

LDI in Practice: Current Trends, Challenges and Solutions

**DPN Assets & Liability Convention
Workshop Session 2**

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Introduction: A new world for German pension funds

What can be learnt from LDI experiences elsewhere

What has changed

- **Rates:** structurally higher, not reverting
- **Inflation:** elevated and volatile — structural forces in place
- **EGB spreads:** wider and diverging — France/Belgium downgraded; Bunds still tight
- **Credit spreads:** historically tight — but AA curve distorted by tech issuers
- **Capital scarcity:** Dutch WTP selling, AI issuance and fiscal deficits all pressuring long-dated yields

What it means for German pension funds

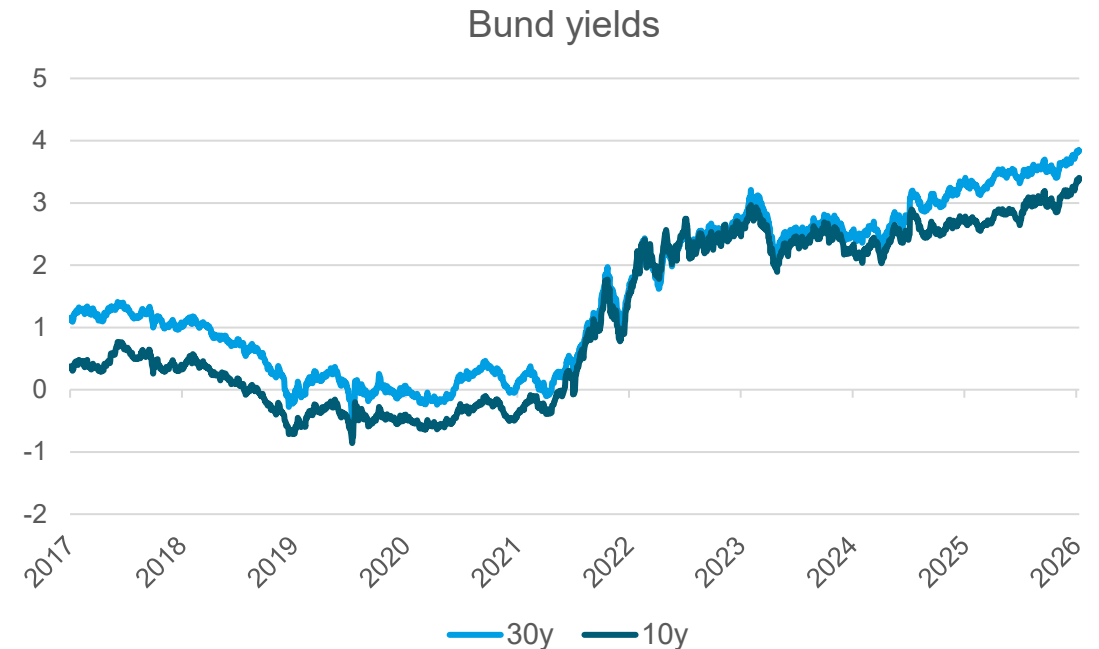
- **Inflation hedge:** most schemes carry zero — a hidden solvency risk
- **IFRS spread:** AA corporate curve = unique German challenge
- **Cash flow:** schemes are now net payers — decumulation has begun
- **Resilience:** higher rates mean higher collateral demands — headroom matters more than ever
- **Derivatives:** KVG infrastructure constraints limit efficiency and flexibility

“The old playbook no longer applies. This session draws on lessons from the UK, Netherlands and Ireland to show what the new one looks like.”

Higher for longer — and structurally so

The playbook of the last decade no longer applies

- 30-year bund rate: sub zero in 2021, above 3% today
- Yields have reset structurally higher after a decade near zero
- German pension funds: solvency improved materially, derisking now realistic
- But higher volatility, macro sensitivity and more complex hedging follow



Source: Bloomberg. As per 10 Sep 2026

The question is no longer when rates fall back — but how to manage while they stay elevated and volatile

Why long-dated yields face persistent upward pressure

Three forces compressing the supply/demand balance for long-duration assets

1. Dutch WTP transition

Pension funds cut long-dated swap and bond exposure; 20y+ DV01 selling clusters at the 1 Jan 2027 transition.

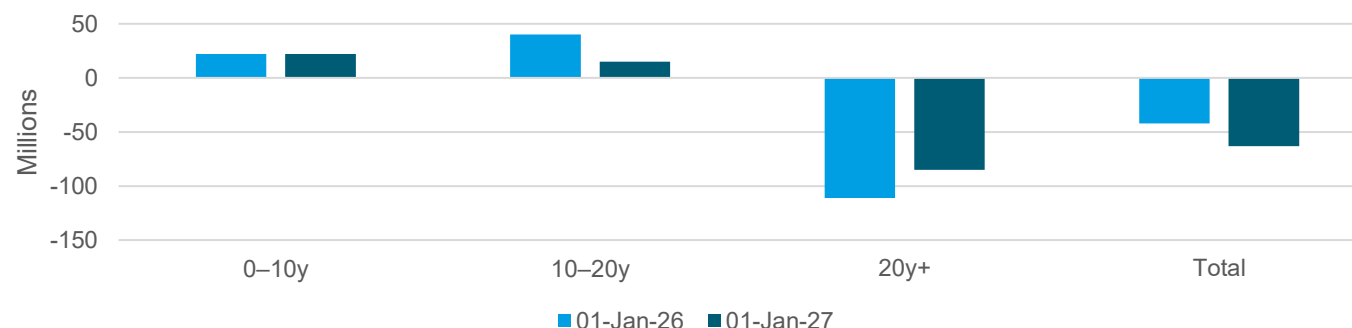
2. AI/hyperscaler issuance

Hyperscaler and NVIDIA debt up from ~10% of 10-year UST equivalent in 2015 to nearly 70% in 2026.

3. Fiscal deficits

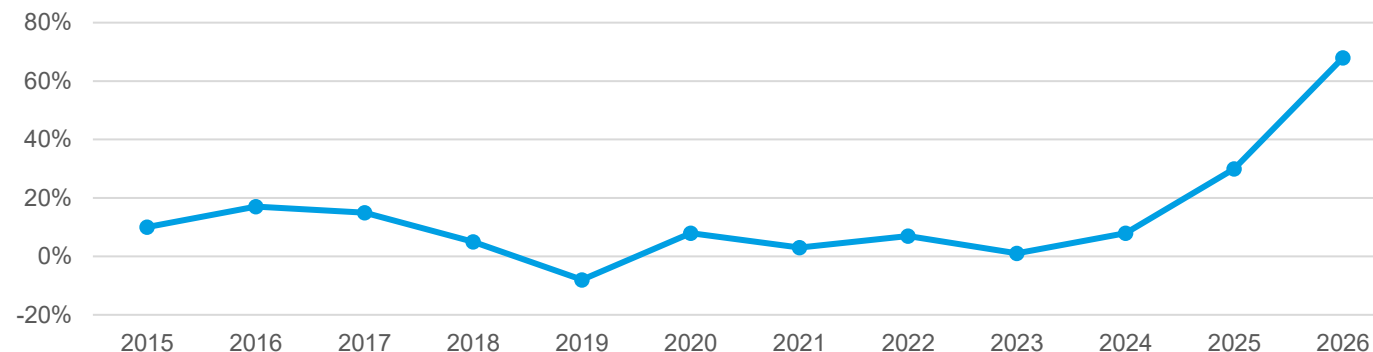
US federal debt above \$40 trillion; Bessent buybacks are finite and European defence spending adds EGB supply.

DV01 for Dutch pension funds transitioning on specific date



Source: Columbia Threadneedle Investments

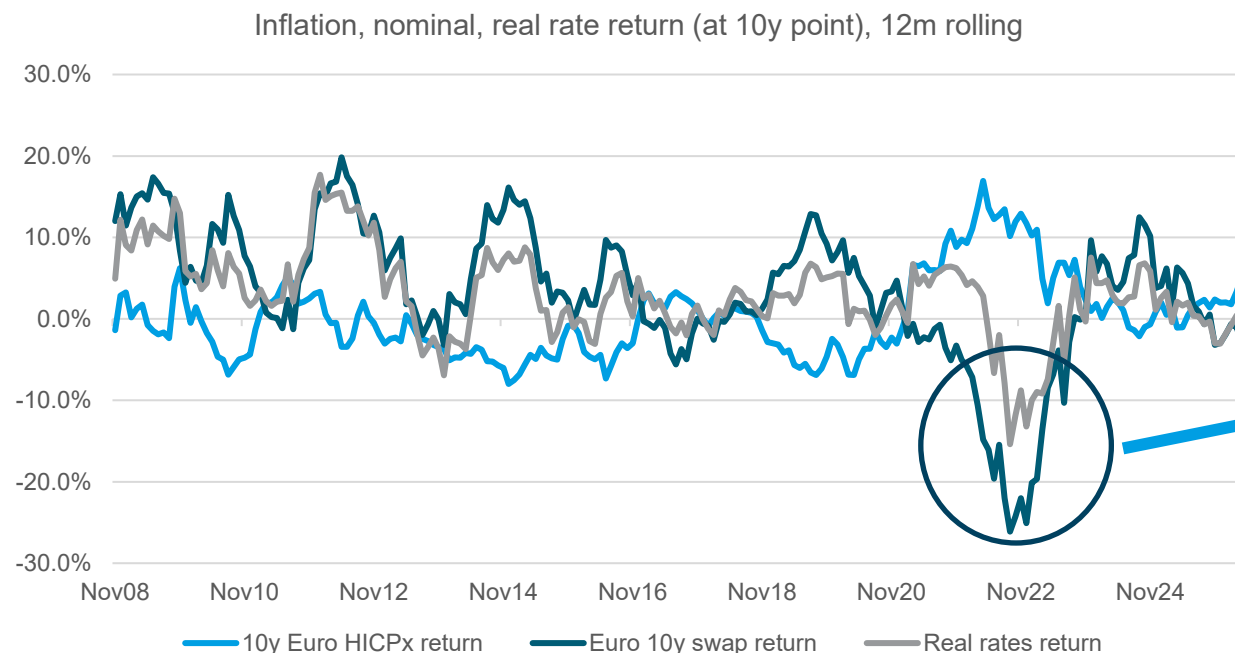
Hyperscaler + NVIDIA debt issuance as a % of Treasury bond issuance



Source: Bloomberg, JP Morgan, as per 31 Aug 2026

Inflation risk is not over — it has changed character

From transitory spike to structural uncertainty



WHY IT MATTERS

- The surge has partly normalised, but structural drivers remain in place.
- The IFRS AA corporate curve barely moves; the economic liability is highly inflation-sensitive.
- In 2022–2023 nominal-only hedges lagged real-rate liabilities by ~8% cumulatively.

A 100bps parallel shift in the inflation swap curve increases a typical German DB liability by ~8% of PV — and most German schemes carry zero inflation hedge

Source: CTI scenario analysis, illustrative

Country risk is elevated — and requires active management

France and Belgium downgraded to single-A; the AAA/AA universe is shrinking

THE CHANGING EGB LANDSCAPE

- France downgraded to A+ by both S&P and Fitch (October 2025); Belgium similarly downgraded
- AAA/AA now ~30% of the EGB market by market cap, down from over 50% five years ago
- ECB APP wind-down removes a key buyer; rising defence spending adds supply
- But not all bad: Spanish sovereign fundamentals have improved (and so have Italy, Greece)

CASE STUDY

Proactive reduction of French exposure

French allocation in LDI mandates	Weight
March 2024	28.9%
June 2025	11.9%

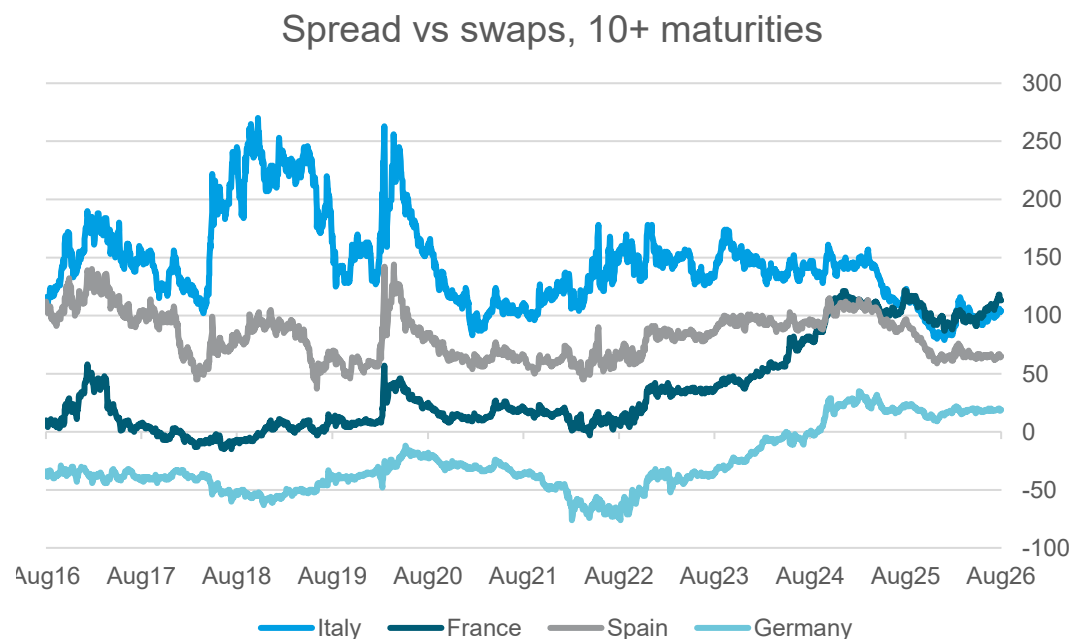
Phased, controlled reduction under pre-agreed governance frameworks.

Interest rate hedging was maintained throughout — only spread and concentration risk was reduced.

Proactive spread management — not passive index replication — is what protects solvency as sovereign ratings drift

The repo opportunity: EGB spread widening as an advantage

The UK repo model applied to German pension funds



Source: Bloomberg, as per 10 Sep 2026

1 The traditional setup

German funds held government bonds as collateral and used swaps for duration. That made sense when swap rates exceeded bond yields.

2 What changed

Bunds and other high-quality EGBs now yield more than equivalent-maturity swaps across much of the curve. Paying fixed on swaps is no longer the most efficient route to duration.

3 The repo opportunity

Repo Bunds, receive cash, reinvest in Bunds and cut swap notional — as UK managers do with gilt repo. This captures the positive bond-swap spread and cuts counterparty exposure to swap dealers.

The KVG constraint — and the solution: most KVGs have limited repo infrastructure, so use LDI funds — bespoke fund-for-one structures or generic duration funds — that already have the derivatives documentation, clearing, repo and collateral management in place.

German DB schemes: better funded, but facing challenges

The accumulation phase is over — the decumulation challenge has begun

The good news: solvency has improved

- Higher yields have materially improved IFRS funding ratios over the past 3–4 years
- Many schemes can now consider derisking: raising hedge ratios, cutting return-seeking allocations or exploring buyout
- A genuine window of opportunity that should not be wasted

The structural challenge: cash flow negative

- Ten to fifteen years ago schemes were in accumulation: contributions exceeded benefit payments
- Today most are cash flow negative, paying out more than they receive
- Portfolio construction changes fundamentally: a scheme cannot ride out volatility when it needs liquidity as benefits fall due
- LDI strategies designed for accumulation become problematic in decumulation

Improved solvency is only useful if the portfolio can also pay benefits on time

Cash flow-driven investment is not the answer for most German schemes

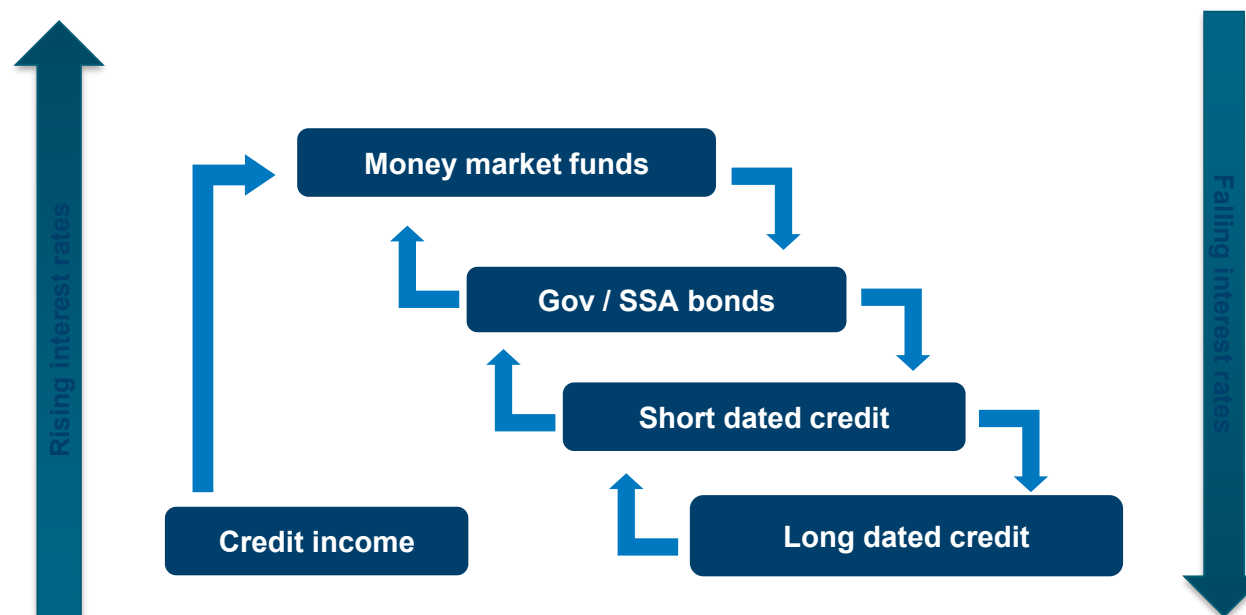
A cash flow-aware approach offers the right balance of protection and flexibility

WHY CDI DOESN'T FIT

- CDI matches individual liability cashflows with physical bonds — capital-intensive and inflexible
- The IFRS spread constraint and KVG infrastructure make full CDI impractical in Germany
- CDI sacrifices flexibility in the return-seeking portfolio most schemes still need

THE CASH FLOW-AWARE ALTERNATIVE

- Align portfolio liquidity with near-term benefit payments without matching every cashflow
- Hold a liquid payment buffer of money market funds and short-dated government bonds covering 12–24 months of net benefit payments
- Use the resilience framework so the LDI portfolio survives rate shocks without forced asset sales



Dynamic LDI: navigating rising and falling rates

Cash flow-aware investing sits between traditional LDI and full CDI — the liquidity discipline of CDI without the capital intensity.

Resilience management: lessons from the UK gilt crisis

What 2022 taught us about headroom, collateral and governance

WHAT HAPPENED

In September/October 2022, a rapid rise in UK gilt yields triggered margin calls across leveraged LDI programmes; schemes without sufficient collateral headroom were forced to sell gilts into a falling market, amplifying the stress. The crisis was caused by insufficient headroom and inadequate stress-testing, not by LDI itself.

1

Maintain sufficient headroom

- Portfolio must absorb a significant yield shock (e.g. +100–150bps) without forced selling
- A higher-rate environment demands more collateral relative to notional exposure

2

Stress-test regularly

- Scenario analysis must cover curve steepening and spread widening
- Test simultaneous equity/credit stress, not just parallel rate shifts

3

Governance speed matters

- When markets move fast, acting within hours rather than days is critical
- That requires pre-agreed trigger frameworks and clear escalation paths

Cash flow-negative schemes cannot defer benefit payments — resilience planning is a fiduciary requirement, not a luxury.

German LDI is different than elsewhere in Europe

Two features that make Germany unique

IFRS discount curve = AA corporate bond curve

- German IFRS discounts liabilities on an AA corporate curve, not a swap curve
- Schemes manage credit spread risk as a core part of liability matching
- AA curves are increasingly concentrated in large technology issuers (Google, Amazon, Microsoft), creating idiosyncratic concentration risk in the discount rate itself

Hedge performance vs IFRS liability

Period	Portfolio	IFRS liability	Relative
3M	1.9%	1.1%	0.8%
YTD	-1.2%	-2.1%	0.9%
1Y	3.7%	2.5%	1.2%
3Y	6.2%	3.0%	3.2%
5Y	-14.9%	-17.8%	2.9%
SI*	-14.9%	-17.8%	2.9%

Relative return of a live LDI portfolio for a German pension fund, portfolio versus IFRS liability. SI* = since inception.

The spread hedging toolkit

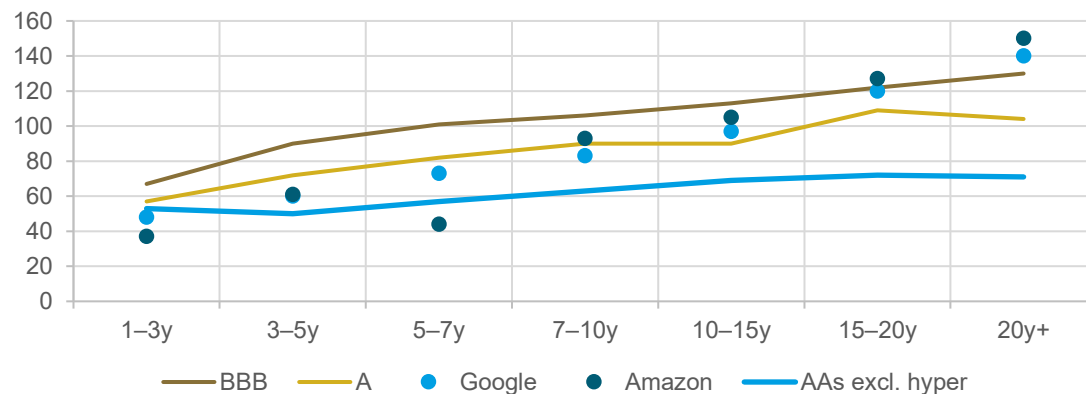
- Government and SSA debt provide the duration foundation
- Corporate bonds and CDS allow precise spread management against the AA discount curve
- A blended approach, not a pure rates hedge, is essential under IFRS

A blended rates-and-spread hedge — not a pure rates hedge — is what IFRS actually requires.

The AA corporate curve: thin, concentrated, and growing riskier

Hyperscalers now represent ~35% of the 10y+ AA universe — up from zero two years ago

EUR IG seniors; duration weighted G-spread by maturity bucket, in bps



Source: Bloomberg, as per 31 Aug 2026

Why it matters

- **Concentration:** Alphabet and Amazon alone are ~35% of the 10y+ AA universe, up from effectively zero in 2024
- **Short term, helpful:** hyperscalers trade at 140–150bps G-spread at 20y+ versus ~70bps for AAs excluding them, so a wider AA curve lifts discount rates and IFRS funding ratios
- **The risk:** a single downgrade from AA to A pulls them out of the index abruptly

Three ways to respond

Accept the curve

Simple — but full downgrade event exposure

Cap issuer weights

Equal-weight or concentration-capped variant — needs actuary agreement

Broaden the universe

Blend in A and AAA/SSA bonds — deeper and more stable, requires accounting policy discussion

LDI funds: the derivatives + collateral solution

An alternative route through the KVG derivatives set-up

The problem

- Many German pension funds use derivatives inefficiently — their KVG lacks clearing, or premium pricing erodes returns.
- Building the infrastructure alone demands scale, legal documentation and operational investment most schemes cannot justify.

The solution: LDI funds

- Access to institutional-grade derivative execution, clearing, repo and collateral management.
- They sit alongside traditional bond allocations at the KVG
- Two formats: fund-for-one for full customisation, or pooled generic duration funds at lower cost.

WHAT TO LOOK FOR IN AN LDI FUND PLATFORM

- Breadth of fund range across the curve (2031 to 2076+)
- Real rate (nominal + inflation) fund options
- Proven track record and platform scale for pricing and liquidity
- Robust collateral management and EMIR reporting

LDI funds are not a product — they are an infrastructure solution

Summary: four actions for German pension funds

What to take back to your investment committee

Priority	Action	Why now
1. Complete the inflation hedge	Add inflation swap exposure to complement nominal rate hedging	Structural inflation risks are elevated; hedging only nominal rates leaves solvency exposed
2. Manage spread risk actively	Monitor AA corporate curve concentration; use CDS and government bonds to manage IFRS spread exposure	Tech issuer concentration in AA curves is a growing risk; France/Belgium downgrades show spread risk is real
3. Build resilience headroom	Stress-test collateral buffers; implement trigger frameworks; plan for cash flow needs	Cash flow-negative schemes cannot afford forced selling; UK gilt crisis showed the cost of insufficient headroom
4. Upgrade derivatives infrastructure	Optimise KVG setup or consider LDI funds for efficient derivative and repo access	Premium pricing and limited clearing erode returns; the repo opportunity requires KVG set-up



For all defined benefit pension schemes,
the path ahead is becoming more complex.
Improved funding levels are bringing endgame
objectives into sharp focus.

The question is no longer just how
to hedge liabilities.

It's about what comes next.

And who is best placed to help
you navigate it efficiently.

This is where we shine.



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