Q4 2024

Seeking Resilient Growth:

Why It's Time for the LGPS to Consider Liquid Alternatives

Executive Summary

Most Local Government Pension Scheme (LGPS) investment portfolios rely on substantial equity allocations to drive growth over the long term, with smaller allocations to bonds and alternatives intended to provide income, mitigate losses, and cushion volatility during turbulent market episodes. This approach worked very well in recent decades characterised by easy monetary policy, cheap debt, and rising market valuations. Funding levels are high. But has this golden era run its course?

Heroic rates of earnings growth would be needed to maintain recent strong equity performance. Bonds have become riskier assets with the return of monetary policy and inflation uncertainties in the 2020s. Alternatives are increasingly seen as the source of future returns and diversification. But which alternatives are best positioned to deliver on those objectives? LGPS allocations to private assets have been rising, but here we make the case for truly diversifying *liquid alternatives* as a viable and versatile complement to existing portfolios, and explore the benefits of a transparent, quantitative approach.

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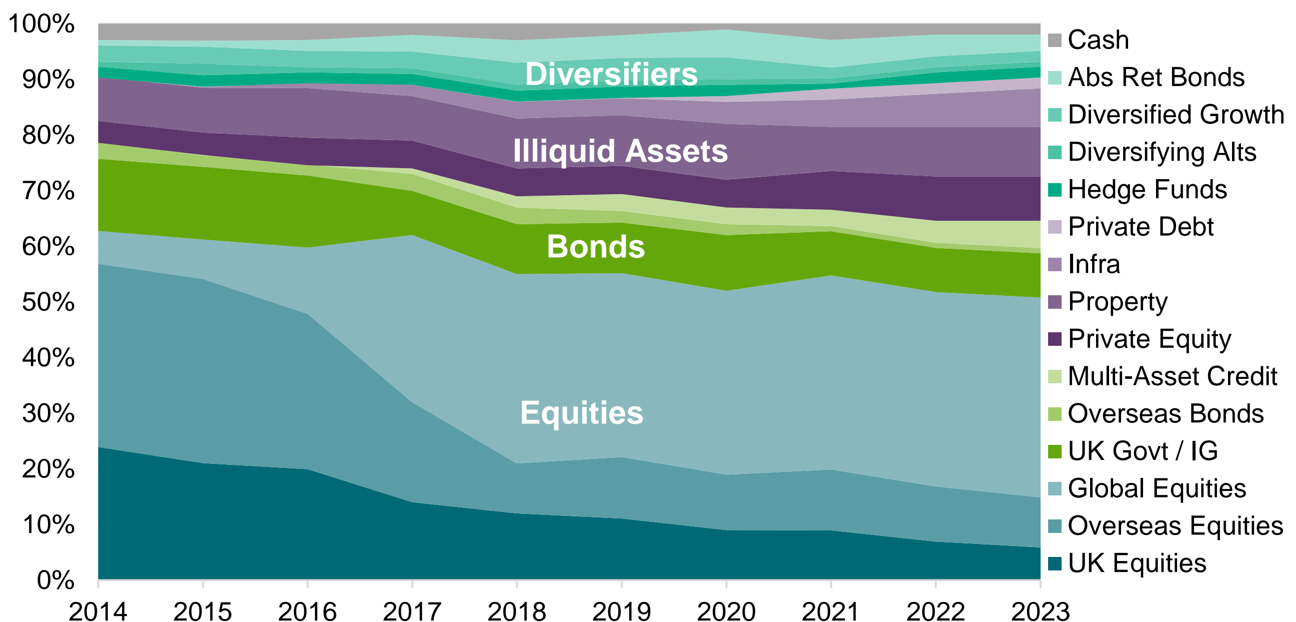
Introduction

The Local Government Pension Scheme (LGPS) is the UK's national public sector pension scheme. There are eighty-six local administering authorities in England and Wales, eleven in Scotland, and one in Northern Ireland. The LGPS for England and Wales is one of the largest pension schemes in the world with over £390 billion in collective assets as of March 2024, according to the UK Government.

The most noticeable shift in LGPS asset allocation over the last 10 years has been an increasing role for illiquid alternatives, funded by a trimming of equity allocations (see **Exhibit 1**). Both asset classes have performed well since the Global Financial Crisis trough in 2009, so LGPS portfolio returns have likewise been strong. But this has left combined allocations to equities and illiquids, at 77% – higher than at the start of the long U.S. bull market that drove the gains. This may leave portfolios vulnerable going forward.

Exhibit 1: LGPS Asset Allocation Trends – the Shift from Equities to Illiquid Assets



Source: Local Government Pension Scheme Advisory Board for England and Wales as of June 2024. Diversification does not eliminate the risk of experiencing investment losses.

Diversifying allocations did not have such a strong run during this period. The LGPS embraced diversified growth funds (DGFs) and multi-asset strategies in the mid to late 2010s, but later retreated after anaemic performance. These diversifiers were increasingly – and justifiably – seen as a drag on portfolio returns.

In this article we make two arguments. Our first is that LGPS investors cannot expect such strong performance from equity and illiquid asset combinations as was delivered in the last 15 years. As for bonds, they remain important diversifiers for disinflationary recession episodes and provide income when yields are fruitful, but they cannot protect in all scenarios, and they bring their own risks as 2022 demonstrated.

Our second argument is that diversifiers are not all alike. Some are indeed only superficially diversifying and rely on traditional market exposures. Such strategies are unlikely to serve their intended purpose. But others give access to genuinely uncorrelated sources of return and can even thrive in equity bear markets and periods of macroeconomic turmoil, as demonstrated by their substantial gains in 2022. We argue that these *liquid alternative* diversifiers significantly broaden the investment opportunity set and deserve a strategic role in LGPS portfolios going forward.

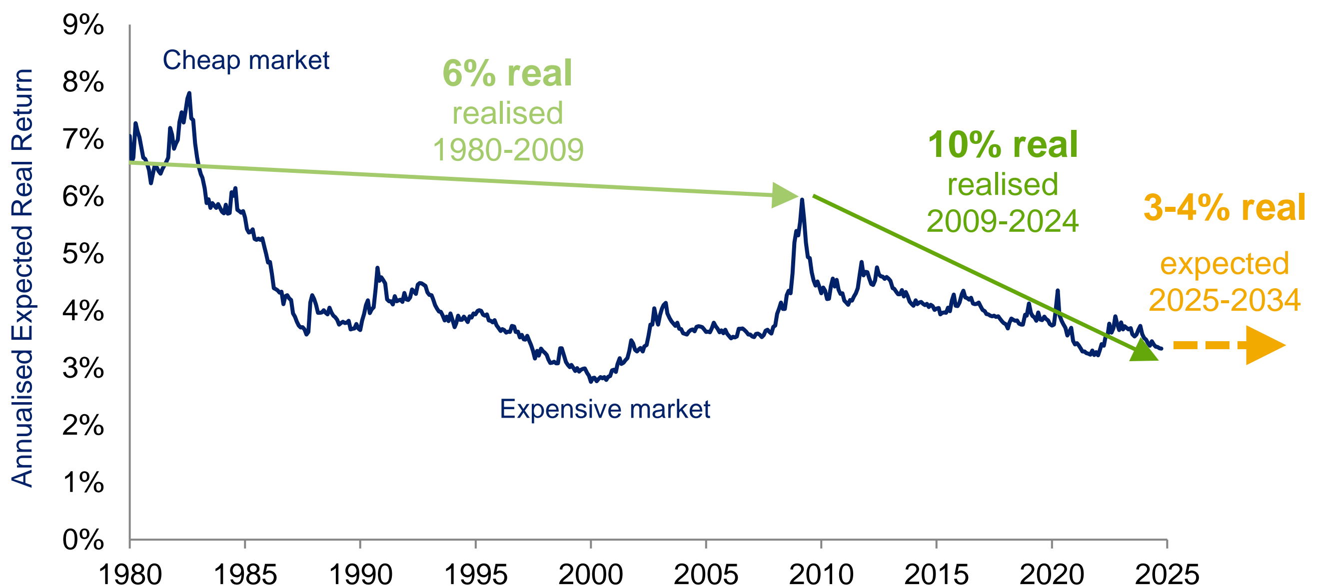
Not the Time for Rearview Mirror Investing

Equity market returns can be split into three components: dividend yield, growth in fundamentals and change in multiples. Over the last 15 years, global equity fundamentals have been strong. But an even bigger driver of returns has been multiple expansion – investors paying a higher price per unit of fundamental value. This mechanism delivers capital gains while compressing future returns. In other words, it borrows returns from the future.

Exhibit 2 shows a simple measure of expected real return for the global equity market, assuming no future change in valuation at each point in time. As valuations rose between 2009 and 2024, realised returns came in well above expectations (a blistering 10% real return per annum) but expected returns crept lower and lower. Valuations cannot rise forever, so either earnings growth rates must be spectacular going forward, or low expected returns will eventually materialise. The LGPS can and should adjust to this world of gloomier equity market prospects by embracing other sources of return.

Exhibit 2: Past 15 Years' Strong Equity Returns Were Partly "Borrowed from the Future"

Expected and Realised Annual Real Returns for Global Equities, January 1980 – September 2024



Source: AQR, Bloomberg, Robert Shiller Data Library, Consensus Economics. Local real equity yield is simple average of two measures: (0.5 * Shiller E/P * 1.075) + 1.5% and Dividend/Price + 1.5%. 1.5% term is assumed long term real earnings-per-share growth. 0.5 multiplier reflects long-term payout ratio; 1.075 multiplier accounts for EPS growth during 10-year earnings window. Realised real returns are annualised returns of MSCI World in GBP in excess of UK CPI.

Are illiquid alternatives the solution? Perhaps part of the solution. But strong investor demand for private equity, real assets and private debt has pushed up their valuations too – though these are harder to measure. Private equity managers successfully converted a decade of ultra-cheap financing into bumper returns for investors, but those days are probably over too, given generally higher interest rates and financing costs. A few cuts in interest rates will not take us back to the zero-rate world, and as of late 2024, AQR's valuation-based expected return for private equity is at a historic low. Finally, equities and illiquid assets have both tended to earn smaller excess-of-cash returns in more financially-restrictive higher rate environments.

Why Did Diversifiers Disappoint?

Some multi-asset funds categorised as 'diversified growth' were in fact positioned to deliver a low-octane combination of traditional market exposures, with a small amount of active risk, as we and our colleagues discussed with many investors during the late 2010s. This was unlikely to move the needle for LGPS portfolios looking for impactful alpha and diversification. Hedge funds in aggregate have also disappointed, delivering lots of beta and shrinking alpha. Some funds have excelled, of course, but identifying top performers in advance is difficult.

The most powerful diversifiers - true "absolute return" strategies - have not always been palatable for investors anchored to equity benchmarks. The returns from such strategies can lag equities during bull markets. Their headline fees can appear high compared to conventional long-only mandates (even if they are delivering far more active risk). And they can experience idiosyncratic episodes of poor performance that can be hard to explain precisely because they are not driven by traditional market risk exposures. All these considerations tempted managers to offer - and investors to accept - more modestly diversifying products. Diversification may be the closest thing to a free lunch in markets, but in practice it is not completely free or easy to harness.

Building Resilience in the LGPS

LGPS schemes are much better-funded than they have been in the recent past, thanks to strong equity market performance and higher bond yields. The aggregate funding level for England and Wales was 107% at the last actuarial valuation in March 2022, up from 85% in 2016, and has probably increased further, as did the funding level for LGPS Scotland, which stood at 141% in March 2023.[1]

So why is diversification needed if the LGPS have strong funding levels? High funding levels naturally tend to coincide with the late stages of a bull market, and remain exposed to unpredictable market conditions. Most LGPS portfolios are - quite deliberately - heavily reliant on equity market performance, and this exposure doesn't just come from their public equity allocations. Private equity is, after all, levered equity - the lack of mark-to-market provides some cosmetic cushioning from short-term volatility, but in a prolonged bear market where diversification is most needed, the underlying exposures are likely to bite hard. Private debt and multi-asset credit allocations are likely to perform poorly in a recession or bear market, and property valuations may be vulnerable too. Funding levels can fall quickly in this scenario.

In order to protect funding levels while retaining growth potential, LGPS funds are seeking investments that have the ability to perform well in worst-case scenarios - severe and prolonged equity bear markets - without sacrificing long-run returns. That's asking a lot. Is it achievable? Some diversifiers have a better chance than others.

Popular Diversification Candidates

Government bonds have a liability-matching role but have also provided very good diversification to equity risk in recent decades, with the stock/bond correlation generally negative from 2000 to 2020. But as inflation uncertainty has re-emerged in the 2020s, the correlation has crept back up and bonds have become

[1] Sources: LGPS Advisory Board and Hymans Robertson. There is some anecdotal evidence that favourable actuarial treatment of equities in these calculations may further encourage large equity allocations and discourage diversification.

less reliable diversifiers – most notably in 2022.[2] Bonds still have a diversification role to play, but while they are higher yielding assets in the 2020s, they are riskier assets too.

Property and infrastructure have long been a staple within the LGPS arsenal. They can offer some inflation protection, depending on the type of investment, as well as generate income. However, many real assets are exposed to some combination of economic growth and interest rates, limiting their ability to diversify during equity bear markets, recessions, and periods of monetary policy tightening. They are also illiquid, which constrains the LGPS' ability to respond to market changes.

Another candidate is explicit **tail risk protection strategies** that use options to deliver attractive payouts in the event of a sudden drop in markets. Like all explicit insurance policies these come at a cost: a substantial negative expected return over the long term. Their protective capabilities are also path-dependent – they tend to deliver large pay-offs in the event of a dramatic market crash like 2008 or 2020, but can disappoint investors in the case of more gradual losses as experienced in 2022 or the extended bear market of the early 2000s. They may have role to play around specific market or portfolio valuation events.

Finally, **liquid alternatives** can be designed to deliver positive long-term returns that are lowly correlated to the equity risk that LGPS portfolios are most exposed to. They often pursue strategies across several asset classes, using financial tools such as leverage, shorting and derivatives to target and manage risk. They bring their own challenges as we discussed above in the section 'Why Did Diversifiers Disappoint?' We explore the different strategies further in the next section.

Exhibit 3: Four Candidates for Enhancing LGPS Diversification

	Government Bonds	Real Assets	Tail Protection	Liquid Alternatives
Pros	Recession hedging; higher yields now available	Inflation protection and income	Substantial payout in the event of a market crash	Long-term returns; strong diversification; macroeconomic resilience
Cons	Less reliable if inflation uncertainty persists	Exposed to economic downturns and/or rising rates	Long-term cost; path-dependent protection	Perceived complexity; lack of investor familiarity

Source: AQR. Table is not exhaustive. Diversification does not eliminate the risk of experiencing investment losses.

Liquid Alternatives That Really Diversify

Liquid alternatives can invest in multiple asset classes and can use financial tools, such as shorting and leverage, to hedge macroeconomic risks and deliver genuinely diversifying returns. Many strategies also hold a large amount of free cash alongside their active positions, meaning they directly benefit from the higher cash rates available today – unlike equities and private assets. The most promising "cash-plus" complements to equity-dominated LGPS portfolios are as follows:

- **Equity market neutral:** Pure security selection without the beta, this can augment or replace active risk in traditional equity allocations and allows a more efficient expression of security selection views.
- **Trend following:** This macro-focused strategy uses signals from price movements and economic data to take long and short positions across many markets, exploiting the tendency of recent trends to continue. This strategy has exhibited the very useful property of outperforming during tough times for

[2] See "A Changing Stock-Bond Correlation: Drivers and Implications" by Brixton et al. (2023).

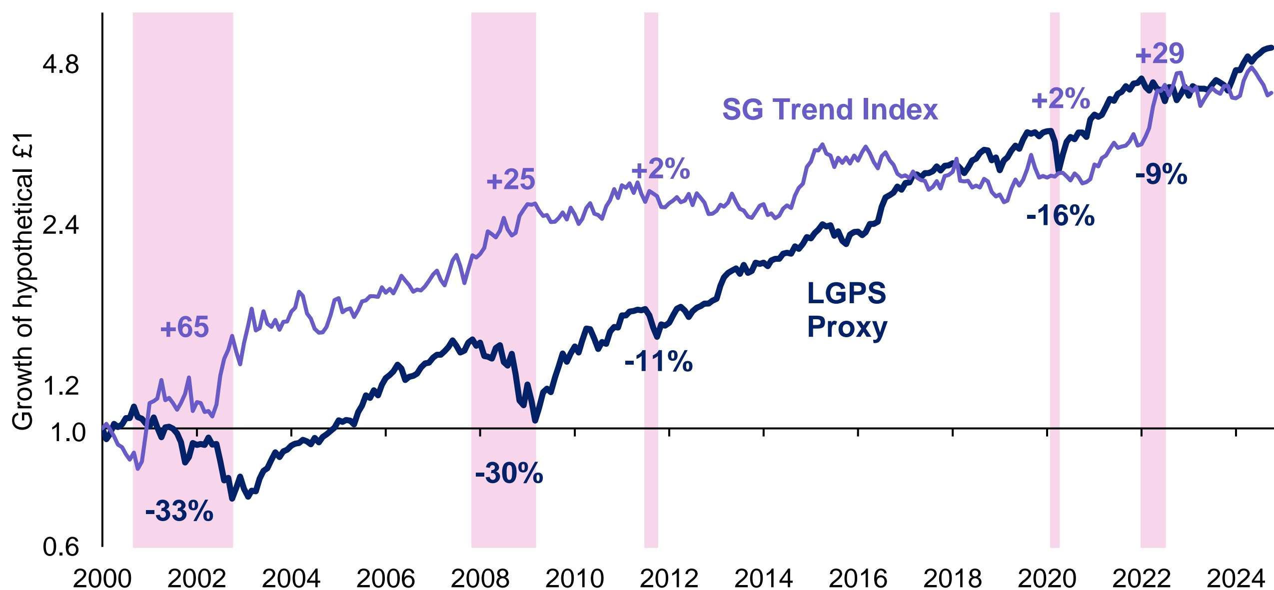
traditional assets, including equity bear markets, inflation shocks and recessions, and can be considered a risk-mitigating tactical overlay to market exposures elsewhere in the portfolio.[3]

- **Multi-asset absolute return:** This strategy combines equity market neutral and macro components to deliver positive risk-adjusted returns that are uncorrelated to traditional markets. It systematically goes long assets with characteristics associated with outperformance, and short assets with the opposite characteristics, across multiple asset classes.[4]
- **Multi-asset total return:** This strategy combines equity market neutral and macro components with modest strategic market exposures. It can be constructed to deliver much less market beta than a typical DGF or multi-asset strategy, and much more active risk.

Exhibit 4 illustrates how one liquid alternative strategy, trend following, reliably delivered outsize returns during the rare but instructive drawdown episodes of the last quarter-century.

Exhibit 4: Now *That's* What I Call Diversification...

LGPS Proxy Portfolio and SG Trend Index, January 1, 2000 – September 30, 2024



Source: AQR, Bloomberg, LGPS Advisory Board. Pink bands indicate 5 largest drawdowns for LGPS Proxy portfolio. LGPS Proxy allocations are based on 2023 LGPS Advisory Board survey: 51% Global Equities (MSCI World unhedged in GBP), 9% Bonds (Bloomberg Global Aggregate hedged), 6% High Yield (Bloomberg Global High Yield hedged), 8% Private Equity (MSCI World Small Cap in GBP), 16% Real Estate and Infrastructure (average of FTSE NAREIT Developed Reits index in GBP and S&P Global Infrastructure index in GBP), 8% Hedge Funds (HFRI Fund-Weighted Composite), and 2% cash (GBP T-Bill). All indices are gross of fees except the hedge fund proxy, which is net. The SG Trend index is an equal-weighted combination of the largest trend managers, net of fees. Based on monthly data. Past performance is not a guarantee of future performance. Diversification does not eliminate the risk of experiencing investment losses. Please read important disclosures in the Appendix.

Some may question whether the role of these complex strategies be explained to all stakeholders in the LGPS, or whether the benefits are worth the effort of doing so. We believe the answer is yes. A vast amount of expertise is available within the LGPS, from LGPS officers, the pools, Independent Advisors, and investment consultants. The asset class is also widely used by public pension plans in the U.S., Canada and Australia.

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[3] For a comparison of option-based tail protection and trend following strategies, see "Tail Risk Hedging: Contrasting Put and Trend Strategies" by Ilmanen et al. (2021).

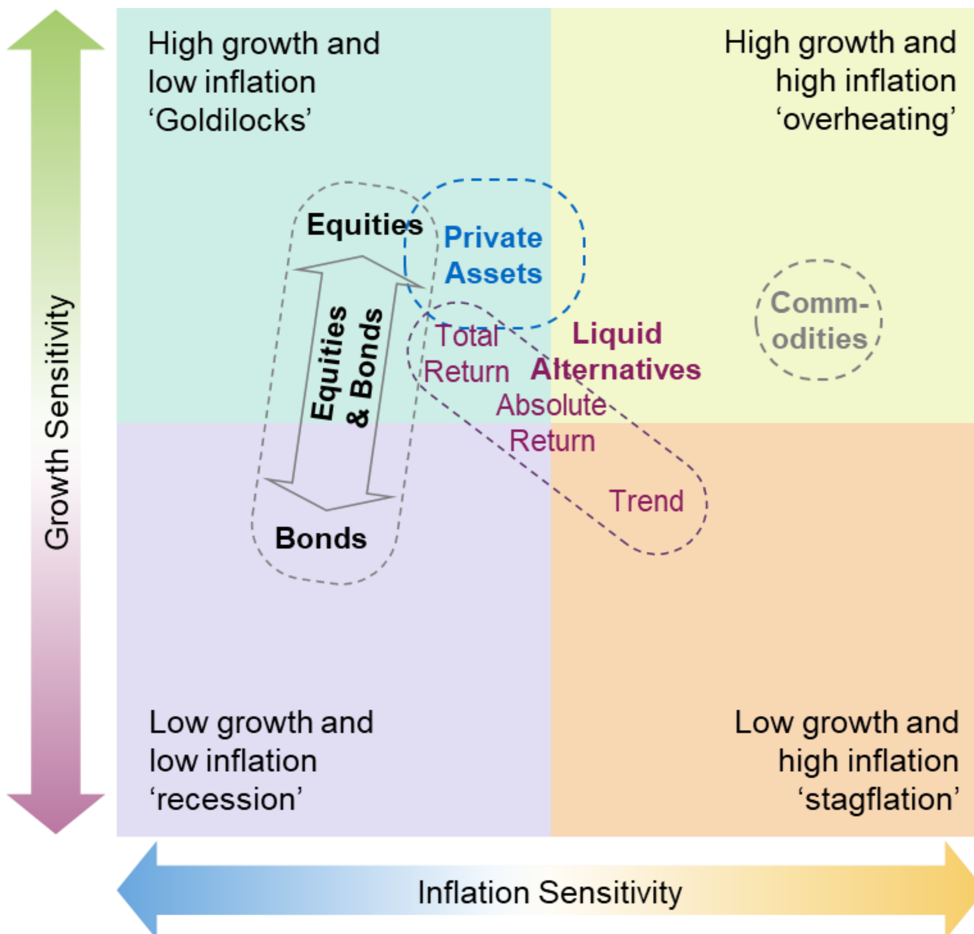
[4] For a fuller description see "Understanding Style Premia" by Israel and Maloney (2014).

One simple communication idea is to introduce concepts of growth and inflation risks, to illustrate why it's important to diversify beyond just stocks, bonds and illiquid assets. **Exhibit 5** Panel A shows a traditional linear visualisation of investment risk, with cash and high-grade bonds at one end, and single equities at the other. But this only shows one dimension of risk, as investors discovered painfully in 2022. An illustration like Panel B reminds stakeholders that while stocks and bonds have offsetting exposures to economic growth, they have compounding exposures to inflation – they are both on the left side of the chart, meaning they tend to underperform when inflation rises. Illiquid assets can help with long-run returns, but they share the same-signed macro exposures as equities. Any allocation that can shift the portfolio towards the centre of the chart (i.e., liquid alternatives) is likely to enhance macroeconomic resilience.

Exhibit 5: Not Just Strength, But Flavour Too: Better Risk Insights for LGPS Stakeholders

A. Traditional Linear Risk Visualisation Underplays the Risk of Bonds

B. Schematic Illustration of Macroeconomic Exposures



Source: AQR. For illustrative purposes only. Panel B is a schematic representation of long-term empirical sensitivities, measured as contemporaneous correlations to growth and inflation news metrics, based on U.S. data since 1972. For more details see for example Thapar et al. (2021), "When Stock-Bond Diversification Fails."

The Quantitative Quandary

Many liquid alternatives are provided by quantitative asset managers who can leverage technology to process huge amounts of fundamental data, and build diversified portfolios designed to harvest intuitive and well-documented sources of return. This approach is different to traditional discretionary asset managers who typically build more concentrated portfolios based on analyst research and the views of their portfolio managers. In **Exhibit 6** we address some common misconceptions about the quantitative approach.

Exhibit 6: Quantitative Strategies – Some Common Misconceptions and Realities

Misconception	Reality
'Black boxes' - Hard to understand - No grounding in fundamentals	- Investment inputs, processes and resulting holdings can be transparent - Many systematic strategies are based on fundamental inputs
'Machines rule humans' - Lacking human judgment, overreliance on numbers - Backward-looking, too history-dependent	- Human judgment is used to design, revise, and provide qualitative input into the process when necessary - Models often include forward-looking inputs (e.g., forecast revisions, option-implied risk estimates, etc.) - Out-of-sample evidence is crucial in building a well-designed investment process that avoids 'overfitting' to the past
'Lack of conviction' - Over-diversified portfolios may earn anaemic returns	- In quantitative strategies, the high conviction is in the process - Diversifying *across* well-rewarded themes or factors and diversifying *away* idiosyncratic risks can improve risk-adjusted returns - Prudent leverage converts this diversification into attractive returns - Concentration can easily raise active risk but may not raise returns
'All quants do the same thing'	- Quant strategies can be applied in many different contexts - Even within the same category, heterogeneous design and implementation leads to lowly-correlated and complementary outcomes

Source: AQR. Table is not exhaustive. Diversification does not eliminate the risk of experiencing investment losses.

Can Liquid Alternatives Be Sustainable?

Liquid alternatives offer unique possibilities for addressing environment, social and governance (ESG) objectives. In particular, long/short equity strategies allow investors to more fully express any negative views on companies with poor ESG characteristics. While a long-only portfolio is restricted to divesting from such companies, going short can achieve greater impact as well as improving risk and return characteristics. Desirable impacts include raising management awareness of issues – as they tend to pay attention to short interest – and raising the company's cost of capital through downward pressure on its share price.[5] Carbon-aware liquid alternatives can efficiently hedge climate-related risks by tilting towards lower-emitting companies on the long side and towards higher-emitting companies on the short side, while still pursuing attractive risk-adjusted returns. Shorting in this context is not a panacea, but it can be a useful tool alongside other sustainable investment practices.

[5] Campaigns to build more ethical pension portfolios tend to focus on divestment as an investor's main weapon against firms perceived to be misaligned with their values. Divestment by some investors doesn't end or reverse emissions or other non-sustainable practices, and neither does shorting. But if divestment is an effective tool for raising awareness and a company's cost of capital, then shorting should be a more effective tool, as argued in "Shorting Counts" (Cliff's Perspective blog, 2022).

Concluding Thoughts

In this article we've argued that the strong performance of LGPS portfolios has been bolstered by rising equity market valuations and other tailwinds in recent decades, and those tailwinds may be turning. Expected returns for traditional assets are much lower that recent realised returns. The global economy remains in a period of high uncertainty as the aftershocks of the pandemic and the ensuing inflationary boom continue to play out. Soft landing, hard landing, and persistent inflation scenarios are all plausible macroeconomic outcomes as of late 2024, with geopolitical risks layered on top.

Against this backdrop, it is critical for LGPS investors to ensure their portfolios are well-diversified, and able to deliver long-term value in a range of different macroeconomic outcomes. Risk matters, even for long-term investors: better diversified portfolios are able to compound higher returns in the long run. Bonds have an important role to play, but a broader set of diversifiers has the potential to deliver a more attractive combination of macroeconomic resilience and long term growth.

Liquid alternatives saw mixed performance in the 2010s, but well-designed strategies could have an important role to play in this more challenging environment for traditional assets. Strategies that can deliver returns independent of the direction of equity markets are especially valuable when macroeconomic uncertainty is high, and offer the LGPS the opportunity to broaden the growth engine of their portfolios. With all the diversification capabilities discussed in this paper, and an added return advantage from generally higher cash rates, we believe liquid alternatives have made their case to be in the mix.

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