 |
| Communication Services | -19% | 5 |
| Industrials | -26% | 4 |
| Utilities | -65% | 2 |

Source: Janus Henderson Investors, Credit Suisse, as at 11 July 2022. MSCI World Sector indices excluding the financials sector. Net cash shows total cash on the balance sheet minus debt, cash shows purely the cash on the balance sheet. 'Net cash as % of market cap' is a measure of the net cash on a company's balance sheet as a percentage of its total market capitalisation. EV/FCF ratio is trailing Enterprise Value (EV) / trailing Free Cash Flow (FCF).

## Continued R&D drives future growth and earnings

The most successful firms typically reinvest their earnings into R&D to generate further growth. Technology companies with superior earnings and strong balance sheets have, and are more able to continuously fund R&D – a key advantage in the fiercely competitive tech space. The vast majority of the top ten global firms with the highest R&D expenditures have tended to be tech firms (figure 6).

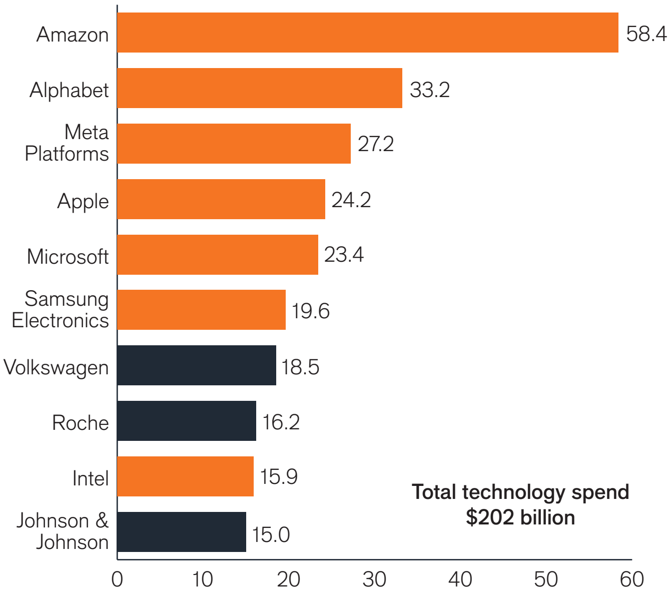
## But be mindful of valuations

While technology is exciting, rapidly evolving and can be a rewarding sector to invest in, accelerating tech trends often give rise to overexuberant investor expectations and hence some pockets of elevated valuations.

While investors tend to underestimate the size of new markets, they are also likely to underestimate the growing pains of a new technology, and consequently, the ability of companies to make sustainable profits. The ability to pick the right point in the technology adoption curve, select the right companies and invest at the right valuation are key to generating consistent returns. After all, over the longer term, valuations should be supported by profits and cash flow.

### Figure 6: Highest R&D spend

Top 10 global spenders on R&D (US$ bn)

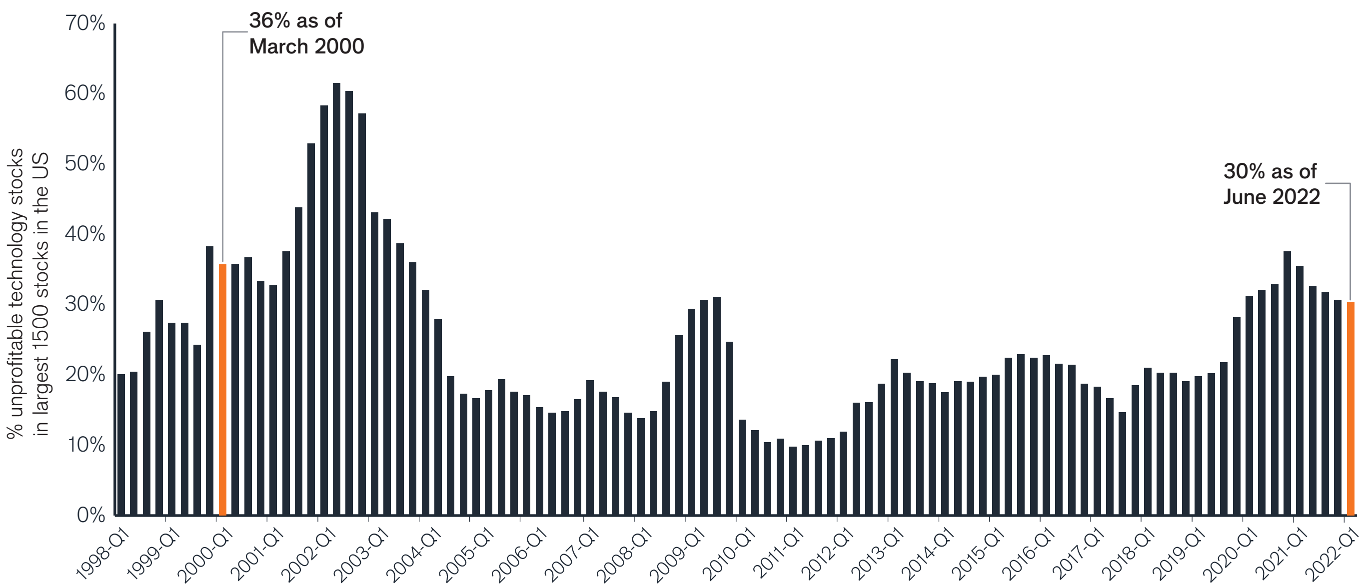



Source: Janus Henderson Investors, Bloomberg as at 30 June 2022.

Grey bars indicate non-technology securities using GICS sector classifications. References made to individual securities should not constitute or form part of any offer or solicitation to issue, sell, subscribe or purchase the same.

### Figure 7: Around a third of tech companies are unprofitable

Quarter-end 1998 through 2022 YTD




Source: Janus Henderson Investors, Bernstein, as at 30 June 2022.

Unprofitable tech stocks (number of unprofitable tech stocks/total number of technology stocks among largest 1500 stocks in the US).

## At a glance

**Tech is synonymous with innovation**
Technology is a positive force for both innovation and disruption. As tech adoption rises, businesses find new ways to operate and consumers change their behaviours and preferences, creating attractive investment opportunities.

**Tech is the answer to inflation**
Technology makes things faster, cheaper and more efficient, making it a deflationary force. It can combat higher input and labour costs given its capability to create novel and more efficient products and services, as well as automate production processes.

**Tech is enabling sustainability**
Investing in sustainable technologies can offer solutions to key global challenges and provides investors with an avenue to drive positive change in both environmental and social issues.

**Tech flywheel drives continued share gains**
Technology is enabled by a virtuous cycle, where companies reinvest earnings to continue driving growth and capture market share.

**Strong financial position**
The tech sector has been able to grow earnings at a faster pace versus many other sectors. Stronger balance sheets and free cash flow mean these companies are better positioned to reinvest for growth and are less vulnerable in a rising rate environment.

**R&D drives future growth and earnings**
Technology companies with superior earnings and strong balance sheets are more able to continuously fund R&D, a key advantage in the fiercely competitive tech space.

**Valuation discipline required**
Accelerating tech trends often give rise to elevated valuations. Picking the right point in the technology adoption curve, selecting the right companies and investing at the right valuation are key to generating consistent returns.

FOR MORE INFORMATION, PLEASE VISIT **JANUSHENDERSON.COM**

Janus Henderson
INVESTORS