Investment Manager's Report

This report forms part of the Strategic report section

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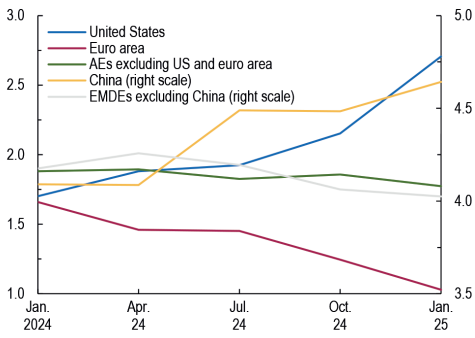
Market review

Equity markets delivered modest gains during the Trust's fiscal year to the end of April 2025 (FY25) following a strong FY24 although this belied significant geopolitical and market volatility. Global equity markets, as per the MSCI All Country World Net Total Return Index, returned +4.8% during the fiscal year, while the US (S&P 500 index) and Europe (DJ Euro Stoxx 600 index) returned +5% and +7.6% respectively. Economic growth remained firm, led by consumer spending, while labour markets showed only mild signs of softening. The inflation picture also continued to improve globally, including in the US, where headline Consumer Price Inflation (CPI) fell from 4.9% in April 2023 to 2.3% by April 2025, nearing the Federal Reserve (Fed)'s 2% goal. Progress on inflation changed the balance of risks for many central banks and shifted policy focus from managing the risk of higher/sticky inflation to supporting economic growth and labour markets. The Fed duly began its interest rate-cutting cycle with a 50 basis point (bps) cut at its September meeting, followed by 25bps cuts at the November and December meetings. The European Central Bank and Bank of England began their own rate cuts in June and August respectively.

Evolution of 2025 Growth Forecasts
(Percent)



Source: IMF staff calculations.

Note: The x-axis shows the months the World Economic Outlook is published.
AEs = advanced economies; EMDEs = emerging market and developing economies.

Equity markets broadly trended higher through 2024 as economic growth surprised to the upside and major macroeconomic and political risks appeared to dissipate, supporting higher equity valuation multiples. 2024 US GDP (gross domestic product) growth ended the year at +2.9%, up from forecasts of just 1.2% at the start of the year. Performance for the calendar year was again dominated by the largest technology companies, with the 'Magnificent Seven' (Mag-7) returning +71% and continuing to benefit from positive earnings revisions and excitement about artificial intelligence (AI), accounting for almost 60% of the S&P 500's 2024 return.

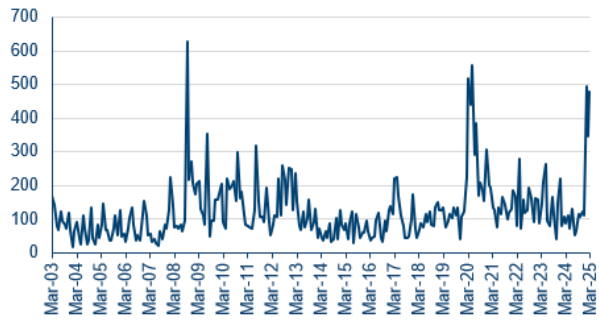
From the turn of the calendar year (the final third of the Trust's fiscal year), markets were no longer led by changes in the Fed's language and CPI components but buffeted by political developments. The election of Donald Trump as US President proved the defining event of the fiscal year as markets were forced to react to sweeping tariff policies, a flurry of Executive Orders and bilateral dealmaking. Equity markets initially took this political upheaval in their stride: Trump's pro-growth, pro-business, low-tax agenda appeared to have ignited animal spirits, and the equity market upgraded its economic growth expectations. The nomination of Scott Bessent as Treasury Secretary and Elon Musk's high-profile Department of Government Efficiency (DOGE) role led investors to be more sanguine about inflationary tariffs, expanding deficits and geopolitical instability. The decisive election outcome in the form of a Republican 'clean sweep' and stock market 'Trump bump' added fuel to the 'US exceptionalism' narrative: US equities saw c$141bn worth of inflows during the month following Trump's election (the largest monthly inflows on record), cyclicals outperformed defensives, and the S&P 500 high beta factor reached the 99th percentile by early December.

The reality of the Trump administration's policy agenda and erratic *modus operandi* proved more challenging, and the S&P 500 soon gave back all its post-election gains. The

market turned more defensive as investors digested trade uncertainties, DOGE disruption and even a potential shift in the geopolitical world order as Trump and Vice-President Vance raised significant questions about the future viability of NATO and the survival of *Pax Americana* (which succeeded in galvanizing Europe – particularly Germany – into increasing defence spending). Growth and inflation concerns emerged as consumer and business confidence collapsed and policy uncertainty spiked to early Covid and global financial crisis (GFC) levels. Against this volatile backdrop, the arrival of DeepSeek's low-cost AI model shocked the market and prompted a momentum unwind in small/mid-cap, long-duration and AI infrastructure stocks and, without mega-cap technology/AI leadership, the market struggled.

Trump's Liberation Day Executive Order on 2 April unleashed further volatility; indeed, April was the fifth most volatile month in 85 years. A baseline 10% tariff was set on imports from all countries from 5 April and much higher 'reciprocal tariffs' on around 60 'worst offenders' from 9 April. The size and scope of the Liberation Day announcement surprised the market and appeared to confirm the administration's commitment to reordering global trade policy and geopolitics. Equity markets experienced significant volatility in early April: the VIX (a measure of market volatility) closed above 50, the S&P 500 registered some of the largest intraday swings in history amid record trading volumes and fell more than 20% from mid-February highs. The trade-weighted dollar weakened significantly, closing down more than 10% from January highs by mid-April.

US Policy uncertainty has spiked to GFC/covid levels



Source: Bloomberg, 11 March 2025

Fortunately, the sharp correction in the bond and equity market prompted a softening in the trade tariff negotiations, which led to a rebound in the market. On 9 April – the deadline for reciprocal tariffs to go into effect and following unsettling moves in the bond market – Trump paused the higher reciprocal tariff rates for 90 days on all countries excluding China (where the cumulative tariff was increased to 125%) to provide an opportunity for countries to engage in trade talks. In the face of extremely bearish investor sentiment, the S&P 500 recovered more than 15% from its lows to close above its Liberation Day level within a month. The rebound included nine consecutive trading session gains; the first time this has happened since November 2004. While most countries appeared to be negotiating, China announced counter-tariffs on US goods. This started a cycle of retaliation which resulted in a 145% tariff on Chinese imports to the US and the Chinese restricting rare earth exports, which are critical to various high-tech industries. In early May, however, China and the US also reached an agreement to lower tariffs to 10% and 30% respectively for 90 days, leading to a further move higher in markets following a solid Q1 earnings season.

Technology review

The technology sector (as measured by the Dow Jones Global Technology Index) returned +5.1% for the Trust's fiscal year through 30 April 2025. The rapid progress of AI remained the sector's primary focus, but modest positive headline returns belied significant sector volatility, as well as within the AI story itself.

Despite cracks appearing in some large companies in 2025, large-cap technology stocks continued to significantly outpace their small and mid-cap peers over the fiscal year: the Russell 1000 (large cap) Technology Index and Russell 2000 (small cap) Technology Index delivered returns of +5.9% and -12.3% respectively. Similarly, the market cap-weighted NASDAQ 100 Index gained +7% while the equal-weighted NASDAQ 100 (the same stocks held at equal weights) returned -1.5%. Despite DeepSeek and regulatory headwinds, the Bloomberg Magnificent 7 Total Return Index still delivered +15.8% during the year. US exceptionalism driven by AI continued as the dominant investment theme for much of the year with the continued outperformance of the Mag-7 driving returns. However, the technology sector had to contend with several growth scares during the year. These, combined with continued progress on inflation, prompted the Fed to finally begin its rate-cutting cycle in September. This helped sector performance, and the Trump victory and Republican 'clean sweep' as a pro-business, deregulatory and – above all – pro-AI administration was anticipated to offer an (even more) fertile environment for US AI dominance. The effective US tariff rate reached c18% by early May, up from 3% at the start of the year and the highest since 1934. This theoretically translates to a real GDP growth headwind of -0.7% in 2025 and a 1.7% increase in the price level.

Investment Manager's Report continued

The tech sector made new highs in early February 2025, returning +29% in local terms from the start of the Trust's fiscal year. This was led by AI infrastructure stocks as earlier excitement gave way to AI strength, evidenced by upwardly revised AI capital expenditure (capex) budgets, rapid adoption and significant model progress. Microsoft, Amazon and Alphabet were consistently capacity-constrained against the strong AI demand backdrop. While there were occasional AI setbacks, the year was defined by a rapidly improving AI story as new entrants such as Elon Musk's xAI and its 200k GPU (Graphics Processing Unit) Colossus cluster emerged. Instead of GPT-5 (seemingly delayed), OpenAI released its o1 model – the first widely available reasoning model that allocates more time to deliberate to tackle more complex tasks. Reasoning models (aka 'test time compute') represents a new vector for model improvement as performance scales predictably with the time spent on inference, and a significant step on the path to agentic AI. OpenAI also announced its o3 model, which showed better than human performance on the ARC-AGI benchmark (built to measure progress toward AGI).

AI adoption progressed meaningfully at both individual and corporate levels. The first nationally representative survey of generative AI adoption indicated that in August 2024, 39% of the US population aged 18-64 used generative AI. ChatGPT itself reached 200 million weekly active users (globally) in August 2024, 300 million by December and 500 million by April 2025. AI chatbots accounted for more than 9% of search activity by this stage, according to Wells Fargo. Furthermore, FinTech provider Stripe also reported that other AI startups are growing at a significantly faster rate than the software-as-a-service (SaaS) companies that came before them. The 100 highest-revenue AI startups on its platform took a median of 20 months to reach $30m+ in annualised revenue, five times faster than for the equivalent SaaS companies during the SaaS boom in 2018.

Against this bullish AI backdrop, the arrival of DeepSeek's R1 model in February 2025 sent shockwaves through the tech industry and prompted a meaningful correction in AI infrastructure stocks.

However, AI stocks rebounded as deeper evaluation suggested the impact may not be as stark as first appreciated. While many of DeepSeek's innovations were hailed as "impressive" by Western counterparts, there was considerable scepticism related to its training cost claims. Furthermore, DeepSeek R1 is a 'text-only' model with a limited context window in contrast to other natively multimodal frontier models. Even DeepSeek's disruptive inference pricing soon came to be better understood as 'just' the acceleration of an existing path of rapidly declining inference costs. More importantly, the market was reassured by the fact that all hyperscalers raised capex post-DeepSeek. Sam Altman, OpenAI's CEO, referenced GPUs "melting" under overwhelming consumer demand for its new image generation capabilities, as well as broader demand.

Tariffs presented an incremental challenge to a more vulnerable AI narrative post-DeepSeek as technology production is skewed to Asian countries with high trade deficits with the US, while sector-specific semiconductor tariffs brought further uncertainty. The sector faced geopolitical headwinds throughout the fiscal year from Biden-era export controls (prohibited customers) and latterly Diffusion Rules (which aimed to limit the amount of AI compute that can be shipped to specific countries – later abandoned by President Trump).

Despite strong AI demand, the DeepSeek rout meant the semiconductor sector was the weakest subsector (SOX -14.3%) during the fiscal year. NVIDIA delivered a series of outstanding quarters despite reported delays to its next-generation Blackwell chips resulting in some stock price turbulence. Since January 2023, NVIDIA's quarterly revenues have risen more than sixfold from $6bn to >$40bn. Broadcom's custom ASICs proved to a be a worthy alternative source of AI compute for hyperscalers and Shareholders alike (while Advanced Micro Devices (AMD) struggled), and its dominant position in high-end merchant silicon for AI networking benefitted from AI data centre investments. Other networking stocks also benefited from the power/compute density theme and the power complex became the first non-tech industry to be 'pulled into' the AI theme as increased capex and larger compute clusters highlighted potential future power bottlenecks.

The semiconductor sector also had to contend with weak end demand and inventory digestion in many mature, cyclical markets including automotive, industrial, PC and smartphone. Apple's results were uninspiring but were overshadowed by excitement about a potential AI-driven iPhone upgrade cycle following the (ultimately disappointing) release of Apple Intelligence, its suite of AI features integrated into iOS 18 announced in June 2024. Investors remain concerned about regulatory threats to Apple's services business, particularly the multibillion-dollar advertising payments it receives from Google to remain the default search engine on Safari.

TSMC – the world's leading semiconductor foundry – also experienced some cyclical headwinds and, early in the Trust's fiscal year, reduced its expectations for 2024 overall semiconductor industry growth (excluding memory) to just +10% year-on-year (y/y), despite outlining a 50% AI

compound annual growth rate (CAGR) over the next five years. Cyclical weakness and TSMC's dominance weighed on semiconductor equipment providers, which reversed their earlier gains following foundry-related capex cuts at both Intel and Samsung Electronics. Weak Q3 orders at ASML Holding and potentially tighter export controls to China weighed on the group.

The internet sector performed reasonably well (NASDAQ Internet Index +11.4%), led by Meta Platforms (Meta) where the AI story strengthened during the year (Llama models; monetisation via existing businesses; wearables). Streaming platforms Netflix and Spotify Technology delivered strong returns in a volatile environment; both expanded their user bases while increasing monetisation and profitability, solidifying their natural monopoly status. Alphabet struggled despite further AI progress as investors became increasingly concerned about its core search business coming under pressure from AI chatbot competition – albeit in terms of usage rather than revenue at this stage – as well as a series of more hostile regulatory developments.

Software delivered solid returns (IGV +14.2%) despite potential AI headwinds with outstanding performances from Palantir Technologies (+405%) and Oracle (+17%) offsetting challenges elsewhere. Microsoft (-4%) struggled despite passing $13bn in annualised AI revenue as free cashflow estimates were frequently revised lower on higher capex, and Azure repeatedly missed growth expectations. An obviously strained OpenAI relationship and disappointing CoPilot adoption/monetisation raised further questions.

Application software companies announced AI product enhancements and then struggled to price for them to deliver the numbers to match the pro-AI narrative. Others such as Adobe (-24%) suffered under the threat of new AI-native competition. AI spending 'crowded out' traditional projects and caused some enterprises to adopt a more considered investment approach given the potential risk posed by AI to the existing software stack. The same issue plagued most infrastructure software stocks where a lack of cloud/consumption reacceleration was worsened by mis-execution and a challenging AI narrative. Despite the worldwide CrowdStrike outage in July, cybersecurity proved another relatively bright software spot, as fundamentals proved more durable than elsewhere in software with AI likely to significantly expand the attack surface.

Portfolio performance

The Trust modestly underperformed its benchmark with the net asset value per share rising +3.1% during the fiscal year versus an increase of +5.1% for its benchmark, the Dow Jones Global Technology Index. The Trust's share price declined by -1.2%, reflecting the additional impact of the discount increasing from 7.4% to 11.3% during the period. Together with the Board, we continue to monitor the discount and the Trust bought back 36.2 million shares during the fiscal year, at an average discount of 10.4% to NAV (net asset value). The US dollar weakened by -6.7% during the fiscal year which was a headwind to absolute returns given the Trust's significant exposure to US-denominated assets, although the impact was more modest on a relative basis.

The Trust's relative and absolute performance tracked its pro-AI positioning with returns to the 23 January highs (+33.6% absolute; +393bps relative) reflecting strong progress for the AI theme. However, DeepSeek and tariff developments presaged a sharp correction in AI stocks which offset these gains through the April fiscal year end. Relative performance was also negatively impacted by significant large-cap outperformance with the Russell 1000 Technology Index (large cap) and Russell 2000 Technology Index (small cap) returning +5.9% and -12.3% respectively in sterling terms. The sustained underperformance of small cap technology stocks has made keeping up with the (mega-cap dominated) index a longer-term challenge: Over the past three and five years, small-cap have now trailed large-cap technology stocks by -63% and -116% respectively. This has represented a considerable relative performance headwind given our structural underweight exposure to large/mega-cap stocks in a diversified portfolio, although the Trust's first-quartile performance versus the Lipper peer group over these longer periods suggests this is widely felt. On a more positive note, the Trust's NASDAQ (NDX) put options acted as intended during the Q1 selloff, allowing us to maintain the (pro-AI) shape of the portfolio, while reducing the downside beta during the sharpest part of the drawdown. For the year, the puts added 41bps while our cash position (average 3.4%) detracted by -16bps.

Investment Manager's Report continued

Despite the DeepSeek and tariff-induced selloff, many AI infrastructure stocks across networking and the power complex still delivered positive relative contributions during the year and, in many cases, were added to on weakness including Arista Networks (+20%), Astera Labs (-28%), Celestica (+85%), Elite Material (+29%), GE Vernova (+126%), Ciena (+36%), F5 Networks (+50%) and Vertiv Holdings (-14%). However, some of the Trust's most significant relative detractors were caught in the selloff, including Micron Technology (-36%), Marvell Technology Group (-50%) and AMD (-42%). NVIDIA (+18%), the Trust's largest absolute position at slightly over 10%, delivered a modest positive relative contribution to returns.

Perceived AI leaders were important contributors including Axon Enterprise (+83%), Cloudflare (+29%) and Tesla (+44%), supported by smaller positions in some non-tech 'AI adopters' including Intuitive Surgical (+30%), Doximity (+119%), RELX (+23%) and Cellebrite (+72%). Elsewhere, a handful of FinTech holdings delivered strong returns, most notably Robinhood Markets (+179%), Wise (+26%) and Adyen (+25%).

The internet sector was a bright spot, with dominant platforms including Spotify Technology (+105%), Netflix (+93%), Roblox (+77%) and DoorDash (+40%) delivering strong returns amid market volatility. These companies proved adept at growing their user bases at the same time as increasing monetisation and margin profiles. AppLovin (+258%), Meta (+20%) and Shopify (+26%) were the strongest of the large-cap internet companies as positive revisions and 'cleaner' AI narratives were well received, although small overweights rendered them modest relative contributors. Elsewhere, the lack of an Amazon Web Services (AWS) recovery and volatile margins weighed on Amazon (-1%) while concerns around AI disruption brought challenges to Alphabet (-9%). MercadoLibre (+50%) shrugged off Latin American volatility and delivered strong earnings upgrades, executing against a burgeoning e-commerce and FinTech opportunity, while Alibaba (+50%) – repurchased during the year – benefitted from an improved Chinese AI story post-DeepSeek.

The Trust benefitted from its structural underweight in application software with a positive contribution from underweights in large index constituents including Adobe Systems (-24%), Microsoft (-5%), Intuit (-6%), Workday (-6%) in favour of an overweight in ServiceNow (+29%). However, underweight positions in legacy software assets viewed as defensive or with a potential AI story were a relative headwind, including IBM (+36%), Oracle (+16%) and SAP (+52%). Palantir Technologies (+405%) also represented a headwind to relative performance, although we were pleased to contain the impact with a small position despite struggling with the valuation. Elsewhere in software, smaller positions in mid-cap companies – including CommVault Systems (+53%), Monday.com (+39%), Twilio (+51%), Klaviyo (+27%), Atlassian (+24%) and DocuSign (+35%) – offset weakness in Braze (-30%) and JFrog (-21%).

Infrastructure software proved more challenging as a lack of recovery in cloud consumption trends and underwhelming AI stories weighed on Confluent (-21%), Elastic (-21%), MongoDB (-56%), Datadog (-24%) and Snowflake (-4%). Cybersecurity was a mixed bag with CyberArk Software (+38%) delivering another strong year but a poorly timed exit in CrowdStrike Holdings (+37%) following the global outage was a disappointment. Other 'derivative' AI plays in semiconductor equipment, where a cyclical slowdown, the threat of regulatory blocks on (significant) sales to China and company-specific weakness at Samsung Electronics (-35%) and Intel (-38%) offered a more challenging backdrop. Headwinds from holdings in Disco (-37%), ASM International (-29%) and BE Semiconductor Industries (-25%) were somewhat offset by Advantest (+22%) and underweights in LAM Research (-24%) and Applied Materials (-29%). First Solar (-33%) was also a significant detractor on the risk of Inflation Reduction Act (IRA) subsidies being rolled back following Trump's victory.

Market outlook

The market backdrop is still likely to be driven by geopolitical developments in the near term, specifically the effective tariff level. Our base case is that the 'tariff episode' represents a recalibration rather than a full reset of the status quo. Our view remains that it is not in global policymakers' interests to provoke a deep global recession and is within their capacity to avoid it. Recent political developments have led to an inherently more volatile market outlook, but not necessarily an unattractive one for investors with the capacity to absorb it. The growth outlook is now tepid but still positive, and the consumer and labour markets are broadly resilient for now. Deregulation and innovation (in the form of AI) offer significant upside potential, while stagflationary risks from disappointing tariff outcomes, immigration reform, geopolitical upheaval and growing public debt remain causes of concern.

The market impact of political change is perhaps unsurprising in the context of the widespread rejection of incumbent parties (and their policies) recorded in the 'year of democracy' across the globe in 2024. Every single incumbent party lost vote share in the 12 developed Western countries that went to the polls in 2024. The causes

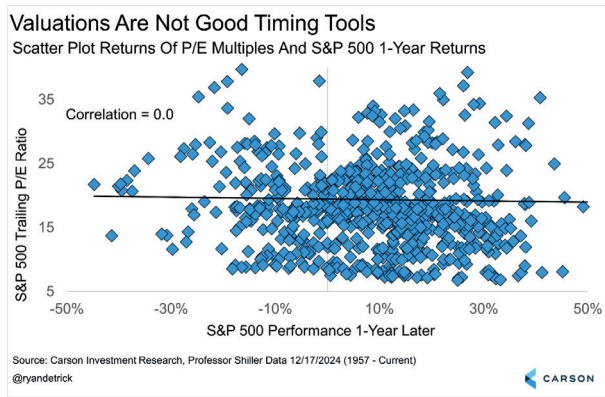
of this shift have been variously attributed to the impact of inflation, pressures arising from unchecked immigration and diminishing state capacity amid growing public debt burdens. The result is that equity markets have become more sensitive to political developments addressing these issues; inflation, labour market and economic growth trends are more exposed to trade and immigration policy dynamics than they have been in recent years.

In terms of economic growth, the International Monetary Fund's April 2025 update noted that forecasts for global growth have been "revised markedly down" so far this year due to tariffs and global inflation is expected to decline at a slower pace. "Intensifying downside risks" dominate the outlook amid a "highly unpredictable environment". A softer US outlook is the consensus view, although not a recession which is likely if there is limited progress on tariff negotiations: Bloomberg consensus in mid-May suggests 1.4% US real GDP growth in 2025 and a 40% chance of a recession within 12 months, although this number should fall as more trade deals are announced. The speed and quantum of change in the effective US tariff rate will likely be the largest swing factor in determining near-term growth.

On the inflation front, US core PCE (personal consumer expenditure) Price Index is sitting at 2.6% and has been broadly stable over the past six months, which should be a supportive backdrop for risk assets. Under the surface, while goods inflation is near zero, services PCE ex-energy and housing (3.25%) is holding up the stubborn 'last mile' to reach the 2% inflation target and appears to be due to lagged inflation in areas such as housing, healthcare and car insurance. Measures of long-term inflation expectations are generally benign, with the 5yr5yr (the market-implied average inflation rate for the five-year period that begins five years from today) remaining rangebound between 2.1% and 2.4%, although the University of Michigan's 5-10-year inflation expectations outlook staying above 4% is more concerning as tariffs start to show up in expectations. This will get the Fed's attention given the importance of maintaining well-anchored inflation expectations, but 5yr5yr and breakevens are not yet signalling anything too concerning.

Financial conditions more broadly have loosened after tightening sharply in early April and consumer spending remains "resilient, even with macroeconomic uncertainty", according to Visa. Ten-year Treasury yields have been volatile but have not broken out in either direction and credit spreads tightened to below 2 April levels after blowing out during the Liberation Day disruption. Against this backdrop, we expect the Fed to remain vigilant on inflation but not in a hurry to cut rates until it has a better idea of the impact of Trump's policies on the inflation and the labour market outlook. The disinflation trend has been occurring for a while which gives conviction in the overall process and, given most of the Federal Open Market Committee believe the neutral rate is below current Fed funds (4.25-4.50%), the bias will be to cut, should the inflation data allow it or the labour market data require it. We will continue to monitor US yields, particularly the dollar, for signs of a significant shift in the risk environment, as well as the realisation of Trump's threats to curtail Fed independence.

Valuations appear extended given the geopolitical backdrop. High company valuations present a challenging starting point for long-term future returns but are poor predictors of near-term returns. We do not see valuations as so high that they preclude further expansion, although the high starting point does represent a long way to fall should the market environment deteriorate. We are also aware of other market and economic measures that appear extended. The rebound in the S&P 500 has been one of the strongest since 1928. US households' allocation to equities has touched a record high and high levels of retail participation in financial markets leaves them vulnerable to a change in sentiment. The wealth effect also cuts both ways and a sharp drawdown in asset prices could lead to a loss of consumer confidence and a slowdown in spending.



The bull case centres on Trump's deregulatory and pro-business agenda taking over as tariff headwinds fade and AI adoption supports an accelerating economic and earnings growth picture. Negative investor sentiment and light positioning also provide a more encouraging backdrop for forward returns.

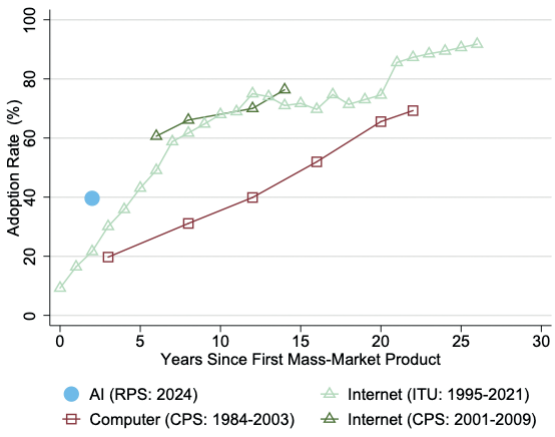
The S&P 500 has registered two 20%+ years in a row, something which has only occurred 10 times since 1871. Only during the 1990s bull market and the Roaring Twenties did strong returns continue for another two years. On both occasions, technology-led productivity booms were taking hold. This remains central to the bull case for the market in

Investment Manager's Report continued

our view. Productivity is notoriously hard to measure – let alone forecast – and is subject to frequent and material revisions. Technology plays a critical role but tends to appear in aggregate macroeconomic data much later than its visibility would suggest: "You can see the computer age everywhere but in the productivity statistics", wrote economist Robert Solow in 1987.

Our base case is productivity gains from AI do not start to show up meaningfully in aggregate statistics (which has historically required >50% adoption), although at lower penetration levels there could be efficiency gains and economic impacts on the labour market and certain industries. AI adoption by end users has been faster than previous technology cycles. As per the Real-Time Population Survey, 40% of the US population (18-64) reported using generative AI to some degree in August 2024 and 28% used it at work. This 40% adoption point took 12 years to reach following the introduction of the PC and four years after the public launch of the internet. We are also hopeful that Trump's deregulation agenda can enable faster adoption of AI technologies than would otherwise have been possible.

Adoption of GenAI vs. other technologies



Source: IMF, NBER January 2025

We also must consider the risk of an AI bubble forming. As BoA puts it: "We are far enough into the AI boom that equities will likely either accelerate towards a more bubble-like state or unwind their already significant gains". Volatility and prices rising together signal a bubble (as opposed to a mere bull market), although these suggest we are closer to 1996-97 than 1998-99. The combination of a potential asset bubble in AI and public policy experimentation (tariffs; deregulation; tax cuts; immigration) could drive a boom/bust cycle at odds with the low-risk, low-return, low-rate era that has been in place since the GFC.

Market risks

The main risks to our market outlook are political and include tariff policies weighing on growth and stoking inflation (stagflation), immigration reform weakening the labour market and the looming threat of rising Federal debt. Political instability and upward pressure on US fiscal deficits and national debt have placed significant downward pressure on the US Dollar, which weakened by -6.4% on a trade-weighted basis and by -6.3% versus GBP during the Trust's fiscal year. Having benefited from USD strength over many years, the Trust was - and could continue to be - negatively impacted by GBP strength / USD weakness given the significant weighting of dollar-based assets in both the Trust portfolio and the Dow Jones Global Technology Index around which it is built. As a reminder, the Manager does not look to hedge this risk but does actively manage FX exposure relative to the benchmark.

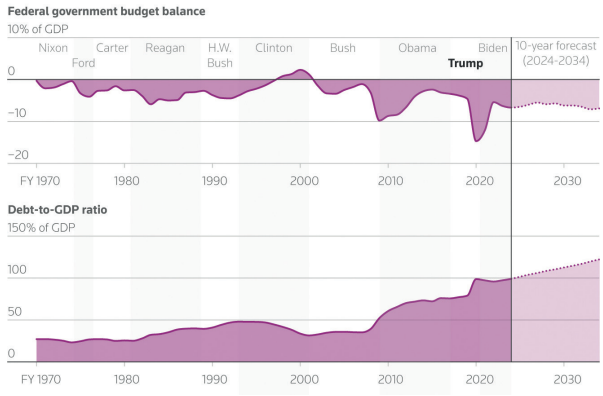
There is also the potential for further setbacks to the AI story which has led markets higher, especially as it becomes more complex amid the frenetic pace of innovation. We expect volatility will become more elevated and the market environment more 'fat tailed'; 2025 so far has not disappointed in this regard. Given the high valuation starting point, we expect – all else equal – more frequent significant drawdowns to be a feature of this equity bull market as policy uncertainty remains elevated.

The greatest risk to the market outlook near term is further arbitrary policy actions from the Trump administration which hurt the economy and undermine the institutions and behavioural norms which have underpinned political and market stability. This may include a failure to reduce effective tariff rates (or even a re-escalation), attempts to undermine central bank independence and/or a strategic miscalculation which provokes an unintended negative consequence.

Growing deficits and debt burdens are perhaps the biggest issue for the longer-term risk asset outlook. According to the Congressional Budget Office, the federal deficit is projected to increase to $1.93trn in 2025, up 5.5% from $1.83trn in 2024 and reaching 6.2% of GDP. Extending the 2017 tax cuts would leave the total and primary deficit at 6.4% and 3.1% of GDP in 2024, at uncomfortably high levels given that US debt-to-GDP is roughly 100% and could reach 130% within a decade. While this may support higher nominal growth near term, the risk of a rebound in inflation as well as the lurking threat of debt markets being unwilling to finance such fiscal largesse at prevailing rates could jeopardise the path of future interest rate cuts. Large government deficits can also crowd out private investment and slow the creation of jobs, thus driving further deficit spending to boost the economy and labour market.

Trump's bond market problem

Some key indicators of the sustainability of U.S. debt are flashing red.



If we were to look for imbalances in the economy that may need to be unwound, the fact that US government debt is up $12.7trn since the depths of Covid while nominal GDP is only up $9.7trn is sometimes cited as evidence that fiscal largesse has caused distortions. Yet there appears to be no public appetite for fiscal conservatism and public debt is set to rise above $100trn in 2024, or about 93% of global GDP, and is projected to reach 100% of global GDP by 2030, 10 points higher than in 2019. There are significant structural drivers of the growing public debt burden, including the costs of an aging population, increasing healthcare and climate adaptation costs and a step up in defence and energy security spending due to growing geopolitical tensions. This is not necessarily a problem for the market or the economy in the near term ("It's a myth that expansions die of old age", according to former Fed chair Janet Yellen), but rising debt-to-GDP should lead to higher interest rates which could crowd out private investment and raises the risk of fiscal dominance, constraining central banks' freedom of manoeuvre.

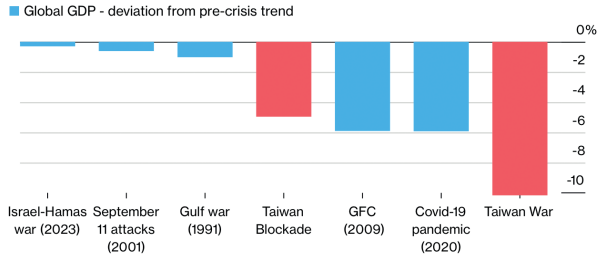
Changes to immigration policy may also bring market headwinds, although this is by no means certain. Lower net immigration could put downward pressure on both the supply and demand sides of the economy. In industries that employ a high share of immigrant labour (e.g. food production; construction), sharply lower net migration might put upward pressure on domestic worker wages. The US economy has been able to grow faster than potential GDP growth over the past two years in part due to the immigration surge boosting labour force growth, so a reversal in that trend could prove a headwind – although this may be offset by higher productivity from technology adoption and workers remaining in jobs longer.

The Trump administration's early geopolitical moves have provoked significant market volatility well beyond its tariff actions and have contained some shocking elements – not least the party of Ronald Reagan openly siding with the Russians in a war. The disastrous meeting between Zelensky, Trump and Vance raised significant questions about the future viability of NATO and the survival of *Pax Americana*. In terms of the impact on our outlook, we assume that Trump's own instincts and preferences play an outsized role in historically strategic policy, resulting in leadership that is unpredictable and likely to further test the boundaries of executive authority.

The Middle East also remains in a fragile state with the potential for further conflict between Israel and Iran. Of most concern is Taiwan, where the potential risks associated with a miscalculation or accidental escalation are significant, as Taiwan accounts for 60% of global semiconductor shipments and more than 90% of leading-edge semiconductor manufacturing capacity. A war game simulation estimated the potential impact on the global economy of a war in the Taiwan Strait at c$10trn or 10% of global GDP, significantly larger than the GFC or the pandemic. Taiwanese and Chinese stocks represented 10.7 of PCT's NAV at fiscal year end as opposed to 7.9% of the Dow Jones Global Technology Index. The potential impact of a deterioration in the political situation would likely be felt far more widely across the PCT portfolio, however, given Taiwan's centrality to the AI story, as well as the size of the Chinese market as a source of end demand.

The Global Risk of a Taiwan War

Model estimates show a Taiwan war could have a bigger impact on global GDP than other recent shocks



Sources: Bloomberg Economics, IMF
Note: Israel-Hamas war, Taiwan blockade, and Taiwan war are Bloomberg Economics estimates.

Despite overall constructive economic and company trends, the market outlook is more complex than a year ago and appears more vulnerable to setbacks. The nature of the US administration being both radical and mercurial has elevated the risk profile. As one analyst put it: "*One should keep extremely wide confidence intervals in place when forecasting the administration's actions and the downstream macroeconomic impacts*". We do not see meaningful imbalances in the economy that will require a sharp downturn to unwind, although we are of course watching tariff impacts, labour market and inflation trends very closely for signs of weakness that we can respond quickly to if required. We expect higher volatility to become a more embedded feature of the equity market.

Investment Manager's Report continued

We are also open to the potential that the move to a multi-polar world might presage a more structural market regime shift under the surface where the US moves from a disinflationary posture with secular stagnation headwinds (dominated by demand-side shocks) to a more inflationary regime more exposed to supply-side shocks. A higher-inflation/higher-growth/higher-volatility environment could also see sustained rebuilding of term premia, which was estimated to be negative for much of the past decade and would have significant investment implications. It is too early to call a new regime (and we will at best be fast followers in doing so), but we are alive to the idea that the conditions for such a regime shift are increasingly apparent.

However, our overall outlook is positive because the AI story – albeit more complex – remains the most exciting market (and perhaps even macro) story we have come across, and it feels a high hurdle for investors to move structurally away from equities when the optionality embedded in AI is material in size and likely to play out over the next five years.

Technology Outlook

Earnings outlook

Increased spending on AI infrastructure meant 2024 proved one of the best years for IT spending since the pandemic with growth of 7.7%, exceeding earlier expectations (+6.8%) and well ahead of the 3.5% recorded in 2023. For 2025, worldwide IT spending is expected to further accelerate to +9.8% y/y. While data centre systems spending is expected to decelerate to +23.2% y/y from 39.4%, this still represents remarkable growth, driven by AI-optimised servers where spending is forecast to exceed twice that spent on traditional servers next year. In addition, all other spending categories are expected to accelerate in 2025, led by software (+14.2%), devices (+10.4%) and IT services (+9%). While these forecasts might be subject to some tariff-related headwinds, 2025 was recently expected to be the best year for IT spending since 2021 while 2024-25 may still represent the best back-to-back growth since 1995-96.

Table 1. Worldwide IT Spending Forecast (Millions of U.S. Dollars)

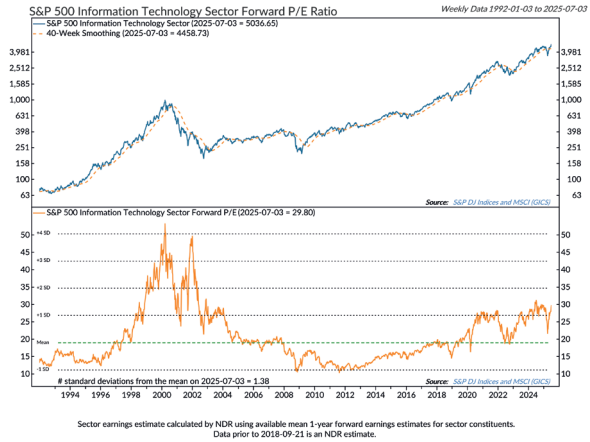
	2024 Spending	2024 Growth (%)	2025 Spending	2025 Growth (%)
Data Center Systems	329,132	39.4	405,505	23.2
Devices	734,162	6.0	810,234	10.4
Software	1,091,569	12.0	1,246,842	14.2
IT Services	1,588,121	5.6	1,731,467	9.0
Communications Services	1,371,787	2.3	1,423,746	3.8
Overall IT	**5,114,771**	**7.7**	**5,617,795**	**9.8**

Source: Gartner (January 2025)

For 2025, the technology sector is expected to deliver revenue growth of 11.7%, while earnings are expected to increase by 18%, the highest of any US sector on both metrics. These forecasts are well in excess of anticipated S&P 500 market growth, where revenues and earnings are pegged at 4.9% and 9% respectively. The technology sector's outperformance is expected to continue in 2026 with early forecasts for 10.6%/16.6% comfortably ahead of market expectations (6.2%/13.4%). While these forecasts may appear at odds with tariff-related developments, corporate earnings have thus far proved more resilient than feared. First-quarter earnings season has been supportive, as (at the time of writing) 74% of S&P 500 companies have beaten on earnings per share (EPS, with the median earnings surprise of 8.5% while Q1 earnings growth is tracking at +12% versus the +6% consensus estimate at the start of the year. Tariff concerns have been flagged in virtually every earnings call, but the impacts have been largely contained so far. However, while macroeconomic conditions may create more significant crosscurrents, we believe technology fortunes this year will once again be determined by the path of AI progress.

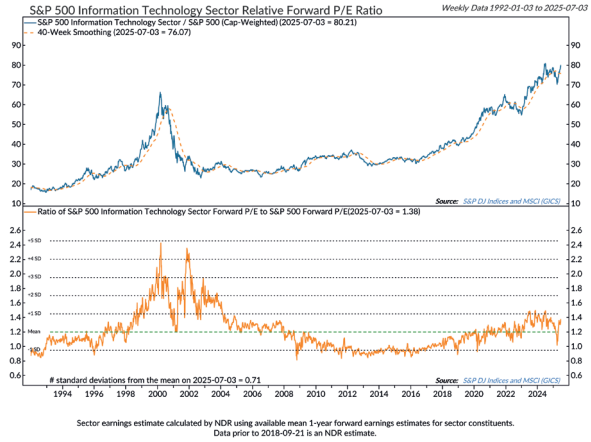
Valuation

The forward P/E of the technology sector contracted modestly over the past year. Twelve months ago, valuations had rebounded to approximately 26x forward P/E, up from c24x at the end of FY23. This marked a full recovery from the post-pandemic compression, with valuations continuing to expand and reaching a peak of around 31x in the summer, before easing ahead of 2025. However, pronounced market weakness during 1Q25 caused a sharp correction, with valuations falling significantly before rebounding to 26x by fiscal year-end. Continued market strength post-period has driven valuations higher still, with technology stocks now trading at a forward P/E of 27.5x, above both the five-year (25.6x) and 10-year (21.7x) averages. This reflects elevated broader market valuations and the sustained momentum of AI as a central investment theme.



Source: Ned Davis, July 2025.

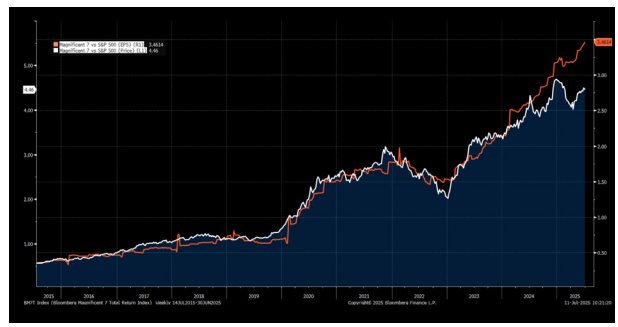
The relative P/E of the technology sector, having recovered to post-bubble highs (1.4x) in 2023, ended 2024 broadly flat. However, this stability was interrupted by the DeepSeek-led market selloff in 1Q25 which saw the sector's premium compress to just 1.1x, its lowest relative level since the pandemic. The recent market recovery has helped lift this back to 1.35x. While this may suggest more limited near-term valuation upside, we believe that continued AI progress could support a structural re-rating of the sector, mirroring the upward valuation drift seen during the internet cycle of the mid-1990s.



Source: Ned Davis, July 2025.

Mag-7 update

Of course, the valuation question remains significantly influenced by a select group of mega-cap technology stocks that as well as substantially driving returns last year, also dominate indices. Despite this, many of our earlier Mag-7 observations remain unchanged – they are unique, non-fungible assets trading at extended, but not excessive valuations. This reflects the fact that Mag-7 outperformance has largely tracked the group's relative earnings progress, with valuation expansion playing a secondary role – recently, the Mag-7 accounted for 33.4% of the S&P 500's market cap and 25.3% of its earnings – a similar ratio to this time last year, when these companies comprised about 29% and 22% of market cap and earnings, respectively. Following recent weakness in several of the Mag-7, the group is, at the time of writing, trading at the lowest valuation premium to the S&P 493 since 2019.



However, this year we are more focused on the sustainability of the mega-cap group's growth profile, rather than valuation. Earlier gains together with aggressive AI investment suggest future margin gains may become more difficult to deliver. At the same time, rising capital intensity has impacted free cashflow with estimates for this year at Alphabet, Amazon and Meta having fallen 20-25% year-to-date, according to Morgan Stanley.

Given the strong correlation between earnings revisions and recent Mag-7 performance, negative revisions are unlikely to be well received by the market, nor is the evolution to more capital-intensive business models likely to be straightforward. Investors may also interpret the direction of earnings revisions as indicative of whether AI-related spending is offensive or defensive, driven by the pursuit of new opportunities or aimed at protecting existing markets. As investors we cannot know the answer to this critical question (until it is too late) because companies never admit to being on the wrong side of technology change. However, new technologies often begin as complements and end as substitutes, which explains why previous technology cycles have rarely been kind to incumbents, with nearly 50% dropping out of the top ranks every decade.

The good news is that today's market leaders are hyperaware of obsolescence risk, as reflected in their massive R&D investments. In 2023 alone, the top five tech companies spent $223bn on R&D, an amount 1.6x greater than total US venture capital (VC) spending. As such, we are not yet concerned about the near-term risk posed to

Investment Manager's Report continued

Mag-7 by AI. Rather, we wonder if the negative reception to sharply higher hyperscale capex (from Alphabet, Amazon and Microsoft) signals the beginning of a new phase where these companies become less effective AI conduits. Of course, we will continue to evaluate each company on its individual merits and are willing to maintain large absolute weightings in these unique, category-defining assets. However, our null hypothesis has shifted from 'half-full' to 'half-empty,' as AI-driven risks to existing profit pools and the diminishing value of incumbency become more apparent. As a result, we have increased our relative underweight positioning in long-term holdings we find less compelling at current levels such as Alphabet, Apple and Microsoft.

Disruption ahead

The idea of previous winners becoming less effective conduits for AI appears to be already playing out within the software sector, evidenced by slowing industry growth, widening disparities in company performance and an increasingly uphill AI narrative battle. Earlier hopes that leading SaaS companies could monetise AI through premium-priced products have largely gone unrealised. Adobe struggled to drive the adoption of Firefly, a task complicated by rapid AI advancements elsewhere, such as Google's remarkable video-generation model Veo2 as well as OpenAI's Sora. Microsoft, despite its deep AI investments, has failed to show meaningful revenue acceleration from Copilot, even as Azure benefited from AI-driven workloads. Meanwhile, Workday recently lowered its medium-term revenue growth expectations, reinforcing broader concerns about industry deceleration.

Consumption-based software alternatives have fared little better – despite easing headwinds from cloud optimisation, growth has failed to reaccelerate. Weak execution, often symptomatic of a slowing growth environment, has further weighed on infrastructure stocks that were initially seen as better positioned to capture AI-driven workload growth. Additional negative developments include elevated executive turnover, further headcount reductions and limited strategic M&A beyond the industrial software subsector. Against this backdrop, the latest phase of post-pandemic pivot from growth to profitability (the private equity playbook) has gone unrewarded by a market increasingly concerned about terminal growth rates and obsolescence risk.

This concern appears well placed, as we believe AI represents a greater existential threat than an opportunity for many incumbent software providers – a view we outlined last year. Today, AI-assisted code generation is increasingly challenging the notion of 'code as a barrier' and every improvement in near zero-cost AI-written code further diminishes the standalone value of existing proprietary platforms. Looking ahead, AI is likely to automate many tasks currently performed by knowledge workers, reducing reliance on the very software tools designed to support them.

Limited strategic M&A

We believe potential disruption to pre-AI-vintage companies has played a large part in the dearth of strategic software M&A in recent years. Last year, deal value increased by 23% y/y (following a dire 2023) helped by private equity activity, which saw Everbridge, Instructure, Smartsheet and Zuora put out of their public market misery. There were also several strategic acquisitions, including IBM's acquisition of HashiCorp, alongside a notable wave of consolidation in design and industrial software. Synopsys' $35bn acquisition of Ansys was the largest deal of the year, while Emerson acquired AspenTech for $15bn and Siemens snapped up Altair for $10.3bn. Given NVIDIA's aspirations in this domain including Omniverse – a 3D collaboration platform – and its newly introduced Cosmos for accelerating physical AI systems, these high-multiple exits in simulation software may soon look inspired.

Software M&A Activity, ~$1 Billion EV or Higher, 2024

Acquirer	Target	Target Description	Date Announced	Enterprise Value ($M)	EV/NTM Rev	EV/LTM Rev	EV/ LTM Rec Revenue
Emerson Electric	Aspen Tech	Vertical Software	11/5/2024	15,180	12.3x	13.1x	NA
TA Associates	NEXUS AG	Healthcare facilities software	11/5/2024	1,321	4.2x	4.7x	NA
Siemens	Altair Engineering	Engineering Software	10/31/2024	10,313	14.9x	16.0x	NA
Silver Lake/GIC	Zuora	Middle Office apps	10/17/2024	1,647	3.5x	3.7x	4.1x
Blackstone/Vista Equity Partners	Smartsheet	Collaboration Software	9/24/2024	8,400	7.0x	8.1x	8.5x
Mastercard	Recorded Future	Cybersecurity Software	9/12/2024	2,650	NA	8.8x	NA
Salesforce	Own Company	Data Protection	9/6/2024	2,111	NA	NA	NA
Roper Technologies	Transact Campus	Educational Software	8/15/2024	1,500	4.6x	5.0x	NA
KKR	Instructure	Educational Software	7/25/2024	4,800	7.0x	8.6x	NA
Bain Capital	PowerSchool	Educational Software	6/7/2024	5,562	6.9x	7.7x	NA
SAP	WalkMe	Product Analytics Software	6/5/2024	1,279	4.4x	4.7x	NA
CyberArk (CYBR)	Venafi	Cybersecurity Software	5/20/2024	1,540	8.9x	10.3x	NA
Permira	Squarespace	Website Building Software	5/13/2024	6,900	5.5x	6.5x	NA
Thoma Bravo	Darktrace	Cybersecurity Software	4/26/2024	4,992	6.7x	8.1x	NA
IBM	Hashi Corp	Infrastructure Software	4/24/2024	6,400	9.9x	11.0x	15.2x
CoStar Group	Matterport	Vertical Software	4/22/2024	1,579	9.0x	10.0x	NA
Vista Equity Partners	ModelN	Vertical Software	4/8/2024	1,227	4.6x	4.8x	N/A
Thoma Bravo	Everbridge	Safety Software	2/5/2024	1,518	3.3x	3.4x	N/A
Roper Technologies	Procare	Vertical Software	1/25/2024	1,750	NA	NA	NA
Synopsys	Ansys	Design software	1/16/2024	35,000	14.5x	16.2x	NA
		2024 Total Deal Value		**115,669**			
		2024 Deal Average		**5,783**	**7.5x**	**8.4x**	**9.3x**
		Average of PE Deals		**4,041**	**5.4x**	**6.2x**	**6.3x**
		Average of Non-PE Deals		**6,412**	**9.5x**	**10.3x**	**15.2x**

Source: FactSet, Jefferies; Note: Highlighted rows denote PE M&A

Looking ahead, expectations are for a further recovery in M&A activity this year, bolstered by a more accommodative regulatory environment under the new administration and over $2trn in private equity and venture capital dry powder. AI could serve as an additional catalyst, with subscale public and private companies likely seeking stronger partners just as some well-capitalised large-cap companies look for acquisitions to offset slowing organic growth.

Cloud update: darker clouds ahead?

As expected, the easing of cloud optimisation headwinds and a surge in AI-driven demand propelled revenue growth of over 20% among the three leading public cloud providers in 2024. AWS ended the year with an estimated 52% market share, down from 55% in 2023, as Microsoft Azure (now at 31%) captured most of these share gains, helped by its strategic relationship with OpenAI. Google Cloud maintained strong double-digit growth, holding a 13% share, though it remains a distant third. Meanwhile, Oracle Cloud Infrastructure (4%) has emerged as a fast-growing challenger, driven by competitively priced GPU offerings and its role in powering OpenAI's model training.

All cloud platforms continue to benefit from AI-related demand. In Q4, Microsoft attributed 1300bps of Azure's +31% revenue growth to AI up from 600bps of +28% Azure growth this time last year. In addition, Microsoft's overall AI revenues exceeded a $13bn run rate in 4Q24. While Amazon does not quantify AWS's AI-specific revenue, it called it "a multi-billion-dollar annualised revenue run-rate business". Likewise, Google Compute Platform (GCP) reported "very strong" AI demand. We continue to believe that public cloud will remain the default choice for compute and storage – Gartner estimates that 70-75% of new enterprise AI applications will be built and/or deployed primarily in cloud environments.

However, the primary challenge for the cloud incumbents is how to reaccelerate growth in a market already worth more than $320bn and where penetration has risen sharply. A recent Morgan Stanley CIO survey suggests that 42% of workloads were already in the public cloud in 4Q24, which is set to increase to 58% within three years. All things being equal, higher cloud penetration rates should equate to lower future growth and greater economic sensitivity. This may have been apparent in 4Q24 with all three public cloud vendors experiencing sequential deceleration and aggregate year-on-year growth falling to 20.7%, down from 22.2% in the previous quarter.

AI to the rescue? Maybe.

The hope is that cloud infrastructure and SaaS growth reaccelerate as enterprise AI adoption increases from just 3% of workloads today to an estimated 10% by 2027. This is one of the key debates for 2025 and beyond. However, history suggests that AI monetisation may prove less straightforward than many incumbents expect as others take the opportunity to challenge in adjacent markets, competing away the upside and potentially more. Early signs of substitution risk are already visible, with IT budgets increasingly favouring AI-related initiatives at the expense of traditional compute and storage. Likewise, cloud optimisation could prove a permanent feature, rather than a limited post-pandemic adjustment as AI excels at uncovering inefficiencies.

The shift to accelerated compute – the foundational architecture of AI – may also be ushering in a new era of competition for the public cloud giants. This could come in the form of hybrid compute which may be better positioned than it was pre-AI, able to optimise data pipelines by running different workloads in the most suitable locations. Gartner predicts that 90% of organisations will adopt a hybrid cloud approach by 2027. At the same time, established hyperscalers will also have to contend with so-called neo-clouds – new industry entrants (often former crypto miners) offering low-cost GPU rentals. Their advantage lies in ready-available to power and preferential access to NVIDIA GPUs. Over the past year, $20bn has been invested across 25 neo-cloud providers with CoreWeave leading the pack and doubling its data centre footprint. While the long-term viability of these neo-clouds remains uncertain, they are currently gaining share, pressuring GPU pricing and challenging industry assumptions, reinforcing the idea that Amazon is not the Walmart of cloud computing, but rather its Neiman Marcus.

In addition, there are other vast AI clusters being built outside traditional public cloud platforms. In October 2024, Meta CEO Mark Zuckerberg revealed that Llama 4 models were being trained on 100,000+ Nvidia H100 GPUs, while xAI's Colossus (used to train Grok 3) has 200,000 GPUs, making it the largest known AI compute cluster. Others have been built by TikTok owner ByteDance, while Tesla runs 35,000 H100 GPUs, alongside its in-house Dojo supercomputer. While these clusters are for internal use (to train models) today, history says this could change; after all, AWS began as Amazon's internal compute platform before it launched EC2 and S3 to external customers in 2006. Today, xAI uses Colossus to both train and run inference workloads for Grok. Other AI leaders are also becoming more self-sufficient, with many choosing to design their own silicon to reduce dependence on NVIDIA. At best, this may reduce their overall reliance on cloud providers. At worst, they might become direct competitors, scaling their infrastructure just as AWS did when it redefined the cloud industry.

The hyperscalers (and leading SaaS vendors) may also have to contend with future competition from AI Labs such as OpenAI and Anthropic. Historically, OpenAI relied entirely on Microsoft Azure for its infrastructure. However, this relationship is evolving, as evident from the $500bn Stargate announcement in January 2025

Investment Manager's Report continued

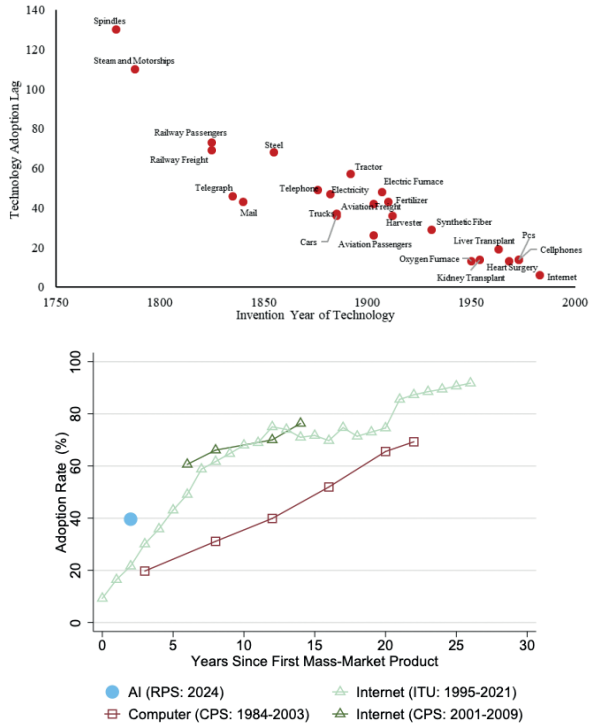
that saw Microsoft transition from OpenAI's exclusive infrastructure provider to a right of first refusal (RoFR) partner. This change likely reflects the differing priorities of a public company accountable to Shareholders and a private company aiming squarely for artificial general intelligence (AGI. OpenAI is also in flux, with CEO Sam Altman attempting to transition the company into a for-profit public benefit corporation (PBC) able to attract necessary investment. For now, Microsoft and OpenAI have reaffirmed their core partnership, which is set to remain in place through 2030. However, OpenAI has launched several applications that compete (or might compete) with Microsoft including SearchGPT and Operator, an agentic offering. More recently, OpenAI hired the CEO of Instacart as its CEO of Applications, to oversee its efforts to develop and scale customer-facing products.

AI Cycle Update

Rapid adoption

Last year we argued that AI diffusion was likely to proceed rapidly, informed by the presence of essential AI building blocks – six billion smartphones, vast datasets and cloud infrastructure – and by historical adoption trends showing that implementation lags halved with each major general purpose technology (GPT): c80 years for steam, c40 years for electricity, and c20 years for ICT (Information and Communication Technologies). Today, it is clear that AI adoption is significantly outpacing historical trends with OpenAI recently announcing 500 million weekly active users, up from more than 100 million from February and adding more than a million users in a single hour. Similarly, Meta revealed in January that its AI assistant *(Meta AI)* had reached 700 million MAU (Monthly Active Users). More recently, Microsoft processed over 100 trillion tokens in its most recent quarter, up 5x y/y with *a record 50 trillion tokens processed in March alone*.

Although the pace of enterprise adoption has trailed consumer adoption, AI has become a strategic imperative. A recent McKinsey survey revealed that 72% of companies now actively use AI, up from 50% observed consistently over the past six years. Echoing this, half the S&P 500 constituents referenced AI on their Q4 2024 earnings calls – marking an all-time high. CIO surveys also consistently reveal that AI is the highest IT spending priority for 2025, followed by cybersecurity and digital transformation, both of which are likely being pulled into the AI conversation. Meta's open-source Llama model, along with its derivatives, has already been downloaded 650 million times while corporate use cases continue to extend well beyond software copilots. Walmart recently announced it had used GenAI to create or improve over 850 million pieces of data in its product catalogue, work that would have required "nearly 100 times the current headcount to complete in the same amount of time". Economist Erik Brynjolfsson (who expects AI to drive "at least 3%" average US productivity over the coming decade) believes we are "near the bottom of the productivity J-curve for AI". If so, corporate AI adoption should accelerate before long, although many companies are likely to remain guarded about disclosing the specifics of their AI "secret sauce."



NBER Working Paper Series, February 2025.

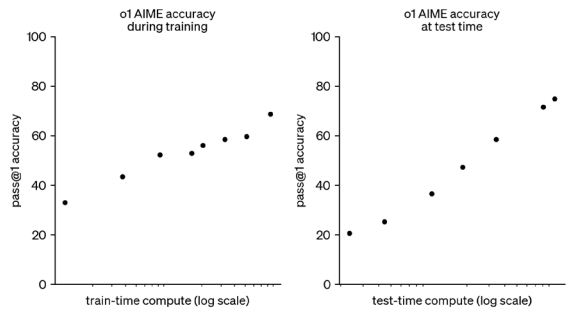
Model progress

AI models made significant gains during a frenetic 2024. Frontier models made continued progress, led by OpenAI's GPT-4o, Google's Gemini 2.0, and Meta's Llama 3. While architectural advances and data curation improvements played a role, most of these gains came from post-training techniques and test-time scaling. Post-training model optimisation helped GPT-4o and Gemini 2.0 easily surpass previous benchmarks set by GPT-4 in code generation and multimodal understanding. GPT-4o also introduced a (remarkable) voice mode, enabling real-time, voice-based conversations, with the model also able to interpret non-verbal cues. Open-source models also continued to make strong progress, particularly in terms of cost efficiency with Llama 3 said to have achieved performance comparable to GPT-4 at just 1/50th of the cost. While OpenAI's GPT-5 was delayed, xAI released Grok 3 – the first Gen3 model

(between 10 and 10 FLOPs of compute), an order of magnitude (OOM) greater than existing Gen2 models. Achieving the highest benchmark scores of any base model to date, Grok 3 suggests that pre-training scaling laws continue to hold for a new generation of AI.

A new scaling vector: test-time compute

However, the most significant gains last year were generated beyond scaling pretrained models. In September, OpenAI released its o1 models. Unlike most LLMs (large language models) which are *zero-shot* (processing inputs and generate outputs rapidly, relying only on the knowledge learned during training), o1 introduced the world to reasoning models which can generate internal chains of thought (CoT) at run-time. This enables the model to perform human-like multi-step reasoning; by breaking down complex tasks into manageable steps ('thinking' about the question) o1 significantly outperforms GPT-4o on most reasoning-heavy tasks and exceeds human PhD-level performance on a benchmark of physics, biology and chemistry problems.



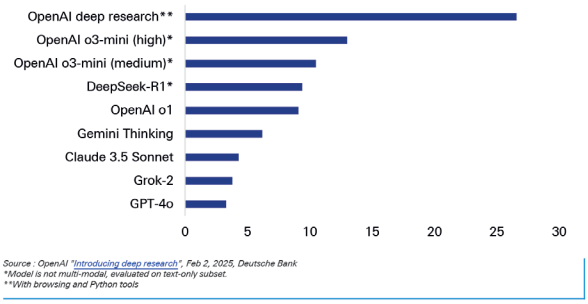
Source: One Useful thing, 24 February 2025.

Reasoning models perform predictably better the longer they are allowed to 'think' at test time (inference). As such, so-called test-time compute represents a powerful new approach for advancing AI capabilities, complementary to traditional 'brute force' model scaling. There has already been a rush of new reasoning models (including OpenAI o3, Anthropic's Claud 3.7 and DeepSeekR1). In addition, both OpenAI and Google have introduced advanced reasoning capabilities (branded 'Deep Research') to their flagship consumer offerings. These allow the models even longer to complete tasks, with OpenAI's Deep Research Mode *taking between 5-30 minutes*, depending on the complexity of the query.

Running out of benchmarks

Less than three years after the introduction of ChatGPT, OpenAI's o3 can solve 25% of problems on a Frontier Maths benchmark, where no other model has exceeded 2% previously. Even more remarkably, o3 achieved 76-88% on the ARC-AGI benchmark (built to measure progress toward AGI) as compared to 5% with GPT-4o in early 2024. If "GPT-4 offered us a glimpse of the future", reasoning models are surely early evidence of superhuman AI. They also represent a critical step towards agentic AI while accelerating the timeline towards AGI.

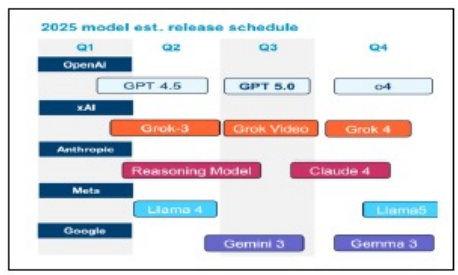
Figure 1: Open AI's deep research significantly outperforms earlier models in new Humanity's Last Exam (HLE) benchmark test

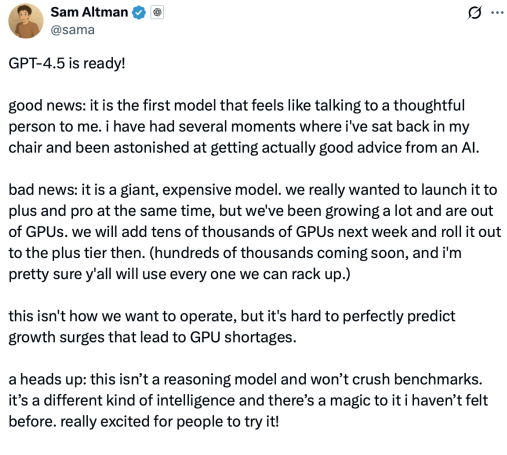


Source : OpenAI "Introducing deep research", Feb 2, 2025, Deutsche Bank
*Model is not multi-modal, evaluated on text-only subset.
**With browsing and Python tools

Capex strength set to continue

Model progress, intense competition and AGI aspirations resulted in a remarkable year for capex with the big four hyperscalers spending $226bn (+70% y/y) during 2024. Earlier concerns about a potential slowdown were lost in a blaze of upward capex revisions with estimates for 2024 rising 34% and 48% respectively during the year. This momentum continued into 2025 as each of the hyperscalers raised their expected capex budgets for the year during their Q4 reports.





Investment Manager's Report continued

Strong AI venture funding should also remain supportive for training and inference spending with $110bn (+62% y/y) raised in 2024. In October, OpenAI's $6.6bn raise took its valuation beyond any VC-backed technology company in history at the time of its IPO (initial public offering) while Anthropic raised an additional $4bn from Amazon last year. AI VC funding has accelerated into 2025 with AI companies raising $67bn in 1Q25 (+246% y/y) even though overall VC spending has only just recovered to 2021 levels.

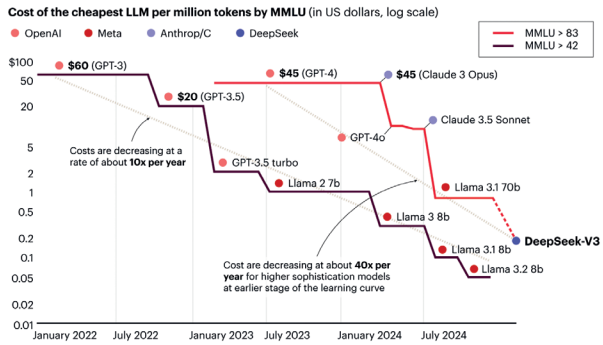
The pursuit of Gen-4 models (GPT-6 and beyond) is expected to further drive AI capex as they are likely to require more than one million H100s equivalent costing tens of billions. However, these mega-clusters are significantly more power hungry as they move from Gen-3 (100MW) to Gen-4 (1GW). For reference, 1GW of power is equivalent to half the estimated output of the Hoover Dam or the amount required annually to supply 3.2 million UK homes. Current estimates suggest that by 2028, data centres could consume up to 12% of projected US electricity use. This power imperative explains why power-related stocks have been 'pulled in' to the AI trade as hyperscalers scramble to acquire DC sites with readily available power and sign long-term Power Purchase Agreements (PPAs). The totemic deal between Microsoft and Constellation Energy signed in September which will see the infamous nuclear power facilities reopened on Three Mile Island, captured the zeitgeist perfectly.

Capex trade, interrupted

However, capex-related stocks were severely challenged by the release of DeepSeek R1 model in January as a small Chinese AI lab had seemingly closed the performance gap with US models at a fraction of the cost ($6m versus $100m spent on GPT-4). This sent shockwaves through the technology market, wiping out $1trn of market capitalisation as investors questioned the sustainability and necessity of current AI capex.

While it may still be too soon to fully assess the implications of DeepSeek's impressive innovations, the "just $6m" training costs have been widely debunked; reports indicate the company deployed tens of thousands of GPUs costing over $1bn. Likewise, cheap inference pricing is perhaps best viewed as another example of the ongoing, rapid decline in inference costs. As Anthropic CEO Dario Amodei noted, DeepSeek models are "roughly on the expected cost reduction curve that has always been factored into…calculations". For instance, input token cost price declines between OpenAI's o1-mini (September 2024) and the o3-mini (January 2025) represent an annualised price reduction of approximately 75%. These price reductions are possible because of 2x cost improvements coming from new hardware, as well as 4-10x improvement from algorithmic progress *per year*. As such, collapsing inference costs have been described as a "hallmark of AI improvement".

Rapidly declining AI Inference costs



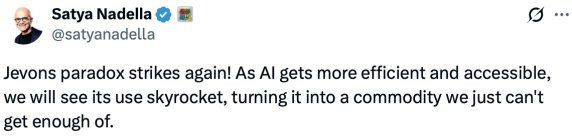
Source: Bain & Company

Indeed, collapsing inference costs have not prevented Microsoft growing its Azure AI revenues to a $13bn run rate nor have they derailed OpenAI's own revenue projections which are reportedly now forecast at $13bn in 2025 rising to $125bn in 2029, up from expectations of $12bn/$100bn last autumn. This points to a volume explosion in token usage already with lower inference pricing likely driving significantly higher revenues via higher usage (more users, more use-cases, more advanced models etc.). Reasoning models consume significantly more tokens than traditional frontier models because they only 'think' when generating tokens; deep research-type queries on OpenAI's o3 are said to require 2,000x more compute than o1 preview.

Reasoning models are also the foundation of agentic AI, enabling multi-step problem-solving and autonomous decision-making without human intervention. Not only do AI agents likely require 50-100x more tokens than single-shot requests, but we also expect agentic AI to act as a force multiplier in the coming years, scaling far beyond human-driven usage and current comprehension. NVIDIA CEO Jensen Huang has suggested that inference demand could increase by a factor of one million, or even one billion.

In time, these projections may even prove conservative should more efficient AI lead to far higher usage. The idea that greater efficiency can paradoxically lead to increased rather than decreased overall consumption of a resource was first articulated by William Jevons in 1865. Jevons observed that improved efficiency in coal usage actually drove up coal demand instead of reducing it by unlocking new, previously non-existent (invisible) markets

at previous (higher) price points. History is littered with examples of Jevons paradox, including the steel industry transformed by the Bessemer process, the transition from DC to AC electricity and of course, *Moore's Law*. In the immediate DeepSeek aftermath, Microsoft CEO Satya Nadella exclaimed: "*Jevons paradox strikes again! As AI get more efficient and accessible, we will see its use skyrocket*". While this came as little immediate comfort to AI infrastructure-related stocks, we expect "any published DeepSeek improvement (to) be copied by Western labs almost immediately". As such, all future AI models should enjoy better performances at a lower cost which is likely to accelerate both AI adoption and model progress.



A less straightforward capex story

While most infrastructure-related stocks have rebounded strongly following the DeepSeek-related selloff, we remain bullish on the sustainability of AI capex growth. In part, this reflects that despite DeepSeek uncertainty, aggregate AI capex at the US hyperscalers *accelerated* in 1Q25 reaching $81bn (+71% y/y) while FY25 capex growth estimates increased to +44% y/y from +38% earlier.

That said, the advent of new scaling vectors means that the capex story has become more nuanced. Today, reasoning (or test-time compute) is "early on the scaling curve and therefore can make big gains quickly". However, once it and other optimisations have been more fully exploited, we still expect the path to maximum capability will be to train the largest, most dense model feasible. This assumes scaling laws continue to hold as they provide a high degree of the predictability for the returns on incremental investments in the (costly) pretraining process.

For now, scaling laws appear intact. In November 2024, Jensen Huang said "foundation model pre-training scaling is intact and is continuing" while Sam Altman posted "there is no (scaling) wall". However, scaling laws are likely to plateau naturally over time as the rate of AI model improvement follows an exponential decay. What this means is that the industry "will have to work harder over time to get further performance improvements.

In today's AI race, some of the contenders may decide that the diminishing returns and escalating costs are no longer justifiable, leading them to withdraw. This dynamic could explain the changing nature of the Microsoft/OpenAI relationship. Others may consider the performance of recent 'fast follower' models like DeepSeek and conclude the race is in fact, over. Looking at the number of active models above 10 FLOPs suggests that the field has already significantly thinned.

However, and continuing with the parallel, it is well understood that marginal improvements in sport yield outsized gains, with fractions of a second separating champions from the rest of the field. In elite sprinting, every 0.01 second improvement is the result of months, if not years of optimisation. Usain Bolt's world record 9.58 second 100 metre sprint in 2009 was only 1.6% faster than the record set by Asafa Powell in 2007, but that difference cemented his status as the fastest person in history. In endurance sports, the same principle applies; Eliud Kipchoge's sub-two-hour marathon in 2019 required breakthroughs in shoe technology, drafting strategies and meticulous pacing. At the cutting edge of performance, the compounding effect of marginal gains determines greatness.

The biggest opportunity

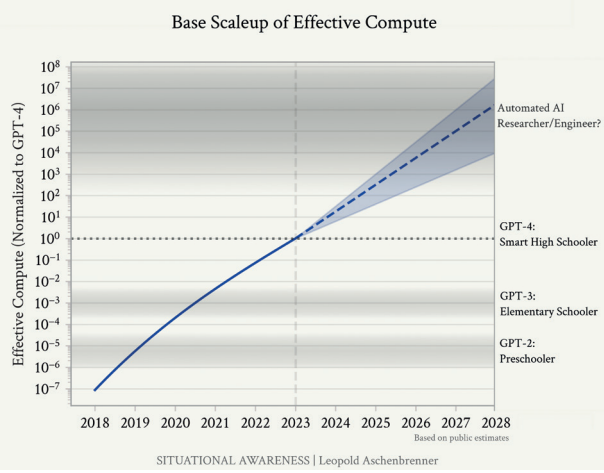
While these factors (accuracy; emergent behaviour; multimodality) explain our continued excitement around training-related AI capex, the most significant driver of today's AI spending remains the size of the prize. According to Bernstein, information workers represent 34% of the global labour force and contribute $20trn to GDP. A 20% productivity uplift could represent a $4trn opportunity and a potential $800bn in annual willingness to spend. If a 20% uplift appears optimistic, consider that McKinsey believes AI could automate 30-50% of tasks in about 60% of occupations by 2030. In the longer term, the opportunity is likely to be significantly greater should AI begin to substitute rather than augment human labour.

Much more than Moore

Unlocking this vast opportunity rests on continued advancement in model capabilities which, as outlined above, are progressing rapidly. As we have previously argued, humans struggle with non-linear change particularly when compounding over many years. The exponential scaling of semiconductors (as predicted by Moore's Law) was driven by an improvement of 1-1.5 orders of magnitude (OOMs) *per decade*. In contrast, AI scaling has been progressing at one OOM *per year* or 5-6x faster than Moore's Law. As a reminder, one OOM is a 10x difference, whereas 3 OOMs is equivalent to 1,000x.

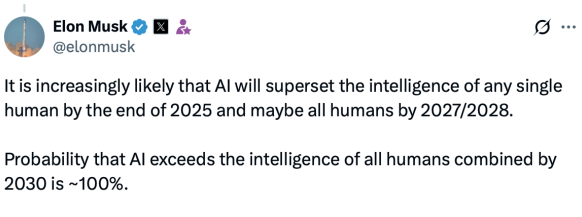
Investment Manager's Report continued

This exponential scaling is evident in the cost of AI, which – for a constant level of intelligence – has been declining by approximately 10× every 12 months, compared to Moore's Law, where the cost of silicon per square inch historically fell by around 2× every 18 months. This explains why leading models today are said to be "running out of benchmarks" where their predecessors just a decade ago "could barely identify simple images of cats and dogs". As one AI commentator argues, "we are racing through the OOMs, and it requires no esoteric beliefs, merely trend extrapolation of straight lines, to take the possibility of AGI…by 2027 extremely seriously".



AGI coming into view

When we first referenced AGI in last year's Annual Report, we were careful to downplay the likely timeline of so-called 'superintelligence'. Today, it feels increasingly possible that within a few years AI might be "able to understand, learn and apply knowledge across a range of cognitive tasks at a human-like level". Sam Altman has said that "systems that start to point to AGI are coming into view" with *superintelligence* possible "in a few thousand days". Elon Musk believes "AI will supersede the intelligence of any single human being by the end of 2025". Perhaps more importantly, Musk has suggested that the "probability that AI exceeds the intelligence of all humans combined by 2030 is 100%". Metaculus (a community-driven forecasting platform) anticipates the first general AI system by 2030, a year ahead of its forecast last year.

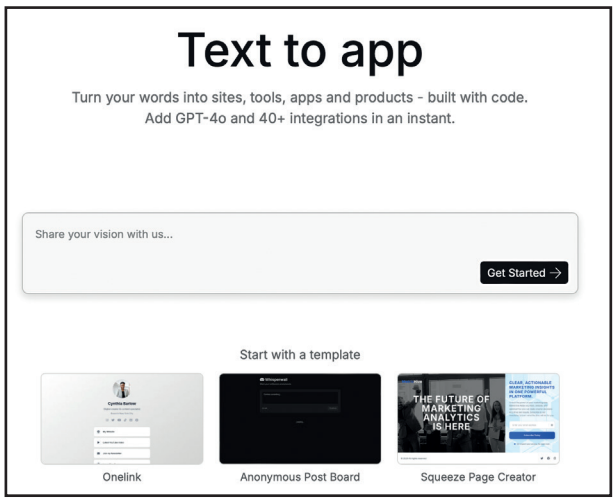


Agentic AI first

While there are still many dissenting voices around the AGI timeline, most AI commentators believe the next step on that journey is agentic AI with 2025 billed as the "year of agents". Like AGI, agentic definitions vary, reflecting a spectrum of agentic capabilities not dissimilar to differing levels of autonomy in vehicles.

Agentic AI comprises compound AI systems that chain together multiple task-specific models where the LLM decides the control flow of an application. The remarkable gains in reasoning models have paved the way for a new wave of AI agents designed to bridge the gap between LLM-based assistants (tools) and human agency. There has already been a flurry of agentic announcements from software companies such as Salesforce and ServiceNow. However, we are more focused on product previews such as OpenAI's *Operator* – "an agent that can use its own browser to perform tasks for you" – and Google's *Project Mariner* an experimental AI agent that can "think multiple steps ahead". Multiple Chinese AI labs have also launched agents, such as UI-TARS from ByteDance and *Manus* from Chinese startup Monica. Gartner predicts that by 2028, one-third of all GenAI interactions will use agents like these. Over time, these agents are likely to gain increasing autonomy, shifting decision-making authority away from the human in the loop toward the underlying LLM itself. At that point, they might more closely resemble the programs depicted in the movie *Tron* (1982), which independently operate and compete on behalf of their users, marking a significant evolution from today's human-guided 'copilot' systems.

Today, agentic AI remains nascent, with hallucination (error) rates still incompatible with agency. However, *Operator* provides our first real glimpse into a world where AI is no longer a tool used by humans, but instead performs tasks previously done by humans. Today, basic AI agents are already creating Neon (serverless) databases at *four times the rate of human developers*. End users simply describe what they want to build and AI agents autonomously initiate database operations, manage data workflows and scale infrastructure effortlessly.



Technology/AI risks

Given its centrality to sector fortunes, the key risk posed to technology stocks relate to AI. The Trust's significant exposure to AI means any setbacks to AI fundamentals or investment narrative could be magnified in the portfolio. These risks may include a slowdown in the pace of AI model improvement (including a tapering of the 'scaling laws' observed so far), production challenges presented by the rapid development cadence of each generation of leading-edge semiconductors (as we saw with NVIDIA's Blackwell delay) and other bottlenecks in scaling AI such as sourcing sufficient power for data centres and ever-larger datasets to train models. Other AI risks include the advent of 'cheaper' models like those introduced by DeepSeek that challenge capital intensity and negatively impact hyperscaler capex. Disappointing AI adoption (undermining investor confidence) or very rapid adoption (provoking public or political backlash) could also present challenges, although neither is likely to derail the technology's progress in the longer -term. There is also the risk that despite improvement, AI model hallucination rates remain incompatible with agentic AI, potentially delaying or preventing AGI.

Regulation also poses a significant threat to AI progress should it escalate sharply. While export controls aimed at slowing China's AI progress may become more effective as scaling continues, additional restrictions could stifle innovation while insufficient oversight could accelerate AI proliferation. Given that DeepSeek was heralded as AI's 'Sputnik moment', greater AI competition between the US and China could presage a new AI 'space race'. The original *Sputnik moment* led to the creation of NASA in 1958, with US space spending soaring from 0.1% of GDP in 1958 to over 4.4% by 1966 , culminating in the 1969 moon landing. A similar trajectory may now unfold in AI, as sovereign investments surge. However, AI competition, particularly if the industry continues to make rapid progress towards AGI, could increase the likelihood of *Manhattan Project*-type regulatory intervention. However, this might simply slow US progress while shifting leadership to more permissive nations, rather than mitigating risks.

On a more prosaic level, regulation also presents a significant risk to the sector should behavioural remedies challenge the natural monopoly status of some of today's mega-caps. We are hopeful the worst-case scenarios will be avoided given the critical role mega-cap US technology companies will play in counterbalancing the AI threat from China. Indeed, a further deterioration in US/Sino relations may present a greater risk and any escalation in tensions around Taiwan would likely put pressure on the semiconductor industry.

Other risks include tariffs which are impossible to fully assess other than at a very high level due to moving targets and the inherent lack of clarity (e.g. the semiconductor sector is still undergoing a Section 232 investigation). Even as these waypoints are reached, there is significant scope for exemptions and/or phased implementations given the need to deliver US AI supremacy. Valuation also remains a key risk, particularly following the absolute and relative rerating in the technology sector as well as the broader market. While we believe the rerating is appropriate given AI progress, it does leave valuations more exposed to disappointment, both within and beyond the technology sector. However, we remain dismissive of the notion that AI stocks are in a bubble, akin to the dot.com period in the late 1990s. While there are features of today's market that rhyme with that earlier period, we do not believe investors are really considering trillion-dollar market opportunities, scaling laws and an accelerated path to AGI. Factors that would challenge this view include much higher valuations (technology traded above 2x the market multiple in 2000), a 'hot' IPO market dominated by immature AI companies and the application of new valuation metrics necessary to justify elevated valuations. None of these conditions exist today.

Concentration risk

For several years, we have consistently reminded Shareholders of the concentration risk embedded both within the Trust and in the market cap-weighted benchmark around which the portfolio is constructed. Following another period of pronounced large-cap outperformance, this risk remains elevated. At year-end, our three largest holdings – NVIDIA, Apple and Microsoft –

Investment Manager's Report continued

accounted for approximately 23% of NAV and 31% of the benchmark. Our top five holdings, which also include Meta and Broadcom, represented around 34% of NAV and 50% of the benchmark.

As a large team with a growth-centric investment approach, we would welcome the opportunity to move materially underweight positions in the largest index constituents should we become concerned about their growth prospects, their positioning in an AI-first world or if we believe there are more attractive risk/reward profiles elsewhere. That said, large-caps continue to dominate small-caps, and the strong performance of the Mag-7 during 2024 serves as a reminder of the opportunity cost associated with a premature move away from unique assets, many of which still capture the zeitgeist of this technology cycle.

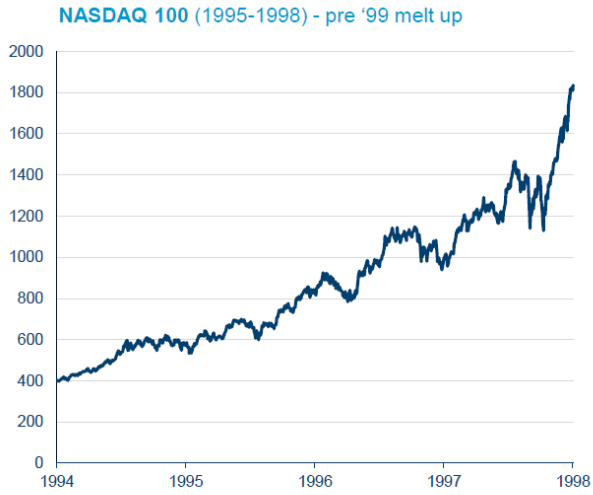
However, as previously discussed, there may be some early evidence of AI disruption beginning to challenge the investment narratives at certain mega-caps, including Alphabet and Apple. We have held both positions for close to 20 years but have meaningfully reduced them over the past 12 months. We remain unafraid and prepared to materially underweight or exit large index constituents should we become concerned about their growth or return prospects, or AI positioning. We will continue to communicate our thoughts and positioning as they evolve, just as we did when we pivoted the portfolio towards AI. For now, Shareholders should expect lower equity exposures to these stocks (potentially augmented by call options to mitigate upside risk) and greater daily variance in terms of our relative performance.

Conversely, while the Trust can hold up to a full benchmark weight subject to a maximum limit of 15%, we remain unlikely to do so; we struggle with the idea that we are reducing risk by making the portfolio ever more concentrated. Instead, our intention remains to construct a diversified portfolio comprising the best of what the benchmark has to offer, plus a selection of growth technology companies which investors may lack the resources or expertise to discover, analyse and monitor for themselves. We continue to believe that a diversified portfolio of growth stocks and themes capable of outperformance and constructed to withstand investment setbacks, should deliver superior returns over the medium term, particularly on a risk-adjusted basis.

Conclusion

The Trust has fully participated in the recent market rebound as we maintained our constructive positioning. This reflects our conviction in the significant AI progress and strong company results under the surface, even amid market and geopolitical volatility, and our belief that it remains within policymakers' interests and capacity to avert a severe global recession. NASDAQ puts helped to soften the Trust's beta during the sharpest phase of the market drawdown, as intended, and we have retained some protection given the timeline for progress on tariffs is short and there may well be temporary pauses or supply constraints even as things improve.

Setting aside current macroeconomic uncertainties, we believe recent volatility is best understood as a persistent feature of new technology cycles, when the innovation curve is at its steepest and both the pace of progress and scale of the opportunity are hard to define. The recent DeepSeek episode underscores this point, proving an important, if unwanted, reminder of this. In many ways, the current period feels highly analogous to the mid-1990s when people were excited about the potential of what Fed Chair Alan Greenspan would go on to call the "new economy" (in late 1997) but had not moved into the self-reflexive euphoria of the full dot.com bubble. Interestingly, between 1995 and 1998 – the internet years prior to the dot.com 'melt up' – there were nine NASDAQ Index corrections of -10% or more, seven of which were drawdowns of -15% or greater. However, during this volatile period, the Index rose by 350% (in US dollar terms). While history is an imperfect guide, investors should anticipate elevated volatility and bouts of AI-related risk aversion, even against a backdrop of continued AI progress.



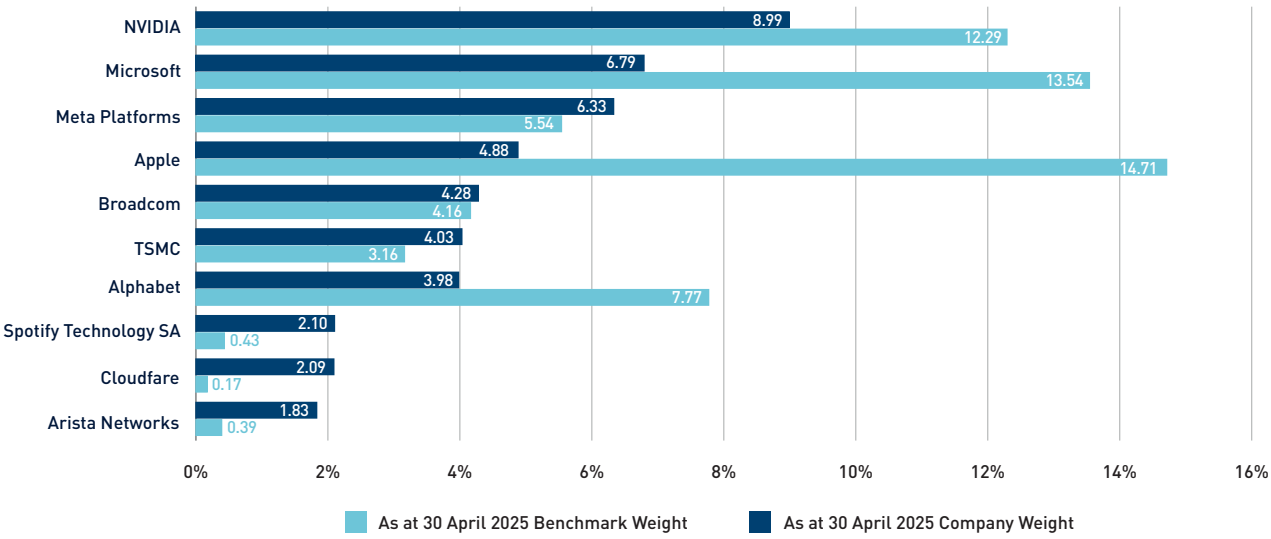
Source: Polar Capital and Bloomberg, January 2025.

To date, that progress has been remarkable – the product of rapid, non-linear scaling. Together with the advent of reasoning models, many of the building blocks necessary for agentic AI are falling into place. The promise of these agents is that they transform AI from a passive tool to an active participant in the digital ecosystem with infinite scalability. AI-enabled non-human scaling could change the world as we know it, just as agricultural mechanisation did in the 19th century (when labour force participation in agriculture declined from 58% in 1860 to 27% by 1920). However, before that, McCormick's horse-pulled reaper (1831) had already transformed the grain harvest by six-fold, increasing the amount of wheat that each person (and horse) could harvest in a day to 12-15 acres compared to two acres previously possible using tools like scythes. This not only helped the US wheat crop quadruple between the 1830s and the 1860s, but mechanised agriculture, and the surpluses it produced led to higher living standards and greatly improved food security. While the Great Irish Famine (1845-49) proved a tragic exception, peacetime famines had largely been eradicated in the US and Europe by the late 19th century.

We expect AI to unlock similar productivity gains and unknowable positive externalities while enabling individuals and businesses to reduce their dependency on human scaling, allowing them to "reap as much as they can sow".

*Data and statistics referenced within the Investment Manager's report may have changed between the financial year end and the date of publication.

Company vs Benchmark Weighting



Source: Polar Capital

Ben Rogoff & Alastair Unwin
Polar Capital Technology Trust
10 July 2025*