

Diversification in the age of AI: a practical toolkit

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Summary: AI has made markets more concentrated, not only in US mega-cap technology stocks but also across emerging markets, sectors and individual companies tied to the AI value chain. In a world of AI, diversification requires a more deliberate approach that goes beyond traditional allocation decisions.

- Concentration risk has spread beyond the US, with emerging markets and AI-linked hardware hubs such as Taiwan and South Korea becoming increasingly dominant.
- Despite rising concentration, markets remain resilient due to strong earnings among AI leaders and supportive macroeconomic conditions, but energy and geopolitical risks, along with heavy capital expenditure demands, pose potential vulnerabilities.
- Effective diversification now means separating different types of AI exposure, adding targeted hedges, and using assets with genuinely different return drivers.

Until recently, diversification had started to feel unnecessary. Clients would ask: *“Why diversify away from the US when the US keeps winning?”*

The numbers appeared to justify that view. US equities had grown to around two-thirds of global equity benchmarks, leaving many investors highly concentrated in both US equity risk and US dollar exposure.

But the surge in mega-cap technology stocks made the market top-heavier and sharpened the risks, as we warned [here](#) and [here](#) – although we do not think the market is currently in a bubble.

Our message to clients was nuanced: *“Diversify modestly away from the US – without avoiding it altogether or underweighting artificial intelligence (AI), the key forward-looking theme of the decade.”*

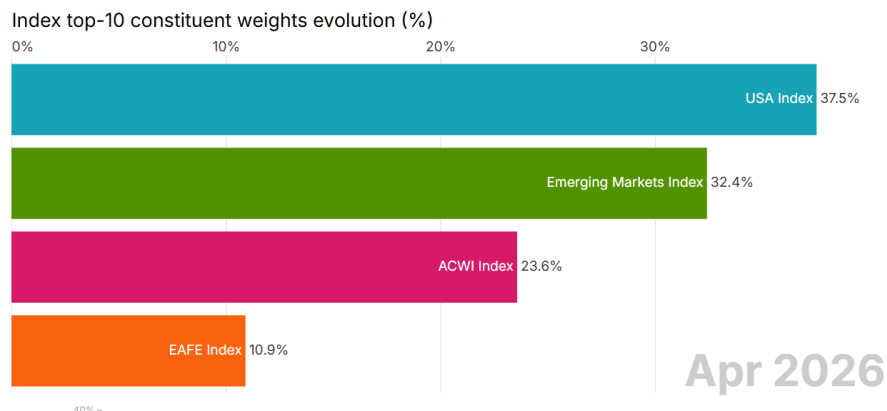
That nuance mattered because concentration risk did not end with US dominance. It spread. Investors, therefore, need to be more strategic in how they diversify – and stay alert to three key market trends.

1. Concentration didn't disappear – it migrated

In the beginning, AI concentration was largely a US phenomenon. Interest focused on a narrow band of AI innovators, fuelled by a reinforcing loop of passive flows.

But more recently, the lack of diversification has started to show up elsewhere, especially in emerging markets (see Exhibit 1). Information technology also now accounts for 40% of the MSCI Emerging Markets Index, higher than the comparative weighting in the US's S&P 500.

Exhibit 1: Technology stocks have pushed emerging-market concentration risk close to US levels



Note: ACWI Index = All Country World Index, EAFE Index = Europe, Australasia, and the Far East Index. Source: MSCI. Data as of end of April 2026.

As AI adoption has grown, demand has surged not only for software and cloud but for hardware too. Much of the infrastructure behind servers, memory, advanced packaging and other components is concentrated in Asia, especially Taiwan and South Korea.

Earlier this year, for the first time in nearly two decades, Taiwan overtook China as the largest country weight in the MSCI EM Index, driven by AI demand and semiconductor gains. At the end of April, Taiwan stood at 24.8% versus China's 23.1%, showing how tightly EM benchmarks are now linked to AI hardware.

South Korea too has benefited from the AI hardware cycle and memory pricing (see Exhibit 2), leaving EM investors with a less discussed reality: diversification is increasingly dominated by two countries whose equity performance is tightly tied to the AI hardware cycle.

Exhibit 2: South Korea's stock market, which has led the recent rally, has become cheaper as earnings forecasts have risen faster than price movements



Source: Bloomberg. Data as of 15 May 2026.

With earnings expectations for South Korean firms up more than 300% over the past year and valuation multiples falling even as share prices rose, it suggests the real shortage in today's economy following the closure of the Strait of Hormuz is key components in the AI value chain, rather than oil and gas.

Concentration has also intensified at company level. A handful of stocks, mainly in Taiwan and South Korea, have become “portfolio-critical” – large enough to shape both index returns and overall portfolio performance.

- **Investor takeaway:** In our view, diversification is no longer only about asset allocation. It increasingly depends on micro-level research – company fundamentals, management quality, competitive advantage and the durability of margins.

2. Markets are not fragile – yet

Rising concentration can make markets look fragile. History offers warnings: high concentration often appears in periods of exuberance, from the dotcom era to earlier industrial revolutions and railway manias. When leadership narrows, markets can feel strong – until they are not.

For now, a key difference is earnings strength. Many of today's largest companies in the US are highly profitable. For some firms earnings are strong enough to justify elevated valuations, and up until now cash generation supports buybacks and investment.

The macro backdrop has also helped. The global economy, especially the US, has proved more resilient than expected, supporting the view that AI gains can extend across the value chain – from chipmakers and equipment suppliers to data centres, power infrastructure, enterprise adoption and productivity.

Even so, two fault lines deserve attention because of their direct connection to the concentration problem.

- **Energy and geopolitics are a potential weak spot:** The AI value chain is energy-intensive, global and tightly stretched. A sustained energy shock could raise costs, squeeze margins, delay capex and push up discount rates. South Korea and Taiwan, both major energy importers, are especially exposed during oil-driven risk-off episodes.
 - **Capex is now absorbing the cash:** AI infrastructure requires huge, sustained investment in chipmaking, fabs, advanced packaging, data centres, networking, cooling and power. Returns increasingly depend on durable demand, resilient margins and continued revenue growth. If earnings disappoint, the narrative can quickly shift from “investment for the future” to fears of “overbuild.”
- **Investor takeaway:** To manage these fault lines we closely monitor geopolitical risks and energy markets, as well as earnings revisions and forward guidance to determine if and when we need to reposition.

3. Tech is not a single coherent trade

A key trap is treating tech as a single trade. Some of the biggest AI winners are not even labelled tech. A portfolio can therefore look diversified by sector and still be heavily concentrated within the AI universe.

Performance dispersion inside technology has widened sharply. For example, the MSCI ACWI Semiconductors & Semiconductor Equipment returned +29.88% year to date¹, while the MSCI World Software & Services returned -8.61%.² The market is drawing a line between AI infrastructure winners and software models under pressure.

- **Investor takeaway:** When we assess concentration risk, we focus on avoiding too much of the same type of tech rather than too much tech overall.

Diversifying AI risk without missing the AI benefits: our toolkit

The challenge, therefore, is not whether to engage with AI, but how to manage the concentration it creates. In practice, this means combining a set of complementary tactics across three dimensions: managing market risk, owning the constraints that AI creates, and broadening sources of diversification.

Avoiding the AI winners could be costly. A better approach is to treat AI not as a single play, but as a stack of exposures with different drivers, correlations and risks, while building protection into portfolios through hedges and investments in uncorrelated asset classes.

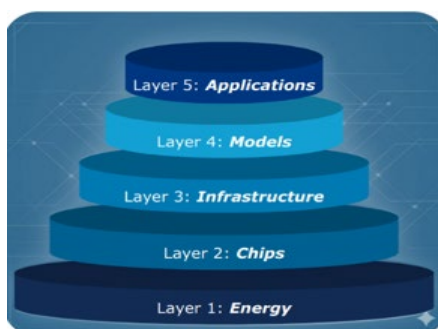
¹ As of 30 April 2026.

² As of 30 April 2026.

1. Managing market risk

Diversify within the AI stack – If the US is the AI platform innovator and China, Taiwan and South Korea are key hardware hubs, portfolios can diversify by investing across the value chain, not just in more mega-cap stocks (see Exhibit 3). Investors can also add second-order beneficiaries, those stocks and sectors set to indirectly benefit from AI's rise.

Exhibit 3: The five-layer cake for investing in AI



Source: Allianz Global Investors.

Use relative trades, not just directional bets – In a world where AI means many things, relative value can be a more precise tool. That might mean going long hardware beneficiaries while hedging expensive or crowded segments or expressing regional dispersion through paired currency exposures.

Rethink FX hedges – The US dollar has often acted as a risk-off hedge, but that relationship can shift, especially during geopolitical shocks. It may therefore make sense to complement dollar exposure with other diversifiers and targeted hedges tied to different macro drivers.

2. Investing in AI-driven constraints

Own the constraints: power, grids, and “smart energy” – AI is forcing the world to rebuild parts of the energy system: generation, transmission, transformers, cooling and efficiency. That creates a natural extension trade, linked more to real-economy capacity expansion than to chip trends. Opportunities may include smart grids, sustainable baseload, nuclear and next-generation energy reliability.

3. Broadening sources of diversification

Make volatility a deliberate asset, not an accident – In concentrated markets, volatility management becomes more valuable. We continue to favour [structured downside protection](#) when it is cheap, complemented by systematic

signals such as VIX-based frameworks to avoid overpaying for hedges. Diversification is increasingly about owning convexity as much as assets.

Add truly different return engines – Investors can still diversify with assets not primarily driven by equity beta, such as insurance-linked securities, where the risk driver is catastrophe risk rather than earnings multiples. These are not magic bullets, but they can reduce the single-factor problem concentration creates.

Why AI is the end of traditional diversification

In our view, AI is not the end of diversification. But it *is* the end of the old version, where investors could simply spread money across regions and sectors and assume they were protected.

AI is compressing the investment landscape into a smaller set of critical sectors: compute, energy, data, fabs and platforms. Those sectors are profitable, powerful and increasingly benchmark heavy. But while the concentration is real, so is the opportunity. The answer is to evolve investment strategies, not step away from AI.

In the AI era, diversification has become more intentional, more granular, and more holistic. In other words, AI doesn't kill diversification. It forces us to do it properly again.

Investing involves risk. The value of an investment and the income from it may fall as well as rise and investors might not get back the full amount invested.

Past performance does not predict future returns. If the currency in which the past performance is displayed differs from the currency of the country in which the investor resides, then the investor should be aware that due to the exchange rate fluctuations the performance shown may be higher or lower if converted into the investor's local currency.

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