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NEWSLETTER | Q2 2025

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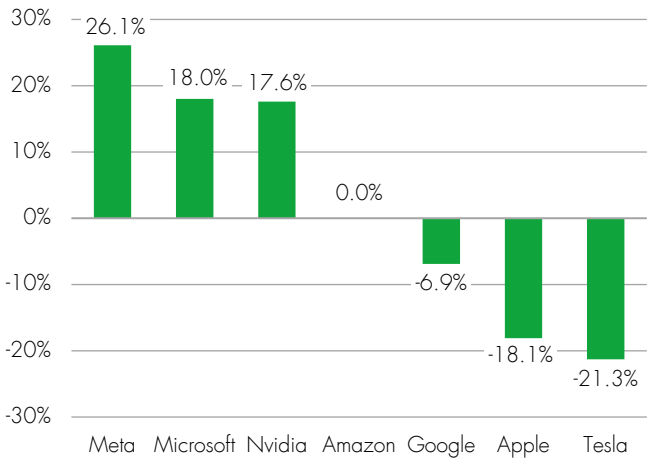
Q2 2025 COMMENT

MARK HAWTIN, HEAD OF THE GLOBAL EQUITIES TEAM

The first half of 2025 gave us a real flavour of life without the concentration of winners amongst US (exceptionalist) mega caps. Indeed, within the MSCI World ACWI index, only 6% of performance was attributable to those seven names combined. Admittedly, that was also due to the unusual dispersion of returns within those seven names ranging from Tesla at the bottom, down 21.3% in the first half of the year, to Meta at the top, up 26.1%.

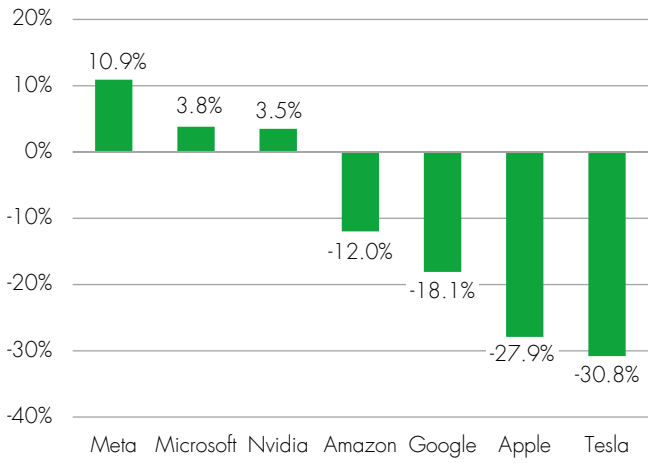
What made the dispersion and rotation even more pronounced was the impact of a weaker US dollar on available returns to equity investors. The euro rose by 13.8% against the US dollar in the first half, resulting in both depressed returns for non-US investors and also the lure of exciting returns for US investors outside their home market. The graphs below show the returns from M7 names in both US dollars and euros to highlight this point.

Returns in US dollars



Source: Bloomberg, June 2025. **Past performance does not predict future returns.**

Returns in euros



Source: Bloomberg, June 2025.**Past performance does not predict future returns.**

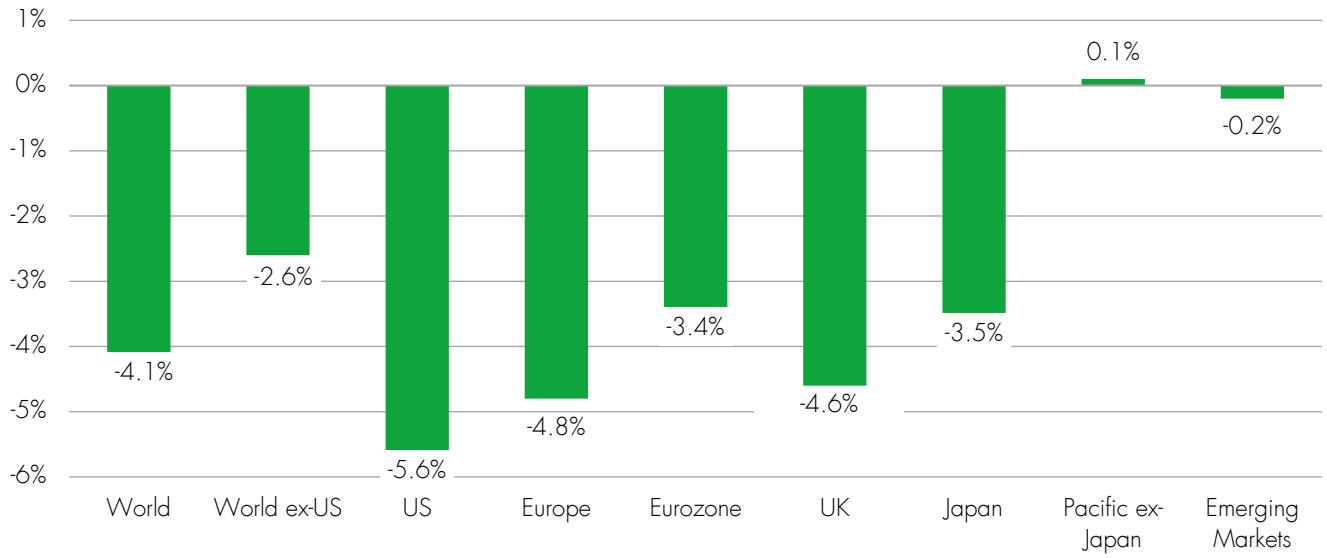
We can start to see that for the first time in many years, investors are being asked to question the multi-year trade of passive S&P focused investments. A US dollar investor was able to make significantly more from international markets. While +5.5% was on offer from the S&P 500, the DAX in Germany gave a US dollar return of 35.9% in the first half!; the Nikkei, also in US dollars, provided +10.6%, and the UK FTSE 100 +17.4%.

However, it was not as simple as a geographical allocation decision; the almost 7% return from the STOXX Europe 600 in the first half of the year was attributable entirely to banks, SAP, Siemens Energy and Rheinmetall. Investors needed to be highly active in both the geographical allocation and stock picking for best results.

In addition to better equity returns being available outside the US, alternative assets pushed on too. Gold rallied by 25.9% and Bitcoin by 14.8% as concerns mounted over the solidity of the US dollar and the level of interest being required to service America's ballooning debt levels. At the same time, the vacillations of the US administration raised levels of volatility.

On fundamentals, earnings expectations have been cut across all geographies except for emerging markets. The chart below from SG Cross Asset Research shows the US has led with a full 5% of cuts in growth forecasts.

Returns in US dollars



Source: SG Cross Asset Research/Equity Quant, I/B/E/S, June 2025. Past performance does not predict future returns.

This trend will need to stabilise in the second half of the year to avoid a profit decline in some markets. The second quarter reporting season therefore takes on added significance.

The Initial Public Offering (IPO) market was a highlight of the first half of 2025 – $100 billion of IPO proceeds in the US market was the highest level of activity since 2021 (Source: Pitchbook, June 2025). The rest of the world was more muted and has not seen returning volumes, but US tech-led deals blazed the trail. The biggest among these were a number of eagerly anticipated tech names. CoreWeave (AI infrastructure) and Circle Internet (stablecoins) made stunning debuts, rising by 407% and 584% respectively to 30 June 2025. In both cases, these are sizable companies ending the half year with market caps of $78 billion and $40 billion. The surge in share prices has led to nosebleed valuations; CoreWeave trades at a half year end valuation of 17.3x revenues and Circle at 16x.

Both of these companies play into topical themes, and we have written about these below. CoreWeave is a provider of AI infrastructure on a subscription basis to companies needing additional compute (see Tech Stack or Smoke Stack) while Circle is a leading stablecoin issuer (see Stablecoin Summer – Full Circle).

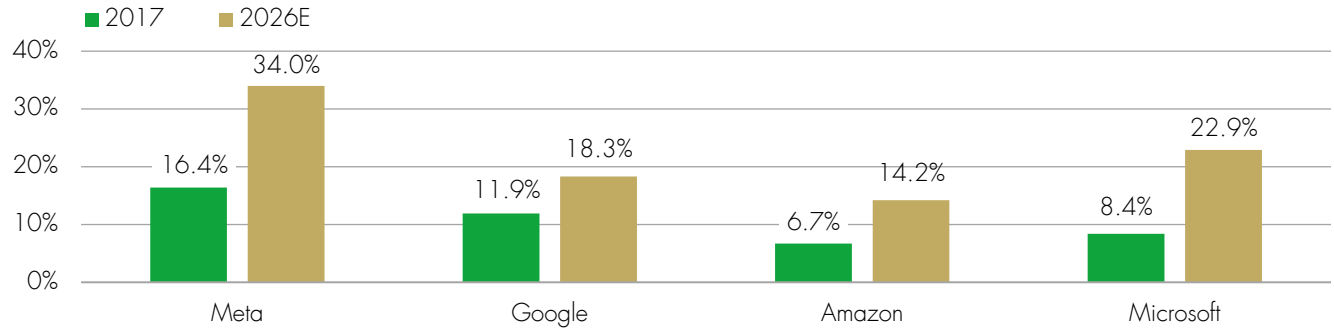
Tech stack or smoke stack – who wins in AI?

MARK HAWTIN, HEAD OF THE GLOBAL EQUITIES TEAM

Since the launch of the smart phone and the creation of the network opportunity across billions of connected devices, one of the much vaunted characteristics of the most successful companies has been their capex light models. The concept that it was an advantage not to own assets but rather to be the platform for the assets of others created a new breed of highly profitable companies generating market leading returns in less than a decade of existence.

Google and Meta, in particular, built businesses that have taken well over 50% of the global advertising market in a very short space of time, creating combined revenues that grew from about $150 billion in 2017 to a forecast $640 billion in 2026. However, the era of AI has changed the dynamic for return creation going forward and, with it, a degree of uncertainty about the incremental returns that can be earned on substantial capital expenditure increases. The chart below shows the level of capex/revenues for 2017 and 2026 estimated. Capital intensity has increased dramatically, making yesterday's asset light business models into the smoke stack companies of the AI world – in fact, they are now some of the most capital intensive companies in any sector globally.

Capital expenditure as a % of revenues

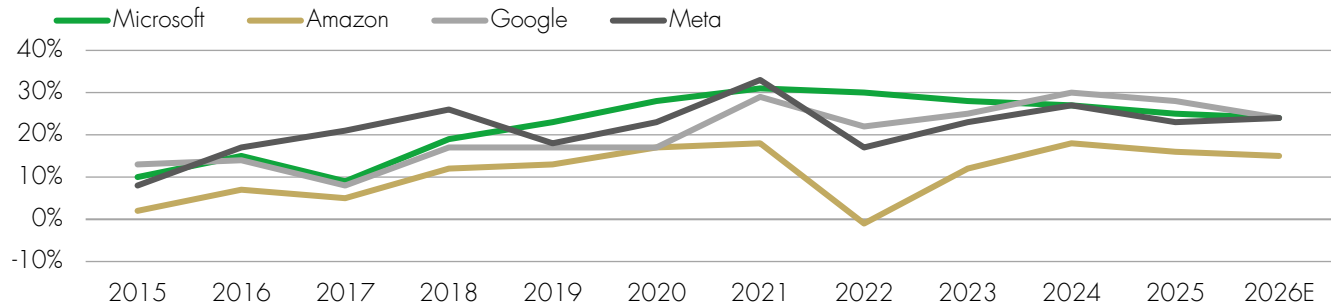


Source: Bloomberg, Liontrust, June 2025. Past performance does not predict future returns.

The question that remains hotly contested is: will these investments in substantial amounts of AI infrastructure generate a better return than if the spending was not targeted at this area or even to capital expenditure projects at all. Apple now generates over 60% returns on invested capital (ROIC) through its capital allocation policy to return money to shareholders.

As the chart below shows, while returns remain solid, increased capital spending has started to dampen ROIC for the mega scalers. Meta is the exception, suggesting that where a company has sufficient proprietary data and this data set is sizable, it is possible to earn a return on investment.

Return on invested capital (%)

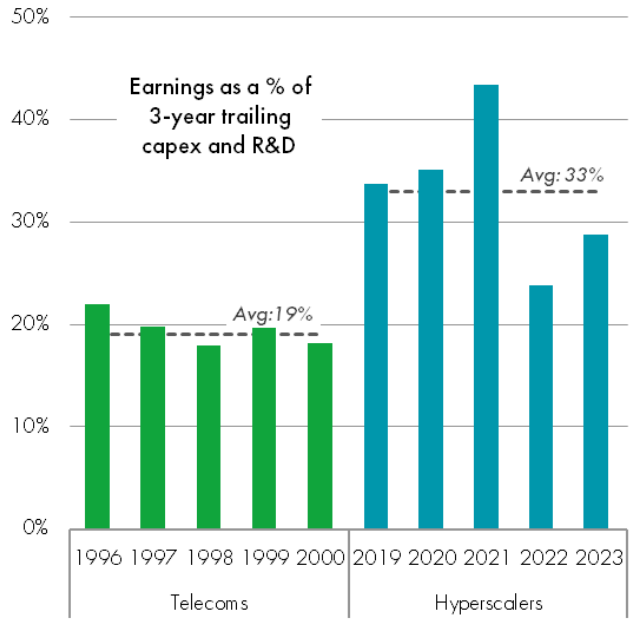


Source: Goldman Sachs, Consensus estimates, June 2025. Past performance does not predict future returns.

The critical piece of the puzzle now in determining what happens to the ROIC looking forward is being able to see what revenues can be generated from the AI spending frenzy. There is very little information on which to make this analysis. Microsoft has indicated that AI ventures have already generated $13 billion in annual revenue and Open AI has stated that annualised revenue is currently running at $10 billion. While this is impressive on one level, as new software companies or revenue streams accelerate to multi-billion dollar levels in a short period, the capital expenditures being undertaken to deliver this are just off the scale. UBS forecasts total AI capex at $360 billion in 2025, rising to $480 billion in 2026. Much of this sits in the hands of a very few mega scale companies that are flush with cash and publicly state the risk of missing out far exceeds the risk of losing money. Luckily, these companies are in a position to make that call with plenty of cash available, but whether shareholders will see any benefit remains to be seen.

It is worth reminding ourselves of the 1999-2000 capex binge that led to miles and miles of surplus cable capacity being built for the expansion of the Internet. Much of that capacity is still redundant today. The charts below from Goldman Sachs show the returns required back then and today from capital intensity. The realised return on investment (ROI) of -120% for telecoms in 2001 is a salutary reminder that trees don't grow to the sky.

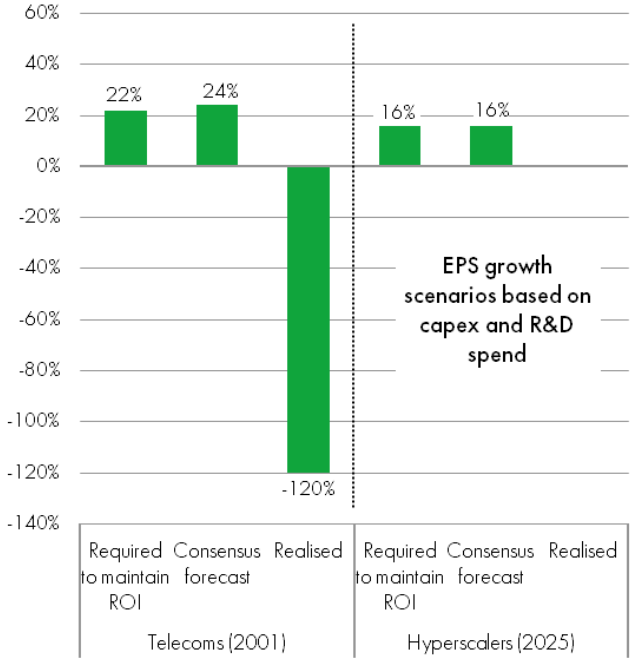
Comparing the "ROI" between late 1990s and today



Source: Compustat, Goldman Sachs Global Investment Research, June 2025. Past performance does not predict future returns.

R&D = Research and Development.

Required earnings growth to maintain recent "ROI"



Source: Compustat, Goldman Sachs Global Investment Research, June 2025. Past performance does not predict future returns.

EPS = Earnings Per Share.

In the AI iteration of capital intensity, we believe the playbook will definitely look different. First, the spending to date has been largely driven by a small number of cash-rich companies that can afford to take the risk. The worst outcome will not be the bankruptcies of the 2000s, where companies could not service their debts. It will instead be writing off investments with commensurate lowering of the ROIC.

Markets do not necessarily care that the impact on returns and shareholders has been negligible – Meta spent over $10 billion on VR (Virtual Reality) and AR (Augmented Reality) in its last big expenditure gamble. In the AI world, all capital expense is, at the very least, a useful expense in the sense that the capacity will be used, unlike after the cable mania of the 2000s. However the counter to this is that without significant AI revenues, the cost of AI will be pushed down to almost zero. This creates an exciting new world for the users of AI and maybe the mega scalers see that in their spending – Meta, Google, Amazon and Microsoft all have massive, unique data lakes that allow them to extend their competitive advantages.

It is for this reason we continue to favour those companies which use AI effectively across all sectors as well as those that both build it and use it like the hyper scalers. What makes us more nervous are those companies that sit in the capex supply chain or those which only offer AI cloud infrastructure for rent, such as CoreWeave that came to the market recently. Telecom companies learned in the 2000s that it was not sufficient to own the pipes alone; we expect that AI providers will discover the same this time around. It is ownership of data that will define the winners.

A new dawn in Alzheimer's therapy?

KEVIN KRUCZYNSKI, FUND MANAGER, GLOBAL EQUITIES TEAM

Alzheimer's disease is often referred to as one of the final frontiers in drug discovery. It represents one of the most complex, elusive and high stakes areas in medical research. It is one of the most formidable challenges in neuroscience and drug development due to the complexity of the brain, the long pre-clinical phase of the disease and the difficulty in measuring outcomes.

The stakes are high

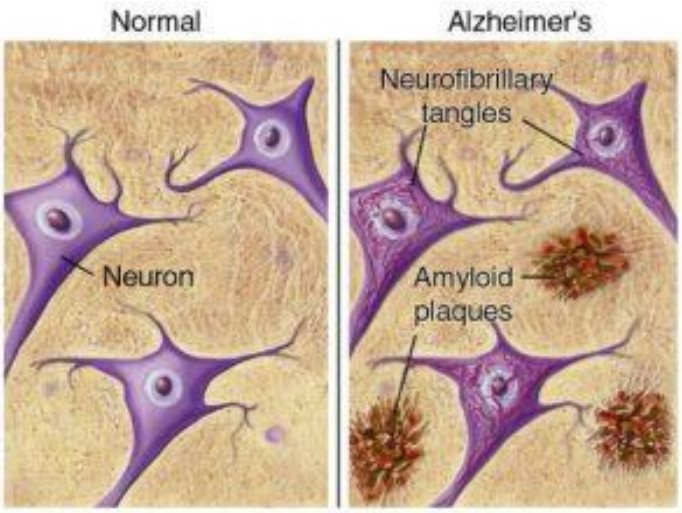
Alzheimer's disease and other forms of dementia are unfortunately common; many readers will likely know someone affected by these conditions. Alzheimer's disease is a progressive neurological disorder that unfolds gradually, impacting memory, cognitive functions and daily activities.

The preclinical stage involves brain changes occurring years before any symptoms emerge. This is followed by mild cognitive impairment, characterized by subtle memory issues while maintaining independence. In the early stage of mild dementia, noticeable memory lapses may occur, such as difficulty in word-finding or becoming disoriented. The middle stage, or moderate dementia, sees increased confusion, mood fluctuations, challenges with daily tasks and behavioural changes. The late stage, or severe dementia, results in individuals losing the ability to communicate, recognize loved ones or control movements, necessitating full-time care.

Beyond the significant emotional and personal toll, the economic cost of Alzheimer's disease and other dementias is substantial. Annually, unpaid care, social care and healthcare costs amount to an estimated $1.3 trillion, with this figure projected to more than double by 2030.

The amyloid hypothesis

Until recent advancements, most treatments focused on managing the disease's symptoms rather than addressing its root cause. The amyloid hypothesis proposes that Alzheimer's disease is caused by an accumulation of amyloid beta protein fragments in the brain. These fragments clump together, disrupting communication between brain cells and eventually causing cell death. This hypothesis has guided research since the early 1990s, following the pioneering work of Professor John Hardy and his team at University College London (UCL). They first identified genetic mutations associated with certain types of Alzheimer's and then observed the build-up of amyloid beta plaques in patients. The key question is whether eliminating this build-up of amyloid will stop the disease's progress?

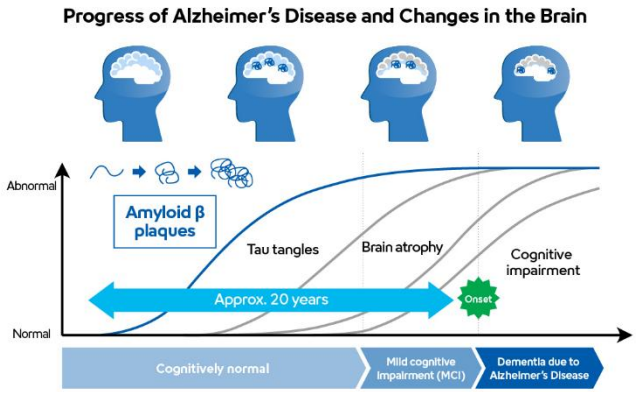


Source: Understanding Plaques and Tangles in Alzheimer's Disease | Kinesiology, UNC Greensboro, 24 February 2025.

Major breakthroughs?

There have been several advancements in anti-amyloid treatments, with new medications such as Eisai's Lecanemab and Eli Lilly's Donanemab demonstrating effectiveness in clearing amyloid from the brain and decelerating the progression of the disease by up to 35% in clinical trials. However, the real-world results have been less impressive. In the US, physicians have been reluctant to prescribe these medications, and many health systems globally have refused to cover the costs.

The recent decision by the National Institute for Health and Care Excellence (NICE), one of the primary decision-making bodies for the NHS in the UK, not to cover the estimated $30,000 annual cost highlights the issues, concluding that these drugs offer only modest benefits and require significant resources to administer via intravenous infusion and the necessary scans for diagnosis and monitoring.



Source: sysmex.co.jp/en/dementia. Modified from Jack CR Jr et al., Lancet Neurol, 2010.

Does this disprove the amyloid hypothesis? A significant challenge is that by the time patients typically exhibit symptoms and become eligible for these treatments, the brain damage incurred during the long, multi-decade pre-clinical stage is irreversible. By focusing trials on symptomatic patients or those already at an advanced stage of the disease, the best achievable outcome is a deceleration of decline. However, if we can diagnose the disease earlier in its course, when patients are still cognitively normal, the outcomes could be substantially different.

A new hope

There are several imminent developments poised to significantly alter the landscape. Blood-based diagnostics developed by companies such as Sysmex are on the verge of receiving regulatory approval. These diagnostics can detect specific proteins in the blood many years before symptoms manifest, offering a simpler and more cost-effective alternative to brain scans and lumbar punctures.

The next generation of treatments, such as Eli Lilly's Remternetug, currently in phase 3 trials, will be administered subcutaneously, like insulin pens.

Looking further ahead, primary prevention trials are exploring the administration of anti-amyloid drugs to individuals genetically at risk, up to 25 years before the expected onset of symptoms. Additionally, combination treatments that address both amyloid beta accumulation and associated Tau tangles are under investigation. These have the potential to transform Alzheimer's disease into a manageable chronic condition, akin to the advancements in HIV treatments during the 1990s.

What about the cost?

The recent decision by NICE primarily focused on quantifiable costs to the NHS and observable benefits, but it did not consider the quality of life and financial implications for patients and their families. A more holistic analysis could potentially lead to different conclusions. The cost of housing a dementia patient in a care home with specialist nursing care exceeds $100,000 a year and is increasing. Additionally, the benefits of having patients and their caregivers remain in the workforce for longer are likely to be substantial.

Tackling Alzheimer's disease is a significant challenge, but recent advancements in diagnostics and treatments offer hope. Early diagnosis and innovative therapies are paving the way for better management of the condition, potentially improving patients' quality of life to a degree where the benefits will far exceed the costs. While obstacles remain, the progress made signifies a crucial step forward.

Unlocking growth: the incredible power of networks

DAVID GOODMAN, FUND MANAGER, GLOBAL EQUITIES TEAM

Ever since Facebook first emerged in the mid-2000s, the concept of network effects has become one of the most powerful and often most misunderstood drivers of value in the modern economy. Defined as the phenomenon where the value or utility of a product, service or platform increases as more people use it, each additional user makes the network more valuable for all existing users. Understanding network effects has become crucial for unlocking a company's growth potential and, consequently, its ability to achieve market dominance.

The Liontrust Global Equities team continually hunts, monitors and measures network effects in companies. How can we fully understand this phenomenon to ensure we stay ahead of the curve?

What are network effects?

A network effect occurs when a product or service becomes more valuable as more people use it. This self-reinforcing loop can lead to exponential growth and the creation of strong competitive advantages, known as moats. These moats, established by network effects, make it exceptionally difficult for competitors to dislodge market leaders, providing a sense of security and confidence for investors. The network effect often results in a "winner takes most" scenario.

The two main types of network effects

Direct network effects, also known as same-side effects, occur when the value of a product or service increases directly with the number of users. Classic examples include social networks and messaging apps – each new user adds value for everyone else by expanding the pool of possible connections. For instance, WhatsApp becomes more useful as more friends and contacts join, making communication easier and more comprehensive.

Indirect network effects, sometimes called cross-side or two-sided effects, occur when users on one platform attract users from another and vice versa. This is typical of marketplaces and platforms connecting distinct user groups, such as Uber's drivers and riders or eBay's buyers and sellers.

Uber: Poster child example

Uber's ascent is a textbook case of leveraging network effects to achieve scale and defensibility. By rapidly onboarding both drivers and riders in new cities, Uber hit critical mass faster than its rivals. As more drivers joined, wait times dropped and coverage improved, attracting more riders. This, in turn, made driving for Uber more attractive, creating a virtuous cycle. Today, Uber's entrenched network of drivers and riders forms a powerful economic moat, making it extremely difficult for new entrants to compete without massive investment and subsidies.

How the market misunderstands network effects

Despite their prevalence, markets often fail to understand network effects. Many investors focus on a company's early growth metrics, failing to recognise whether that growth is underpinned by true network effects or aggressive marketing spend. The distinction is critical; only genuine network effects create a durable economic moat, making it increasingly hard for competitors to catch up as the network scales.

A common misconception is that all fast-growing platforms have network effects. In reality, only those where each additional user increases value for others—either directly or indirectly—enjoy the compounding benefits that lead to long-term dominance. Without this, growth can stall or reverse as competition intensifies. Crucially, companies achieving rapid growth through aggressive marketing spend do not necessarily indicate the presence of network effects.

Network effects enable growth, while high switching costs keep customers on side

High switching costs are a significant barrier to exit, enabling companies like Microsoft, Amazon and Apple to maintain their dominance, even after network effects have helped them scale to new heights.

For users of Microsoft, the idea of moving platforms becomes intimidating once a business has integrated its operations into the Office 365 and Windows ecosystem, becoming dependent on its interconnected workflows, proprietary file formats and extensive user training. Transitioning to a competitor would involve substantial costs, including retraining, data migration and potential compatibility issues with partners and clients who use Microsoft systems.

Similarly, Amazon's Prime ecosystem keeps customers tied to the platform. Years of accumulated purchase history, personalised recommendations and exclusive services like Prime Video and fast shipping make it inconvenient for consumers to switch to another retailer, even if lower prices are available elsewhere. Which brings us to Apple's walled garden. Users who have invested in iPhones, iPads, Macs and a collection of apps and media are not only faced with technical challenges in moving their data, but also the loss of seamless device integration and exclusive features.

Examples today

Intuitive Surgical, the manufacturer of the da Vinci robotic surgery system, benefits from indirect network effects. As more hospitals adopt the da Vinci system, an increasing number of surgeons receive training on it, leading to the collection of more data that enhances surgical procedures, making the da Vinci system even more effective.

This growth creates an ecosystem of trained professionals, support staff and third-party tool developers. As a result, training, support and compatibility improve, making the system more attractive to new adopters and reinforcing Intuitive Surgical's leadership in robotic surgery.

Omnicell, a leader in automated medication management, benefits from indirect network effects. As more hospitals, healthcare providers and pharmacies adopt Omnicell's solutions, the platform becomes more valuable due to improved data sharing, workflow integration and the dissemination of best practices.

Omnicell creates significant network lock-in, making it hard for institutions to switch providers without disrupting operations. Its cloud-based analytics and SaaS offerings further enhance predictive tools, benefiting all users. This integration and data-driven approach ensures that Omnicell's network becomes increasingly essential and increasingly hard to exit.

Atlassian, the enterprise software company behind collaboration tools such as Jira and Confluence, benefits from a direct network effect as more teams and organisations adopt its products. The platform's value increases with the number of integrations, plug-ins and shared workflows across teams. High switching costs arise because businesses deeply embed Atlassian tools into their project management processes, with custom configurations, historical data and employee training making migration to a rival platform complex and costly.

These companies illustrate how network effects, when reinforced by high switching costs, can create durable competitive advantages even for firms outside the tech mega-cap club.

The economic moat of network effects: A competitive advantage

Network effects are the hidden engine behind many of today's most successful companies. They drive exponential growth, create formidable barriers to entry and underpin the enduring dominance of market leaders. For analysts and investors, recognising genuine network effects is essential to identifying companies with the potential for long-term success in an increasingly interconnected world.

Stablecoin summer – full circle

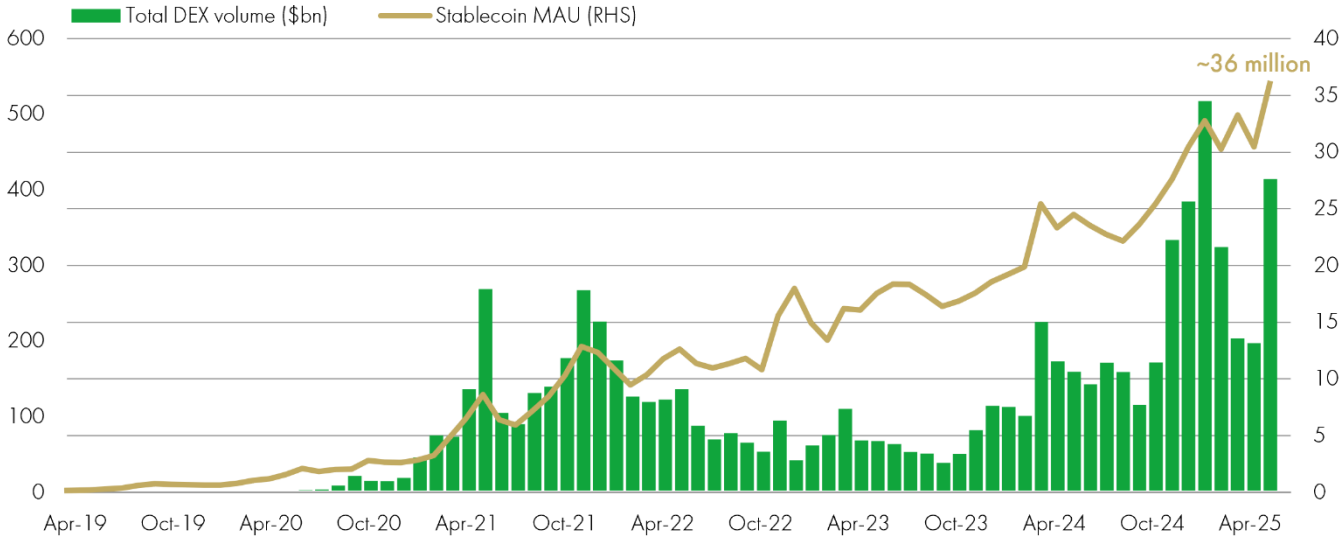
PIERAN MARU, FUND MANAGER, GLOBAL EQUITIES TEAM

Stablecoins – digital assets pegged to stable fiat currencies such as the US dollar – have evolved dramatically since their early use in crypto trading. Originally designed to simplify the exchange of cryptocurrencies, they have rapidly found product-market fit in the infrastructure layer for global payments, remittances and cross-border business to business (B2B) transactions.

To the average consumer, payments seem simple – just a tap to pay. But behind this seamless experience lies a complex web of intermediaries: point-of-sale systems, acquiring banks, issuing banks, payment processors, FX conversion layers and card networks, with each adding cost, latency and complexity. Stablecoins, a tokenised currency on public blockchains, can cut through this friction. We can now send dollars across the globe in under one second and for less than one cent. This is not just an incremental improvement – it is a leap forward, especially when including instant settlement and transparency. Stablecoins are no longer just a crypto trading tool; they are solving deep inefficiencies embedded in the architecture of global finance.

While volatility has long defined crypto trading and decentralised exchange volumes, stablecoins tell a different story. Their activity has shown consistent, upward momentum, steadily growing through periods of market turbulence. As the chart below illustrates, this resilience highlights their expanding role far beyond crypto trading, binding their place in real-world payment applications.

DEX trading volume ($bn) versus monthly active Stablecoin addresses (mn)

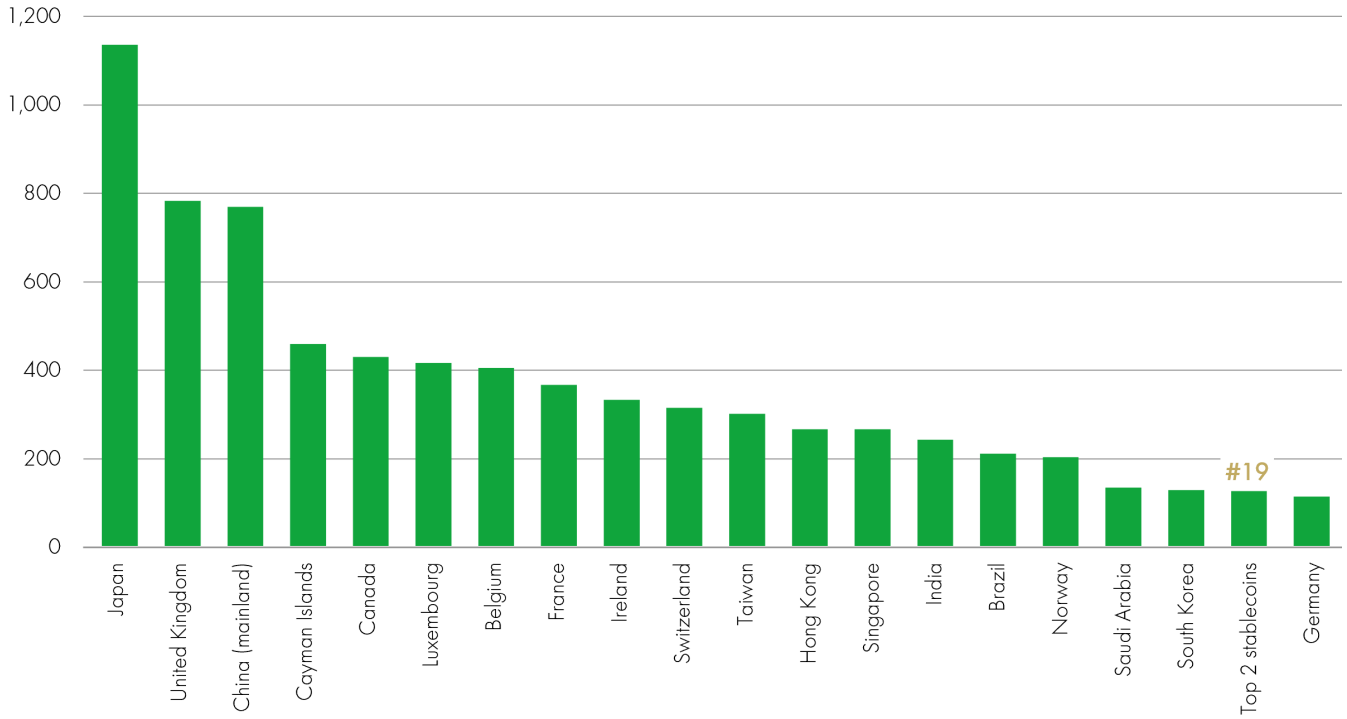


Source: Artemis Terminal, The Block, Bernstein analysis, June 2025. Past performance does not predict future returns.

Even more remarkable is the sheer volume processed via stablecoins. Today, they handle nearly 20 times PayPal's transaction volume, with last year's annual transfer volume surpassing the combined volume of Visa and Mastercard by 7.7% – and rapidly closing in on the scale of the Automated Clearing House (ACH) network.

In only a decade, stablecoins have become the 19th largest holders of US Treasuries, rivalling sovereign nations. Citi recently projected that by 2030, total stablecoin assets could hit $3.7 trillion, placing them at the very top of the international leaderboard for US Treasury holdings.

Top international holdings of US treasuries (billions)



Note: US Department of the Treasury, as of March 2025; Source: FRED, DefiLlama, Visa on-chain analytics, Company filings, Bloomberg, Bernstein analysis, June 2025.

Use cases

With increased efficiency, improved transparency and enhanced resilience, stablecoins are solving problems now, with use cases multiplying across industries. On the retail front, margin sensitive businesses are the biggest beneficiaries. Think coffee shops, newsagents and locally run restaurants who can add 2% directly to the bottom line – potentially doubling profits. But the deepest disruption currently is hitting global remittance and B2B cross-border settlements, where stablecoins are available 24/7, 365 days a year with near instant settlement.

Stripe, the financial infrastructure platform for businesses, completed its acquisition of Bridge earlier this year. Bridge's most obvious use case is cross-border money flows, in particular to countries that have unstable currencies or are underbanked. For example, one firm which hires around the world pays contractors in stablecoins, allowing them to receive payment immediately in US dollars in countries with unstable currencies.

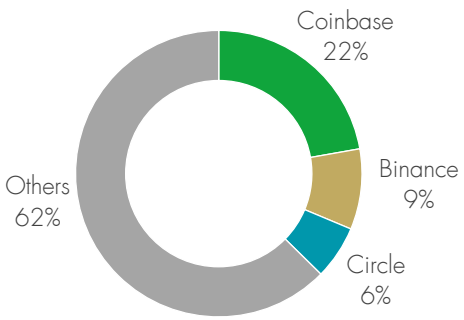
Shopify recently partnered with Coinbase and Stripe to bring frictionless, secure stablecoin payments to merchants globally using their existing payment and order fulfilment flows, with no integrations or new gateways required. Onchain stablecoin payments also go beyond transferring value – they are programmable, allowing automated triggering steps in complex financial flows like multi-stage payment commitments.

Visa and Mastercard, the backbone of the payments world, have also embraced stablecoins. Visa is actively integrating stablecoins directly into its settlement infrastructure, with Mastercard also enabling global acceptance and payments with stablecoins, allowing consumers and merchants to use stablecoins like cash at over 150 million merchant locations worldwide.

'Stablecoin Summer' also saw the much anticipated Circle IPO, which soared over 450% in June. As the second-largest issuer of US dollar stablecoins (with around a 24% market share compared to around 60% for Tether), Circle's rise reignited interest in Coinbase, which enjoys a 54% reserve income split thanks to a preferential USDC distribution agreement.

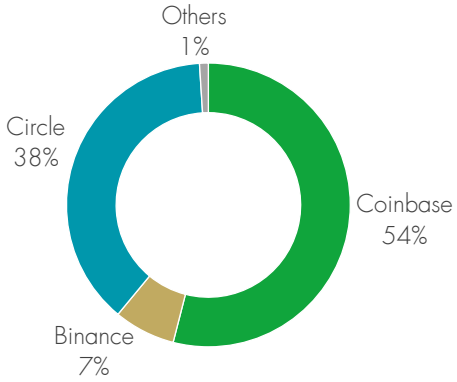
USDC: Circle's revenue sharing model (Q1 2025)

USDC supply distribution (average, %)



Source: Bernstein Research, 31 March 2025.

Reserve income distribution (%)



Source: Bernstein Research, 31 March 2025.

Regulation

Regulation is beginning to catch up with the stablecoin boom. On 17 June, the US Senate passed the GENIUS Act with a vote of 68–30, marking the first comprehensive regulatory framework for the issuance and supervision of payment stablecoins. By mandating full reserve backing, third-party audits and strict compliance with anti-money laundering laws, the legislation aims to protect consumers and rebuild trust in the crypto and blockchain space – especially after several high-profile failures in recent years.

A key provision within the GENIUS Act* prohibits non-financial public companies from issuing stablecoins, therefore setting the stage for tech platforms, e-commerce firms and digital marketplaces to partner with regulated US financial institutions instead. *(On 18 July, President Trump signed the GENIUS Act into Law).

The CLARITY Act is beginning to draw clearer definitions and jurisdictional boundaries for the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC). Together, these legislative moves mark a decisive pivot from regulatory ambiguity to structured oversight – signalling the wider crypto economy entering a new era of legitimacy and to re-shore crypto companies back to the US.

What's next?

Blockchain and tokenisation – once viewed as a direct threat to the US dollar – are now emerging as its most powerful enabler. With over 99% of stablecoin supply denominated in US dollars, the technology is reinforcing this currency's dominance in today's digital economy. In fact, stablecoin supply is at an all-time high, with roughly 1.1% of the total US dollar supply now tokenised.

Excitingly, Coinbase recently launched a new standard for internet-native payments – where sending stablecoins becomes as effortless as loading a webpage. By enabling instant payments over HTTP, this will unlock seamless transaction capabilities for APIs, apps and even AI agents, paving the way for an automated internet economy.

Meanwhile, tokenised real-world assets (RWAs) are gathering momentum. With over $20 billion already onchain and projections of a $2 trillion market base case by 2030, tokenisation is reimagining traditional finance. Tokenisations of RWAs transforms physical assets into programmable digital tokens that retain economic utility – offering benefits such as lending, fractional ownership, faster settlement and lower transaction costs. With adoption accelerating across major institutions like Visa, Mastercard and Stripe, stablecoins are poised to revolutionise cross-border money movement – breaking apart an industry long plagued by cost, inefficiency and fragmentation.

AI, blockchain and critical minerals are shaping the future of Chile

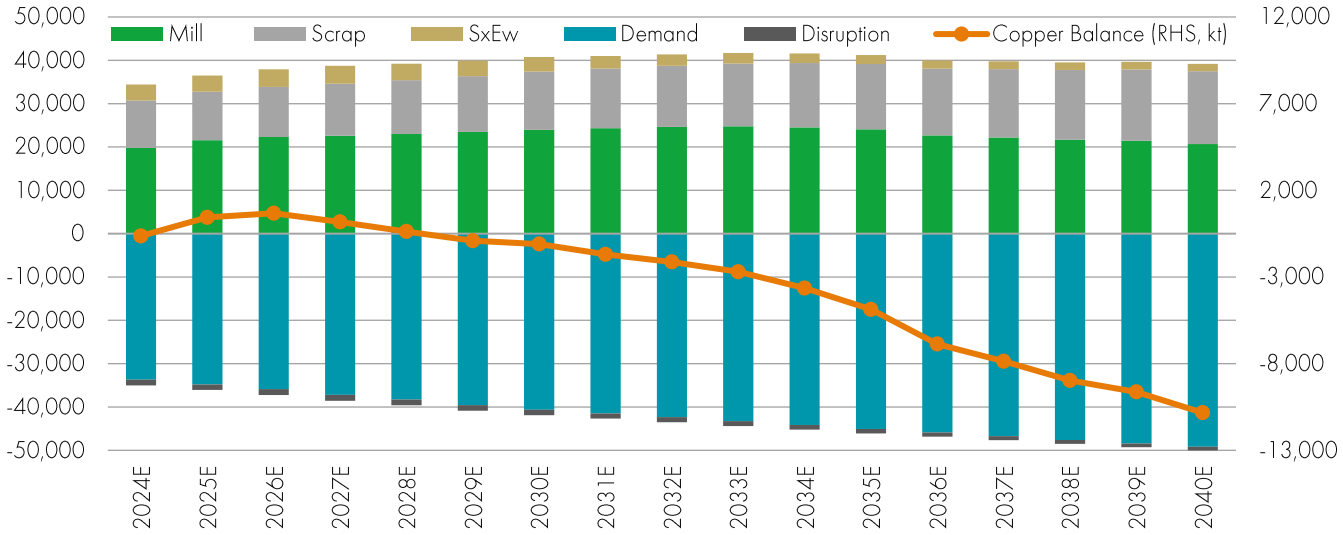
TOM SMITH, FUND MANAGER, GLOBAL EQUITIES TEAM

Few countries are as pivotal to the world's green transition as Chile. The country has vast reserves of both copper and lithium, but what truly sets it apart is not just mineral wealth, but its bold embrace of technological innovation. By integrating AI, blockchain and advanced sustainability practices, Chile is forging a new model for resource-rich countries seeking to lead the global shift towards cleaner, more transparent and more ethical supply chains.

Copper and lithium, often dubbed "critical minerals", are the backbone of the clean energy revolution. They are essential for electric vehicles, solar panels, wind turbines and the batteries that store renewable power. Chile is the world's largest producer of copper and the second-largest supplier of lithium, accounting for roughly a quarter of global output of both metals. As demand for these minerals is projected to soar – copper by 50% and lithium by 600% by 2040 – Chile will play a key role in ensuring supply can keep up, including companies like SQM which produces 15% of lithium globally.

But Chile's dominance is not guaranteed. Many of its largest copper deposits are aging and declining in quality, and the process of developing new mines is fraught with political, environmental and social complexities. Local opposition, regulatory hurdles and the imperative to protect fragile ecosystems are real constraints. The challenge is not just to mine more, but to mine smarter – and more sustainably.

World Copper balance breakdown (kt)



Source: WoodMac, Bernstein, December 2024.

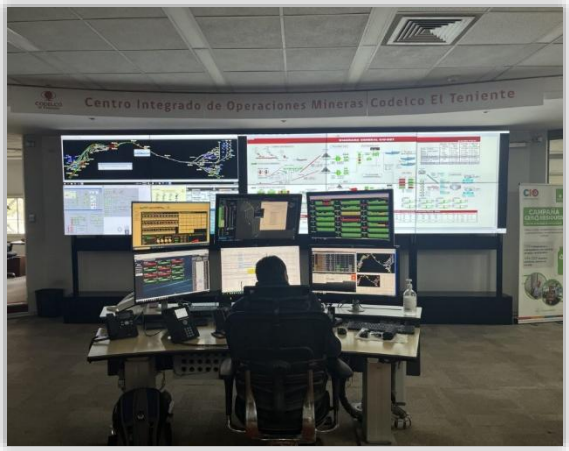
Chile's mining sector is undergoing a quiet revolution powered by AI. AI-driven predictive maintenance systems are now commonplace, analysing sensor data to forecast equipment failures and prevent costly downtime. This has led to dramatic reductions in maintenance costs and unplanned outages at major mining operations. Unplanned downtime costs the world's 500 largest companies nearly $1.4 trillion annually, about 11% of revenues, and predictive maintenance systems have reduced catastrophic failures in critical mining equipment, such as trucks, pumps and mills, by as much as 60%.

Source: bhp.com (2025) – Escondida mine (owned by BHP & Rio Tinto).

Real-time environmental monitoring, powered by AI, is also helping companies optimise water usage and energy consumption – critical in a country where water stress is a growing concern. BHP's Escondida mine in northern Chile has been able to reduce water and power consumption by 2-3%; with its water coming from a desalination plant in the water scarce Atacama Desert, even small reductions in use are critical for preserving local ecosystems and reducing stress on limited resources.

Perhaps most transformative is AI's role in resource management. By analysing geological data, AI can pinpoint high-grade ore deposits more accurately and efficiently, reducing exploration costs and environmental impact. Chilean innovators are even using AI-powered scanners to recover copper from mining waste, potentially reclaiming up to 40% of minerals that would otherwise be lost. This not only boosts productivity but also reduces the environmental footprint of mining operations.

Automation, too, is reshaping the workforce. Autonomous haul trucks and drilling equipment, guided by AI, are becoming the norm at large sites. These technologies improve safety by removing workers from hazardous environments and enable round-the-clock operations, further increasing efficiency.



Source: im-mining.com – Codelco's Integrated Operations Centre, El Teniente mine.

As global consumers and manufacturers demand cleaner, more ethical supply chains, transparency has become a strategic imperative. Blockchain is a technology well suited to track the provenance of minerals and the sustainability of their production. Chile's National Electricity Coordinator is piloting the Renova initiative, a blockchain platform designed to trace the renewable energy used in copper production. By logging every megawatt of renewable power that goes into mining, Renova provides verifiable proof that Chilean copper is produced with lower carbon emissions. This not only addresses the risk of "greenwashing" but also gives mining companies a competitive edge in global markets where buyers increasingly demand certified, sustainable materials.

Chile's innovation agenda is not limited to mining. The country is aggressively phasing out coal, with a goal to retire or retrofit 70% of its coal plants by the end of 2025 – well ahead of its initial targets. The government's National Green Hydrogen Strategy aims to make Chile the world's lowest-cost producer of green hydrogen by 2030 and a top three global exporter by 2040. Green hydrogen, produced using renewable energy, is seen as a game-changer for decarbonising heavy industry, transportation and even mining itself.

Pilot projects are already underway, operated by Chilean steel company CAP and utility Engie Chile as well as many of the major global energy companies. Projects also include the development of Chile's first locally made hydrogen bus. The government's Green Hydrogen Action Plan, published in 2024, outlines steps to build the necessary infrastructure and regulatory framework to scale up production and the use of green hydrogen across sectors. The country is well positioned to be a key player in the production of green hydrogen given its abundant renewable energy resources – vast solar radiation in the Atacama Desert and consistent winds in Patagonia.

Source: powerengineeringint.com – Haru Oni efuels plant in southern Chile, producing green hydrogen and then efuels.

Technological disruption is only as effective as the people who drive it. Chile's innovation story is as much about human capital as it is about hardware and software. The country is investing in STEM education, nurturing a new generation of engineers, data scientists and entrepreneurs who can harness AI and blockchain for local challenges. Ethical considerations are also coming to the fore. As AI and automation transform the mining workforce, there are questions about job displacement, worker safety and the role of humans in increasingly digital operations. Chilean innovators and policymakers are actively engaging in these debates, seeking to ensure that technology serves both economic and social goals.

Chile's unique combination of mineral wealth, technological ambition and commitment to sustainability positions it as a bellwether for the global green transition. By leveraging AI to optimise mining, blockchain to ensure transparency and green hydrogen to decarbonise industry, Chile is not just adapting to disruption – it is actively shaping the future of energy and resource management.

OUTLOOK

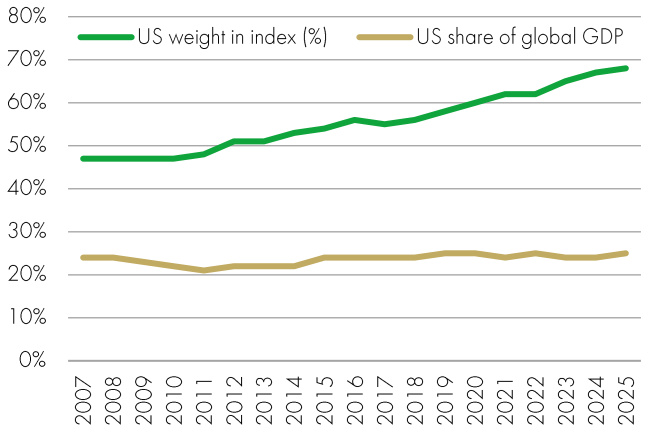
MARK HAWTIN, HEAD OF THE GLOBAL EQUITIES TEAM

The outlook for the rest of 2025 offers an exciting opportunity for active management and alternative equity strategies. As we outlined in the review section of the first half of 2025, the path to the best returns will likely continue to lie outside the concentrated (passive) S&P trade of the last few years.

The charts below show how the consensus trade has raised the level of US concentration in the World Index, rising from 47% in 2010 to 68% in 2025. Within the S&P 500 itself (being a proxy for US concentration), the Magnificent 7 represent 29% of that index, levels barely seen in the last 100 years. With concentration risk, valuation and profit margins all sitting at record high levels over many years, overall equity returns are going to be harder to achieve.

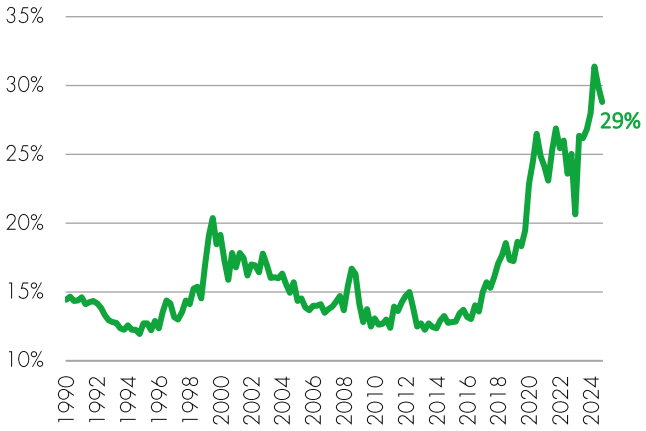
This means that the way to generate acceptable returns will require more creative and thoughtful portfolio creation and stock picking. This might be in a long only context but we believe it will also shine a light again on long/short equity investing that has been sidelined by a combination of easy gains over the last 10 years and the rise of private equity as a portfolio diversifier.

Concentration of the US equity market in the World (ACWI) Index



Source: Bloomberg, June 2025.

Weight of the top 7 companies in the S&P 500



Source: BofA US Equity & Quant Strategy, Factset, 31 December 2024.

The world today is filled with higher levels of geopolitical risk, led by a US administration that is putting America first and rushing headlong into strategies that support onshoring and the development of its independence in all critical resources from energy to AI.

The reserve currency status of the US dollar has been called into question with some of the highest foreign exchange volume days ever since April's Liberation Day tariff announcements. From corporates to pension funds, investment teams have been mulling over the rise of economic nationalism and the impact this will have on the US dollar. Investment teams, realising that so much of their risk has been tied up in US dollar longs of various flavours, have moved from a SAA (Strategic Asset Allocation) approach to a total portfolio approach placing more emphasis on the risks inherent in the underlying assets. All of this is music to the ears of highly risk aware active managers. The status quo of the last 10 to 15 years is set to change.

This backdrop requires a much more careful assessment of risk v reward. We believe that risk adjusted returns will be front and centre of investors' minds running through the second half of the year and this will translate into a demand for strategies that both diversify risk and reduce volatility – again a potential recipe for the resurgence of long/short investing alongside carefully curated funds.

Thematically, we remain positive about the potential for AI to drive significant benefits across all industries and work on identifying winners in the use cases that trump investing in the infrastructure providers which run a risk of running into a capacity glut.

We have waited patiently for the crypto world to unfold, and the IPO of Circle Internet could act as a Chat GPT moment for stablecoins. This will benefit the entire blockchain/crypto supply chain and, together with fintech, remains a key theme for the rest of this year.

Our base case is that equity markets globally remain little changed in the second half of 2025 but the polarisation of winners and losers will remain significant. For the first time in many years, geographical diversification will matter, as will stock selection outside the very biggest companies in the world. In this environment, the overall market returns matter less, but we worry that many investors will remain stranded in the trades that led the last 10 years rather then those that will lead over the next 10, leaving portfolios vulnerable to underperformance. Active equity strategies, both long and long/short, will play a vital role in cementing return profiles as well as risk mitigation.

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