Guinness Global Innovators

Investment Commentary – February 2025

RISK

This is a marketing communication. Please refer to the prospectus, supplement, KID/KIIDs for the Funds, which contain detailed information on their characteristics and objectives, before making any final investment decisions.

The Funds are equity funds. Investors should be willing and able to assume the risks of equity investing. The value of an investment can fall as well as rise as a result of market and currency movement, and you may not get back the amount originally invested. Further details on the risk factors are included in the Fund's documentation, available on our website.

Past performance does not predict future returns.

ABOUT THE STRATEGY

Launch	01.05.2003
Index	MSCI World
Sector	IA Global
Managers	Dr Ian Mortimer, CFA Matthew Page, CFA
EU Domiciled	Guinness Global Innovators Fund
UK Domiciled	WS Guinness Global Innovators Fund

INVESTMENT POLICY

The Guinness Global Innovators Funds are designed to provide investors with global exposure to companies benefiting from innovations in technology, communication, globalisation or innovative management strategies. Innovation can take many forms, and not just in disruptive tech-driven products. It is the intelligent application of ideas and is found in most industries and at different stages in the company lifecycle. The Funds are actively managed and use the MSCI World Index as a comparator benchmark only.

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COMMENTARY

For the month of January, the Guinness Global Innovators Fund provided a total return of 5.7% (in GBP) against the MSCI World Index net total return of 4.4% and the IA Global sector average return of 5.0%. Hence the Fund outperformed the benchmark by 1.3% and outperformed the IA Global sector average by 0.7% (GBP).

Although global equities finished January higher than they started, it was a volatile start to the year due to a stream of significant news events. Donald Trump's second term as President was a core catalyst. Despite a blitz of 'day-one' executive orders, clarity on highly anticipated tariffs did not immediately materialise. Markets weighed up further threats on key trade partners, including Mexico, Canada and later the EU, amidst a lack of any immediate action on China, which had been a key focus of Trump's election campaign. While markets were buoyed by a lower-than-expected inflation print, the Federal Reserve defied Trump's wishes to cut borrowing costs further, stating that there was no "need to be in a hurry" in adjusting its policy rate. The biggest source of volatility came in the final week of the month with a potentially significant development in the world of artificial intelligence. Chinese AI firm DeepSeek delivered a shock to markets by revealing a model supposedly on par with the cutting-edge models in the US but developed at a fraction of the cost. Nvidia's market capitalisation fell almost $600bn in one day as markets posited that this would result in reduced demand for the firm's high-end chips. However, it was not all bad news for tech stocks. The implications of a significant leap forward in efficiency lead to 'integrators' of AI potentially benefiting from the reduced cost of implementation. Amid the resulting volatility there was a shift towards defensive areas of the market. Sector performance was varied but mostly positive, driven predominantly by valuation expansion, with Communication Services the top-performing sector as a result of expectations of lower AI-related costs. Only Information Technology ended in negative territory, in part driven by the significant sell-off in Nvidia shares. In this commentary, we take a deep dive into DeepSeek, and its implications for the wider market and the Guinness Global Innovators Fund.

Over the month, relative performance of the Fund was driven by the following:

- The Fund's largest overweight sector position to the benchmark's only negatively performing sector during the month, Information Technology, was the largest detractor to relative Fund performance. However, strong stock selection within the sector more than offset this impact, with the Fund's semiconductor names in particular - KLA, Lam Research, Applied Materials, TSMC and Infineon - all contributing to outperformance, alongside the Fund's slight underweight position in Nvidia.

- The Fund benefited from an overweight position to the benchmark's top performing sector, Communication Services. This was supported by good stock selection within the sector, with Meta ending the month as the Funds top performer, with recent purchase Netflix (Q3 2024) also aiding Fund outperformance.

- The Fund benefited from a zero-weight allocation to the Consumer Staples, Real Estate, Energy and Utilities sectors, which all underperformed the benchmark, in part offset by a zero weighting to Materials, which outperformed.

It is pleasing to see the Guinness Global Innovators Fund in the top quartile versus the IA Global Sector over the longer time frames of 1, 3, 5, 10, 15 and 20-year periods, as well as since launch.

Past performance does not predict future returns.

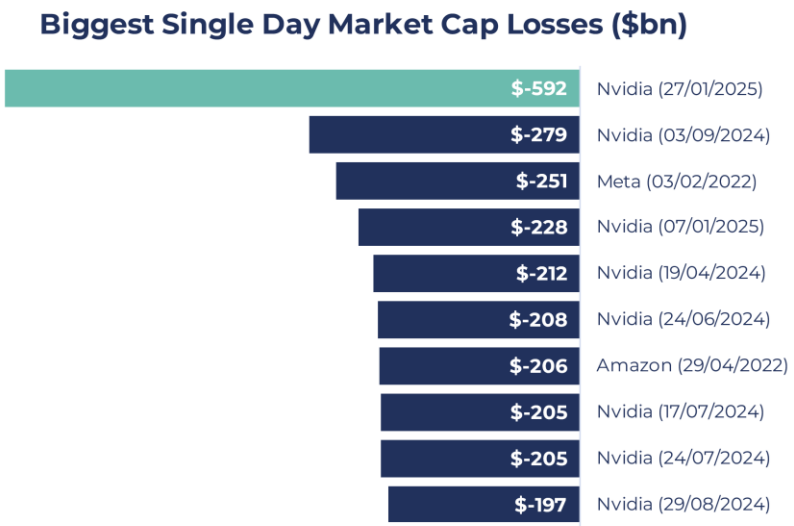
Cumulative % total return in GBP	YTD	1 year	3 years	5 years	10 years	15 years	20 years	Launch
Guinness Global Innovators	5.7	25.8	44.4	117.6	300.1	806.0	1249.0	1481.1
MSCI World	4.4	24.4	41.9	87.6	229.0	484.3	645.1	817.2
IA Global (average)	5.0	17.7	27.6	60.3	161.7	315.7	441.3	589.7
IA Global (ranking)		50/549	57/495	7/414	5/261	1/165	1/98	2/90
IA Global (quartile)		1	1	1	1	1	1	1

Source: FE fundinfo. Data as of 31st January 2025

JANUARY IN REVIEW

DeepSeek: a Primer

DeepSeek is an AI start-up founded in 2023 by Liang Wenfeng, employing just c.150 people and backed by 'High-Flyer', a Chinese quant hedge fund. DeepSeek previously released a base Large Language Model (LLM), called V3, in December 2024, but the big news that rocked markets came towards the end of January when it published its latest 'R1' reasoning model. This model took a big step forward from a technical perspective, displaying performance on par with the cutting-edge US models, but (supposedly) costing just a fraction of the amount to train. This sent shockwaves through equity markets, wiping out nearly a trillion dollars in US technology value and Nvidia losing close to $600bn in market cap, the largest single-day loss in history. Whilst equities have since recouped some of these losses, the news raised questions about the future trajectory of AI and caused investors to weigh up several potential investment implications.



Source: Bloomberg; as of 31st January 2025

Models: Base vs Reasoning

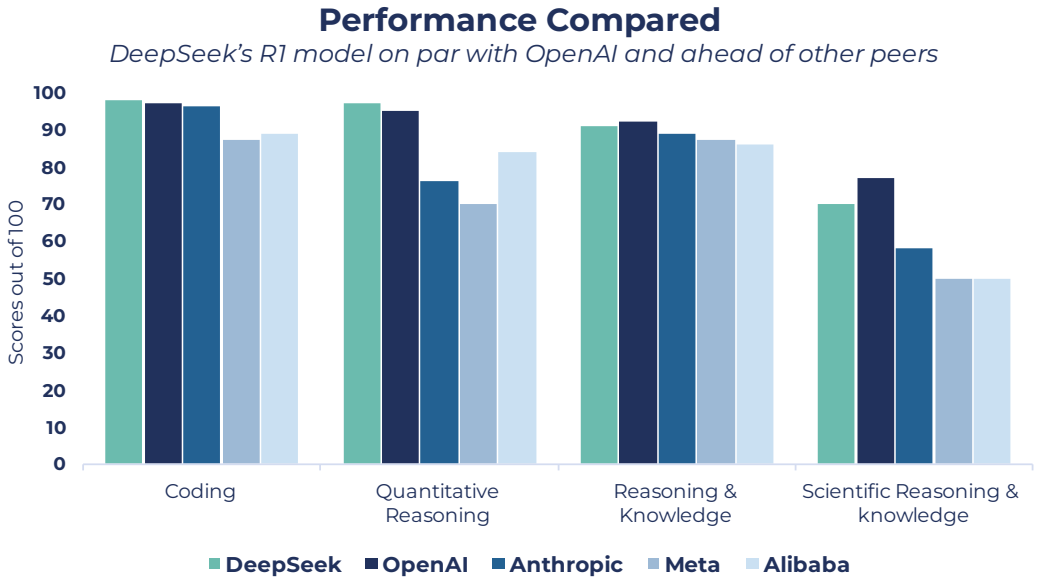
DeepSeek claims its base model (V3) was trained on a mere 2,000 H800 Nvidia chips. The H800 chip, which was made specifically for the Chinese market due to US export restrictions, is a slightly slower version of the most cutting-edge H100 Nvidia chip with significantly reduced data transfer speeds, making traditional AI training processes take far longer than with the H100. The cost of training was claimed at just $5.6m, an order of magnitude less than current leading US models. DeepSeek achieved this by using efficient algorithms, optimised hardware, strategic graphical processing unit (GPU) allocation, and an AI training technique called Mixture of Experts that substantially improves computational efficiency. Some speculation suggests DeepSeek used more compute than it claims, and possibly even export-restricted H100s, but there is no hard evidence for this. Nonetheless, it's important to stress that the $5.6m figure has been slightly misunderstood, as this simply refers to the cost of the final model training run (and doesn't include the cost of buying the compute cluster, prior research costs, staff salaries, data processing, etc). Even so, the model was still far cheaper than the existing US competitors.

DeepSeek also released an updated R1 'reasoning model' in January — a distilled, more efficient version of its V3 base model. In this process, knowledge from the complex V3 is transferred to a smaller model that retains key functionality but lowers computational demands. While DeepSeek did not disclose R1's cost, it is also believed to be an order of magnitude cheaper than its counterpart's reasoning model (OpenAI's o1). Crucially, DeepSeek models are all open-sourced, granting developers and researchers free access to modify and use them. Currently, only Meta (Llama) and Alibaba (Qwen) offer open-source models, while most leading providers (OpenAI, Gemini, Anthropic, Perplexity AI) remain closed-source and behind a paywall.

What was the breakthrough?

DeepSeek addressed a significant AI challenge: enabling models to reason step-by-step. Traditionally, LLMs have been trained on a very compute-intensive process called supervised learning, where models are fed immense quantities of labelled data and then match inputs to correctly labelled outputs. In contrast, DeepSeek's reasoning model was accomplished using a technique called reinforcement learning, where responses are fine-tuned by rewarding accurate outputs and penalising mistakes. This approach mimics human reasoning by breaking tasks into intuitive, process-driven steps and giving feedback at each step of the way. In simplified terms, it's like teaching someone how to write intuitively via feedback instead of getting them to memorise every single word ever written.

Although OpenAI introduced a reasoning model in September 2024, DeepSeek became only the 2nd firm to do so, matching OpenAI's performance (see chart below) at a fraction of the cost. It also surprised many that a Chinese competitor had made such a big leap forward in LLM technology, despite many believing that China was years behind the US.

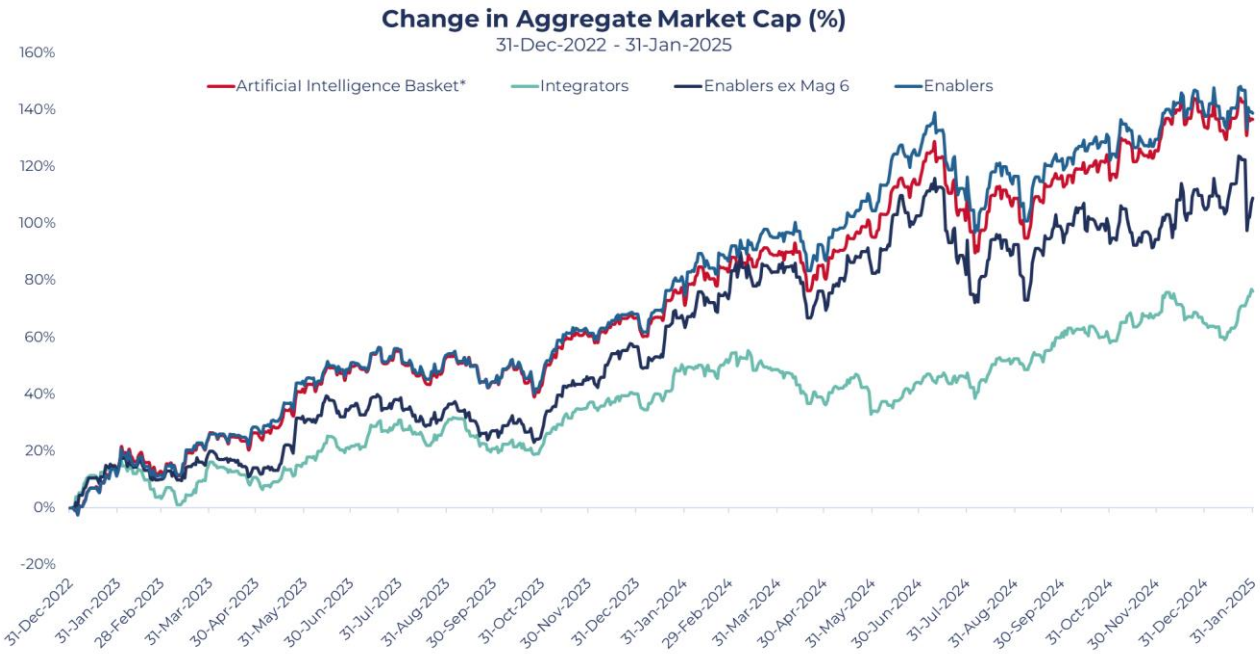


Source: Guinness Global Investors, Artificial Analysis as of 31st January 2025

Note: Models used OpenAI (o1), Alibaba (Qwen 2.5 72B), Meta (Llama 3.1 405B), Anthropic (Claude 3.5). Tests used are HumanEval, MATH-500, MMLU, GPQA Diamond.

What are the implications: training vs inference?

Training is the process where an AI model learns by analysing massive amounts of data and adjusting its internal parameters, while inferencing refers to the trained model applying that knowledge to make real-time and real-world predictions on new, unseen data. If DeepSeek has pioneered a way to create lower-cost models, increased training competition from upstarts could emerge. Because of the huge demand for the latest chips used in cutting-edge AI training (primarily Nvidia GPUs), the waiting list can often extend to many months. If LLMs can now be trained using fewer GPUs and at a lower cost, this may enable a wider range of market participants to access these chips, leading to greater model creation and perhaps even the commoditisation of LLMs. This is especially the case if open-source models (like DeepSeek) can provide similar performance without sitting behind a closed-source paywall. It may be the case that companies will differentiate themselves at the application-layer (what is built on top of LLMs), instead of the pure LLM technology itself.



Source: MSCI, Bloomberg as of 31st January 2025

**Artificial Intelligence Basket is a selection of stocks that Guinness Global Investors believe is most exposed to the AI theme.*

Lower training costs and more efficient models might accelerate the shift from training to inference, a process that is already underway. Inference is widely believed to have a far larger total addressable market over the long term as it includes a wider range of use cases. These include asking an LLM simple questions to getting autonomous vehicles to process live data in real time. LLMs that are less power-hungry will be able to operate on a greater number of so-called 'edge devices' (devices that process data near the source such as phones, cars, or wearable accessories) and will aid the move to inference. As a result, we may see value creation shift away from the *AI Enablers* (those that provide the foundational AI infrastructure) towards the *AI Integrators* (those that provide software, applications and services built on top of that infrastructure). The chart above shows the January performance of these two groups and in particular the sharp divergence after the DeepSeek announcement. While the initial market reaction suggests Integrators may emerge as a beneficiary of cheaper and more efficient models, there is clearly still a wide range of opportunities at many stages of the AI value chain.

What does this mean for overall capex spend?

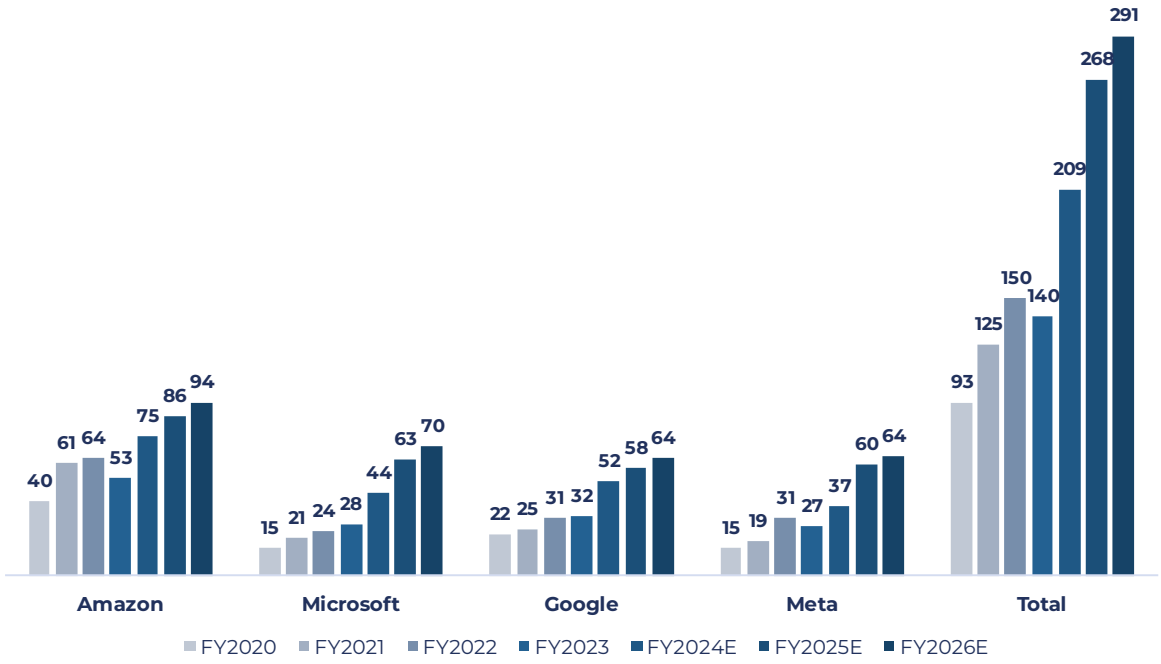
Despite the DeepSeek news, hyperscalers continue to spend heavily on AI infrastructure (at least for the time being). Microsoft are leading the charge, forecasting for $80bn of capex in 2025, with Meta calling for $60-$65bn this year, and Oracle, Softbank and OpenAI recently announcing long-term investments of up to $500bn via the Stargate Project. This capex is generally split between compute (e.g. buying Nvidia GPUs or Broadcom ASICs) and infrastructure (the physical data centres that store, process, and distribute the data). If training and inference are becoming more efficient, then some argue that hyperscalers will reduce their overall capex spend and right-size their infrastructure footprint. However, we believe it is more likely that a huge uptake in inferencing will more than offset any potential fall in training (see above). This view has been corroborated by recent earnings releases which indicate a continued commitment to large-scale capex spend:

Meta CEO Mark Zuckerberg: "We continue to believe heavily investing in the company's AI infrastructure will be a strategic advantage... It's possible that we'll learn otherwise at some point, but I just think it's way too early to call that."

Microsoft CEO Satya Nadella commented on their balanced approach to building infrastructure: "We are building a pretty fungible fleet … and making sure that there's the right balance between training and inference." He also noted that their capex spend will be enduring: "You don't want to buy too much of anything at one time… you want to continuously upgrade the fleet, modernise the fleet, age the fleet and, at the end of the day, have the right ratio [of capex to demand]"

Moreover, whilst DeepSeek does point to a step change in the efficiency of models, there has been an ongoing optimisation cycle within the world of LLMs. Initially, firms were in a rush to get models to market with no focus on cost. However, over the past year, OpenAI has refined its models and optimised training cost (GPT4 cost less than GPT3.5 which in turn cost less than GPT3). Some estimates suggest that algorithmic progress improves fourfold each year, meaning that with each passing year, achieving the same capabilities requires only a quarter of the compute previously needed. The market was already aware of this optimisation cycle and yet the hyperscalers continue to up their capex (see chart below). This should give investors some solace (or concern) that large scale capex is likely to remain for the foreseeable future, even if there is some rationalisation of spend at the margins.

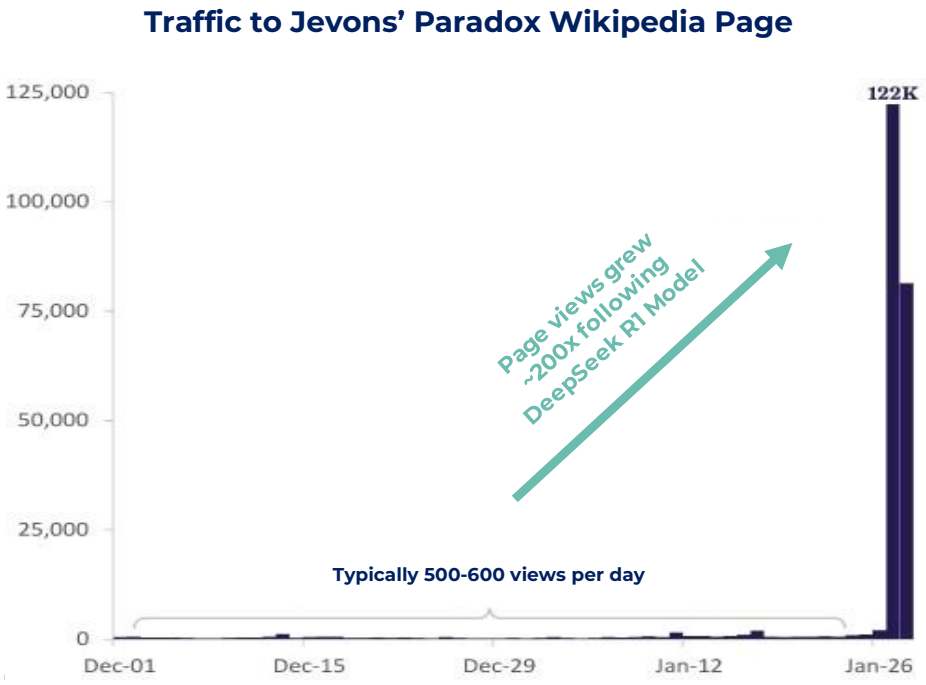
Hyperscalers Capex ($bn)



Source: Bloomberg; as of 31st January 2025

Note: Data takes consensus estimates until the end of January 2025. Expectations have shifted at time of writing given earnings reports in early February

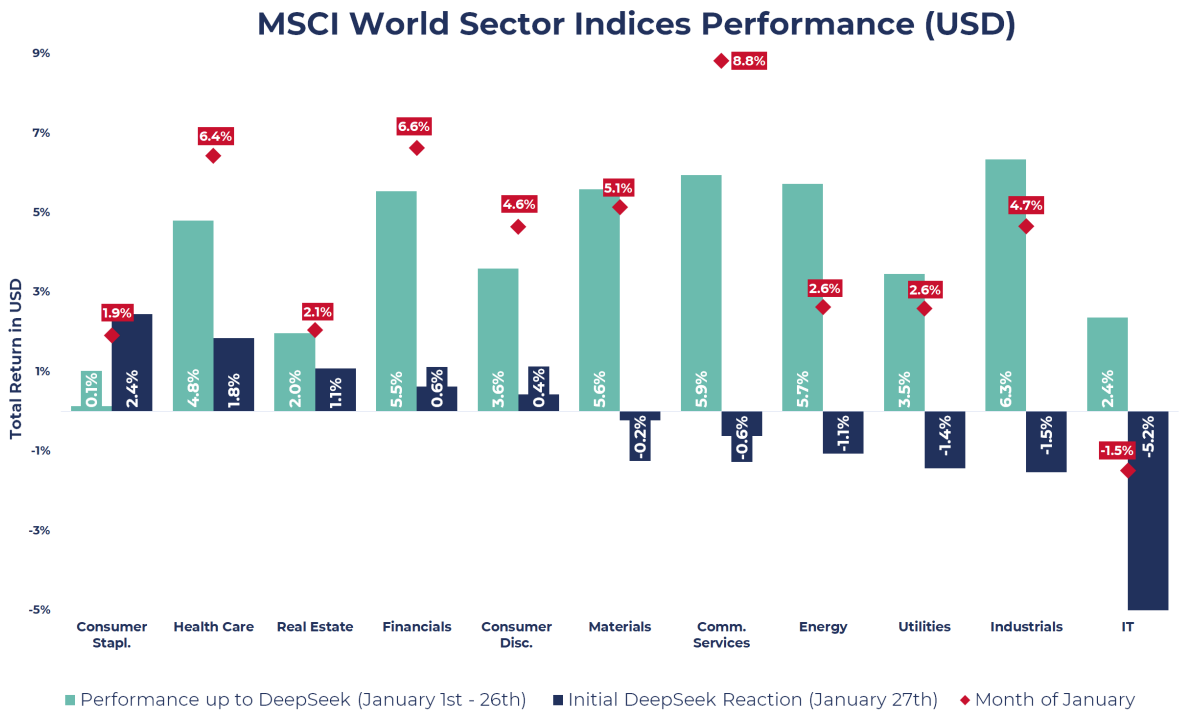
What does this mean for the long-term AI story?



Sources: Chartr, PageViews Analysis, SemiAnalysis; as of 31st January 2025

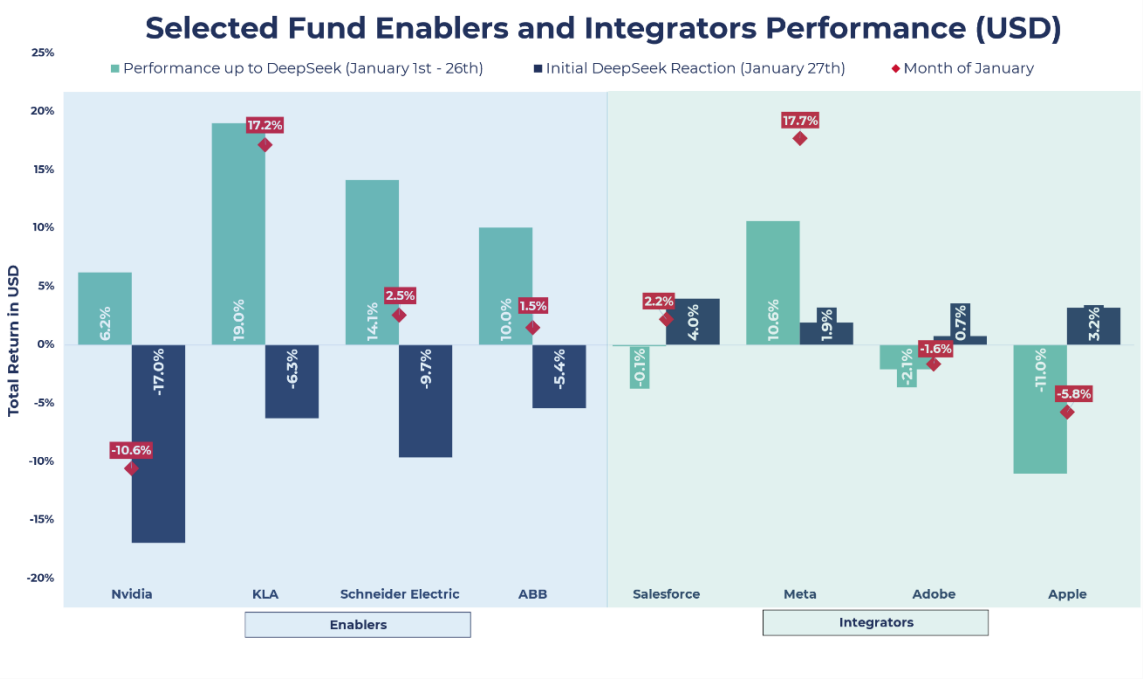
The long-term implications of the DeepSeek model are far from certain and, given the pace of AI developments, will likely play out in ways that can't be foreseen. This has allowed both pessimists and optimists to enlist the DeepSeek news in support of their positions. For those that thought the AI theme was overhyped, the market news over January reinforced their viewpoint. Conversely, many have sought to strengthen the bull case by citing Jevons' Paradox, which states that increased efficiency in resource use can lead to higher overall consumption (not a reduction) because lower costs will drive more use cases and therefore greater overall demand. With regards to compute, the argument here is that more efficient AI models will lead to a cheaper cost of use, and therefore more organisations can run AI (largely through inferencing), which will lead to a steeper adoption curve. Looking back over 50 years and further, ever since the advent of the microprocessor, there has never been a lack of demand for compute. More powerful machines (and therefore more abundant compute) have always been used to innovate and benefit the end consumer across a wide range of use cases. The chart above shows the growing popularity in Jevons' Paradox, and this may yet continue to hold true.

Initial Market Reaction: who were the winners and losers?



Source: Bloomberg, MSCI, Guinness Global Investors, 31.01.2025

The chart above outlines MSCI World performance over January until the DeepSeek announcement (in green), the market reaction on the day of the R1 model release (in blue), and January performance in red. As the chart depicts, stocks generally performed well over January up until the release of DeepSeek R1, with broad-based gains and positive returns from all sectors. However, on the DeepSeek announcement, performance was much more varied. Sectors like IT, Industrials, Utilities and Energy, those that include many of the *AI Enablers*, were the most negatively impacted as investors weighed up the implications of lower training costs on companies involved in the data centre build-out.



Source: Guinness Global Investors, Bloomberg, 31.01.2025

How did *Enablers* react?

Holdings	Exposure	Description
Semiconductors		
Infineon		Infineon produces power-efficient semiconductor solutions, such as microcontrollers and power management chips, which are increasingly used in AI applications
Applied Materials		Applied Materials delivers materials engineering solutions that support semiconductor manufacturing, enabling high-performance processors used in AI and data centres.
KLA Corp		KLA specializes in process control and yield management systems essential for the precision manufacturing of AI chips and semiconductor components.
LAM Research		Lam Research provides wafer fabrication equipment and services used in the production of semiconductors critical to AI hardware and data centre processing.
Nvidia Corp		NVIDIA develops GPUs and AI platforms that are foundational for training and running AI models. These products are heavily utilized in data centres for deep learning and high-performance computing.
TSMC		TSMC manufactures advanced chips essential for AI acceleration and data centre hardware. Its cutting-edge semiconductor technology supports high-performance computing needs.
Data centre infrastructure		
ABB Ltd		ABB supports AI data centres through its automation and energy management systems, ensuring reliable operation and optimized resource use.
Amphenol		Amphenol designs and manufactures high-performance connectors, cables, and interconnect systems. These components support critical operations by ensuring reliable connectivity for AI servers and networking equipment.
Schneider Electric		Schneider Electric delivers electrical infrastructure solutions, including power distribution and cooling systems, tailored to enhance AI data centre performance.
Hyperscaler		
Meta		Meta operates hyperscale data centres optimized for AI workloads, supporting its social platforms, virtual reality initiatives, and AI research.
Amazon		Amazon's AWS cloud platform supports scalable AI workloads, including machine learning and data analytics. AWS provides infrastructure-as-a-service (IaaS) solutions for data-intensive applications.
Google		Google's Cloud Platform (GCP) powers AI research and development with specialized tools like TensorFlow and custom AI hardware such as Tensor Processing Units (TPUs).
Microsoft		Microsoft operates hyperscale data centres that power its Azure cloud platform, a cornerstone for hosting AI workloads and providing scalable computing for machine learning models.

Source: Guinness Global Investors, 31.01.2025

On 27th Jan, Nvidia suffered the largest single-day market capitalisation loss in history, wiping almost $600bn from its market value, as market participants assessed the potential impacts of lower training costs on future compute demand, and more specifically, GPU demand. Considering that in recent earnings calls by some of the hyperscalers we have seen a recommitment to previously guided 2025 capex numbers, a big cancellation of GPU Nvidia orders seems unlikely in the short term. In the medium term, a possible scenario is the emergence and shift towards sleeker, more efficient AI models that don't rely on AI GPU clusters of such massive scale. However, other industry experts argue a potential consequence of fewer entry barriers to training models could be more competition and use cases, and with that, more inference demand. Interestingly, Nvidia is not only extremely well positioned to serve the AI training market, but it is also the largest inference

platform in the world, as roughly 40% of the company's revenue stems from inferencing. Nvidia CEO Jensen Huang mentioned during the Q3 2025 earnings call that "We're seeing inference really starting to scale up for our company." Therefore, we believe the release of DeepSeek R1 does not change our thesis in Nvidia, and we feel optimistic about its future performance despite its impressive rally over the last two years. Our flexible but disciplined portfolio management approach of 'letting our winners run' beyond the c.3% position weight has allowed us to generate substantial gains from Nvidia and at the same time crystallise some of those gains by trimming the position six times since 2023.

Another *AI Enabler* company that saw a big drop on the 27th Jan (-6.3% USD) is KLA, one of the largest semiconductor wafer fabrication equipment (WFE) manufacturers in the world, as investors weighed up the possibility of lower demand for advanced chips leading to reduced orders for the process and control equipment machines that KLA provides to the semiconductor manufacturers. Despite this share price drop, KLA still managed to secure a spot as the second-best performer of the Fund during the month (+17.2% USD), as a strong set of quarterly results and positive 2025 outlook, which matched peers Lam Research (also held in the Fund) and ASML (not held), helped dissipate investor fears about AI demand.

The ramifications of the DeepSeek R1 release also led to a sharp one-day price decline in some of the *AI Enabler* Industrials stocks held the Fund, such as Schneider Electric (-9.7% USD) and ABB (-5.4% USD), although both finished the month in positive territory. Potentially, lower demand for compute could negatively affect both companies, as their data centre revenue is partly a function of compute demand and the services and products required to ensure efficient functioning of data centres. For reference, Schneider Electric's revenue exposure to data centre is 25%, whereas ABB's is 10% as of 2023. We remain optimistic that their exposure to the data centre build-out will continue to boost their top-line growth while providing a diversified source of revenue to their high-quality businesses.

How did *Integrators* react?

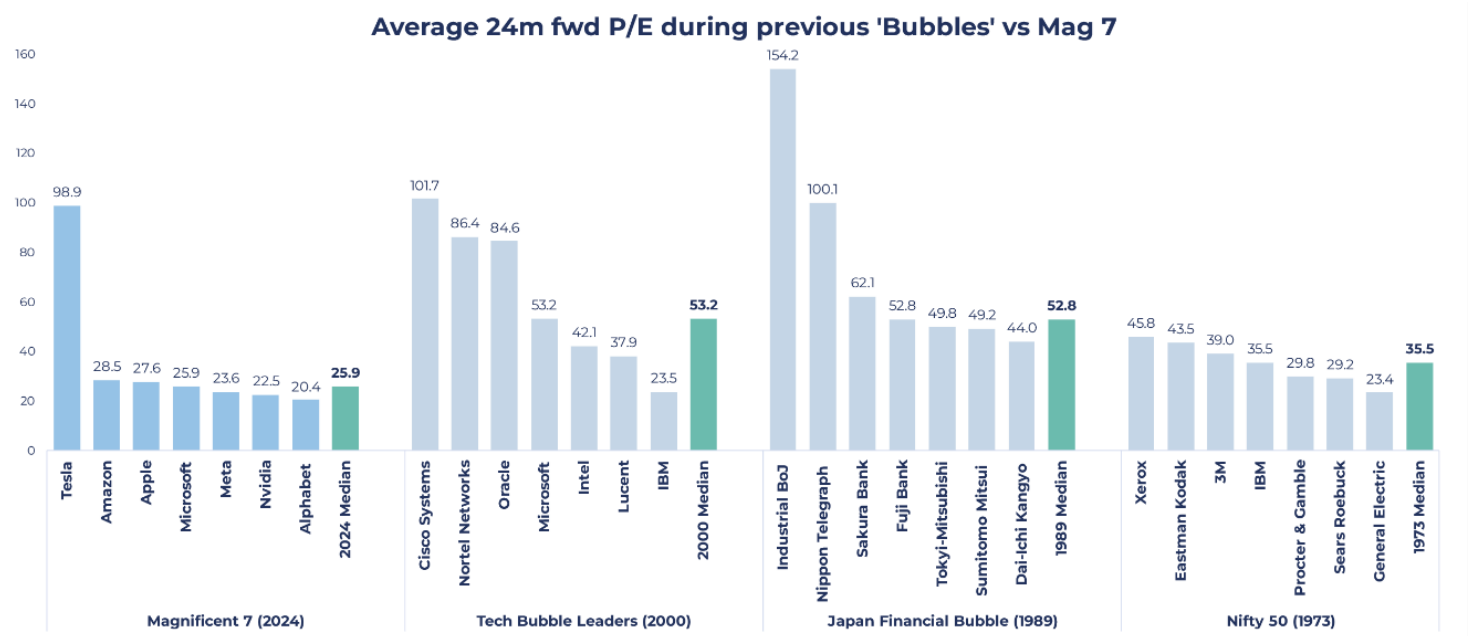
Holdings	Description
Apple	Apple integrates AI across its ecosystems with applications like Siri, image recognition in its Photos app and real-time insights through the Apple Watch. The 'Apple Intelligence' service embedded into its devices, uses AI and machine learning to enhance the customer experience.
Adobe	Adobe has embraced generative AI with its assistant Sensei, powering features like auto-masking in Photoshop and automated video editing in Premiere Pro. Its AI-driven tool, Firefly, enables generative AI-based content creation such as text-to-image for creative professionals.
Meta	Meta leverages AI for personalized ad targeting, content recommendations, and moderating content. Its AI application, Llama (a large language model), underpins advancements in generative AI and metaverse experiences.
Netflix	Netflix uses AI for personalized content recommendations and optimizing its streaming infrastructure. Newer capabilities have enhanced vieweing engagement and can prevent subscription abuses.
Salesforce	Salesforce integrates AI through its Einstein platform providing predictive analytics and automation for customer relationship management. Einstein's capabilities include predictive lead scoring, sentiment analysis, and sales automation.
London Stock Exchange Group	LSE Group leverages AI to enhance trading platforms, risk management, and data analytics. Its Refinitiv platform has AI-embedded tools which offer real-time financial insights, alerts and analytics.

Source: Company Data, Guinness Global Investors, 31.01.2025

As described above, many *AI Enablers'* share prices initially reacted negatively to the release of DeepSeek. On the other hand, we found that, broadly, *AI Integrators'* share prices reacted positively, including Salesforce (+4% USD), Meta (+1.9% USD), Adobe (+0.7% USD) and Apple (+3.2% USD). The likely explanation is that the market is factoring in declining AI training costs, which could drive the commoditisation of LLMs and shift companies' focus toward the implementation layer built on top of them. By being closer to the end customers, these companies can embed AI into their data and products, potentially increasing monetisation as the value proposition of their services and products rises. Note that while Meta is investing heavily to develop its own AI infrastructure, like many of the enablers, we view the firm as more of an 'Integrator' given that it is integrating AI to develop its core operations. For example, the firm is using AI to drive engagement in its Family of Apps and thus generate further advertising revenues.

While companies at various stages of the AI value chain reacted differently to the release of DeepSeek R1, their initial share price reaction is hardly a prediction of what the future might hold. We believe we are still at the early stages of the AI trend and remain optimistic about our holdings' potential to extract value across all parts of the AI value chain.

Are we in an AI bubble?



Source: Guinness Global Investors, Goldman Sachs, Bloomberg, 31.01.2025

The chart above shows the average 24 months forward price/earnings (P/E) ratio for some of the more highly valued companies during previous bubbles and the current Magnificent 7 as of end of 2024. Excluding Tesla, the only company among the Magnificent 7 not held in the Fund, Magnificent 7 valuations remain significantly lower than those seen in bubbles of the past. The Magnificent 7 median P/E ratio (24 months forward) is 25.9x, compared to 35.5x from the Nifty 50, 52.8x from the Japan Financial Bubble and 53.2x from the 2000 Tech Bubble. There is a considerable difference between past bubbles and the current Magnificent 7 valuations, which reflect profitable growth expectations.

We continue to monitor the rapidly evolving AI landscape and the implications for both *enablers* and *integrators*. While the Fund has clearly benefited from exposure to AI, we find it interesting to note that this exposure has not increased in the last two years, and AI is only our third-largest theme by weight. Our approach allows us to have exposure to this attractive secular growth theme while remaining diversified. Additionally, the portfolio's equally weighted structure ensures no single position becomes overly dominant, providing balance in a rapidly evolving market.

PORTFOLIO HOLDINGS

In January, we made no switches to the portfolio.

The Fund's second-best performer was KLA, with strong performance also seen in our other semiconductor equipment manufacturers, Lam Research and Applied Materials. Nvidia ended the month as the Fund's bottom performer. Having discussed semiconductor stocks above, we focus here on stocks in other industries.

Meta (+17.7% USD)

Meta's extraordinary run since the end of 2022 continued into 2025, with the stock ending the month as the Fund's top performer. Meta's outperformance relative to the market began soon after DeepSeek's announcement, with the market weighing up the implications for hyperscalers such as Meta, ultimately challenging the notion that significant capex spend is required in the development of cutting-edge AI. Meta has committed more than $60bn to capex in 2025, a step-up of at least 60% from 2024, with the vast majority focused on AI-related development. While Zuckerberg continued to commit to these continued heavy investments ("*We continue to believe heavily investing in the company's AI infrastructure will be a strategic advantage… It's possible that we'll learn otherwise at some point (re DeepSeek), but I just think it's way too early to call that.*"), the market is now placing weight on the notion that AI costs could eventually be tamed through alternative architectures/models (as DeepSeek have shown), and that the super-cycle in capex spend will not be infinitely long. At the very least, there are efficiency gains to be had. DeepSeek was not the only relevant Meta-related news during the month, with the firm printing a strong set of Q4 2024 earnings, with continued strength in both the top and bottom-lines, alongside key KPIs. Revenues were able to grow +21% over the quarter, as the firm continues to drive engagement through Daily Active Users (+5% year-on-year, a reacceleration from Q3) and Average Revenue Per User growth of +16% – with both an increase in both ad 'impressions' (+6% year on year) and pricing (+14%), reflecting strong advertising backdrop. While the core of the business was particularly strong, investor enthusiasm is in part driven by a healthy pipeline of innovations. To illustrate, Meta shared that Advantage+, its AI-powered advertising tool designed to automate and optimise ad campaigns across its platforms, hit a $20B revenue run-rate (+70% year-on-year) – which would represent approximately a tenth of 2024 sales. Meta is also growing uptake and engagement from Reels, WhatsApp, Threads, Business Ads on Messenger and more. These projects, which started as 'side bets', are increasingly contributing towards a healthy growth outlook. Meta is also delivering on the bottom line with operating margin expansion up 7% year-on-year. The main question for investors will remain the firm's substantial investment spend, but for 2025 management has set a clear guideline on what to expect, and the DeepSeek news has at the very least provided visibility towards a potentially reduced capex burden at some time in the future.

Thermo Fisher (+14.9% USD)

It was a strong start to the year for Thermo Fisher in which it recouped the vast majority of the weakness in its stock over the last six months and reached touching distance of its 52-week high. Thermo Fisher is the leading player in the provision of scientific solutions for healthcare purposes (with over 50% of the market). It provides scientific tools and instruments, reagents and consumables for diagnostics, and software for pharma, biotech and other healthcare companies. The firm struggled in the second half of 2024, with its Q3 results in line with management commentary but below high market expectations, following flat top-line growth (actual and organic) below expectations, with continued pressure from covid headwinds (c.3%). Thermo produced a strong 4Q 2024 earnings print in the final days of January, however, significantly beating expectations and driving a strong rebound in the share price. Pleasingly, this was supported by a healthy guide for 2025. Three of the firm's four segments significantly beat organic growth expectations, such that firmwide organic growth of 4.0% was 140 basis points ahead of consensus, and a significant step-up from the 0% print just a quarter before. This strength filtered through to the bottom line, with margins expanding 160 basis points driving an adjusted earnings per share (EPS) beat of 2.7%. The firm's guidance of 3-4% organic growth for 2025 (inclusive of a 1% covid tailwind) was taken positively by the market, with management indicating continued market share gains and improving global demand leading to a potential reacceleration towards historical, normalised, high-single-digit growth levels by the end of 2025. Although Thermo has faced numerous headwinds in recent years, we believe the outlook for the company remains robust, with covid issues continuing to ease and an improving spending environment within the biotech end-market. We believe Thermo Fisher is well positioned for growth, with a leading position in a market with sticky, recurring revenues and structural tailwinds in precision medicine and drug discovery tools. With organic growth trending towards management's long-term targets, the firm can continue

to supplement the top-line with M&A. Thermo Fisher's diversified market position in markets with sustained growth drivers is an enviable one, in our view.

Apple (-5.8% USD)

Apple ended January as the Funds second bottom performer. The stock fell 11% in the first three weeks (MSCI World +4.1% over the same period), before rebounding in the run up to earnings on the 30th January. Shares had generally been under pressure in the lead up to earnings, with analysts questioning whether Apple's AI offering, 'Apple Intelligence', was facilitating enough of a boost to sales amidst a downturn in the iPhone cycle. News in the month that local Chinese makers Vivo and Huawei had leapfrogged Apple to become the top two sellers in China over 2024 also raised questions over Apple's competitiveness in the region. In the final week of the month, Apple remained relatively insulated from the broader tech market rout, with Nvidia's market cap fall of just under $600bn making Apple once again the world's most valuable company. The firm released its Q1 (Fiscal Year 2025) earnings at the end of January, exhibiting a relatively clean quarter for Apple, with most areas in line with expectations and few negative surprises. iPhone sales (which account for 56% of the total) were mixed, with a miss driven by local competition and a destocking by distributors in China – although commentary around a strong end to the quarter reassured investors of an improvement in the region. There was also evidence that Apple Intelligence was positively impacting more than expected. Cycle-to-date, iPhone 16 sales are outpacing that of iPhone 15, and are stronger in markets where Apple Intelligence is already available. Apple is taking a staggered approach to rolling out Apple Intelligence, launching in English-speaking countries first. In April, Apple Intelligence will support several more languages including Chinese, a positive indicator for Q2 and a further reassurance to investors on the outlook for the region. Beyond iPhone, Apple performed very strongly. While Mac and iPad significantly beat expectations, the continued strength in Services was particularly encouraging. The segment is a remarkably sticky revenue stream, with near double the gross margin of 'Products'. With double-digit growth of +14%, a slight acceleration from last quarter, Services is now at all-time highs with respect to contribution to earnings (c.40%), with the segment also seeing strong gross margin expansion (75.0% vs 72.8% year-on-year). Services is a key element of our investment thesis, as its increasing contribution reduces Apple's reliance on cyclical iPhone sales and adds a significant level of stability to earnings. Given it is only 21% of sales, the fact it accounts for such a large proportion of earnings is underappreciated, in our view. Although iPhone may be in the bottom of a downcycle, the Apple ecosystem is continuing to strengthen, with the installed base growing 7% year-on-year to 2.35 billion devices, leaving the firm very well positioned for when the upcycle in iPhone arrives.

Danaher (-3.0% USD)

Danaher had a relatively weak month, as the firm's 2025 outlook disappointed investors. Danaher is a US conglomerate that specialises in life sciences, owning a portfolio of med-tech and scientific companies that provide tools for healthcare and research applications. Covid-19 was initially a boost to the firm's business due to high demand for testing, vaccines and bioprocessing tools, but these tailwinds eventually turned to headwinds, resulting in a multi-year reset of growth expectations. Post-pandemic, the firm has struggled to reinvigorate the top line, with its bioprocessing segment continuing to suffer from a prolonged correction phase as pharma companies have cut back on spending and destocked from existing inventories. The biotech industry more generally has also been in a downturn in spending due to tighter financing conditions. The firm reported results at the end of the month which drove a 9.7% sell-off in the stock on the day. Although results were relatively strong, investors were disappointed that a rebound towards more normalised growth trends, following what has been deemed a multi-year post pandemic reset, looks set to be delayed further. On the other hand, the company beat expectations on the top line (+1.6%) and was ahead of expectations for organic growth across all three segments. Management expressed confidence in the company's ability to return to long-term high-single-digit-growth on the top line, alongside double-digit EPS growth, but markets were ultimately disappointed with the 3% growth outlook for 2025, at roughly half the rate of expectations, driven by materially greater headwinds in the Chinese market than expected. Many sell-side analysts are questioning whether this truly is a slower recovery, or simply conservatism from management, given question marks over new policy implications from a new US administration with Robert F Kennedy Jr at the helm. Ultimately, whilst the short-term guidance is disappointing, we retain a positive long-term outlook on the stock given continued dissipation of headwinds, the fact that the firm is a best-in-class operator within the core bioprocessing end-market, exposure to end-markets that are supported by a number of long-term growth drivers (portfolio management allows the firm to focus on markets with the most growth potential), and a high-quality recurring revenue stream (80% of sales). We continue to see a good opportunity for a re-rating should the expected return to normalised growth trends emerge.

We thank you for your continued support.

Portfolio Managers
Matthew Page
Ian Mortimer

Investment Analysts
Sagar Thanki
Joseph Stephens
William van der Weyden
Jack Drew
Loshini Subendran
Eric Santa Menargues

GUINNESS GLOBAL INNOVATORS FUND - FUND FACTS

Fund size	$1327.7m
Fund launch	31.10.2014
OCF	0.81%
Benchmark	MSCI World TR

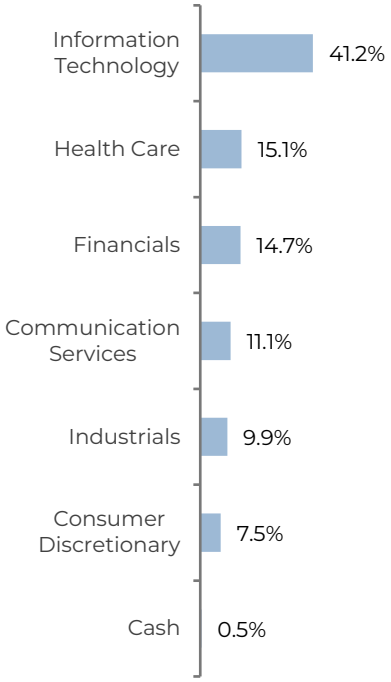
GUINNESS GLOBAL INNOVATORS FUND - PORTFOLIO

Top 10 holdings

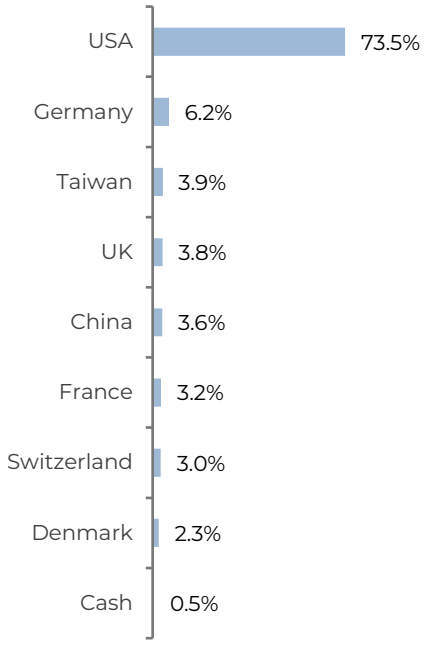
Amazon.com	3.9%
Mastercard Inc	3.9%
Taiwan Semiconductor	3.9%
Meta Platforms	3.8%
London Stock Exchange Group	3.8%
Visa	3.7%
Alphabet	3.7%
Netflix	3.7%
Anta Sports Products	3.6%
AMETEK	3.6%

Top 10 holdings	37.5%
Number of holdings	30

Sector



Country



Past performance does not predict future returns.

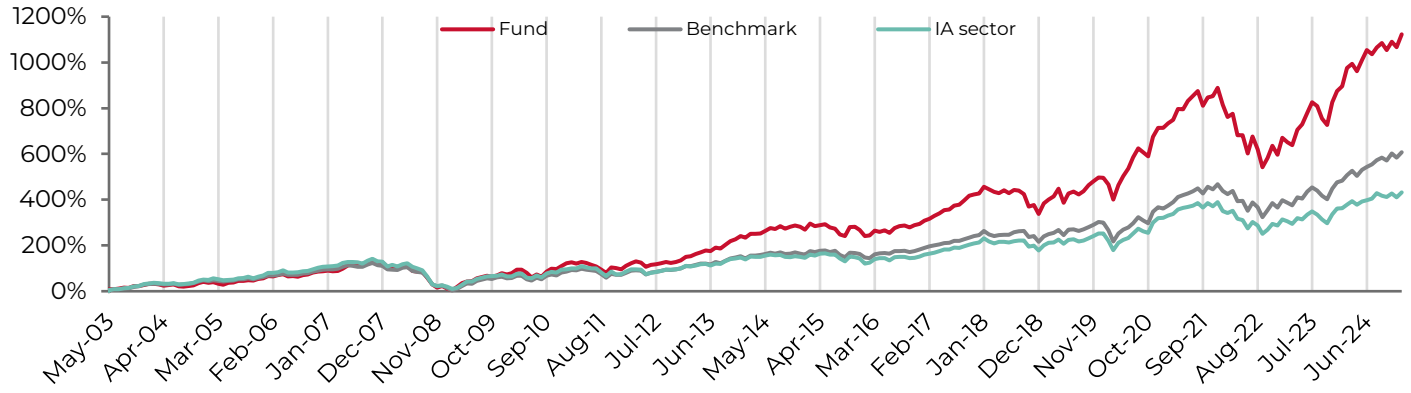
GUINNESS GLOBAL INNOVATORS FUND - CUMULATIVE PERFORMANCE

(GBP)	1 Month	YTD	1 yr	3 yr	5 yr	10 yr
Fund	+5.7%	+5.7%	+25.8%	+44.4%	+117.6%	+300.1%
MSCI World TR	+4.4%	+4.4%	+24.4%	+41.9%	+87.6%	+229.0%
IA Global TR	+5.0%	+5.0%	+17.7%	+27.6%	+60.3%	+161.7%
(USD)	**1 Month**	**YTD**	**1 yr**	**3 yr**	**5 yr**	**10 yr**
Fund	+4.8%	+4.8%	+22.7%	+33.8%	+105.1%	+231.8%
MSCI World TR	+3.5%	+3.5%	+21.4%	+31.5%	+76.9%	+172.2%
IA Global TR	+4.2%	+4.2%	+14.9%	+18.2%	+51.1%	+116.5%
(EUR)	**1 Month**	**YTD**	**1 yr**	**3 yr**	**5 yr**	**10 yr**
Fund	+4.4%	+4.4%	+28.3%	+44.3%	+118.7%	+259.0%
MSCI World TR	+3.1%	+3.1%	+26.9%	+41.8%	+88.5%	+195.4%
IA Global TR	+3.8%	+3.8%	+20.0%	+27.4%	+61.0%	+135.0%

GUINNESS GLOBAL INNOVATORS FUND - ANNUAL PERFORMANCE

(GBP)	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Fund	+21.9%	+32.1%	-20.7%	+22.6%	+32.1%	+31.3%	-11.9%	+22.0%	+27.7%	+2.0%
MSCI World TR	+20.8%	+16.8%	-7.8%	+22.9%	+12.3%	+22.7%	-3.0%	+11.8%	+28.2%	+4.9%
IA Global TR	+12.6%	+12.7%	-11.1%	+17.7%	+15.3%	+21.9%	-5.7%	+14.0%	+23.3%	+2.8%
(USD)	**2024**	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**
Fund	+19.7%	+40.0%	-29.6%	+21.5%	+36.3%	+36.6%	-17.0%	+33.6%	+7.2%	-3.5%
MSCI World TR	+18.7%	+23.8%	-18.1%	+21.8%	+15.9%	+27.7%	-8.7%	+22.4%	+7.5%	-0.9%
IA Global TR	+10.6%	+19.4%	-21.0%	+16.6%	+18.9%	+26.8%	-11.2%	+24.8%	+3.4%	-2.9%
(EUR)	**2024**	**2023**	**2022**	**2021**	**2020**	**2019**	**2018**	**2017**	**2016**	**2015**
Fund	+27.7%	+35.2%	-25.0%	+30.7%	+25.0%	+39.1%	-12.9%	+17.3%	+10.2%	+7.3%
MSCI World TR	+26.6%	+19.6%	-12.8%	+31.1%	+6.3%	+30.0%	-4.1%	+7.5%	+10.7%	+10.4%
IA Global TR	+18.0%	+15.4%	-15.8%	+25.5%	+9.1%	+29.2%	-6.8%	+9.6%	+6.5%	+8.2%

GUINNESS GLOBAL INNOVATORS FUND - PERFORMANCE SINCE LAUNCH (USD)



Simulated past performance prior to the launch of the Guinness Global Innovators Fund (31.10.14) reflecting a US mutual fund which has the same investment process since the strategy's launch on 01.05.03.
Source: FE fundinfo to 31.01.25. Investors should note that fees and expenses are charged to the capital of the Fund. This reduces the return on your investment by an amount equivalent to the Ongoing Charges Figure (OCF). The current OCF for the share class used for the fund performance returns is 0.81%. Returns for share classes with a different OCF will vary accordingly. Transaction costs also apply and are incurred when a fund buys or sells holdings. The performance returns do not reflect any initial charge; any such charge will also reduce the return. Graph data is in USD from 01.05.03.

WS GUINNESS GLOBAL INNOVATORS FUND - FUND FACTS

Fund size	£15.5m
Fund launch	30.12.2022
OCF	0.79%
Benchmark	MSCI World TR

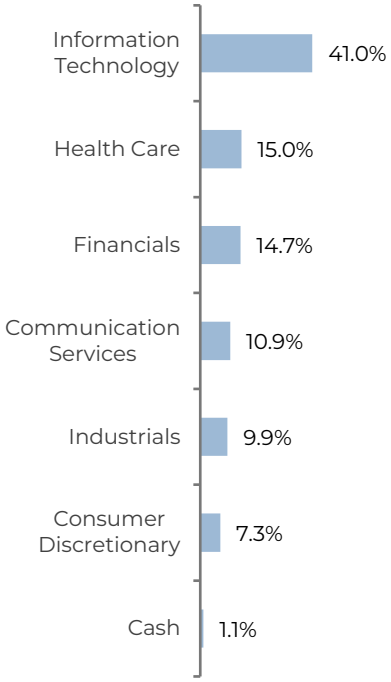
WS GUINNESS GLOBAL INNOVATORS FUND - PORTFOLIO

Top 10 holdings

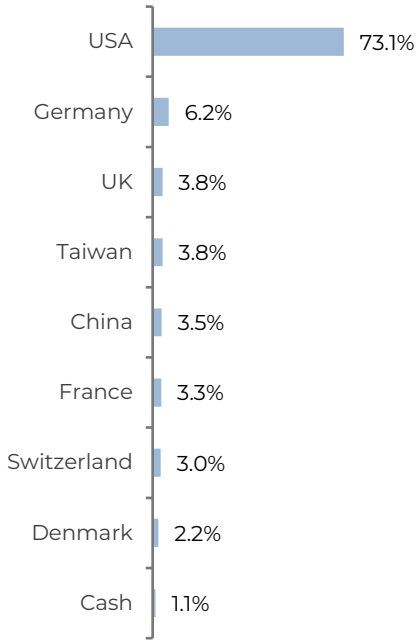
Mastercard Inc	3.9%
London Stock Exchange Group	3.8%
Taiwan Semiconductor	3.8%
Amazon.com	3.8%
Meta Platforms	3.7%
Visa	3.7%
Alphabet	3.6%
AMETEK	3.6%
Netflix	3.6%
Medtronic	3.5%

Top 10 holdings	37.1%
Number of holdings	30

Sector



Country



Past performance does not predict future returns.

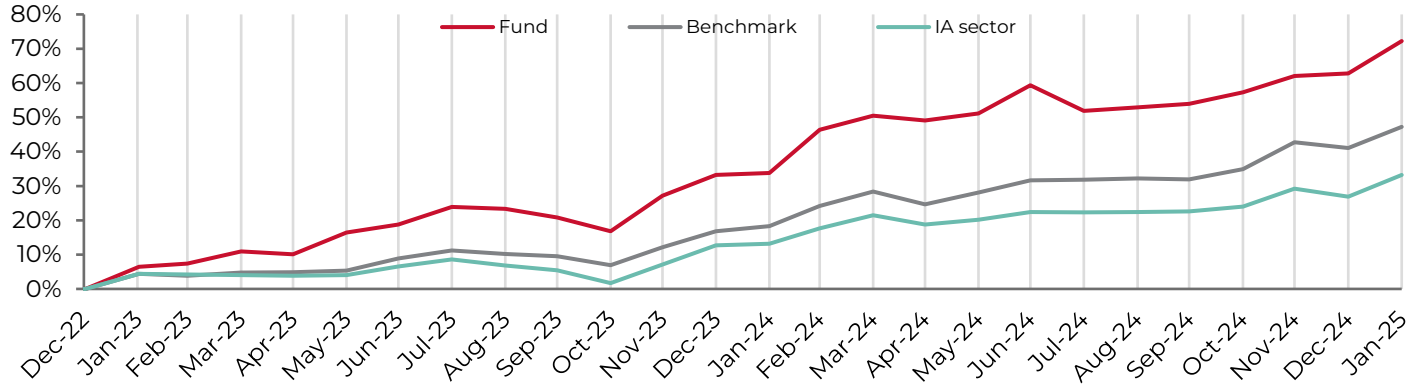
WS GUINNESS GLOBAL INNOVATORS FUND - CUMULATIVE PERFORMANCE

(GBP)	1 Month	YTD	1 yr	3 yr	5 yr	10 yr
Fund	+5.8%	+5.8%	+24.1%	-	-	-
MSCI World TR	+4.4%	+4.4%	+24.4%	-	-	-
IA Global TR	+5.0%	+5.0%	+17.7%	-	-	-

WS GUINNESS GLOBAL INNOVATORS FUND - ANNUAL PERFORMANCE

(GBP)	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Fund	+22.2%	+33.3%	-	-	-	-	-	-	-	-
MSCI World TR	+20.8%	+16.8%	-	-	-	-	-	-	-	-
IA Global TR	+12.6%	+12.7%	-	-	-	-	-	-	-	-

WS GUINNESS GLOBAL INNOVATORS FUND - PERFORMANCE SINCE LAUNCH (GBP)



Source: FE fundinfo to 31.01.25. Investors should note that fees and expenses are charged to the capital of the Fund. This reduces the return on your investment by an amount equivalent to the Ongoing Charges Figure (OCF). The current OCF for the share class used for the fund performance returns is 0.79%. Returns for share classes with a different OCF will vary accordingly. Transaction costs also apply and are incurred when a fund buys or sells holdings. The performance returns do not reflect any initial charge; any such charge will also reduce the return.

IMPORTANT INFORMATION

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This report is primarily designed to inform you about the Guinness Global Innovators Fund and the WS Guinness Global Innovators Fund. It may provide information about the Funds' portfolio, including recent activity and performance. It contains facts relating to the equity markets and our own interpretation. Any investment decision should take account of the subjectivity of the comments contained in the report. OCFs for all share classes are available on www.guinnessgi.com.

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GUINNESS GLOBAL INNOVATORS FUND

Documentation
The documentation needed to make an investment, including the Prospectus, Supplement, Key Information Document (KID), Key Investor Information Document (KIID) and the Application Form, is available in English from www.guinnessgi.com or free of charge from:
- the Manager: Waystone Management Company (IE) Limited (Waystone IE) 2nd Floor 35 Shelbourne Road, Ballsbridge, Dublin D04 A4E0, Ireland or the Promoter and Investment Manager: Guinness Asset Management Ltd, 18 Smith Square, London SW1P 3HZ.

Waystone IE is a company incorporated under the laws of Ireland having its registered office at 35 Shelbourne Rd, Ballsbridge, Dublin, D04 A4E0 Ireland, which is authorised by the Central Bank of Ireland, has appointed Guinness Asset Management Ltd as Investment Manager to this fund, and as Manager has the right to terminate the arrangements made for the marketing of funds in accordance with the UCITS Directive.

Investor Rights
A summary of investor rights in English is available here: https://www.waystone.com/waystone-policies/

Residency
In countries where the Fund is not registered for sale or in any other circumstances where its distribution is not authorised or is unlawful, the Fund should not be distributed to resident Retail Clients**. NOTE: THIS INVESTMENT IS NOT FOR SALE TO U.S. PERSONS.**

Structure & regulation
The Fund is a sub-fund of Guinness Asset Management Funds PLC (the "Company"), an open-ended umbrella-type investment company, incorporated in Ireland and authorised and supervised by the Central Bank of Ireland, which operates under EU legislation. If you are in any doubt about the suitability of investing in this Fund, please consult your investment or other professional adviser.

Switzerland
This is an advertising document. The prospectus and KID for Switzerland, the articles of association, and the annual and semi-annual reports can be obtained free of charge from the representative in Switzerland, REYL & Cie S.A., Rue du Rhône 4, 1204 Geneva, Switzerland. The paying agent is Banque Cantonale de Genève, 17 Quai de l'Ile, 1204 Geneva, Switzerland.

Singapore
The Fund is not authorised or recognised by the Monetary Authority of Singapore ("MAS") and shares are not allowed to be offered to the retail public. The Fund is registered with the MAS as a Restricted Foreign Scheme. Shares of the Fund may only be offered to institutional and accredited investors (as defined in the Securities and Futures Act (Cap.289)) ('SFA') and this material is limited to the investors in those categories.

WS GUINNESS GLOBAL INNOVATORS FUND

Documentation
The documentation needed to make an investment, including the Prospectus, the Key Investor Information Document (KIID) and the Application Form, is available in English from www.fundsolutions.net/uk/guinness-global-investors/ or free of charge from:-

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DL1 9UF
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Dealing: ordergroup@waystone.com

Waystone Management (UK) Limited is authorised and regulated by the Financial Conduct Authority.

Residency
In countries where the Fund is not registered for sale or in any other circumstances where its distribution is not authorised or is unlawful, the Fund should not be distributed to resident Retail Clients.
.

Structure & regulation
The Fund is a sub-fund of WS Guinness Investment Funds, an investment company with variable capital incorporated with limited liability and registered by the Financial Conduct Authority.

Telephone calls will be recorded and monitored.