



What makes thematic investing a strong alternative in volatile markets

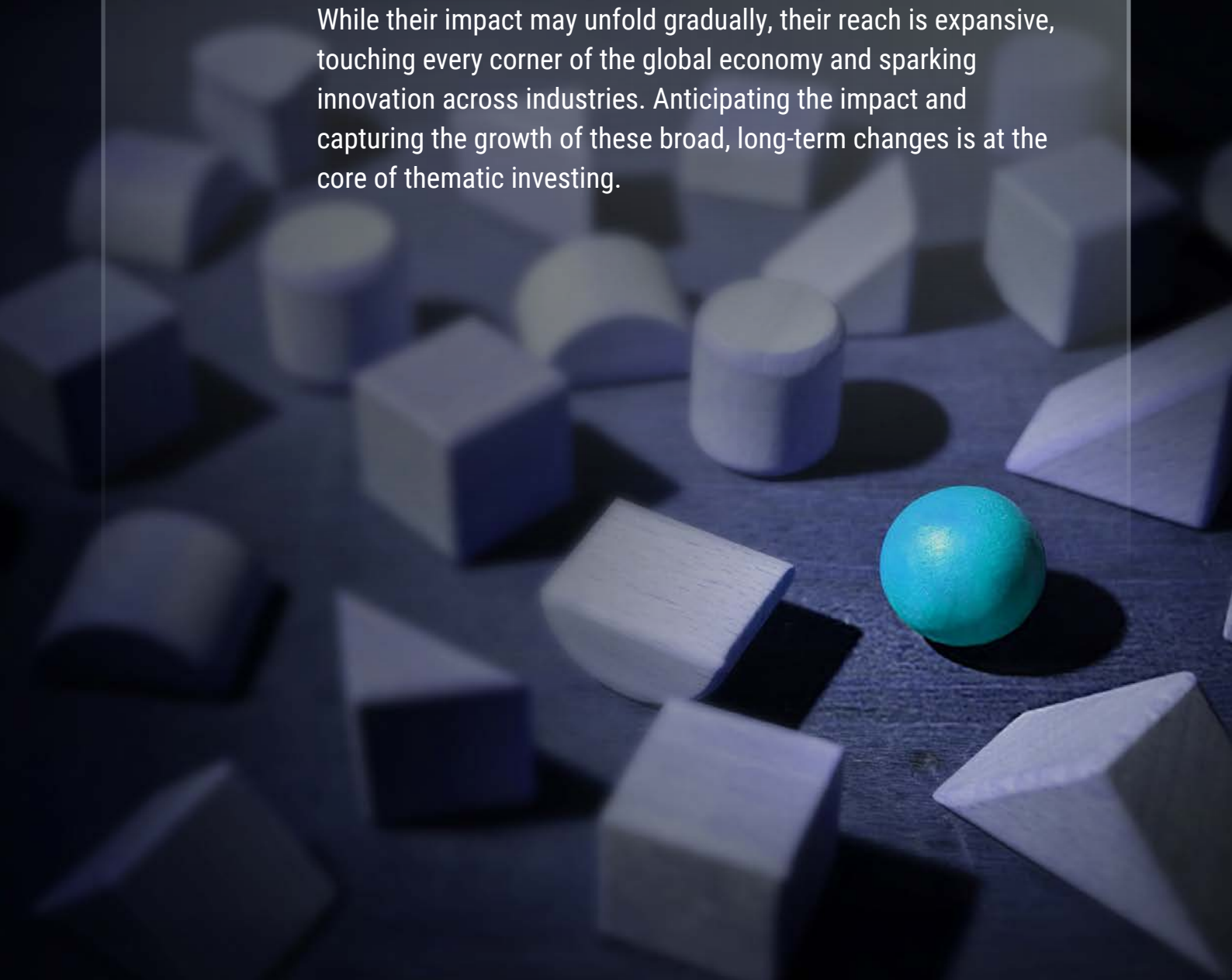
What makes thematic investing a strong alternative in volatile markets

1. Staying one step ahead of transformational change	3
2. Thematic investing – in a class by itself	10
3. Establishing beachheads but experiencing headwinds	16
4. Moving from headwinds to head start	22
5. A critical inflection, where chaos becomes a catalyst	29

1. Staying one step ahead of transformational change

Megatrends are powerful forces reshaping our world. They are as diverse as they are unstoppable. Their magnitude isn't always perceivable and sometimes hype and frenzy can cloud visibility and distract from those that are truly transformative in the real world.

While their impact may unfold gradually, their reach is expansive, touching every corner of the global economy and sparking innovation across industries. Anticipating the impact and capturing the growth of these broad, long-term changes is at the core of thematic investing.



“ We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run

Roy Amara, American researcher, scientist, futurist and president of the Institute for the Future

Investing in the invisible for tangible returns

The world is constantly evolving. Scientific discoveries, technological breakthroughs, and demographic shifts are all examples of megatrends – the strong structural forces that profoundly affect how we live, work, communicate and consume. However, the seismic shifts they create often go unnoticed until they’re nearly ubiquitous and indispensable. That’s because innovation needs time to incubate and supporting factors developed before scale and mass adoption can be achieved.

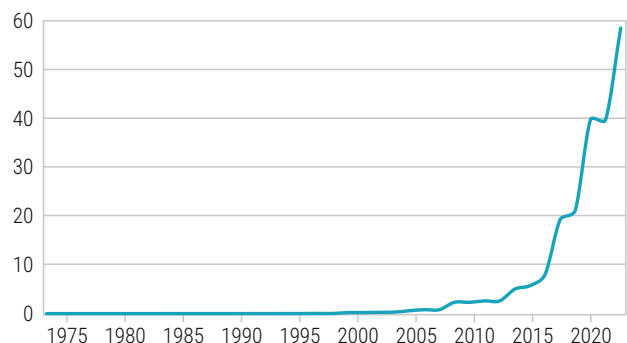
For example, micro-sized transistors embedded in chips and sensors have laid the groundwork for the rapid spread of smartphones, mobile apps, ecommerce, media platforms, and all manner of connected devices now considered essential for daily life. But their transformational potential lay dormant for decades until it could be usefully applied and scaled across economic sectors.

Figure 1: Revolutions need time to be revolutionary

The falling cost associated with packing more transistors onto microchips (Moore’s Law) was crucial for achieving scale. These early precursors enabled today’s edge-computing and hyperscaler data centers which are powering continued AI innovation. It’s a classic example of how foundational technologies need time to incubate before they can be truly revolutionary for society.

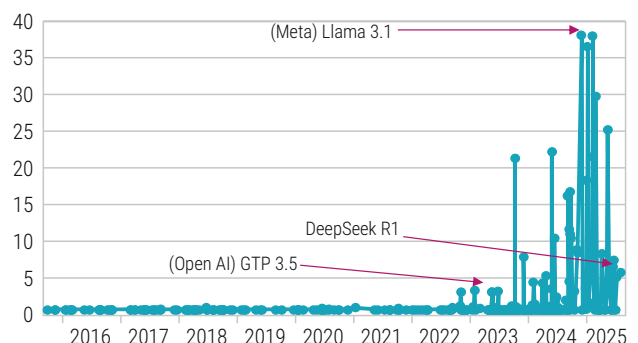
Moore’s Law powers accelerating computing potential

Transistors per micropocessor, billions



AI’s explosive training and processing requirements

AI training computational requirements in petaFLOPs, billions



Source: Robeco, Our World in Data, 2022. Epoch AI, 2025.

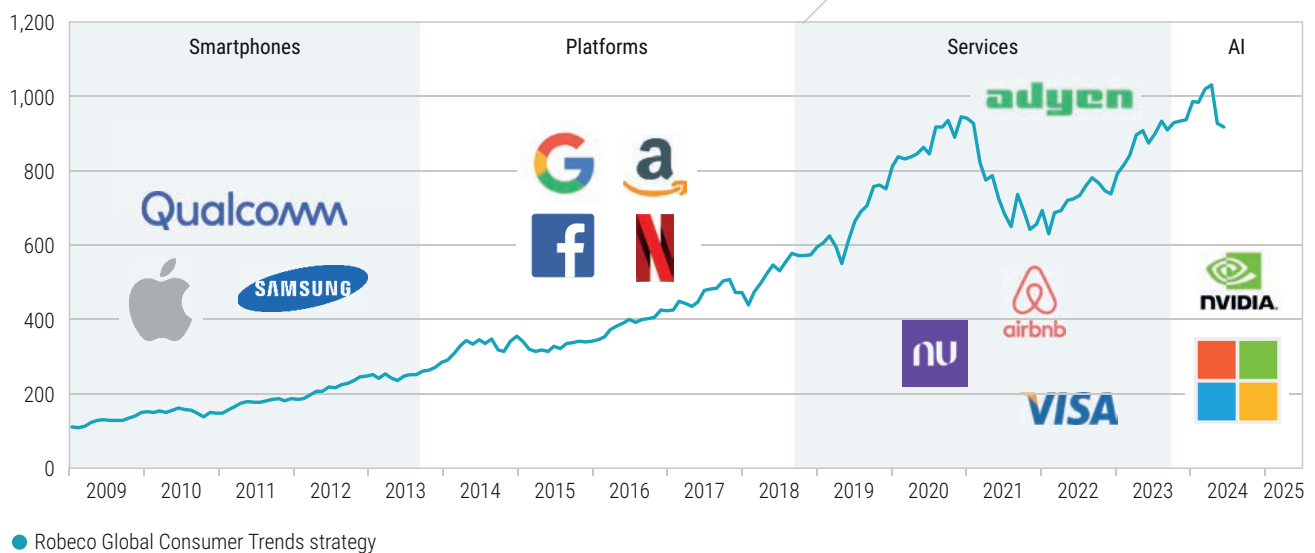
Note: Petaflop progression not drawn to scale. Petaflops refer to a mind-bogglingly fast computing speed used to measure a computer’s processing power. Peta is a prefix denoting one quadrillion (1,000 trillion or 10^{15}). The companies shown on this slide are for illustrative purposes only. The companies are not necessarily held within the thematic strategies.

Transistors, together with other structural drivers (e.g., telecom infrastructure), have been critical in creating the foundations necessary to spawn new iterations of global growth. They have enabled seamless data sharing, cloud platforms and edge computing that are now unlocking the power of AI, automation and advanced robotics for both service-driven enterprises such as banking and retail as well as utilities and asset-heavy industrial processes.

Successive waves of technological change are also building in other areas of the economy. For example, decades of advances in renewables, electrification and battery storage are revolutionizing how we generate, distribute and use energy and are laying the foundations for a truly net-zero economy in this century.

Structural trends are continuously evolving and reshaping the user experience. For example, technological advances are transforming how consumers interface with products and services and are key in driving continued growth for Robeco's Global Consumer Trends strategy (blue line). Tech trends are also changing the landscape of leading companies and industries in the consumer space.

Figure 2: Strong structural trends – built on the past, shaped for the future¹



Past performance is no guarantee of future results. The value of your investments may fluctuate.
Source: Robeco. The illustrative strategy shown, the Robeco Global Consumer Trends strategy, is based on a combination of multiple portfolios and mandates. All figures are in EUR. Returns gross of fees, based on gross asset value. Data as per end of April 2025. The companies shown on this graph are for illustrative purposes only in order to demonstrate the investment strategy on the date stated and may no longer be held by the strategy. No inference can be made on the future development of companies listed.

1. Source: Robeco. The illustrative strategy shown, the Robeco Global Consumer Trends strategy, is based on a combination of multiple portfolios and mandates. All figures are in EUR. Data as per end of April 2025. If the currency in which the past performance is displayed differs from the currency of the country in which you reside, then you should be aware that due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. Performance since inception is as of the first full month. Periods shorter than one year are not annualized. In reality, costs (such as management fees and other costs) are charged. These have a negative effect on the returns shown.

Megatrends – more than technology

While technological advances are significant, not all megatrends involve chips or machines. An expanding middle class and aging populations represent significant demographic shifts creating abundant challenges and solutions across a range of sectors including financial services, healthcare, and consumer goods.

A strengthening middle class is creating huge opportunities among fresh swaths of product-hungry and underserved populations. Increased digitization is democratizing finance. Services such as banking, credit, and insurance – once delivered in brick-and-mortar institutional settings – are moving to cheap, convenient and user-friendly online platforms of fintech providers. Banking is not alone: asset-light and digitally savvy upstarts are challenging traditional brands across retail sectors, from fashion and food to beauty and hygiene.

Aging populations and the growing prevalence of chronic diseases are driving demand for preventative countermeasures such as better nutrition, fitness and active lifestyles as well as early diagnostics and treatment. Meanwhile, rising costs are also pushing both patients and insurers toward telemedicine, pharmacy benefit managers and more cost-efficient forms of care delivery.

New problems, new themes, new growth

Looking ahead, new themes are gathering force and opening the door to the next wave of innovation and growth. From drug discovery in the lab to agile robotics in the factory, generative AI is eliminating slack, accelerating productivity, and reducing costs in diverse sectors. At the same time, shifting consumer preferences toward healthier foods, clean-label ingredients, and natural personal care products are redefining what it means to live well – creating structural demand for new formulations, new links in supply chains, and new brand strategies.

Meanwhile, environmental hazards such as climate change, resource scarcity, and biodiversity loss are no longer distant threats – they are critical business risks that are increasing input costs, disrupting supply chains, and intensifying regulatory oversight. Though worrisome for slow-footed laggards which benefit from the status quo, they also present channels of growth for companies equipped with foresight and innovative solutions.

MAINTAINING THE MOJO

In a rapidly changing world, the relevance of specific themes can rise or fall over time. This dynamic leads to the emergence of new investment opportunities and the disappearance of others. For example, our Smart Energy theme is increasingly less focused on energy generation and more on how to efficiently manage energy flows throughout the economy.

The shift is the result of cross-sector trends like the electrification of automotive transport, the decarbonization of the

built environment as well as increasing digitalization, AI processing and cloud computing. As a result, the Smart Energy strategy extends beyond renewables and smart utility grids to include energy-efficient solutions that reduce energy consumption in transportation, buildings, and even semiconductor technologies used in datacenter servers and electrical equipment.

These shifts are reshaping the dominant players in the energy value chain and are creating new challenges and fresh areas of growth and investment. Such changes

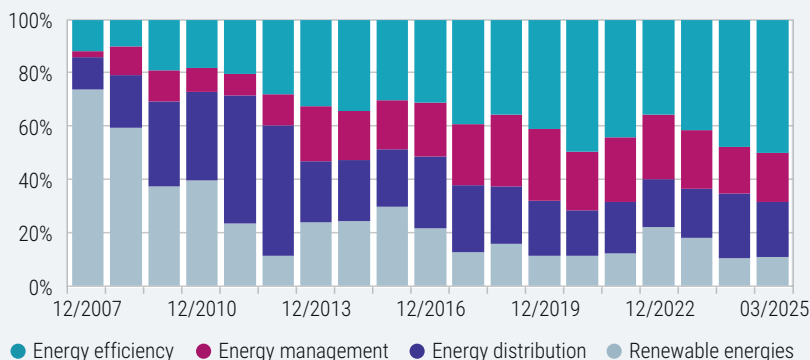
nicely illustrate that theme development is not a 'one-and-done' process. They require constant monitoring to ensure their ongoing relevance and capacity to generate growth and returns.

We continuously explore new themes to develop; prioritizing those that are relevant, unique, and financially lucrative. Even when these criteria are met, expected outcomes are unlikely to materialize in the short term. What is essential is to assess the timing, risk, and rewards of themes under development.

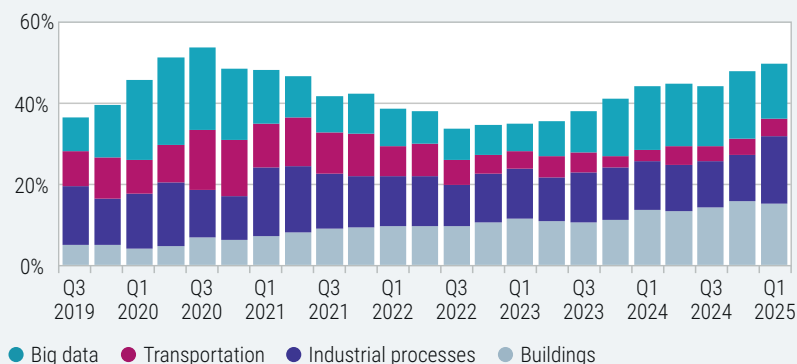
Figure 3: Changing allocation patterns over time

Thematic value chains are composed of multiple energy-related investor clusters and sub-clusters, enabling thematic portfolios to capture a sufficiently broad and diverse opportunity set. The graphs illustrate how allocations to these clusters (top graph) as well as the underlying sub-clusters (bottom graph, here 'Energy efficiency') fluctuate so that the portfolio is positioned to capture the most attractive growth in any given market environment.

Robeco Smart Energy strategy – historical cluster allocation



Robeco Smart Energy strategy – five-year allocation within 'Energy efficiency' cluster



Source: Robeco, Bloomberg. Graphs provide an overview of the Smart Energy strategy's investment cluster and energy efficiency sub-cluster exposure as of 31 March 2025 and is no guarantee of future developments. Data is for illustrative purposes only. It should not be assumed that any investments in clusters or sub-clusters listed were or will be profitable.

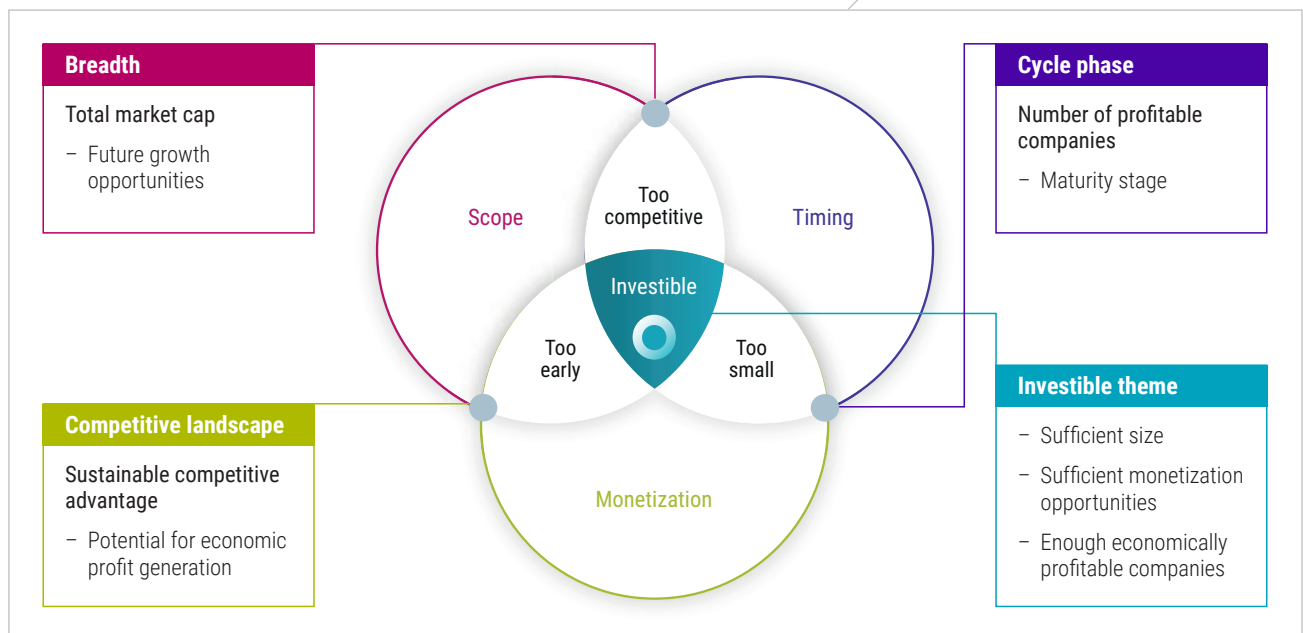
Monetizing megatrends

The tightly targeted research combined with forward-looking thinking enables thematic investors to spot powerful megatrends and the sub-trends they spawn while they are still nascent and their significance less understood by markets. Strategic vision matched with strong analysis help thematic investors ignore the short-term noise – whether from market volatility, global pandemics, trade wars, or fiscal tightening – and remain focused on what really matters – value creation in the long run.

As a result, thematic investors can efficiently concentrate their research in areas of the global economy most likely to generate strong growth. Moreover, they can efficiently construct portfolios comprised of companies within those areas which are most likely to capture growth and market share and which can continue to compound their success and returns well into the future.

An investable theme combines robust growth opportunities, a favorable competitive landscape, and a rich mix of high-growth and mature companies which are benefiting from the theme's development.

Figure 4: Factors that make a theme investable



Source: Robeco, 2025.

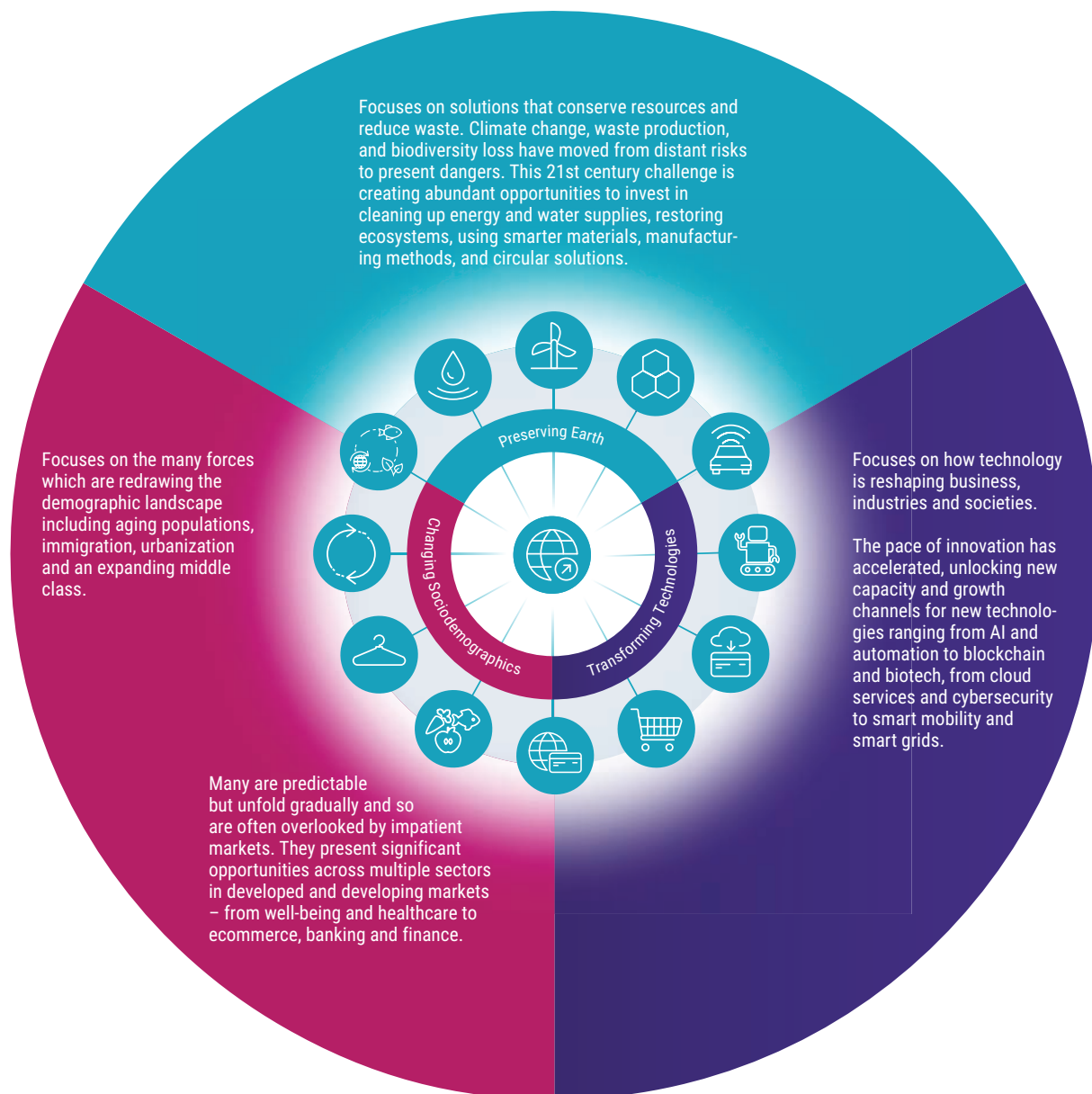
Time-tested and future-proof

Over the last quarter century, we have built a comprehensive suite of thematic investment strategies around three megatrends: Transforming Technologies, Changing Sociodemographics and Preserving Earth. The potential of these core themes is vast, offering strong avenues of enduring growth for client portfolios as innovations help us progress toward a better tomorrow.

Robeco's thematic portfolios are well-grounded in how trends are unfolding in the present but also diligently anticipating how they are likely to evolve in the future. The excitement around AI is a timely example. While the AI buzzword has catapulted in mainstream popularity over the past three years, many of our thematic strategies have been analyzing and investing in the AI space for more than a decade.

It's that type of prescient thinking and conviction, paired with quality, discipline and consistency that characterize our thematic investment framework. They have been essential for building and maintaining themes that are not just conceptually compelling but also continue to rejuvenate relevance and returns across investment cycles. ●

Figure 5: A diverse range of thematic portfolios built for resilient growth



Source: Robeco, 2025.

2. Thematic investing – in a class by itself

Themes can be an appealing alternative for investors seeking differentiated growth. Themes offer a less restrictive path to portfolio profits compared to traditional equities which are bound by benchmarks or traditional conventions.

Robeco's thematic investing provides a differentiated approach – ensuring diversified exposure to game changing, future-shaping forces unfolding across the global economy. Through proprietary investment analysis, we carefully select companies most likely to benefit as these forces unfold. Those include high-growth innovators and well-positioned incumbents which have successfully compounded their first-mover advantage. The result is an attractive risk-adjusted portfolio that aims to be oriented for the future but also optimized to capture growth in the present.



“ The difficulty lies not so much in developing new ideas as in escaping old ones

John Maynard Keynes, British economist

Differentiated portfolio architecture

While sector-based or global portfolios reflect the world as it is, thematic strategies aim to anticipate how it will look in the years ahead. This inherently future-oriented perspective prioritizes convictions over categories, enabling investors to avoid the constraints of conventional benchmarks and instead target exposure to meaningful future change.

Whereas traditional equity investing often groups companies within established classifications like ‘financials’, ‘large caps’ or ‘emerging markets’, thematic investing is class agnostic, defying sectors, regions, benchmarks or other categorical distinctions that can limit investment possibilities.

Thematic investing equips asset allocators with a unique perspective on sources of emerging growth as well as where and how to best capture it. At Robeco, we see

portfolios as evolving ecosystems organized around a well-defined theme. Holdings are selected based on how the stock supports and benefits from the theme’s development rather than on adhering to standardized allocation formulas that could dilute returns.

Our themes are inherently more concentrated but by building portfolios around a theme’s value chain (from raw materials and manufacturing to logistics and end user consumption) we are able to broaden exposure to sectors and segments across the economy. With this approach, we aim to offer highly targeted but sufficiently diversified sources of growth for portfolios. Moreover, it’s this type of alternative thinking and execution that enables our themes to avoid the silo-thinking and herd-effects symptomatic of many equity strategies, particularly passives ones.

A DIVERSE VALUE CHAIN UNIFIED UNDER ONE THEME

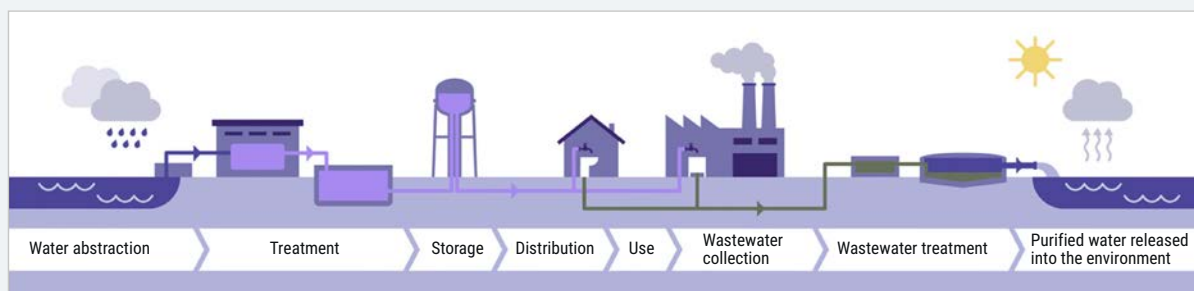
The Sustainable Water strategy considers investments across the entire water value chain. That means it could hold a Japanese company focused on plumbing fixtures for commercial buildings, a US-

based maker of utility-scale water mains, or a French enterprise providing water-filtering solutions for PFAS and other micro-contaminants. These businesses are completely uncorrelated in terms of region,

sector, customer segments, supply chains and end markets. The one thing that does unite them is their contribution to the global water theme.

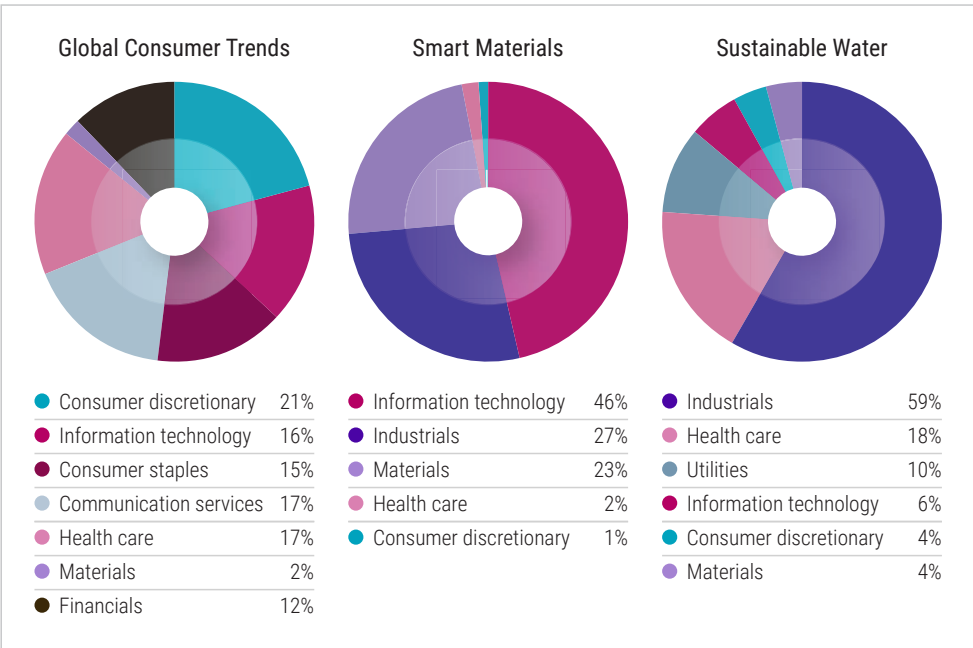
Figure 6: Sustainable Water value chain

Water may be a simple theme, but its value chain is spread over a complex web of companies and industries that culminate into an investment universe of approximately 180 companies.



Source: Sustainable Water strategy, Robeco, 2025.

Figure 7: A value chain approach leads to differentiated sector allocations across themes



Thematic strategies are built around a theme's value chain which means investment allocations are based on which companies are best positioned to capture the theme's growth rather than by equally weighting sectors or applying benchmark-based allocation formulas. This is evident in the sector allocations of three thematic strategies: Global Consumer Trends strategy, Smart Materials strategy, and Sustainable Water strategy. The former is a broad theme while the latter two are more narrowly focused.

Source: Robeco. Sector data is as of February 2025 and is for illustrative purposes only and no inference can be made on future positions. It should not be assumed that any investments in sectors identified were or will be profitable. Information presented does not constitute an offer to buy or sell any investment vehicle. The investment strategies shown may be implemented through various vehicles, which may not be registered or available in all jurisdictions.

Reliable risk engineering

Of course, being less tethered to conventional investing divisions also implies a higher active share and greater deviations from benchmark norms. Typically, such diversification not only helps differentiate sources of alpha but also mitigate the higher volatility that comes from deliberate deviations (see the box on the next page: Beyond benchmarks). As discussed in the next section, Robeco themes are also supported by multiple growth drivers which help to dampen concentration risks and amplify portfolio resilience over the long term.

Embracing an agnostic approach doesn't mean we're completely unhinged. Given we are active managers, we allow our portfolios discretion to exceed market volatility but apply disciplined frameworks to keep risk within a reasonable range.

We continuously monitor active risk, comparing the portfolio's absolute volatility with that of its reference benchmark (e.g., MSCI World or MSCI ACWI). Active risk is further controlled by setting limits on stock ownership, specific trends or investment clusters. Moreover, we routinely measure correlations across these groups as well as broader measures such as sector and region.

This helps ensure portfolio diversity is grounded in fundamental or structural differences, which meaningfully enhance or protect portfolio returns. This is in contrast to investment labels that can be not only superficially diverse but also introduce portfolios to unintended concentrations and systematic biases.

BEYOND BENCHMARKS – DIFFERENTIATED ALPHA DEMANDS DELIBERATE DEVIATIONS

Themes are designed to capture growth from long-term transformational change, not to mirror global benchmarks. That kind of growth requires long-term predictions about the future but it's also what generates differentiated alpha. This naturally leads to large but deliberate deviations in portfolio composition and positioning compared to benchmarks focused on short-term growth and earnings.

These deviations are reflected in higher active shares and tracking errors associated with thematic strategies. Deviations often arise from owning smaller companies unknown and under-represented in global indices. They also

stem from overweighting larger caps whose fundamental value and compounding potential are undervalued by markets. Moreover, increased concentrations of AI and Big Tech have amplified benchmark differences relative to themes, contributing to higher tracking errors for those that are underweight in these areas.

This has been the cause of much consternation, not so much for thematic managers but for investors that have become too focused on relative risk and returns in the short term. It deserves reminding that themes haven't lost touch with the times, with markets, or their function for portfolios. Themes have

always been about making projections on the future that require deliberate deviations from the status quo. If anything, today's larger deviations are a positive sign of themes remaining consistent with their investment philosophy and true to their convictions.

High concentration levels in markets is itself an extreme and unsustainable deviation that will correct as hyped valuations revert to their historic averages. When this happens, we expect tracking errors to fall to reasonable ranges and relative performance to rise as market valuations normalize and become more evenly distributed.

Differentiated sensitivity to market cycles

Themes are driven by long-term secular forces that tend to evolve independently of economic expansions and contractions. Unlike global equity strategies, the timing of thematic returns often diverges from traditional business cycles. In other words, some themes can outperform when global markets are declining and underperform during broad market rallies. Though macroeconomic factors and market sentiment will certainly have a short-term influence on theme-stock valuations, over the long term, the ultimate driver of thematic returns is the pace and breadth of adoption of its underlying structural trend(s).

These structural drivers can impact company fundamentals (and their valuations) at varying speeds. That means they can accelerate or decelerate based on shifts in fiscal or monetary policy, accelerated technological innovation, or supply chain dynamics. Regardless of speed

bumps and tempo changes, Robeco's thematic strategies are built to remain resilient and directionally aligned with these drivers of growth, capturing long-term upside as they materialize over time.

We closely follow where value is building or declining and adjust our exposure accordingly. We may underweight investment clusters facing short-term headwinds, while allocating more to those with stronger fundamentals or growth. By diversifying across different parts of the thematic value chain we mitigate the negative impact of cyclical downturns or take advantage of areas of cyclical growth, all while remaining anchored to the long-term growth of megatrends and strong structural shifts. All things considered, the net long-term effect for a robust theme should mean better returns compared to global equity markets.

Figure 8a: Thematic performance over time²


Past performance is no guarantee of future results. The value of your investments may fluctuate.

Source: Robeco. The chart illustrates the aggregated performance across all of Robeco's Thematic Equity Investing strategies in EUR from 31 December 1998 to 31 May 2025. See footnote 2 for more details.

2. This represents all fee-paying, discretionary portfolios managed according to the underlying thematic strategies (Sustainable Water, Healthy Living, Smart Mobility, Smart Energy, Smart Materials, Fashion Engagement, Biodiversity Equities, FinTech, New World Financials, Next Digital Billion, Global Consumer Trends, Digital Innovations, Circular Economy and Global Multi-Thematic). If the currency in which the past performance is displayed differs from the currency of the country in which you reside, then you should be aware that due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. Periods shorter than one year are not annualized. Returns gross of fees, based on gross asset value. In reality, costs (such as management fees and other costs) are charged. These have a negative effect on the returns shown.

A look at the top five themes in each year for the last five years demonstrates how thematic performance leadership shifts with changing market dynamics.

Figure 8b: Different market regimes favor different themes

Robeco thematic strategies and MSCI ACWI ranking (absolute returns) – Top 5							31 May 2025		
2025 YtD	2024	2023	2022	2021	2020	2019	3-year ann.	5-year ann.	10-year ann.
Circular Economy (1.7%)	FinTech (+31.7)	Digital Innovations (+34.9%)	MSCI ACWI (-13.0%)	Sustainable Water (+40.9%)	Smart Mobility (+50.2%)	Smart Energy (+45.5%)	FinTech (13.3%)	New World Financials (+14.8%)	Smart Energy (+11.5%)
New World Financials (0.8%)	New World Financials (+29.1%)	Global Cons. Trends (+29.7%)	New World Financials (-14.0%)	Digital Innovations (+34.3%)	Smart Energy (+48.4%)	Smart Mobility (+41.9%)	Digital Innovations (+13.2%)	Smart Energy (+14.7%)	Global Cons. Trends (+10.8%)
Biodiversity (-0.5%)	Digital Innovations (+27.5%)	FinTech (+26.1%)	Healthy Living (-14.2%)	Circular Economy (+30.2%)	Global Cons. Trends (+38.5%)	FinTech (+38.6%)	New World Financials (+13.0%)	Digital Innovations (+14.5%)	Sustainable Water (+9.4%)
Global Cons. Trends (-1.7%)	MSCI ACWI (+25.3%)	Global Multi-Thematic (+24.7%)	Smart Energy (-15.0%)	Smart Energy (+29.1%)	Digital Innovations (+23.8%)	Global Cons. Trends (+37.8%)	Global Cons. Trends (+12.3%)	Circular Economy (+13.8%)	Global Multi-Thematic (+9.3%)
FinTech (-2.7%)	Global Multi-Thematic (+22.1%)	Circular Economy (+18.1%)	Circular Economy (-18.7%)	MSCI ACWI (+27.5%)	Global Multi-Thematic (+21.8%)	Digital Innovations (+36.5%)	Circular Economy (+12.1%)	MSCI ACWI (+12.9%)	New World Financials (+9.3%)

Past performance is no guarantee of future results. The value of your investments may fluctuate.

Performance based on absolute returns (EUR) for all portfolios and mandates within each of the listed strategies. Source: Robeco. Data as of 31 May 2025. If the currency in which the past performance is displayed differs from the currency of the country in which you reside, then you should be aware that due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. Periods shorter than one year are not annualized. Returns are gross of fees and based on gross asset value. In reality, costs (such as management fees and other costs) are charged. These have a negative effect on the returns shown.

Differentiated convictions and discipline

Themes are inherently forward-looking. Making high-conviction investments based on an unseen future demands more than storytelling. Clarity and conviction should be based on how a theme, its sub-trends and supporting drivers will materialize over time – focusing on their trajectory, durability, and potential impact. For Robeco that clarity comes from rigorous data analysis, a disciplined investment process and our long-standing experience managing the interplay between themes, macro-environments and financial markets.

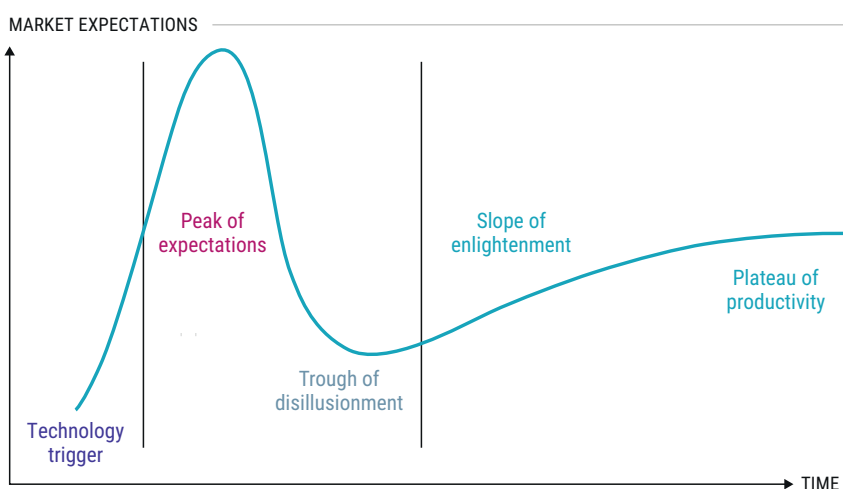
A successful thematic strategy also requires looking beyond well-researched names to uncover smaller players whose innovations or market positions will become increasingly critical as the theme evolves. Often the purest holdings are either unlisted or are too small or too illiquid and therefore too risky to be included in our investment scope. Still, we follow those with strong potential as future IPO candidates.

We use a proprietary approach optimized for thematic portfolios that prioritizes consistent growth over the long term. Our approach combines fundamental company analysis to assess its competitive advantages with a life-cycle assessment to determine where it sits in terms of alpha-generating potential for the theme. We aim to avoid companies at the tail-end of a theme or trend's lifecycle, where normally products or services are commoditized, profits are limited, and growth prospects are shrinking.

That doesn't mean we shun mature incumbents, many of which are rich in cash with deep moats and pricing power. These factors help them compound their success by smartly reinvesting profits and redeploying cash to maintain market share or build bigger buffers in times of volatility. Our aim is to optimize risk-return potential, selecting companies high on innovation and growth as well as mature players with lower expansion potential but with solid recurring revenues and returns. ●

Figure 9: Finding the champions in each phase of a trend's life cycle

Gartner Technology Hype Cycle



The Gartner Technology Hype Cycle illustrates the tendency of investors to overestimate the potential of an emerging technology in the short term and underestimate and under-invest its potential in the long term. Robeco's thematic strategies examine the alpha and risk potential of technology companies across the entire life cycle of a technology – from the initial excitement to scaled adoption across industries.

Short-term overreaction

Early on, clear winners are not always evident. We adopt a basket approach, taking small positions in multiple companies or by investing in 'picks and shovels' – companies that don't make the finished product but whose inputs are essential for its development.

Investment chasm

In this stage, valuations fall as investors dump stocks when company results fail to meet their lofty expectations. As this plays out, we are wary of investing as the industry experiences a shake-out period marked by high volatility.

Long-term underreaction

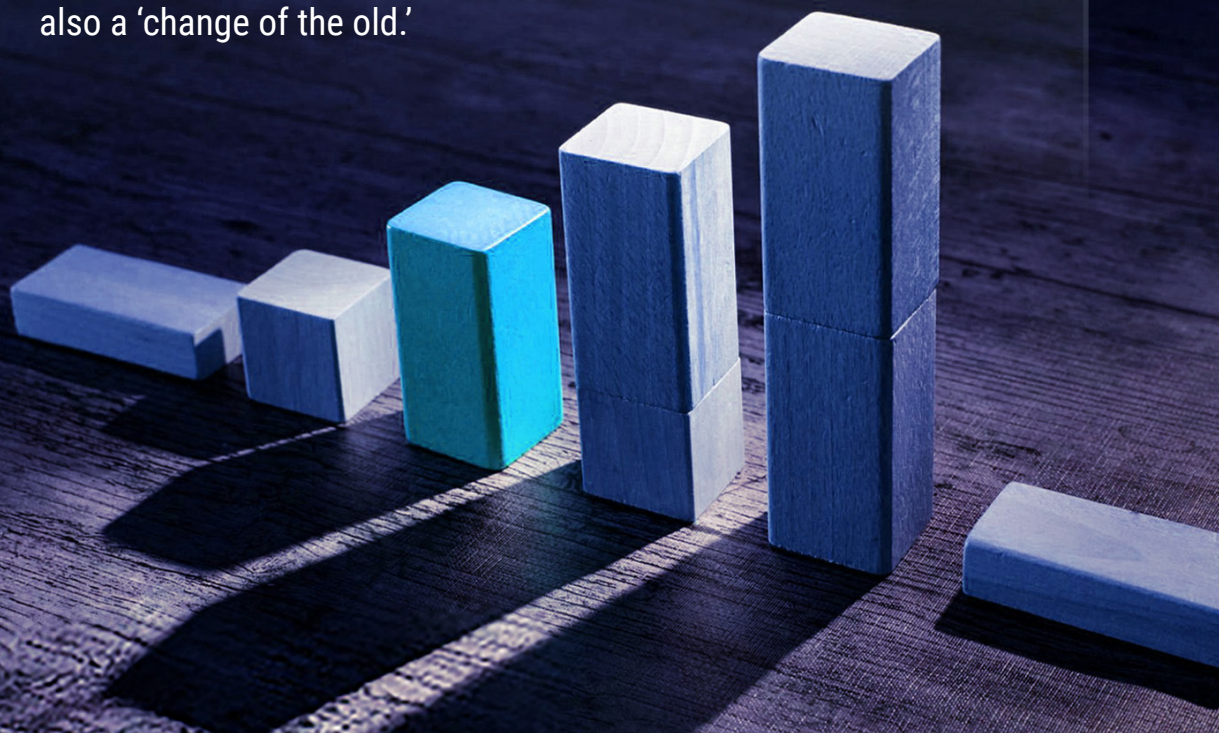
Over time, we concentrate investments on companies which are compounding their competitive advantages as the technology is adopted in industries and associated revenues rise over the long term.

Source: Gartner, Robeco, TechTarget.

3. Establishing beachheads but experiencing headwinds

We were early pioneers in thematic investing and have consistently pursued high-conviction themes long before they entered the mainstream. We have boldly targeted frontiers that are still emerging, under-researched and undervalued across the investment landscape.

From rising incomes and digitalization in emerging markets to unheralded innovation from smaller midcaps, and from climate change and resource scarcity to Europe's sustainability leadership – we've established early beachheads in areas that historically lacked visibility but held significant potential for high, multi-decade growth. In addition, we shed transparency through the fog of certain faster-trending market segments such as consumer preferences or the change of business models in the financial industry. Sometimes shifts are not simply 'in with the new' but also a 'change of the old.'



**“ Vision without action is a daydream;
action without vision is a nightmare**

Attributed to a Japanese proverb

Emerging markets' strength – new terrains of enduring growth

Structural trends such as digitization and aging populations are not confined by borders, naturally driving thematic investors to 'go global'. Generating differentiated alpha inevitably leads to emerging markets (EM), where the adoption curves tend to be steeper and market expansion opportunities larger.

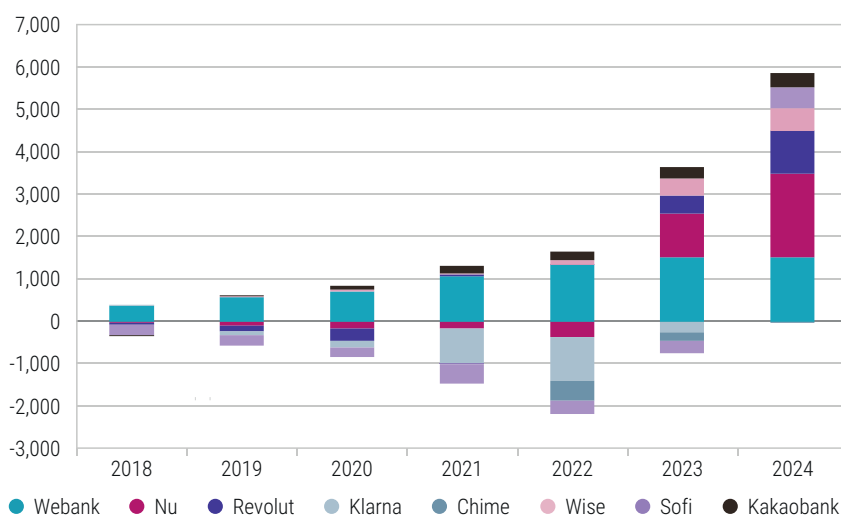
The fact that markets are underdeveloped means companies and consumers can skip or 'leapfrog' over heavy investments in legacy infrastructure, predecessor technologies and entrenched business relationships that lock out innovative newcomers and impede accelerated growth in developed markets.

Low incomes and education levels in Latin America and Southeast Asia have left many shut out of traditional banking and financial channels. That's changing with the boom in mobile phone penetration. Through their focus on digitally based lenders and neobanks with direct access to these underserved segments, our FinTech and New World Financials strategies have built meaningful exposure to a key area of growth in emerging economies.

The modern financial system is riddled with complexity, bureaucracy and bias, shutting out lower-earning consumers in both developed and emerging markets. Neobanks cut through red tape, providing fast, easy access to credit, banking, and other financial services. Rising incomes and digitization are fueling demand globally, resulting in higher growth and profitability.

Figure 10a – Paradigm shifts in emerging markets: Neobanks are turning profits

Neobanks net profits (USD, million)

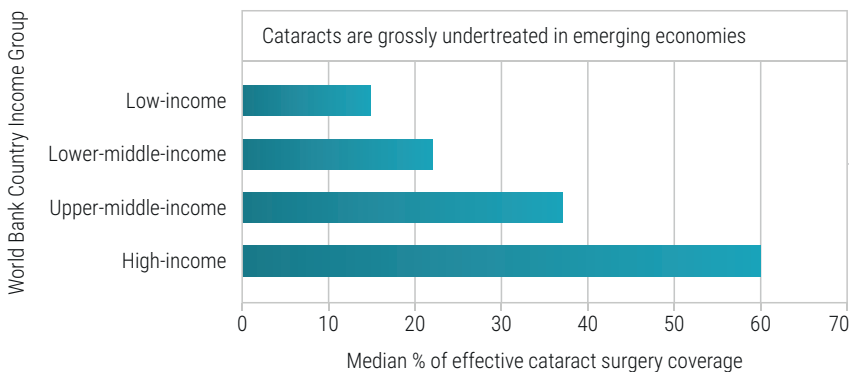


Source: Company reports, Morgan Stanley, Bloomberg, Robeco, 2024. The companies shown on this slide are for illustrative purposes only in order to demonstrate the investment strategy on the date stated and may no longer be held by the strategy. No inference can be made on the future development of companies listed.

Similarly, our Global Consumer Trends strategy focuses on themes that are gaining traction in developed markets but which are set for potentially explosive growth in emerging ones. Those include the rise of the middle class, the rapid digital transformation of consumption, as well as a growing preoccupation with personal health and well-being. Here too, locally based and savvy e-commerce vendors are using the convenience of online mega-apps and cashless payments to leapfrog past the brick-and-mortar stores of slower-footed incumbents.

Figure 10b: Paradigm shifts in emerging markets: Eyecare for the aging

Cataract surgery is an untapped opportunity in emerging markets



Diseases and other debilitating aspects of age increase as longevity increases in regions worldwide. Cataracts, for example, are a leading cause of blindness in the elderly, and represent a sizeable untapped opportunity for healthcare. Rising incomes (and falling treatment prices) mean more seniors in emerging markets can now afford treatments long reserved for developed market patients.

Source: Robeco, World Health Organization, Report of the 2030 targets on effective eye care coverage, 2022.

European strength – ensuring responsible innovation

Several of our themes are deeply aligned with global sustainability goals. They address complex challenges that cause friction and reduce the productive potential of planet, people and profits. Europe remains a global leader in sustainability, setting the direction and pace on topics such as climate change, resource conservation, and biodiversity loss.

Sentiment toward sustainability has soured in recent years, in step with anti-ESG dogma from right-leaning factions around the world. However, quick-fix rhetoric and short-sighted agendas won't solve the long-run problems. As environments, populations, and businesses feel the brunt of intensifying climate change, attention will once again shift to sustainability themes and companies that recognize the long-term value of decarbonizing, improving resource efficiency and reducing waste in their operations and supply chains.

The temporary tug-of-war between old economy business models and newer, solution-oriented approaches deserves investor attention. They are vital indicators of tipping points for areas on the verge of large-scale change. Europe is home to many companies enabling sustainability and nature-based themes and it continues to nurture and invest in long-term sustainable economic development.

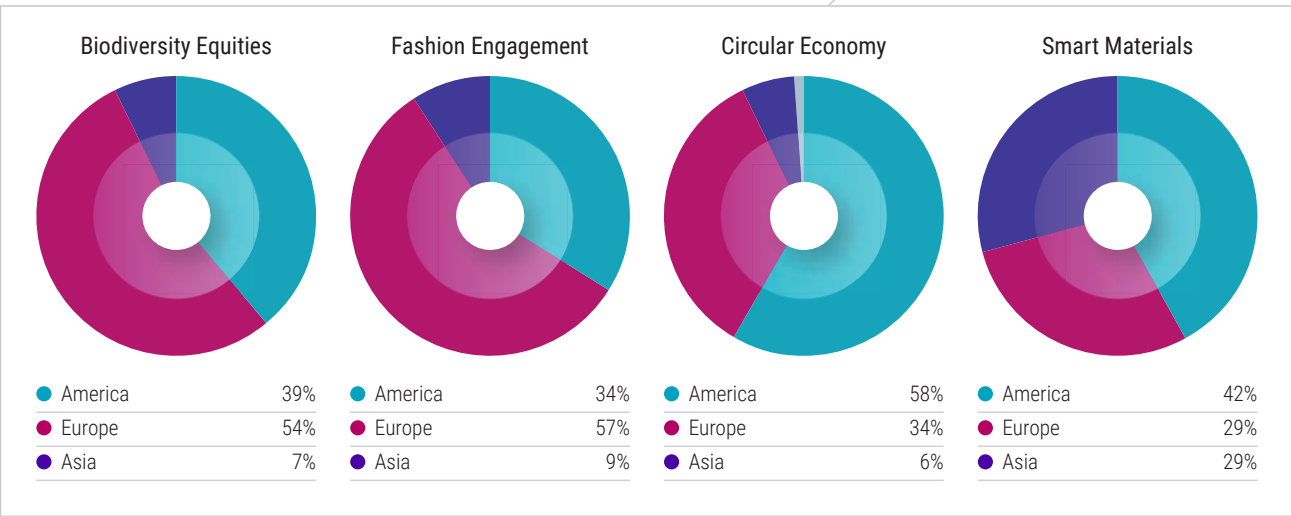
For example, Germany recently passed a half-trillion-euro plan to resurrect its industrial base and modernize its infrastructure, with positive knock-on effects for renewables and resource-efficient manufacturing. France is attacking waste in retail with bans on plastic and the destruction of unsold goods as well as recycled content targets. The EU has also set binding targets across many

sectors – from lower vehicle and building emissions to higher standards for preserving EU habitats and ecosystems. Individually, countries are investing heavily into water infrastructure to mitigate flood and drought risks and ensure ample water supplies to meet increasing industrial demand.

From Fashion Engagement and Biodiversity to Smart Materials and Circular Economy, many of Robeco’s investment strategies are well-positioned to capture the upside stemming from consistent policies and funding incentives, as the EU builds on its commitment to transition to the world’s first sustainable economy by 2050.

Europe is the global forerunner for ensuring technological innovation, business demands, and economic growth are applied by companies in ways that harmonize with social needs and environmental development. That’s why Robeco’s thematic strategies focused on enhancing biodiversity and resource efficiency in business processes have a natural tilt toward European holdings.

Figure 11: Embracing Europe’s strengths



Source: Robeco. This is the current overview as of April 2025 for the Biodiversity Equities strategy, the Fashion Engagement strategy, the Circular Economy strategy and the Smart Materials strategy. These are the regional allocations as of the date stated and there can be no guarantee of future developments. It should not be assumed that any investments in region identified were or will be profitable.

Midcap leadership – small size offset by sharp focus and disciplined hustle

Exposure to midcap equities is an important component of our thematic framework, particularly for many of our narrowly focused strategies. Midcaps create a potent mix of proven technologies, solid leadership, executable know-how, and viable business models. This makes them strong targets for themes seeking exposure to areas of cutting-edge but scalable innovation, without the risk and volatility of inexperienced start-ups.

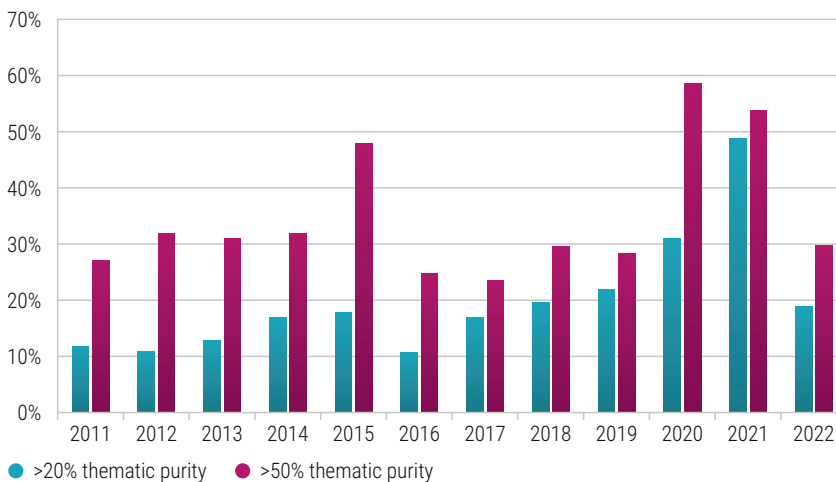
Small size and low visibility leave midcaps plenty of room to expand market share and provide long runways of compounding growth as they develop and mature to larger-cap ranks. That makes them a dream for long-term investors searching for quality stocks to own, buy and hold. And their ‘nichey’ nature mean they aren’t always on the radar of many core equity portfolios. That means lower valuations and great entry points for capturing differentiated growth relative to broader markets.

Maintaining thematic purity means many of our themes tend to be tilted toward mid- and smaller-cap companies whose business models and growth channels are still tightly targeted and less diluted compared to the diverse services and revenue streams of mega-cap stocks. This kind of purity could signal a higher-quality portfolio that should merit a price premium.

A study by Morgan Stanley found that companies aligned with enduring themes tend to see their stock value increase over time. Specifically, a 1% rise in revenue linked to a thematic area can lead to an approximate 1.2% increase in the stock's valuation versus the market. Considering their quality, many of our thematic portfolios are currently trading at a discount relative to more generic portfolios that have more dispersed and diluted sources of revenue growth. This suggests thematic purity could be an interesting indicator for investors seeking attractively priced avenues for growth. ●

Firms with greater thematic purity are rewarded with higher valuations compared to firms with more dispersed revenue sources.

Figure 12: More purity, more upside potential



The graph shows that between 2011 and 2022, the average valuations (measured by 12-month-forward EV/Sales, EV/EBITDA, and P/E multiples as of 31 Dec of each year) were higher for companies with greater thematic purity (more than 50% reported revenues linked to a specific theme) compared to those with more diluted exposure (more than 20% of reported revenue). Source: Robeco, Morgan Stanley Research, Mapping AI's Diffusion, 2024.

ACTIVE VS PASSIVE MANAGEMENT

Active thematic equities command EUR 648 billion in assets – more than three times the EUR 195 billion held in passive strategies (Broadridge, March 2025). This significant gap reflects investor confidence in the value of active management within thematic investing.

Robeco recognized the value of themes long before they reached these heights of popularity among mainstream investors. We've been actively investing in themes for over a quarter of a century and understand the stifling effects of cyclical risks arising from shifts in rising inflation, macroeconomic policies,

consumer sentiment or other disruptions on portfolio returns. We've intentionally designed our thematic strategies to be multi-dimensional so that we have more levers to shift and more room to maneuver in rough economic waters. That can mean trimming high-growth stocks while boosting exposure to defensive stocks.

Active management combined with intimate knowledge of the interplay between company fundamentals, macro trends and a theme's structural drivers enables thematic managers to more precisely gauge when and how much of a position to cut, buy or hold.

In contrast, passive thematic strategies are based on indices bluntly constructed from algorithmic screening of company revenues or keywords. While simple and rapid, they can be too narrow, failing to capture innovative or nuanced applications that can emerge as themes evolve. This may be sufficient when the theme is in favor, but such low diversification leaves passive strategies overly exposed to downside risks with no place to hide if sentiment shifts.

Limited flexibility also extends to portfolio trading. Position sizes can only be changed according to scheduled rebalancing, which can be quarterly or annually. This severely limits the passive

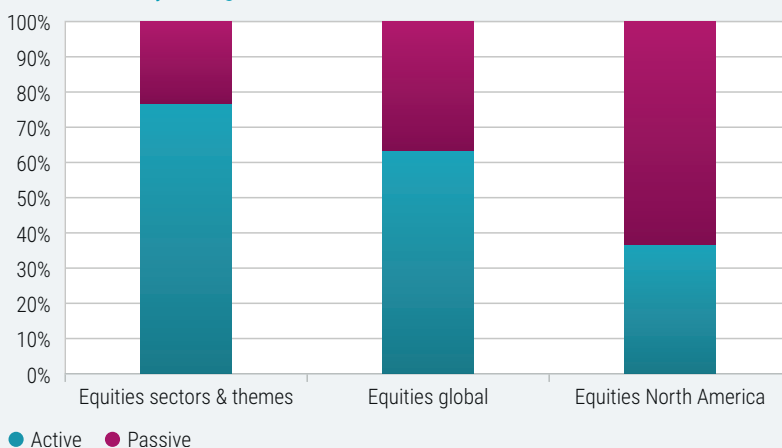
investor's ability to buy more upside when positive momentum accelerates or reduce the damage of stocks in decline.

Finally, their simple build and low maintenance mean many passive/ETF strategies can offer lower fees. However, pricing may not look so attractive if returns are sacrificed due to lack of diversification when a theme hits headwinds. And contrary to popular belief, not all ETFs are cheap. The additional research and analysis involved in discovering and carefully curating an index of niche stocks means thematic ETFs often command higher premiums. Less control and higher fees help explain why actively managed themes are preferred over the passive counterparts.

Figure 13: Active management dominates thematic investing

While passive management styles have overtaken other equity classes, active management dominates within thematic equity investing.

Share of actively managed assets

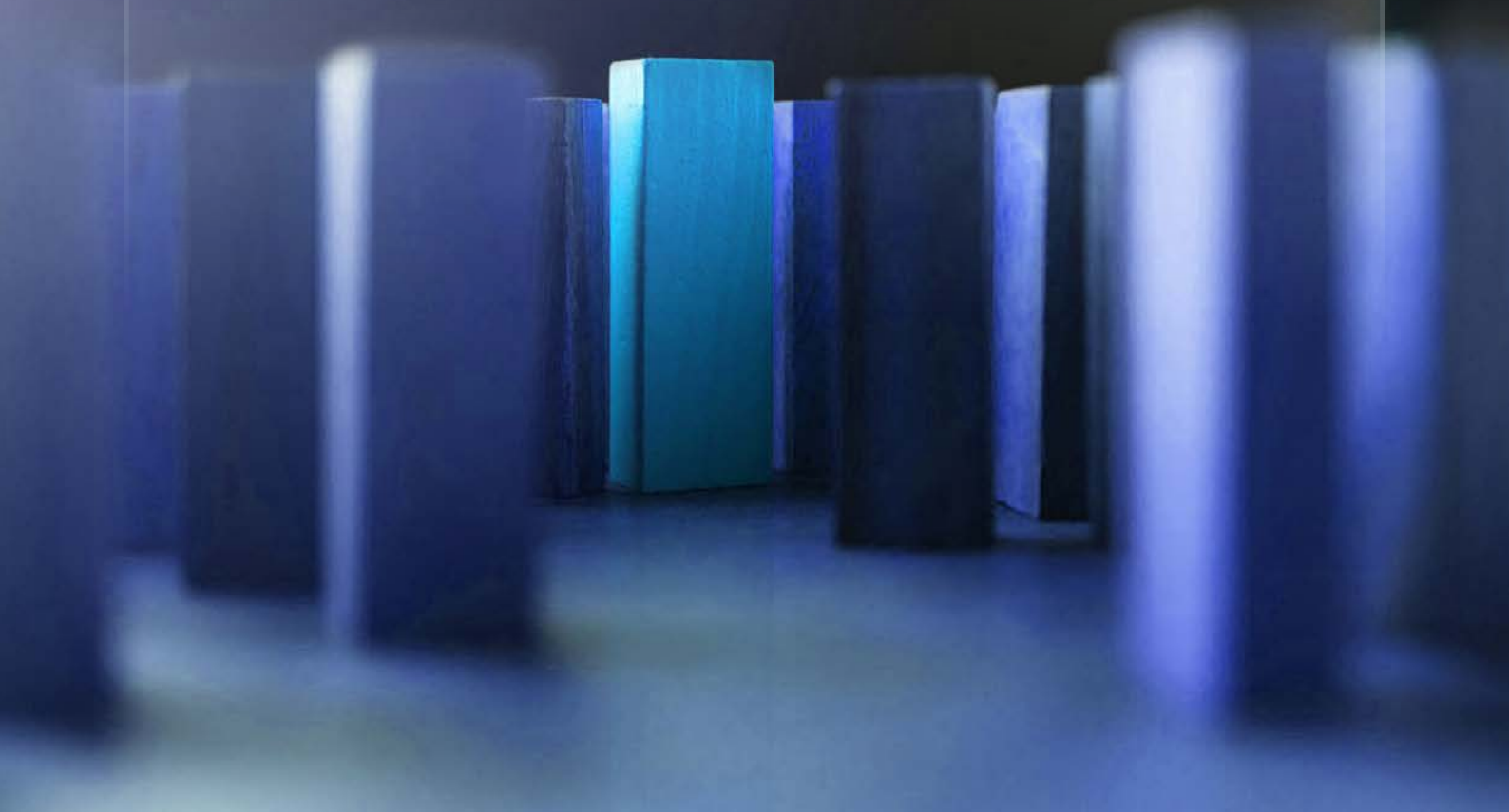


Source: Robeco, Broadridge, March 2025

4. Moving from headwinds to head start

Markets are grappling with change from all sides. Rising protectionism and geopolitical tensions are disrupting global trade, while increasingly passive and concentrated markets are triggering disruptive drawdowns. Such volatility and uncertainty is reinforcing the relevance and rigor of Robeco's approach to thematic investing.

Our strong convictions on the power of themes to drive growth and returns has kept us grounded and has guided us to a rich set of opportunities that are structurally supported and well-diversified across geographies, industries, and market caps. Previously a headwind, our established beachheads now give us a head start as markets fragment and a new global order emerges.



“ *Invention requires a long-term willingness to be misunderstood* ”

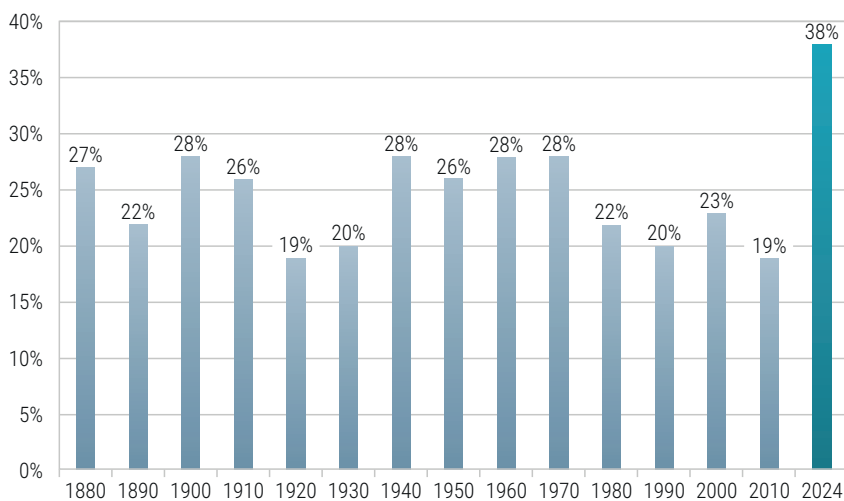
Jeff Bezos, Founder, Executive Chairman, and former CEO of Amazon

Trump’s turbulence marks an end to narrow markets

Strong governance, technological innovation, and seemingly insatiable consumer demand has helped spur growth particularly in a small cohort of tech-tilted stocks known as the Magnificent Seven. While their seemingly unstoppable rise in valuations made them and US markets the envy of the investment world, it also reduced the market’s diversity, concentrating performance in just a handful of stocks.

Figure 14: US equity market concentrations have reached historic highs

S&P 500 concentration (from 1880 to 2024)



The top ten stocks in US markets constituted on average 24% of the total market value for more than a century. The accelerating momentum of the Magnificent Seven broke the paradigm, reflected by higher valuations and higher US market concentration.

Source: Finaeon, S&P 500, Citi Global Insights, Robeco 2025.

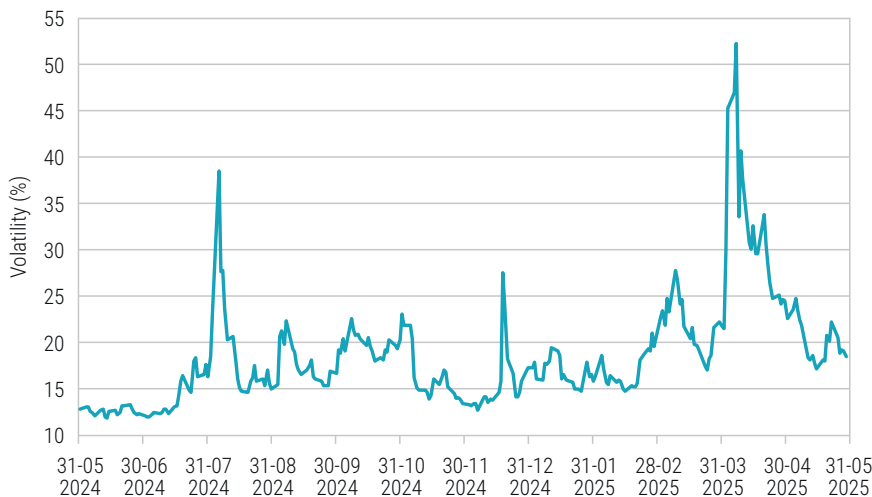
The Magnificent Seven’s mystique already began to ebb in late 2024 with some significant selloffs. Their dominance continues to wax and wane in step with ‘Trumpeting’ headlines from the ‘Trump Trade’, in the run up to his presidential win, to the Trump 2.0 market rally after his win. They have continued with Trump’s tariff turmoil – all of which have contributed to spikes in market volatility.

Figure 15: Stocks fall and volatility rises in US markets

S&P 500 performance



CBOE Volatility Index (VIX)



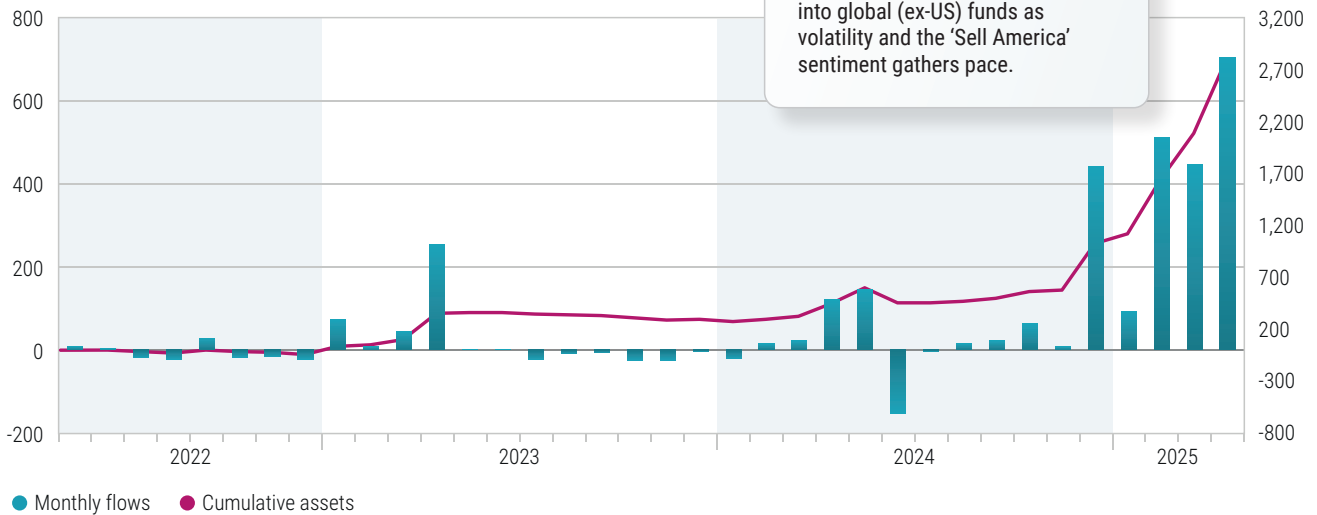
Source: Bloomberg, Robeco, 2025.

The ongoing turbulence of the seesawing, 'on-again-off-again' tariff regime has fueled uncertainty over the stability of US leadership in the world and in financial markets. Liberation Day on 2 April resulted in a USD 6.6 trillion loss in US market value in ensuing days as investors pivoted away from US assets.³ Given his penchant for drama, the positive correlation between Trump's actions and pronounced market volatility should continue not only this year but throughout his second tenure.

3. MarketWatch, Wall Street Journal, 4 April 2025. 'US stocks see biggest 2-day wipeout in history.'

Figure 16: Anywhere but America

Monthly flows to global ex-US funds May 2022-April 2025 (USD, millions)



Source: Broadridge, Robeco May 2025.

The dimming of US and Magnificent Seven dominance should spark renewed visibility and positive momentum for long-neglected stocks across sectors and regions worldwide. This in turn should also help reduce the headwinds faced by many narrowly focused thematic strategies less exposed to US and Big Tech megacaps.

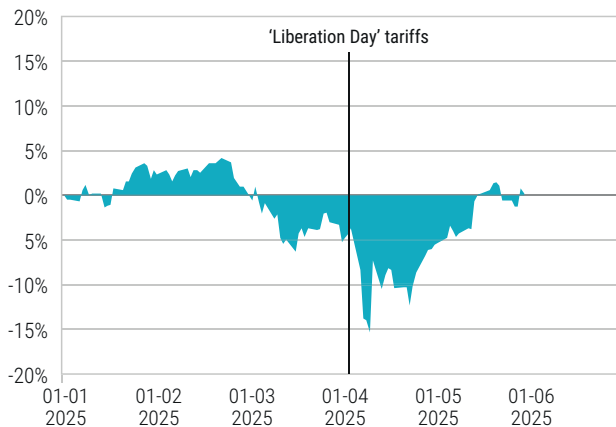
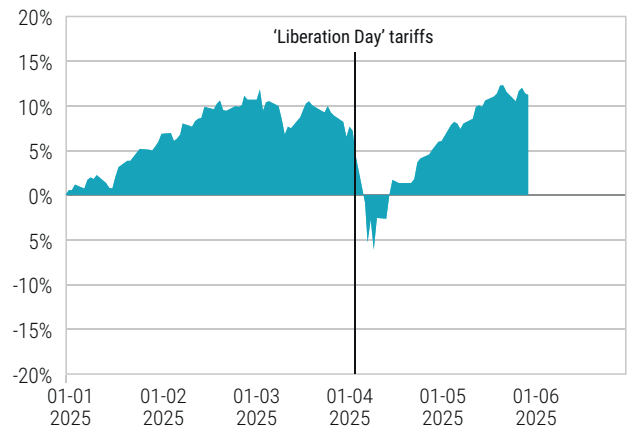
Diversity is a key pillar of portfolio construction for Robeco's thematic strategies, enhancing resilience in up and down markets. That diversity paired with the flexibility of unconstrained, active management has enabled even broader themes to limit losses stemming from a bigger share of investments in US large caps. These broader themes have quickly shifted exposure from expensive Big Tech toward companies in consumer staples, luxury goods, and healthcare companies in Europe and elsewhere in emerging markets – companies that exhibit high quality at reasonable prices.

Desynchronization and fragmentation

Turbulence at the top doesn't just characterize financial markets – industrial policies are also changing. Where once free-trade and international supply chains oiled the gears of global growth, protectionism is now the name of the game.

Intensifying geopolitical tensions are pushing countries toward reshoring and near-shoring their supply chains to minimize disruptions to the flow of inputs and the sale of outputs. Ensuring access to resources and protecting economic and national autonomy are also behind the latest round of domestic subsidies, import tariffs and export controls introduced by the US, EU and China.

The US's tariff hikes should hit not help US firms. It's expected to raise the cost of inputs for domestic companies and finished goods imported back into US markets by US companies manufacturing abroad. That puts all US companies' margins (and valuations) at risk regardless of size, and we are already seeing investors exit US assets in search of safer havens elsewhere.

Figure 17: Trump tariffs flipped the script on valuations**S&P 500 (USD)****STOXX Europe 600 (EUR)**

Source: Bloomberg, Robeco, May 2025.

On 2 April 2025 (or 'Liberation Day'), President Trump announced reciprocal tariffs on countries whose trade policies he deemed as unfair to US industries and workers. US equity markets nose-dived in the days following the announcement while stocks in the rest of the world, including Europe (STOXX 600) experienced strong gains.

Our thematic strategies are built for resilience and should benefit in an increasingly fragmented environment where countries are guarding their interests and shifting investment inward through domestically focused fiscal spending. Our geographic diversification across US, Asian, emerging and EU markets helps reduce the risk associated with over-exposure to economic turmoil or policy regimes of any one region. Moreover, our focus on addressing enduring challenges has driven us to invest in cleaner infrastructure, climate change, resource security, and financial inclusion – areas which disproportionately impact ex-US economies and where EU leadership is also strong.

Cautious conglomerates vs emerging champions

As trade wars and real on-the-ground conflicts continue to rage, it becomes harder for companies to calculate collateral damage and chart their forward strategies. They can no longer rely on stable trade routes, the smooth flow of supply chains, or favorably aligned regulatory regimes. Internationally vulnerable companies understandably become more cautious. Once-ambitious expansion plans are pulled back. Long-term capital investments are delayed, guidance becomes more conservative, and innovation is curtailed as R&D budgets are slashed.

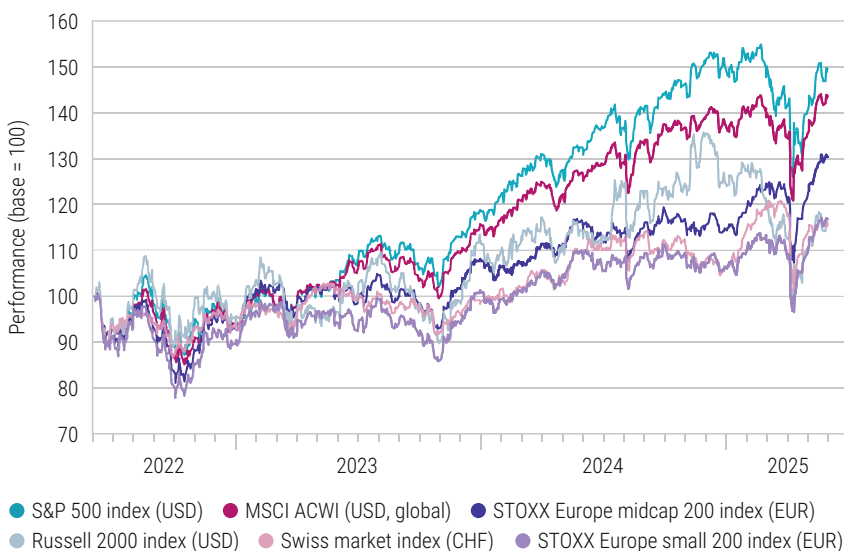
This retrenchment by large caps makes room for smaller, more agile companies to thrive, especially those tied to themes such as circular economy and biodiversity which are closely linked to resource security and long-term economic resilience. At the same time, themes linked to increasing infrastructural development such as water, energy grids, smart materials, manufacturing and mobility are re-gaining relevance.

In this new world, it will be local brands and regional leaders, not international conglomerates, who are particularly well-positioned to benefit from the confluence of rising incomes, increased digitalization, the intensified social media influence, and the need for financial inclusion. These home-grown champions focus capital on growing uptake and market share among retail consumers instead of on inefficient legacy systems that are oftentimes impeding the growth of larger incumbents.

Finally, active management helps us once again turn risk into opportunity. Well before tariff turmoil, even well before Trump's second presidential bid, our Global Consumer Trends strategy began rotating from big brands with sprawling global empires toward native competitors with strong cultural ties, which are better able to cultivate and convert customers and grow regional sales.

Outperformance of magnificent megacaps has helped S&P and MSCI ACWI indices surge relative to their small and mid-cap brethren. Q1 data suggest smaller caps may be catching up, particularly in Europe.

Figure 18: Localization and fragmentation... a boon for midcaps?



Source: Bloomberg, Robeco 2025.

AI's potential is yesterday's news

No theme has commanded as much attention in recent years as artificial intelligence. In 2024 alone, capital spending by the Magnificent Seven – AI's power players – rose 47% to USD 243 billion and is forecasted to rise 24% in 2025.⁴ This was driven in large measure by AI investments in high-performance semiconductors, cloud computing and other data center infrastructure. In other words, the picks and shovels powering the AI gold rush.

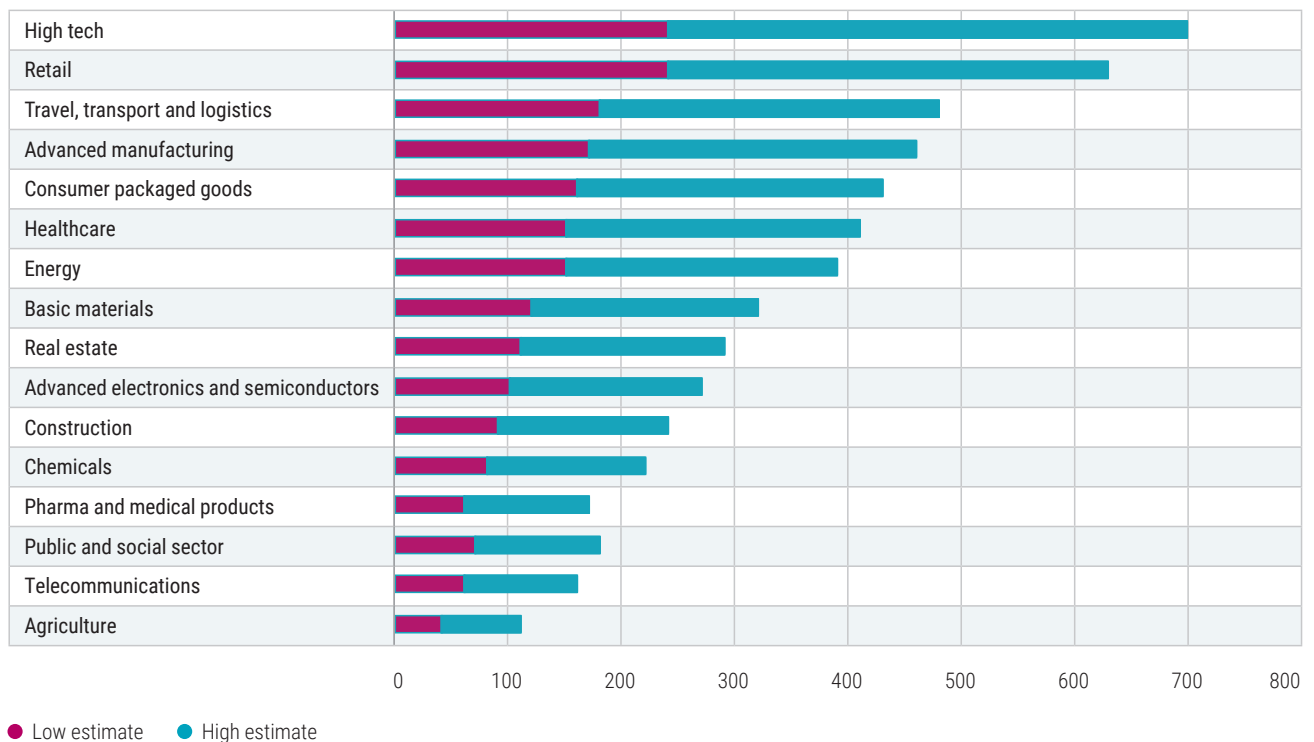
4. Robeco, January 2025. 'Digital Innovations Outlook: Innovation's new golden age.'

Though excitement is still palpable, the initial euphoria has begun to fade, giving way to skepticism over AI's promising potential when applied to real-world settings. It represents a crucial inflection point for AI as well as themes. Interest and investments in AI are now broadening toward companies in diverse industries that can deploy AI into operations in ways that create new products, enhance services, cut costs and waste, and generate productivity gains.

We are already witnessing AI enhancements across healthcare, mobility, industrials, logistics, consumer goods, marketing and customer service to name just a few. Companies are deploying AI tools to accelerate disease diagnosis, drug discovery, and the development of personalized therapies; to enhance manufacturing via automation and reduce costs through predictive maintenance; to forecast weather patterns and optimize logistics and supply chain flows; and to predict changes in consumer demand and refine marketing strategies. ●

Figure 19: AI's value-add in revenue across diverse industries

The revenue-generating potential of generative AI (USD, billions)



Source: McKinsey, Robeco, 2024.

5. A critical inflection, where chaos becomes a catalyst

Market desynchronization, tariffs and trade wars, disrupted and reshored supply chains – these macro forces are converging to create an investment landscape that looks fundamentally different than the globalization-friendly environments on which we have come to rely. This moment isn't just a return to 'normal', it's a profound turning point – and one that makes the case for thematic equity investing more urgent and more relevant than ever.



Thematic investing offers an antidote to a new era of protectionist-induced inflation. Tariffs will with certainty increase the prices of not just finished goods but imported raw inputs needed for products across the board. Moreover, companies are now beginning the expensive task of realigning supply chains, reshoring huge parts of production, and expanding the built environment in oftentimes more costly domestic bases.

As this plays out, investors such as Robeco that have diversified across thematic value chains are well positioned to benefit, especially those that have replicated the approach across regions globally. Our specialized thematic teams have the expertise needed for investing in upstream infrastructure as well as small and nimble local champions with the cultural and digital savvy needed to rapidly gain market share in their respective domains.

Moreover, the chaos of current markets has created a catalyst for themes, offering investors a compelling response to the question of where to turn now that market 'passivization' and the momentum of the Magnificent Seven has seemingly peaked. Concepts like fundamentals and diversification will once again matter giving active managers like Robeco with rigorous investment frameworks and consistent risk-adjusted performance an edge.

Themes offer broad exposure to enduring transformational growth that is supported not by short bursts of momentum concentrated on a single industry (e.g., AI) or a single region (e.g, the US market), but by multiple drivers that are more broadly unfolding across sectors, borders, and decades. Moreover, sustainability should also become an advantage as investors pivot away from an exclusive focus on high-momentum growth and toward areas of the economy capable of generating sustainable, long-term value. Here examples range from clean infrastructure and automation to electrification, financial inclusion and resource efficiency. That's not to say that investors should ignore trends such as AI; we are convinced that AI will increase productivity and efficiency at scale and help solve long-standing sustainability challenges.

Through disciplined, data-driven investment frameworks, Robeco's thematic portfolios are investing in full breadth of transformative change – balancing high-growth innovators with stable incumbents, spanning global markets from emerging market champions to sustainability leaders in Europe. Our foresight, research and discipline mean our portfolios are aligned with where value creation is moving next instead of lingering where it used to be. ●

This information refers only to general information about Robeco Holding B.V. and/or its related, affiliated and subsidiary companies, ("Robeco"), Robeco's approach, strategies and capabilities. This is a marketing communication solely intended for professional investors, defined as investors qualifying as professional clients, who have requested to be treated as professional clients or who are authorized to receive such information under any applicable laws. Unless otherwise stated, the data and information reported is sourced from Robeco, is, to the best knowledge of Robeco, accurate at the time of publication and comes without any warranties of any kind. Any opinion expressed is solely Robeco's opinion, it is not a factual statement, and is subject to change, and in no way constitutes investment advice. This document is intended only to provide an overview of Robeco's approach and strategies. It is not a substitute for a prospectus or any other legal document concerning any specific financial instrument. The data, information, and opinions contained herein do not constitute and, under no circumstances, may be construed as an offer or an invitation or a recommendation to make investments or divestments or a solicitation to buy, sell, or subscribe for financial instruments or as financial, legal, tax, or investment research advice or as an invitation or to make any other use of it. All rights relating to the information in this document are and will remain the property of Robeco. This material may not be copied or used with the public. No part of this document may be reproduced, or published in any form or by any means without Robeco's prior written permission. Robeco Institutional Asset Management B.V. has a license as manager of UCITS and AIFs of the Netherlands Authority for the Financial Markets in Amsterdam.

United Kingdom

This information is provided by Robeco Institutional Asset Management UK Limited, 30 Fenchurch Street, Part Level 8, London EC3M 3BD, registered in England no.15362605. Robeco Institutional Asset Management UK Limited is authorised and regulated by the Financial Conduct Authority (FCA – Reference No: 1007814).

Switzerland

Robeco Switzerland Ltd is licensed by the Swiss Financial Market Supervisory Authority FINMA as a manager of collective assets.

Australia

This document is distributed in Australia by Robeco Hong Kong Limited (ARBN 156 512 659) ("Robeco") which is exempt from the requirement to hold an Australian financial services license under the Corporations Act 2001 (Cth) pursuant to ASIC Class Order 03/1103. Robeco is regulated by the Securities and Futures Commission under the laws of Hong Kong and those laws may differ from Australian laws.

Hong Kong

Issued by Robeco Hong Kong Limited, licensed and regulated by Securities and Futures Commission of Hong Kong. The contents of this document have not been reviewed by the Securities and Futures Commission Hong Kong. Investment involves risks. This information does not constitute an offer to sell, a solicitation of an offer to buy, or a recommendation for any security.

Singapore

This information is for informational purposes only and should not be construed as an offer to sell or an invitation to buy any securities or products, nor as investment advice or recommendation. The contents of this document have not been reviewed by the Monetary Authority of Singapore ("MAS"). Robeco Singapore Private Limited holds a capital markets services licence for fund management issued by the MAS and is subject to certain clientele restrictions under such licence. An investment will involve a high degree of risk, and you should consider carefully whether an investment is suitable for you.

US

This information is for informational purposes only and should not be construed as an offer to sell or an invitation to buy any securities or products, nor should it be viewed as investment advice or a recommendation to buy or sell any financial instrument or instruments. Investment management services are offered to U.S. institutional clients by Robeco Institutional Asset Management U.S. Inc. ("RIAM US"), an investment adviser registered with the US Securities and Exchange Commission ("SEC"). Such registration should not be viewed as an endorsement or approval of RIAM US by the SEC. RIAM US is a wholly owned subsidiary of ORIX Corporation Europe N.V. ("ORIX"), a Dutch investment management firm headquartered in Rotterdam, the Netherlands. RIAM US is located at 230 Park Avenue, 33rd floor, New York, NY 10169.

© Q2/2025 Robeco

ROBECO
The Investment Engineers