

2022 outlook:

Gathering pace



Foreword:

Turning point

Expect profound changes in 2022 and beyond that will create both risks and opportunities for investors.

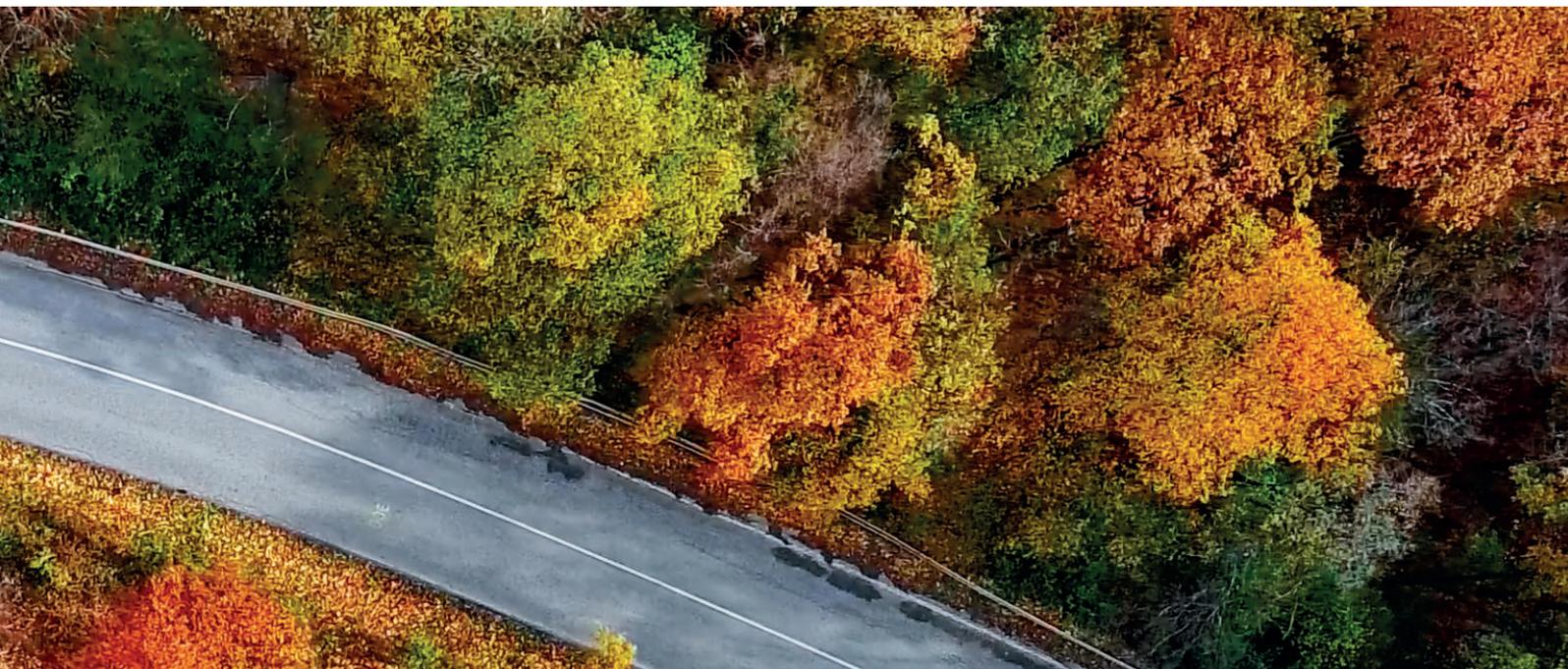
After another extraordinary year for investors, expectations are mounting that 2022 will form a turning point for the global economy and markets: in the face of rising inflation, central bankers aim to withdraw the stimulus that has provided an extremely supportive backdrop for risk assets.

While the world is learning to live with COVID-19, flare-ups will likely continue to be disruptive; there is also the potential risk of a vaccine-resistant mutation that could have a more material impact on growth.

Politics adds another layer of uncertainty to the outlook, with midterm elections due to take place in Washington and tensions between the US and its rivals continuing to smoulder. So too do fast-paced technological developments, from the realm of the 'metaverse' to that of cryptocurrencies, many of which prompt excitement, bemusement and scepticism from investors and regulators in equal measure.

And yet it is also increasingly clear that the key investment themes accelerated by COVID – such as digitisation and fiscal dominance – are likely to gather pace. Following COP26, we also know that the pandemic has focused the minds of politicians and investors worldwide on the next crucial challenge: climate change and the energy transition.

Recent volatility in energy markets and bond-market gyrations, particularly at the front end of yield curves, underscore how long-term trends can reshape the investment landscape with sometimes astonishing rapidity.



In this outlook, teams from across LGIM examine what these themes mean for investors next year. Our conclusions include the following key points:

- Inflation risks could trigger an aggressive shift in monetary policy
- The ‘fear of joining in’ – or FOJI – may not be warranted in some growth themes
- Obesity is a financially material issue on which investors should engage

Other topics addressed are how the road to higher rates poses opportunities to forge more resilient portfolios; the outlook for sustainable buildings; and how demand for long-dated, sterling inflation-linked securities is likely to shape up.

Global solutions

Expectations for the role that investors need to play in tackling environmental, social and governance (ESG) issues are also continuing to rise.

As mentioned in our [autumn update](#), we believe climate change is *the* era-defining challenge we face. It will require us to transform the global energy system, as well as the way we live and consume. Expect profound changes over the coming years that will create both risks and opportunities.

Despite improvements, ESG data remain patchy. We anticipate further advances in the availability and consistency of data along the investment chain, although are pessimistic as to the chances of dramatic progress on carbon pricing in the near term.

But the mixed quality of such data – and uneven market pricing of themes like climate change – enables asset managers to make capital-allocation decisions that can both deliver the positive change the world urgently needs and generate long-term returns for our clients.

This year, we made the point that inaction on climate is simply not an option. In 2022, expect to more hear from us about the nature of the action that is required.

For investors, this means across all investment capabilities, asset classes and regions. The climate emergency is a global problem that requires a truly global solution, in which we can and must play a critical role.



Sonja Laud
Chief Investment Officer



Economics: **‘Growflation’ and the policy outlook**

The global rebound should continue in 2022, but inflation risks becoming entrenched. This might require an aggressive shift in monetary policy.

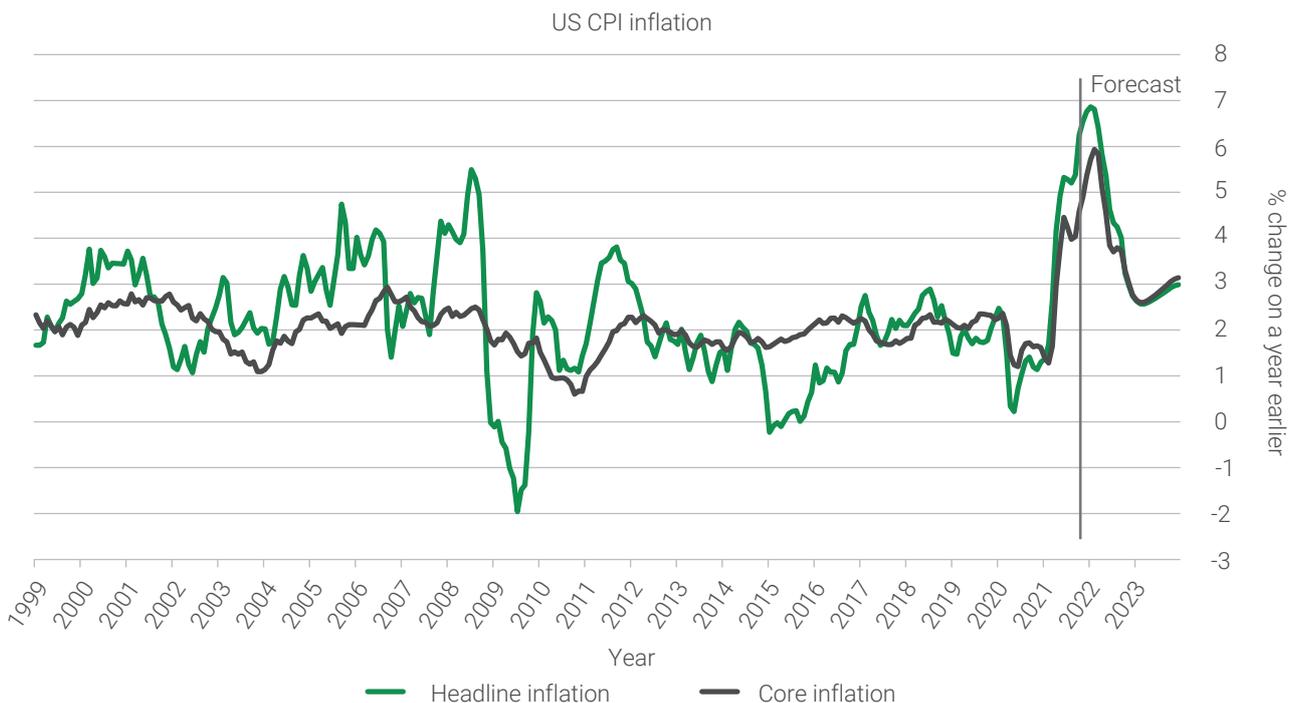
The pandemic continues to sway our economic forecasts, with fresh restrictions in parts of Europe, renewed global uncertainty and travel bans due to the Omicron variant. China’s ongoing tough approach to outbreaks also compound the country’s domestic challenges, most notably in property.

COVID-19 seems likely to linger for a long while to come, but with vaccines now being rolled out rapidly across the

emerging world and booster shots in some developed countries, 2022 should be the year when the world economy learns to live with the virus.

Outside China’s slowdown, which we expect to be managed with some policy easing, global growth should be strong in 2022 as services continue to rebound and output moves closer to the pre-pandemic trend.

Taming inflation



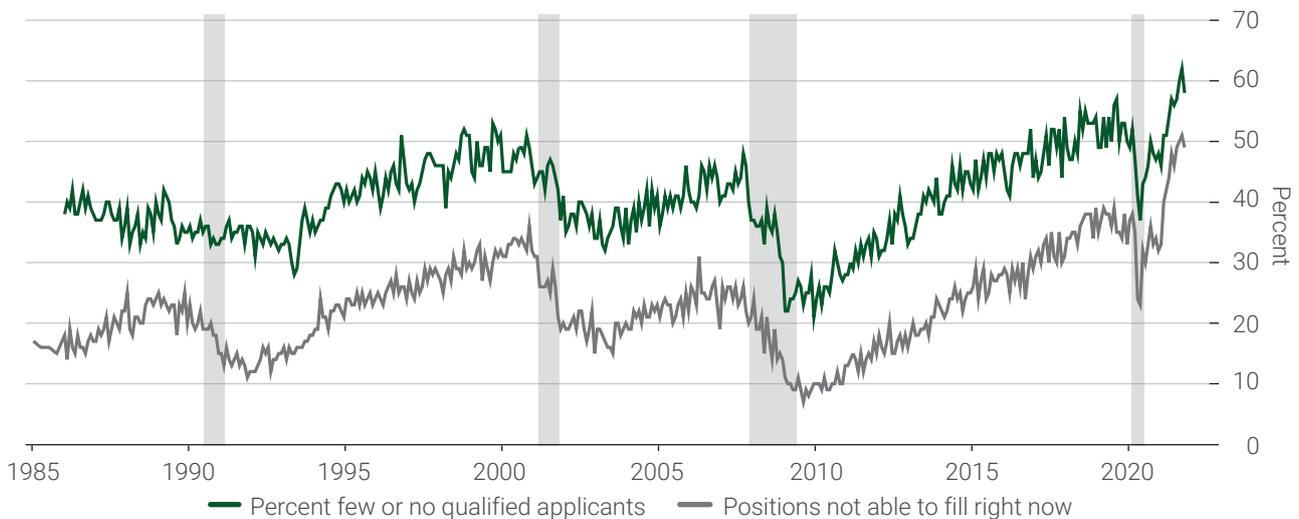
Source: Macrobond and LGIM estimates, as at 1 December, 2021. There is no guarantee that any forecasts made will come to pass.

Our main concern is inflation proving stronger and more persistent than expected. We see evidence that the current high rate of inflation is due to a mixture of positive demand shocks as well as negative supply shocks. While there is uncertainty around when some of the supply shocks will ease, it seems likely that supply disruptions caused by COVID-19 should diminish. For example, there will likely be enough semiconductor chips as production increases. So the unwinding of negative supply shocks should lower inflation next year.

Some rotation away from goods consumption – which has seen the strongest price rises – back to services might help reduce inflation, but not as much as central banks expect as we envisage tight labour markets boosting services prices.

One of the main surprises in recent weeks has been a reluctance for people to return to work, as direct fiscal support has been steadily withdrawn. This has led to widespread labour shortages and increasing wage pressure in several economies, especially the US.

NFIB recruitment difficulties



Source: Macrobond, as at 1 December, 2021

In addition, we anticipate that some of the demand shocks could prove longer-lasting, aided by excess saving; large gains in household wealth; easy financial conditions; and stronger wage growth and pricing power. In other words: some economies might be later cycle than realised – and in danger of overheating in 2022.

After lift-off

As a result, the main policy challenge for central banks has shifted towards convincing everyone that inflation will fall back and containing expectations for future price rises. The major risk for next year is that inflation fails to moderate to the extent expected, forcing central banks to tighten policy more aggressively to slow demand.

While Japan would benefit from global deflation and so too would the euro area, to a certain extent, the US appears particularly at risk of an abrupt policy shift. The US Federal Reserve (Fed) might already be behind the curve; it is not helped by the potential fiscal stimulus discussed in the [autumn update](#), which appears front-loaded even if pared back.

Interest rates should be at neutral as the economy reaches full capacity, but for now, the Fed is only discussing whether it should speed up the tapering of asset purchases. We also [find](#) the US is not particularly sensitive to higher interest rates, as the household sector has reduced debt and locked in low longer-term rates. So a gentle tap on the brakes might fail to slow growth sufficiently. Despite the market bringing forward its timing for the first rate hike in recent weeks, our view is that after lift-off, the Fed will need to move faster and to a higher peak than the market expects.

However, the central bank is likely to learn from any near-term policy mistake and so, in the medium term, should raise rates sufficiently to prevent a prolonged and serious inflation outbreak.



Tim Drayson
Head of Economics

Asset allocation: **Challenging the consensus in 2022**

As the world braces for tighter monetary policy, we see opportunities to forge more diversified and resilient portfolios.

As we head into year end, the market commentariat is almost universally fixated on the road to higher rates globally. We do not challenge the consensus view, for the reasons Tim outlines, but note that this hardening of opinion is creating opportunities for asset allocators.

Indeed, such moments can help us to forge more diversified and resilient portfolios – and generate better outcomes for our clients.

Take the rates market. Short positions are very popular, which suggests the risk of higher rates is broadly anticipated. Yes, yields can go higher; but they would probably need fresh surprises to do so. While directional views are challenging, due to the remaining uncertainty, we prefer to lean against the crowd. As a result, we only favour tactical shorts in bonds on dips in yields and are looking at more idiosyncratic markets, such as China, South Korea and Croatia, to go long duration, as we like the steepest sovereign curves and those where a lot is already priced in generally.

Plenty is also priced into inflation markets, where risks clearly remain elevated but well-flagged. As central banks are likely to act in the event the spike in consumer prices looks even less 'transitory', we favour leaning against market pricing of 5-10 year inflation. We believe this position should also prove beneficial in the event economic growth disappoints, perhaps due to a vaccine-resistant COVID mutation.



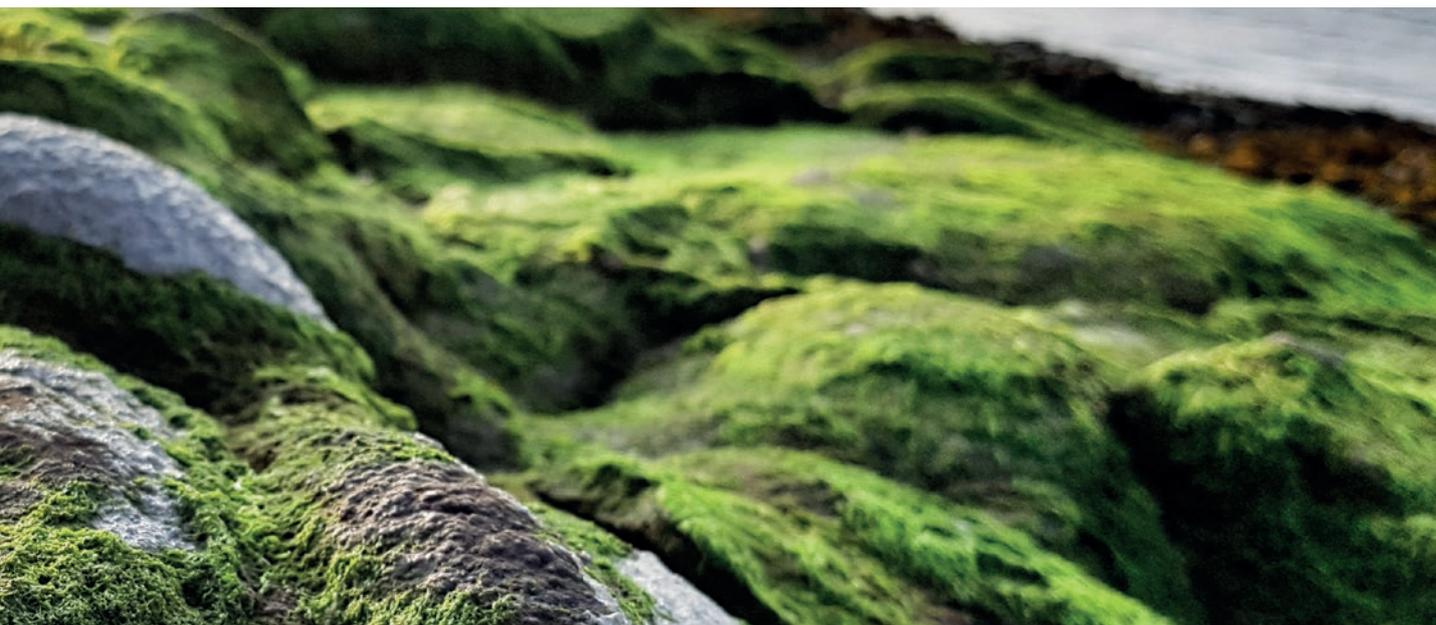
It's expensive to be too cautious, too early

Equities, meanwhile, tend to perform well both in mid- and late-cycle periods, so we remain positive despite the outlook for monetary policy, which is still extremely loose.

Our research indicates that even late cycle need not be bad for risk assets, as long as recession risk remains very low. Absent a significant tail-risk event, we think the risk of a recession over the coming 12 months will increase only marginally from close to zero at present. Moreover, we believe that our proprietary indicators of recession should give us a good read on when that risk is increasing.

Companies have so far been able to pass on inflation to customers, demonstrating the benefits of operational leverage, with the result that earnings have been strong. Other factors supporting our favourable stance on the asset class include investor positioning and sentiment, which do not appear overly ebullient; and valuations, which we don't see as excessive.

While it's difficult to be positive on US equities versus other markets, given their outperformance in recent years, we continue to like technology stocks as a structural growth sector. And this sector is, of course, overrepresented in the US. We do think emerging markets could become very attractive at some stage next year, given their pricing in comparison to developed markets; however, it is too soon to pull the trigger given the low growth outlook in China, in our view.



Opportunities and risks

We like equities over credit as the area in which to take risk in the portfolios we manage. Spreads are tight beyond emerging market debt, constraining the potential upside. We believe some issuers could be caught up in an inflationary risk scenario, especially those with less liquid securities. These factors inform our negative posture towards the asset class, particularly so on investment grade. We believe this stance should help to safeguard portfolios against a drawdown, should spreads widen materially, while giving us the option of buying credit at more attractive levels.

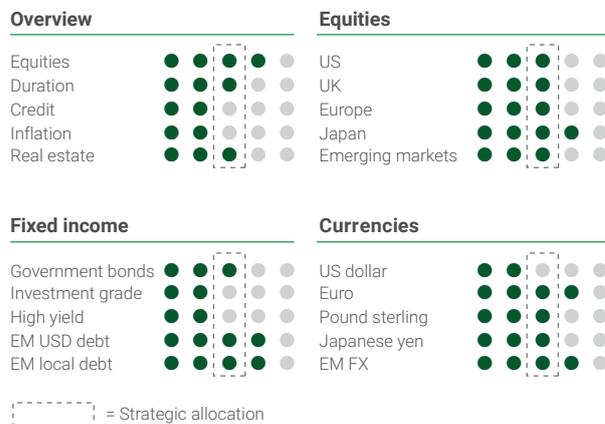
On the other hand, some corporate bond markets provide appealing opportunities. China's high-yield bond market has been under incredible strain in 2021, with prices tumbling by nearly 40% since May. We think this presents a chance to pick up an uncorrelated distressed asset, with much risk already priced in. In addition, we don't doubt the Chinese authorities' ultimate ability to underwrite the near-term growth outlook when they see fit.

In foreign exchange markets, we see the greatest structural support for currencies of countries with limited space for policy easing and strong current account surpluses, which could lead to upward pressure. The euro could well benefit from these characteristics.

Returning to the macro picture, we continue to monitor the risks on the horizon and position accordingly. To name just a few: more hawkish central banks, geopolitical flareups, asset bubbles and, as we are all aware since Omicron, a resurgence of COVID-19 risks.

For example, one non-consensus view we like ahead of France's election next year – whose risks don't look sufficiently priced in – is to go short the country's sovereign debt.

Asset class views



This schematic summarises the combined medium-term and tactical views of LGIM's Asset Allocation team as of 29 October 2021. Asset allocation is subject to change. The midpoint of each row is consistent with a purely strategic allocation to the asset/currency in question. The strength of conviction in our medium-term and tactical views is reflected in the size of the deviation from that mid-point. The value of an investment and any income taken from it is not guaranteed and can go down as well as up, you may not get back the amount you originally invested.



Emiel van den Heiligenberg
Head of Asset Allocation



ETFs:

From thematic FOMO to FOJI

Rallies across many thematic strategies have often been attributed to investors' fear of missing out. But there are also concerns that it is 'too late' to allocate to a theme. Is this fear of joining in justified?

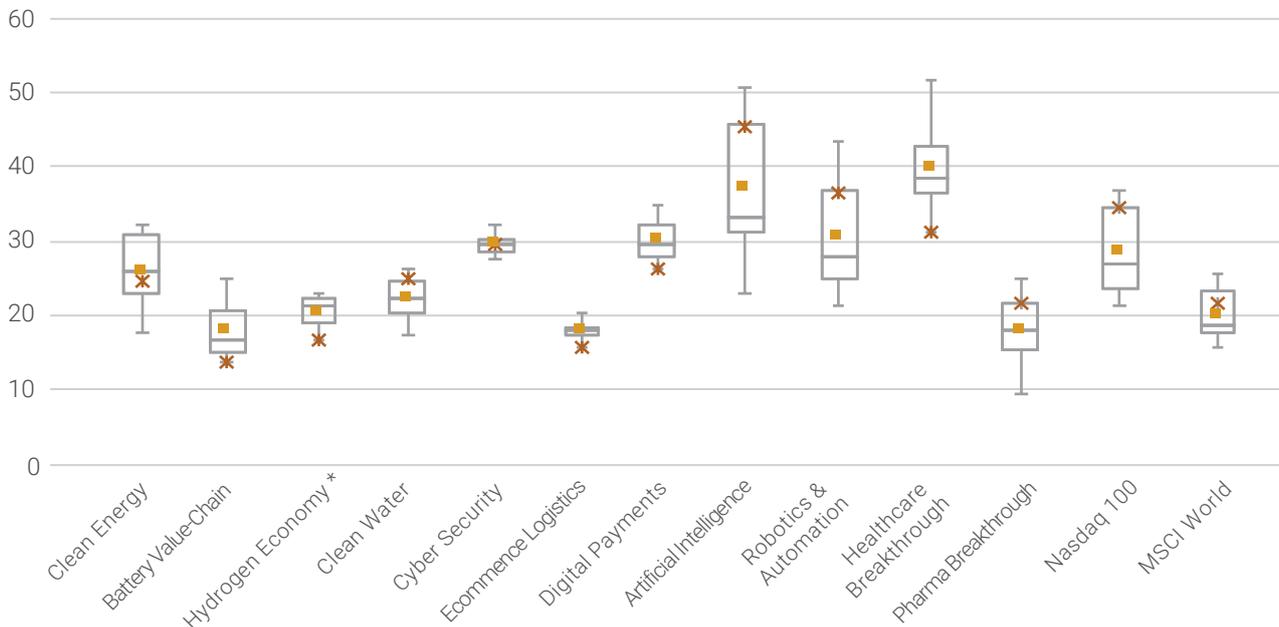
The holiday period is often a time for looking back at the year ending, looking forwards to the year ahead, and of course looking for bargains in the shops. As investors, it can also be an opportune moment to reassess portfolios by looking backwards (at valuations) and forwards (at growth prospects) to find relative bargains of our own.

This balance between price and potential performance is often particularly pronounced with thematic strategies, given the phenomenal rallies many have enjoyed. It's rare to have a conversation about themes without facing questions like "aren't valuations too high?" or "have I missed the best time to invest?"

To try to help answer these questions with greater quantitative rigour, we compared current valuations across a range of thematic indices with their historic range. We focused on the past three years as, before that, the indices were less well developed and the data more idiosyncratic.

The chart shows trailing 12-month price-to-earnings (P/E) ratio averages during the past 12 quarters, excluding constituents with negative trailing 12-month earnings so as not to distort the results. X represents each index's average P/E over the past quarter (to smooth jumps in the earnings component), the squares denote the average P/E over these three years, the upper and lower bounds of the vertical lines correspond to the highest and lowest quarterly average P/E in this time, the horizontal lines are the median P/E, and the boxes show the interquartile range.

P/Es – 12 quarters from Q4 2018 to Q3 2021



Source: LGIM and Bloomberg, data to 30/09/2021. P/E ratios are derived from Bloomberg. *For certain indices such as Hydrogen Economy, gaps in constituent data points may result in lower valuation levels. Past performance is not a guide to the future. The value of an investment and any income taken from it is not guaranteed and can go down as well as up; you may not get back the amount you originally invested.

So what stands out to us from this chart?

Over the three-year period, the energy and resources group of themes (the first four) have displayed relatively little valuation dispersion between them as a range. But over the third quarter, P/Es for clean energy, battery technology, and the hydrogen economy were all below average.

The three themes that together form the backbone of the digital economy (the next three) have generally traded in narrow valuation bands, but ecommerce logistics and digital payments are now below their past ranges.

The most traditionally tech-heavy themes (the next four) have exhibited some of the richest valuations, although they have not typically been priced at their extremes. Since October 2020, though, their P/Es (with the notable exception of healthcare technology) have moved from being concentrated around their median to higher levels – as has the Nasdaq.

The next logical question is whether high starting valuations matter in themes. Again looking at the data, the answer is: perhaps less than may be supposed. Cyber security, for example, started this period with the highest P/E at 31; over the following three years, it comfortably outperformed US and global equities. This is not an isolated case: we have not generally observed valuations being an impediment to thematic performance.

Long-term growth

We believe there is a solid rationale for this. Investors increasingly understand that long-term growth themes should be valued on their long-term potential earnings, not current earnings. For instance, ROBO Global expects the AI market to more than quintuple in size from \$22 billion in 2019 to \$127 billion in 2025, equivalent to a 34% compounded annual growth rate.

Such growth potential arguably makes themes today look cheap relative to their total addressable market. Even leaving that aside, it would perhaps be worth paying a slight premium in valuation terms for such secular long-term growth when set against ongoing disruption to traditional industries, an uncertain economic cycle, and low bond yields. A systematic and dynamic index approach could reinforce this by offering exposure to a theme in its entirety rather than taking company-specific risk.

So this festive season, don't be surprised if I'm shopping for themes – and what could be more appropriate than the current discounts apparently on ecommerce and digital payments?



Howie Li
Head of ETFs

Solutions: UK inflation assets – supply versus demand

As the debate over inflation and market pricing rages, we ask how pension fund valuations might impact demand for index-linked sterling markets.

In light of the macro picture detailed elsewhere in this outlook, defined benefit pension schemes face a key question next year: will the demand for inflation assets, in light of buoyant pension fund valuations, more than offset their appearance as expensive?

With nominal yields slightly up over in 2021 and real yields slightly down – and a lot of this risk hedged anyway – it is growth assets that have driven some of the large improvements in funding levels.



Our below chart indicates that average funding levels have improved this year from 84% to 93%; the Pension Protection Fund [Funding Level Index](#) tells a similar story. Anecdotally, this is supported by our sense that buyout or buy-in conversations are becoming more common.

Pension funds typically link target hedging goals to their funding levels. Based on improvements in the latter, we estimate that structural demand for inflation hedging could exceed £80 billion.

Estimated gilt funding level for a typical DB scheme



Source: The LGIM Funding Level Tracker, as at 30 September 2021. Past performance is not a guide to the future. The value of an investment and any income taken from it is not guaranteed and can go down as well as up, you may not get back the amount you originally invested.



Hedging in 2021

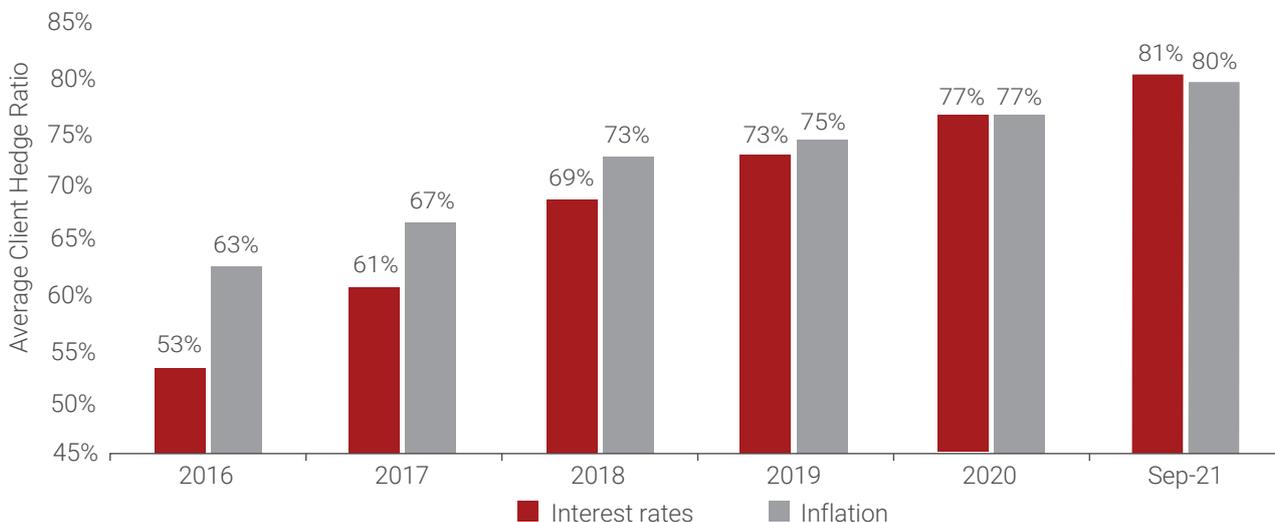
Some funding level gains can filter through to hedging demand relatively quickly, when included within liability-driven investment (LDI) mandates. If this is not the case, or governance models slow down such activity, some demand will lag. We detail below a history of our own average hedge ratios, representing an average of bespoke clients.

We estimate that realised demand for inflation assets over 2021 could have amounted to around 3%, or about £40 billion. This indicative figure would also be influenced by potential changes in liability benchmarks.

Other factors can also influence demand. Some funds have not yet reached a steady-state target, where the hedge ratio is comparable to funding level. This ‘catch up’ is likely to result in extra demand. Estimating the average impact is difficult, but a 1% increase in hedge ratios would likely amount to about £13 billion.

Hedging liabilities is itself a moving target for pension funds, not least due to changing assumptions about longevity and inflation, and as transfers out take place. These dynamics, whose overall impact may be relatively small, can also shift demand both in size and location on the curve.

Hedge Ratios



Source: LGIM, as at 30 September 2021. Past performance is not a guide to the future. The value of an investment and any income taken from it is not guaranteed and can go down as well as up, you may not get back the amount you originally invested.



Supply and market pricing

If we aggregate demand, and consider what might have taken place already, we can compare against estimates for the supply of index-linked gilts for fiscal year 2022/23, which the Office for Budget Responsibility anticipates at £27 billion. The table below summarises the key factors and overall net position.

Area	Inflation demand in 2022 £	Explanation
Funding level improvement over 2021	82bn	Improved funding levels lead to higher hedge ratios...
Actual hedging over 2021	-39bn	...but some demand due to funding level improvement has already fed through
New hedging demand @ 1%	13bn	Some pension funds looking to 'catch up' and move hedge ratio closer to funding level
Liability considerations	-	Longevity, CPI assumptions, transfer values, future accrual, LPI deltas expected to be small and broadly offset
Total demand for 2022	56bn	
Index-linked gilt supply 2022	27bn	
New demand = Total demand - supply	29bn	

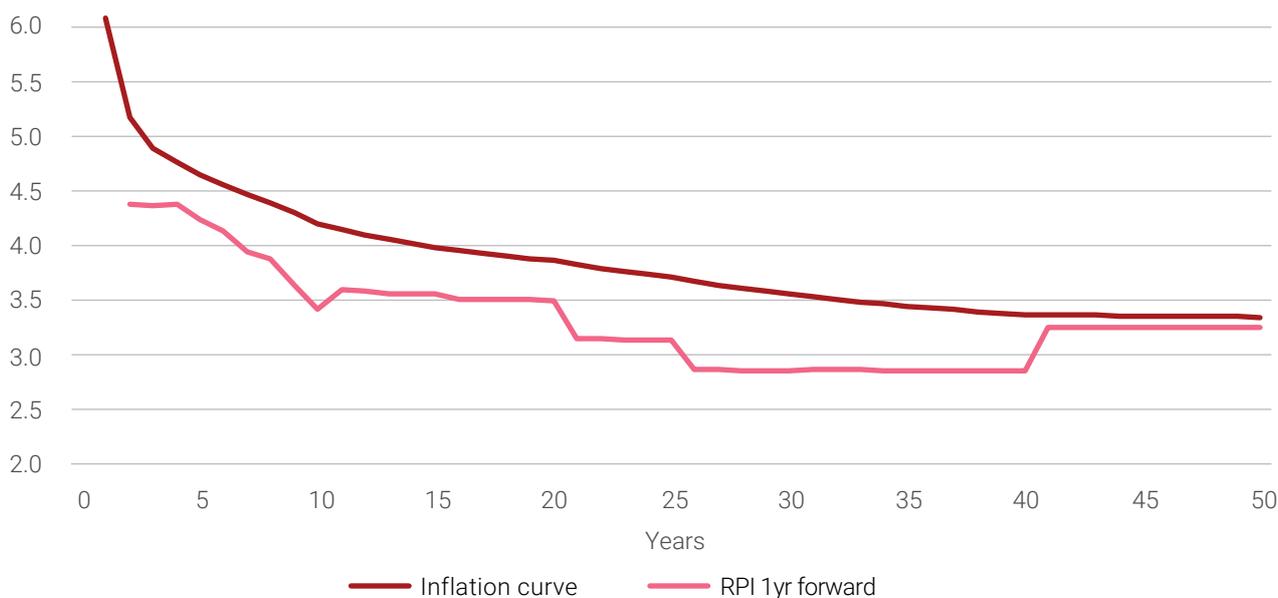
Source: The LGIM Funding Level Tracker, as at 30 September 2021. Past performance is not a guide to the future. The value of an investment and any income taken from it is not guaranteed and can go down as well as up, you may not get back the amount you originally invested.

In light of this picture, it is instructive to consider current market pricing. Inflation forward rates beyond the 10-year point typically range from just under 3% to 3.5%. Inflation levels may trade above the Bank of England's (BoE) target of 2% for a number of reasons, including the evolution of RPI to CPIH and greater comfort at the central bank with higher inflation than deflation.

On fundamental valuation grounds, there is a premium built into the forwards. Nonetheless, given funding level improvements and limited index-linked gilt supply, the catalyst for a pullback is unclear – most likely a reversal in the positive environment for risk assets, which would impact both short-dated inflation and funding levels.



Inflation pricing (%)



Source: LGIM, as at 29 October 2021.

Strategy considerations

Higher inflation rates are not in themselves bad news for pension funds. Liability-hedging programmes have protected most schemes from rising inflation expectations, while growth assets have spurred significant funding-level gains. This opens up the possibility of funds taking advantage of market conditions, where they are ahead of their journey plan, to consider de-risking opportunities.

Augmenting LDI hedges with collateral waterfalls (for example, allocating to absolute return bonds) can help keep expected returns at appropriate levels, while better automating governance around leverage management.

Against this backdrop, many funds will likely look at how to manage more specific end-game risks. This could mean thinking about buy-ins or allocating more to income-generating credit; it could also mean revisiting the approach to hedging and considering whether CPI risk is more meaningful or whether LPI needs to be hedged more actively.



Robert Pace
Senior Solutions
Strategy Manager



Real assets:

COP26 and the outlook for sustainable buildings

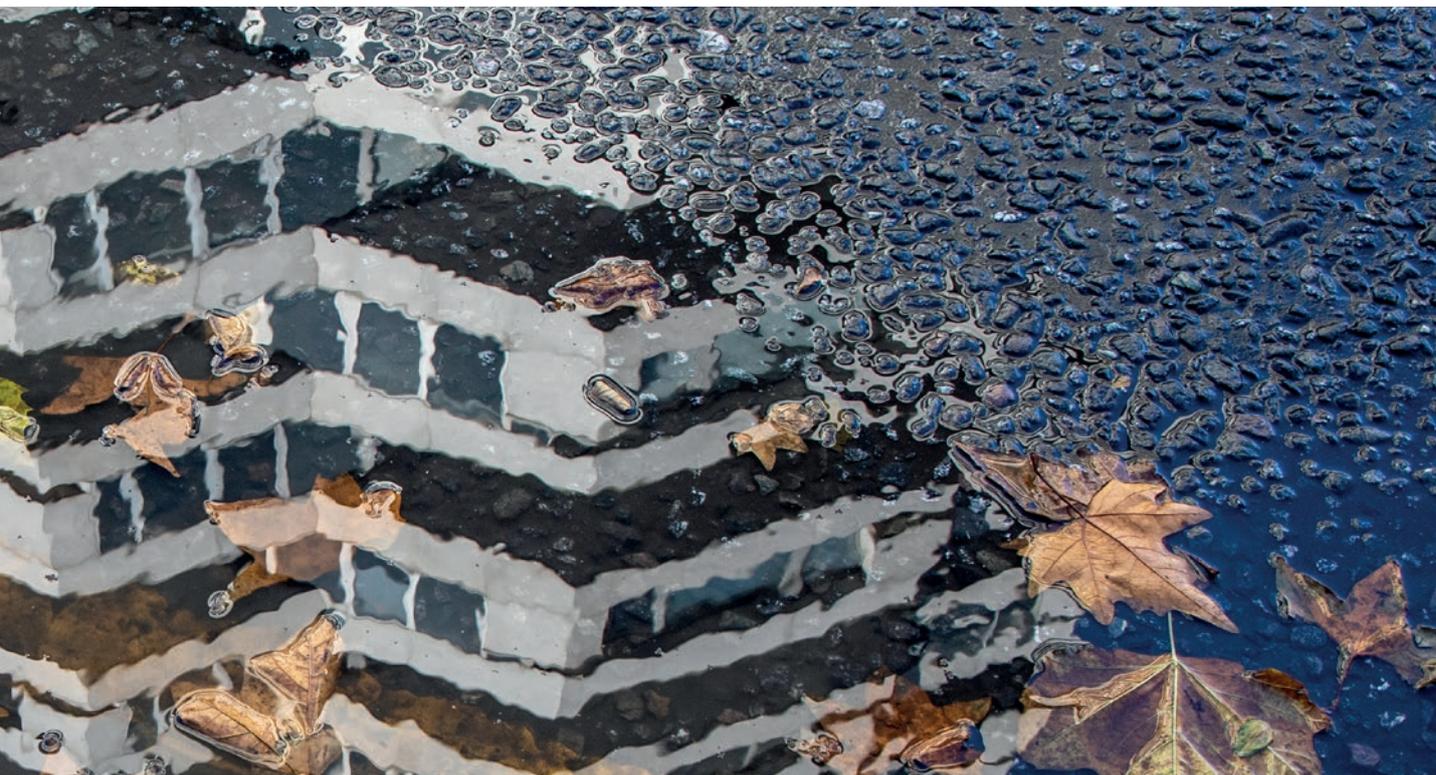
Climate change presents the investment opportunity of our generation. We have much to contribute, on behalf of our clients and customers, in our global mission to net zero.

COP26 and the first Cities, Regions and Built Environment Day of the summit shone a spotlight on the real estate sector – and rightly so. The operation and construction of buildings is responsible for almost 40%¹ of total global greenhouse gas emissions.

The transition to net-zero carbon emissions requires a fundamental transformation of the built environment as well as substantial investment, in both retrofitting existing assets and capital spend on social infrastructure. In the UK, 80% of buildings that will exist in 2050² have already been built.

This year at COP26, the formation of the International Sustainability Standards Board was an important move in improving transparency and comparability of sustainability disclosures for investors, which will have a significant impact on all sectors including real estate. In Glasgow, we also saw the launch of the Net Zero Whole Life Carbon Roadmap. This is an industry led initiative that serves to quantify – for the first time – the specific emission reductions across sub-sectors of the built environment that need to take place every year towards meeting the 2050 target.

1.Source: UKGBC as at 2021.
2.Source: UKGBC as at 2021.



We also welcomed the UK's new heat and buildings strategy, although it's important to recognise that we need more tangible progress towards a global carbon pricing mechanism, which will be critical to quantifying the problem and incentivising consumers and producers on the path to net zero. Agreeing Art 6 in the Paris Agreement has been a positive step forward in addressing double-counting and promoting transparency, but we will need to see how that plays out in practical terms on the voluntary carbon markets.

By contrast, the private sector has stepped up significantly, evidenced through the Glasgow Financial Alliance for Net Zero, where over 450 firms across 45 countries have committed \$130 trillion of private capital with the aim of setting robust near-term, science-based targets to halve emissions by 2030. We think this is a positive step for the private sector, which reinforces our ability to engage constructively with our corporate tenants who occupy our buildings.

Future-proofing assets

Furthermore, the Minimum Energy Efficiency Standards requirement, starting in 2023, will set key milestones for the real estate sector around improving energy performance for occupiers. We expect to see more policy responses, and a widening gap between the best and 'the rest'. More direct policy interventions could materially shift the economics in favour of occupying and owning

low-energy buildings, potentially making them cheaper to occupy. In our view, the users of real estate will increasingly select their spaces based on the environmental and social outcomes that are aligned with key themes around environmental benefits and health and well-being.

At the portfolio level, we believe those that position towards the highest net-zero standards will see benefits to both occupier demand and investment performance, as well as risk reduction. We believe there is likely to be an early-mover advantage to positioning portfolios to capture this additional value through the future-proofing of our assets.

But it is not only down to us. Occupiers procure their own energy and control all site operations across almost 50% of our portfolios and, therefore, play a central role in how efficiently buildings are used and energy is consumed. This will continue to be one of the biggest challenges for us in strengthening our occupier relationships to drive action.



Shuen Chan
Head of ESG, Real Assets

Active Strategies: **Tackling obesity as an ESG issue**

The global disease presents risks and opportunities to investors – and the chance to deliver positive change.

Obesity is widely recognised as the most prevalent disease in the world, with meaningful health, social and economic implications. Yet we believe many investors do not acknowledge its financial materiality as an ESG issue, nor the role they can play in tackling the condition.

More than 650 million people were obese in 2016, according to a recent update from the World Health Organisation³. In 2017-2018, over 40% of the US population was obese.⁴ The rate of obesity prevalence is increasing, as people are less physically active and eat more energy-dense food with low nutritional value.

Obesity is linked to multiple leading causes of death, including diabetes, heart disease and strokes. As a result, it has significant economic implications: the OECD estimates that 8% of member countries' health budgets will be spent treating the consequences of obesity and related conditions over the next 30 years.⁵

Indeed, the disease holds back economic growth as it prevents workforces from operating at full productivity. In doing so, it obstructs progress towards a number of the UN's Sustainable Development Goals, which we target as a firm; for example, "decent work and economic growth" and "good health and wellbeing".



Active engagement

At LGIM, we believe that given the significance of the issue, it is important that as a forward-looking, responsible investor, we must consider obesity as a factor both in our investment process and in our engagements with the companies in which we invest on behalf of our clients.

We have already started to engage on the topic with companies across different industries. Our Investment Stewardship team worked with ShareAction, the NGO, on Tesco.⁶ Our engagement helped to prompt the retailer – Britain's largest – to set a more ambitious nutrition target, with the company now pledging to derive 65% of total sales from healthy products by 2025 (up from 58% at present).

We also work with the Access To Nutrition [Initiative](#) to engage with the 25 largest food and beverages companies in the world on their nutrition strategy.

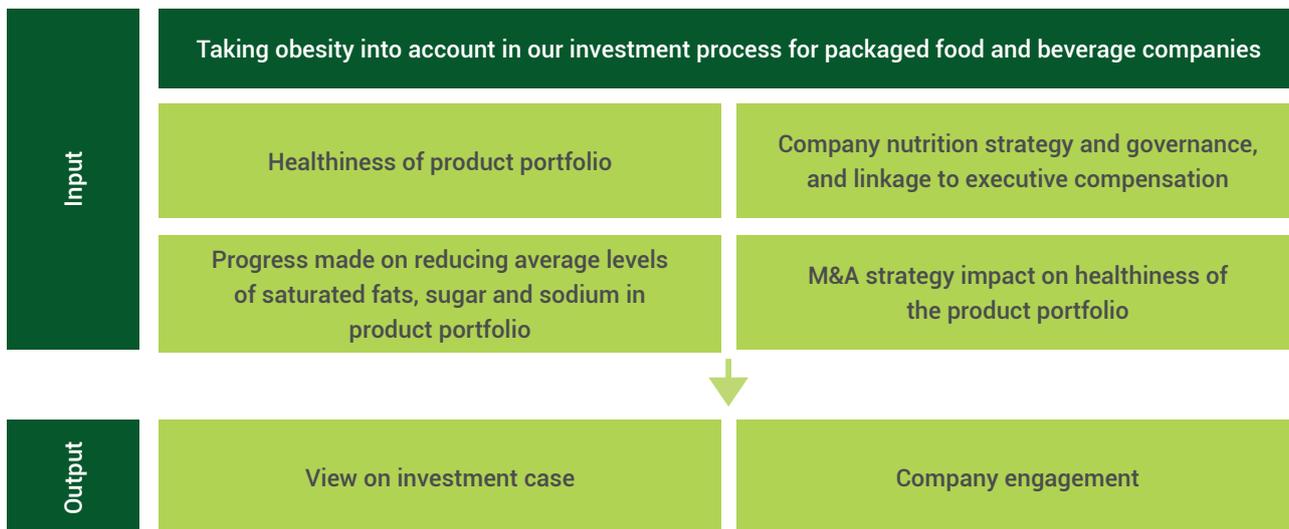
Within our Active Strategies team, we now factor the issue into our assessment of packaged food and beverage companies, to inform our investment views and engagement agenda. We believe companies with high revenue exposure to unhealthy products are likely to face the dual headwinds of increasing regulation and limitations on marketing of unhealthy foods.

3. <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>

4. <https://www.cdc.gov/obesity/data/adult.html>

5. <https://www.oecd-ilibrary.org/sites/6cc2aacc-en/index.html?itemId=/content/component/6cc2aacc-en#:~:text=Countries%20will%20spend%20around%208,treating%20overweight%20and%20related%20conditions.&text=Combined%2C%20the%20impact%20of%20overweight,on%20average%20in%20OECD%20countries>

6. For illustrative purposes only. Reference to a particular security is on a historical basis and does not mean that the security is currently held or will be held within an LGIM portfolio. The above information does not constitute a recommendation to buy or sell any security.



In addition, we see appealing investment opportunities in the healthcare space, where the anti-obesity medication market is experiencing a breakthrough in terms of safety and efficacy.

Today, only about 2% of obese patients are treated with anti-obesity medication (AOM).⁷ With safer and more efficacious anti-obesity drugs coming into the market, we expect this percentage to increase meaningfully, driving growth for the AOM market over the next decade.

This issue is but one of many on which our Global Research and Engagement Groups focus, leveraging expertise across fixed income, equities and investment stewardship to deliver cross-asset insights into investment opportunities and risks – and areas to deliver positive change for our clients.

7. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7003734/#oby22696-bib-0028>



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Key risks

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