BlueBox Funds - BlueBox Global Technology Fund
Direct Connection

Global Technology Fund

bluebox

***This is a marketing communication**. Please refer to the Prospectus and KID of the Fund for more information on general terms, risks, and fees. Investors should only invest in the Fund once they have reviewed the Prospectus and KID before making any final investment decisions.*

PM Ad-hoc Market Commentary on Tech Volatility

Last week a Chinese company called DeepSeek released a new AI model called DeepSeek-R1, which performed extremely well, apparently roughly on a par with the most sophisticated Western models. This morning the market took on board just how cheaply DeepSeek claims to have trained the model – for orders of magnitude less investment, and on comparatively old processors from NVIDIA. This has taken many AI-related stocks down by between 5% to 15% during today's US trading, on the basis that the scale of spending required to train and deploy artificial intelligence might be far lower than previously expected, generating less revenue for NVIDIA and others, and bringing an end to the "AI Bubble" and Technology sector outperformance. This seems dubious on all sort of levels, as even if the details are correct, the dramatic cost reduction is likely to be good for technology spend, not bad.

First: are the numbers correct? The model's performance is clearly very good, although there are suggestions that it is particularly suited to maths and science issues and performs far less well on more general tasks. However, with the release occurring between President Trump's inauguration and Chinese New Year, one has to wonder whether politics are at play here, with China trying to score a point over the US by understating training costs and possibly also inference; and maybe also not mentioning the deployment of a possible stash of smuggled leading-edge NVIDIA chips that have evaded the US embargo. The object here would be to magnify Chinese AI capabilities despite the import restrictions, while casting doubt on US leadership in the field.

Second: is this as a big a leap forward as many are claiming? There seems to be considerable disagreement on this, from normally reliable sources. Many in the industry are declaring R1 to be "AI's sputnik moment" (Marc Andreessen) or the like, while other observers believe that "it is not a game changer, and on the contrary fits very well with the way we have seen the industry evolving in the last 3 years" (New Street Research). Many people are highlighting R1's efficient use of a Mixture of Experts architecture, where only specialised portions of the model are in operation at a given moment, but I understand that MoE was developed in the 1990s and is already in use in other models, for example from Mistral.

Third: if the dramatic reduction in training and inference cost is correct, is that a bad thing for tech? As I have suggested in previous notes and commentaries, NVIDIA is currently acting as a near-perfect bottleneck for AI spend, and has been over-earning as a result, imposing an unsustainable "NVIDIA Tax" of maybe $10 billion a quarter on the industry. As a result, the entire tech sector (except NVIDIA) has been trying to work out how to get a non-NVIDIA chip into an NVIDIA slot, and we have all been wondering what the processor will be that finally competes successfully with NVIDIA's newest GPUs, collapsing its pricing power and eliminating the NVIDIA Tax. If what we are told by DeepSeek is correct, the answer is "an older NVIDIA chip and clever engineering". That would be superb news for everyone except NVIDIA, as AI investment will become far cheaper and thus be much more likely to generate a positive return.

What we have here is Jevon's Paradox: if use of a resource becomes significantly more efficient due to technological progress, the use of that resource actually increases rather declines. This has been the history of the tech sector for 70 years: as semiconductor transistors became ever cheaper to create, their use increased exponentially. Many bearish commentators have been questioning whether the huge sums projected to be invested in AI could ever be justified by the likely returns – but if AI has just become 90% cheaper, those returns are now far more likely to be positive, and potentially more than 10 times as many AI projects will be undertaken, increasing the overall investment in AI.

As we have been suggesting for many months, a reset for NVIDIA's over-earning has seemed due for a while, but when it finally arrived, it should not be seen as the end of the AI boom or of technology spending, but an accelerant. In the medium term it is even good for NVIDIA itself, as its products would offer far more value to their users … although there would likely be a sharp correction in the stock between here and there!

In conclusion: we don't actually yet know whether DeepSeek-R1 is either as cheap or as revolutionary as many are claiming today; and even if it is, that is more likely to increase demand for technology enablers than reduce it. There might well be a period of adjustment first, with NVIDIA the biggest immediate loser, but it doesn't threaten the underlying 15% trend growth that the Information Technology industry has seen over the past 16 years, constrained not by demand, but by supply.

Finally, it is worth noting that after a very strong start to the year, we made numerous adjustments to the portfolio last week, trimming many of the recent winners that are down heavily today, notably NVIDIA, semiconductor production equipment, Arista and TSMC. On the other side, we added to several of the software names that are now rising on the hope of reduced AI capital intensity. Few of these changes were in themselves material, but the overall effect will have been to reduce the overall impact of today's tech correction.

William de Gale
Lead Manager - BlueBox Global Technology
27 January 2025