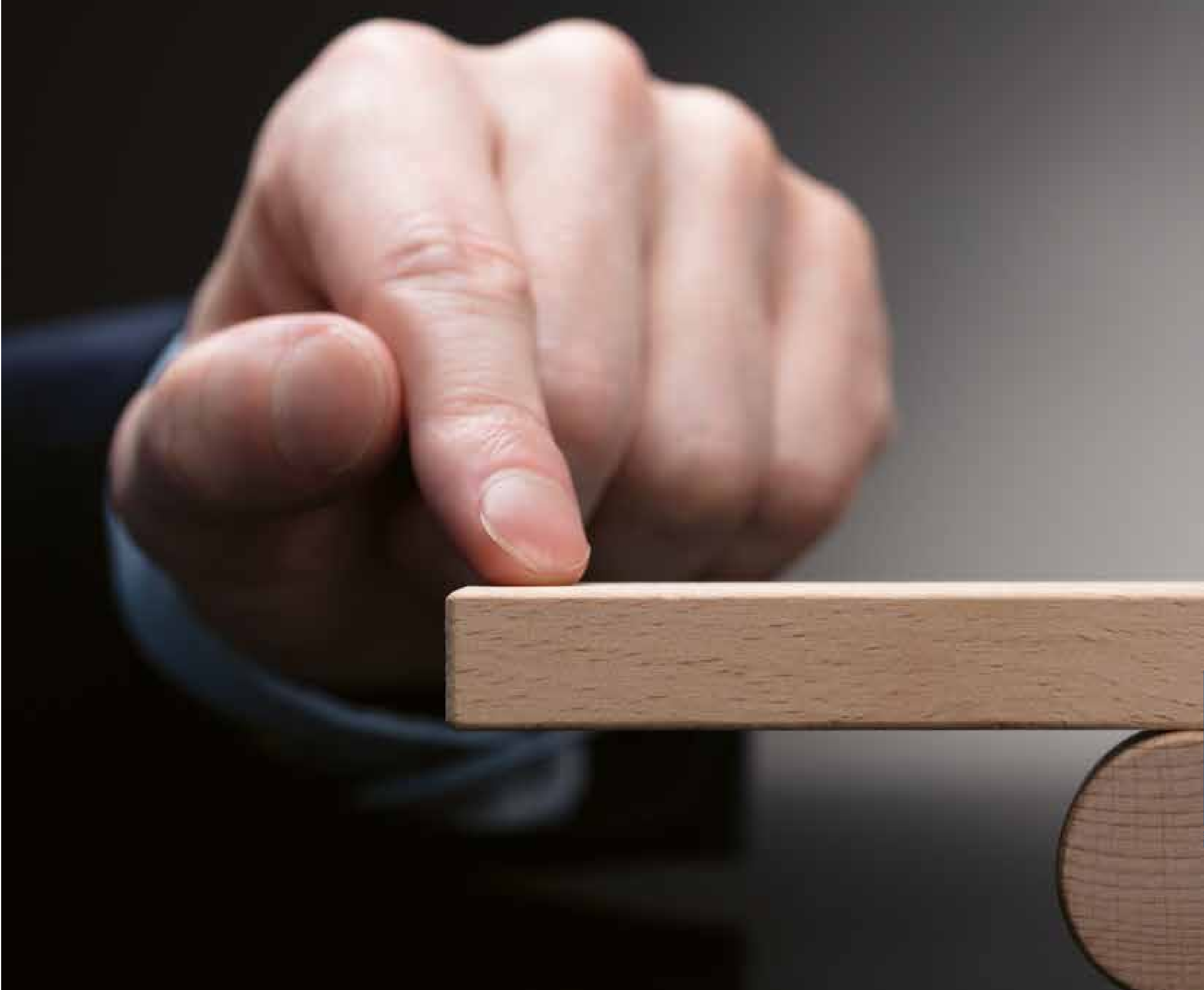
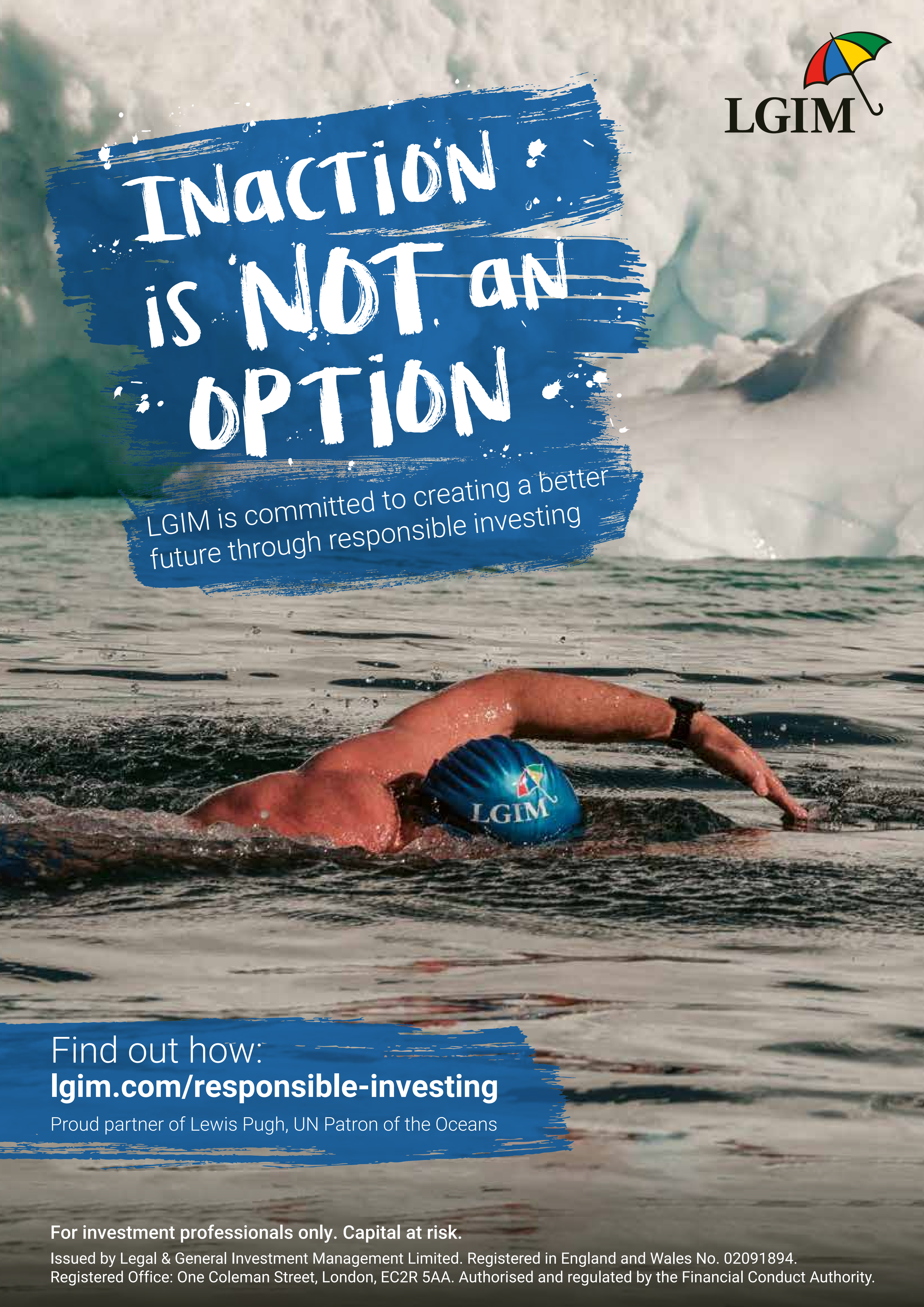
LIABILITY-DRIVEN INVESTMENT AT 20

Two decades have passed since defined benefit pension schemes were first pitched liability-driven investment strategies, more popularly known as LDI. Working to ensure there are enough assets to cover a schemes current and future liabilities appears an attractive proposition. In short, it reduces the risk of final salary schemes not having enough cash to pay their members pensions when they fall due, which should help trustees and sponsors sleep a little better. They have also eased schemes into insurance transactions, which are reducing the responsibility of sponsors to pay members pensions.

The question is, what has happened to such strategies in the past 20 years, and what are they becoming?

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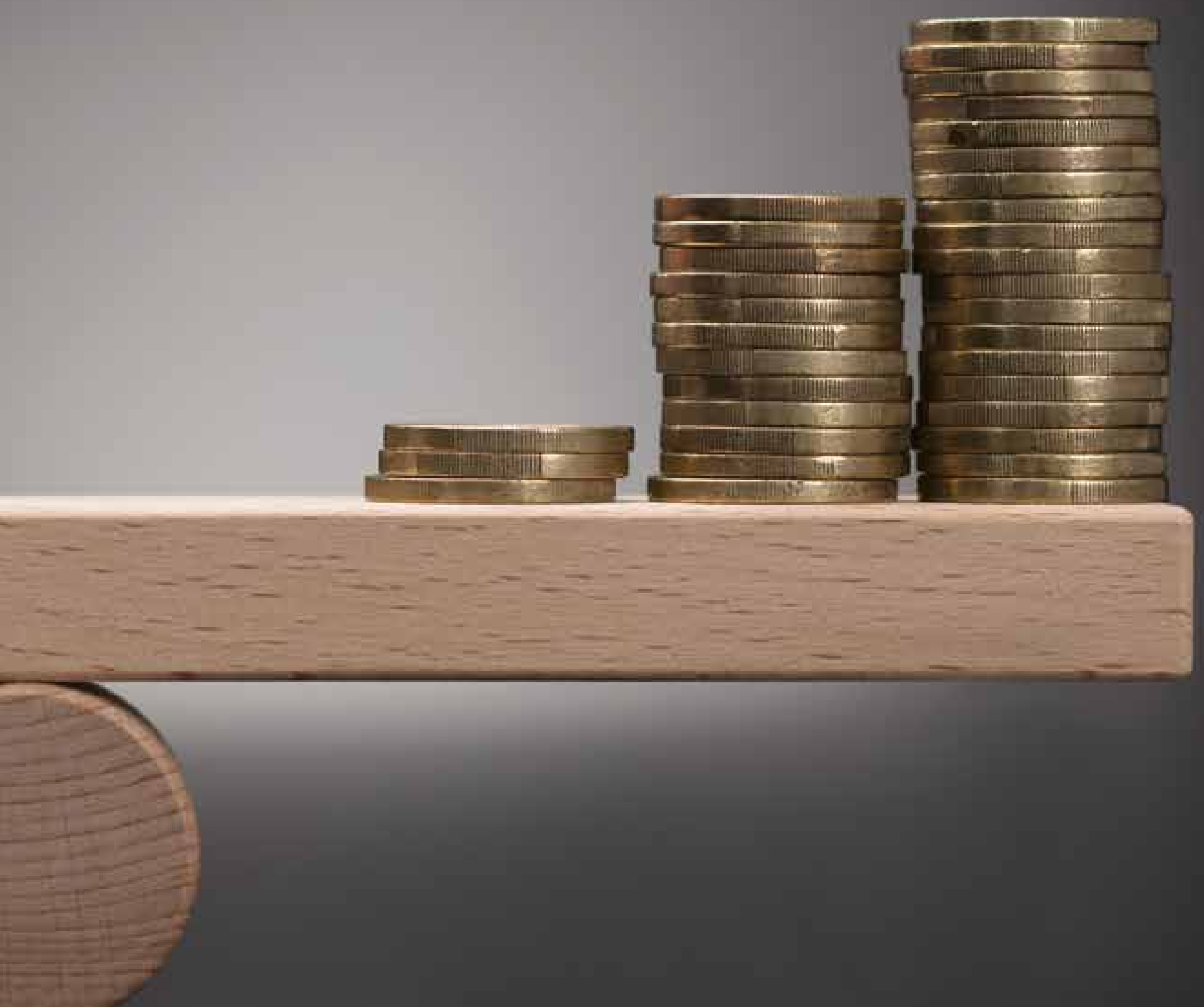
THE FIRST 20 YEARS

It has been two decades since defined benefit pension schemes started adopting liability-driven investment strategies. To mark the milestone, we spoke to three experts at Legal & General Investment Management (LGIM) to discuss how these strategies have evolved.



What did LDI strategies look like 20 years ago?

Guy Whitby-Smith: LDI was built on a core premise that liabilities are bond-like. Therefore, investing in bond-like assets would accurately match the risks of your liabilities. This principle has persisted throughout LDI's evolution.

The earliest LDI strategies were bond based and had limited leverage. This meant that, from a capital perspective, they were expensive as a lot of a scheme's assets were used to match its liabilities.

This limited the appeal. Only well-funded schemes had enough assets to invest in bonds that matched their liabilities. So, overtime more leverage was used in LDI portfolios, which initially focused on interest rate swaps. This opened up LDI to a greater range of clients, as less well-funded schemes could match-off their risks and liabilities.

Another feature we saw 20 years ago was a focus on accurately matching every liability. It was not uncommon to match 50 years of liabilities using 50 swaps, one for each year of cashflow.

Schemes also tried to accurately hedge inflation using limited price indexation swaps that match the caps and floors of the precise pension scheme linkages. That has changed quite a lot over the years with a move away from such accurate hedging to a more pragmatic approach of capturing the broad sensitivities from the liabilities to interest rates and inflation.

Initially, swaps were used to match liabilities where leverage was needed because they yielded more than gilts. In 2008, the financial crisis changed that with gilts subsequently yielding more than swaps. That brought to the fore a greater focus on using gilts to match liabilities and gilt repo when leverage was needed. That has persisted and become the heart of LDI strategies.

How has LGIM's approach to LDI changed and how has your thinking evolved?

Robert Pace: As we heard from Guy, there has been significant change during the past 20 years, but LGIM's philosophy and core beliefs have been remarkably constant: taking a long-term view and continuously adding incremental value for our clients, which you could summarise as efficient risk management.

Looking at the nature of our LDI offering and how that has evolved: we have more than 800 LDI clients. We definitely did not start out with that many.

It has been important to be flexible – whether that be gilts/swaps, LIBOR or CPI – to put us on the front foot and add value in response to those changes.

It is also about being able to offer a tailored solution for our clients. A good example is that we operate an enhanced LDI service for more than 100 of our multi-investor pooled fund clients, where we use multiple pooled fund building blocks with a segregated risk management solution on top. This means we are managing to a liability benchmark and able to deliver many other enhancements depending on a client's objectives, whether that is a funding level trigger, completing around other assets with interest rate sensitivity or some other strategic aspect.

We have made LDI inclusive for more clients and consistently improved our offering, made possible by technology and the scale we have in this area.

The final point is responding to a desire from clients for greater delegation. Historically, we looked to add value by providing trade ideas but that had its governance challenges and as such clients were keen to work with us to incorporate extra flexibility within mandates. For bespoke mandates we will typically always include discretionary switching, where we have historically added three to four basis points per annum of extra value. That is material when you consider it in pound terms, £400k for £1bn of hedged liabilities.

That has enabled us to take advantage of opportunities and over the past few years, it has been excellent to have that extra delegation. The extra supply of government bonds has afforded us the ability to add value whilst also improving the shape of the hedge.

THE PANEL:

Guy Whitby-Smith is head of solutions portfolio management at LGIM

Robert Pace is senior solutions strategy manager at LGIM

Emma Rayner is head of LDI distribution at LGIM

What are the biggest lessons you have learned during the past 20 years?

Whitby-Smith: Firstly, that schemes need to focus on the risk management aspects of an LDI strategy, especially when designing it.

If we look at what has happened in the market during those 20 years, at the turn of the millennium gilts yielded 5%, but have since fallen steadily to around 0% last year.

Low interest rates during that period discouraged some schemes from pursuing hedging. Where schemes fared better is, rather than taking a view on calling the direction of interest rates, they steadily averaged in and increased their level of hedging, year-on-year.

The second theme is first mover advantage. This is particularly significant for pension schemes due to their c.£2trn of assets, which give them a profound effect on whatever market they move into. It is better to be in the initial phase of that than the middle or backend.

An example of this was when central clearing became mandatory. The resulting rise in cleared swap volumes impacted pricing, so the advantage of early adoption was significant.

We also saw this play out in the move to SONIA from LIBOR. A lot of pension schemes had sizable LIBOR positions to

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> Emma Rayner, LGIM

switch, so again, moving early was beneficial.

What we have seen not work so well in the past were trigger-based strategies. Instead of pension schemes hedging at current levels, some schemes set levels above where the market was and would hedge if the market got there. We saw many schemes spend a lot of time designing complex trigger strategies against a backdrop of steadily falling interest rates. Most of those interest-rate triggers never hit, so despite the time they spent setting up an LDI strategy, they never did any hedging.

Inflexible and illiquid strategies also did not work so well. We have learnt over the past 20 years that pension liabilities keep changing. This is due to regulation or membership changes, with people transferring out of schemes.

This means that although pension scheme liabilities are 50 years plus in their nature, there is a lot of uncertainty in those long-dated cashflows. You need to design a hedging strategy that, while catching the long-dated nature of those liabilities, is liquid and flexible enough to adapt, at a low cost, as those changes come through.

Emma, how has the relationship with your LDI clients changed?

Emma Rayner: A great deal. At the start, we were given narrow remits for interest rate and inflation hedging with a high degree of direction from our clients. Now we have more freedom to manage portfolios in the way we feel best. We are also acting as a strategic partner across whole portfolios rather than just for LDI.

Schemes are facing numerous challenges in a world that is only growing more complex; and they are increasingly looking to their LDI manager to help navigate it. Notwithstanding keeping pace with the huge volume of regulatory change that we've seen in our industry since LDI began, there are new and bigger problems they are asking us to solve for. Whether that is help with generating the cashflows needed to pay pensions or working out how a scheme can afford a partial or full insurance transaction; LDI managers are no longer just hedging interest and inflation risks but playing a larger role in ensuring a scheme can meet their obligations to their members.

There's a perfect storm brewing, in that this increasing complexity is happening at the same time as schemes are becoming ever more governance constrained. We are seeing this play out across the industry in the form of consolidation and new types of delegation; for us, we see clients increasingly recognising the value in having an LDI manager in place who can do so much more than just hedge risks. At LGIM, we have worked extremely hard to develop a holistic portfolio management offering which makes it easy for our clients to get what they need to do done.

What part has ESG played in LDI portfolios and how will this evolve?

Pace: ESG has played an important role in LDI. That comes from the top of the organisation and permeates down. At LGIM, we believe ESG risk represents a material systemic risk for investors and we use our scale to influence investors, governments, regulators, policymakers and companies.

We embed ESG within our counterparty review process, where we assess creditworthiness. We also engage with counterparties via our investment stewardship team, analysts, portfolio managers and even the trading team.

Governance and wider industry involvement is highly relevant to LDI. This sees us engage with the Treasury and associated parties on big topics around LIBOR, RPI reform and green gilts.

Finally, ESG is crucial within our Sterling Liquidity Fund, which is an important part of LDI portfolio. These examples are far wider than just LDI portfolio management and it is important to have an organisation which is committed to that.

Around evolution, green gilts are an obvious area of development. £15bn plus of issuance this year and there is going to be more than £200bn worth of gilts issued in the next three to five years. As such we expect green gilts to become part of LDI portfolios, if the price is right.

The final point is data and reporting, where LDI clients will be looking at ESG aspects in more detail. That could be how a counterparty scores on ESG or a newer

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area around what the carbon footprint of a gilt or derivative actually looks like. Those are of some of the key things for the future.

What does an LDI portfolio in the future look like?

Whitby-Smith: It will be less focused on the pure LDI aspects and be more of a matching portfolio, designed to meet a scheme's cashflow needs along with a portfolio that meets the interest rate and inflation risk aspects of a pension scheme's liabilities.

It will be designed with cashflows in mind to make sure it can meet a scheme's short and long-term liquidity requirements. To do that, the LDI portfolio needs to be managed alongside the credit in the portfolio – public, private and real assets – in a holistic manner.

A future LDI portfolio will also have a single pot of collateral to support all the derivative transactions the scheme undertakes. The advantages of this structure include minimising collateral drag because you only need one collateral pot reducing the allocation to lower yielding assets to meet the collateral requirements of the scheme.

It also protects against volatile markets. We have seen the return of volatility in the past 18 months, which we expect to continue. To minimise the risk of a scheme becoming a forced seller due to the leverage in its portfolio, a single pot of collateral is more likely to be able to withstand whatever market moves come your way.

Other considerations that will come into play for well-funded, well-hedged schemes include the second and third order effects that you did not worry about at the beginning of your LDI journey, but at this stage will start to dominate.

One of those is inflation. It is currently high, but it has been high and volatile across longer maturities as well. This has a profound impact on the make-up of pension scheme liabilities.

To manage those liabilities accurately you need to frequently refresh your assumptions regularly. If not, schemes could find that the hedging is not performing and behaving as intended.

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We have an approach for the well-hedged schemes called dynamic inflation hedging, which adapts to market conditions, so it remains appropriate in all markets.

What does the ever-increasing trend to buyout mean for LDI providers?

Rayner: In the past 20 years various LDI players have come and gone and what has become clear is that scale is important. It helps keep costs low, not just for clients, but for providers as LDI is a low margin business.

Scale also matters when times are tough. We have a strong record of leveraging our scale and our relationships with counterparties in stressed markets. In March 2020, for example, our trading volumes were up 30% on the same month a year before as we reacted to rapidly changing market conditions to support our clients through that crisis.

As LDI markets mature, we will see an increasing difference in the ability of funds to operate at scale and with that a willingness by managers to enhance their LDI capabilities.

Over 50% of LGIM's assets are currently managed by their Solutions team and Legal & General, the insurance parent, wants to transact between £40bn to £50bn of new annuity business over the next five years. We are well positioned not only to retain our scale but also for growth, which means we will continue to invest and innovate in this area.

Because of our insurance parent, we are the only LDI manager who can be truly objective in helping clients reach their endgame, whether that be self-sufficiency or a buyout.

Whilst the trend towards buyout might be seen as a threat by other LDI providers, for us, it is a welcomed opportunity. Fundamentally, an increase in buyouts shows that we are doing a good job of being an LDI manager. And as so many of our clients chose to transact with Legal & General, you will hopefully see us being in the business of liability investment for a long time to come.