

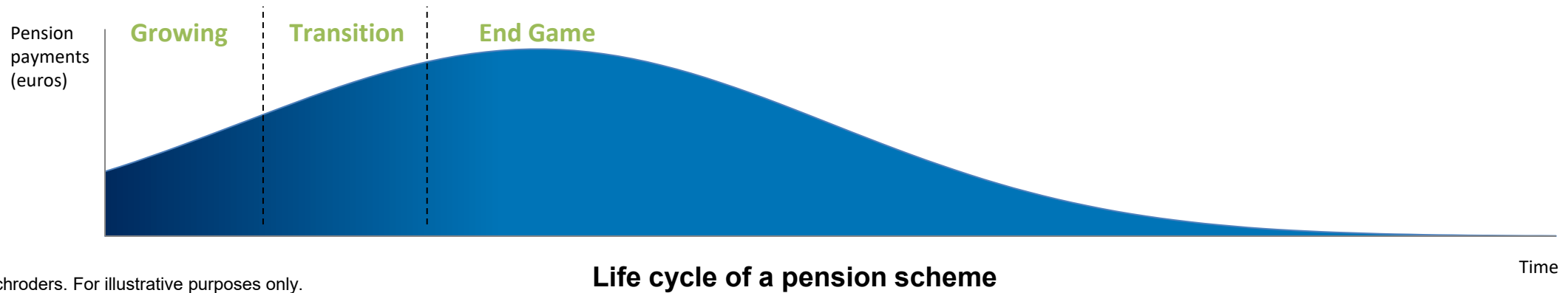
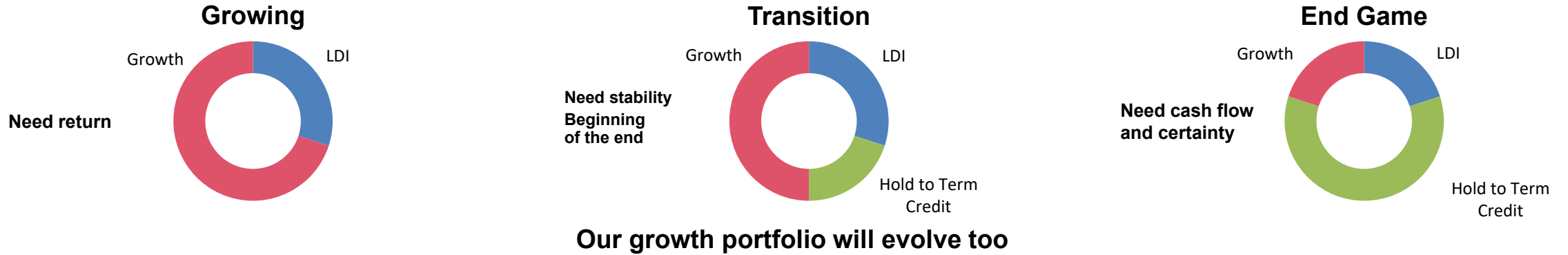
# Planning for the end game

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# Planning for the end game

Investment strategy needs to adapt over the life of a scheme

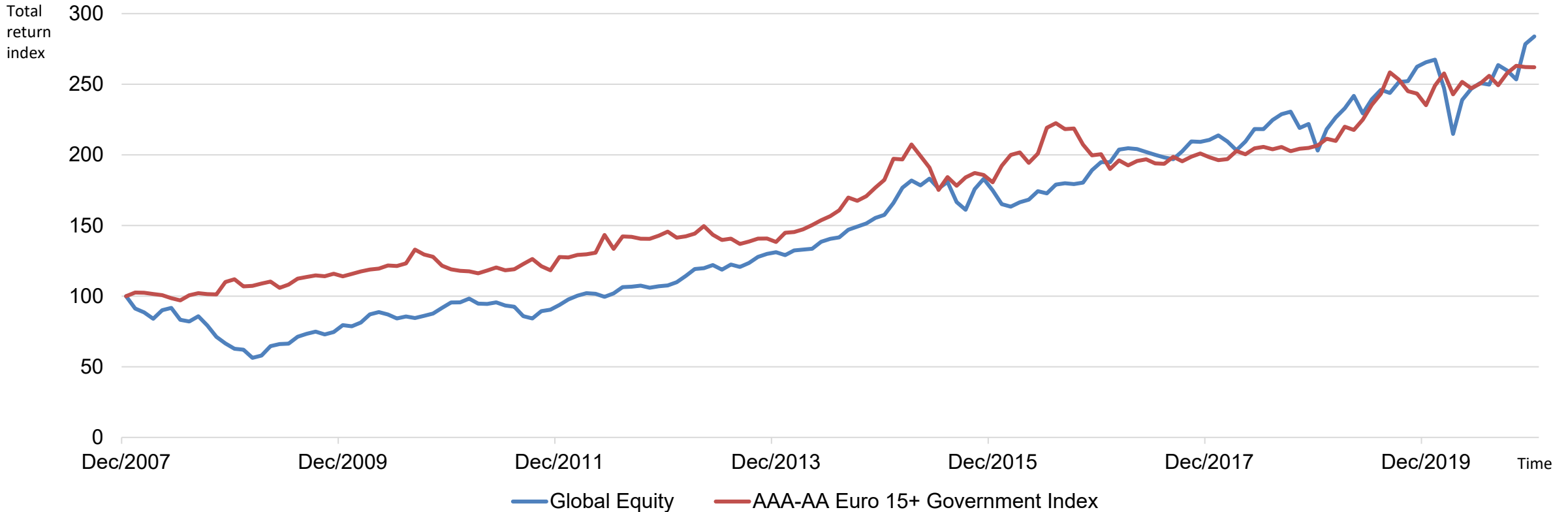


Source: Schroders. For illustrative purposes only.

Life cycle of a pension scheme

# Know what your target is

Without LDI you can be working very hard to stand still

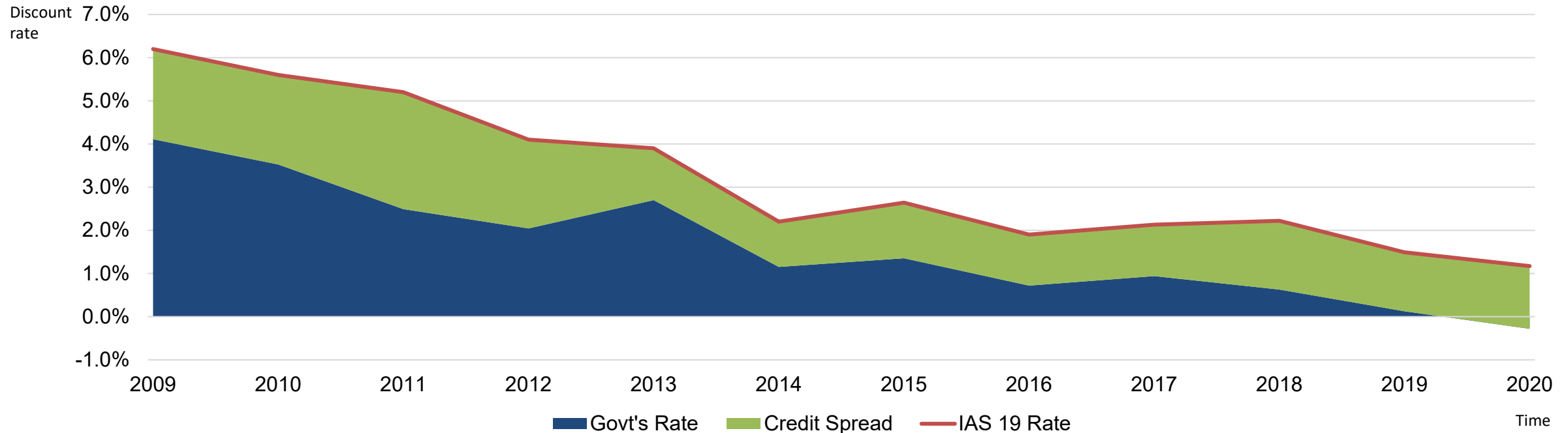


Total return index rebased to 100 between 311207 and 311220. MSCI world (EUR) and ICE Bank of America Merrill Lynch AAA-AA 15 year+ EUR government bond index.

# Protecting the balance sheet

LDI also protects sponsor balance sheet on an accounting basis

## Rates and spreads determine IAS 19 discount rates



Source: Schroders. For illustrative purposes only.

**Corporate sponsors benefit from an LDI program**

# Case study

## Challenge: Corporate DB plan seeking a hedge for IAS 19 liabilities



### IAS 19 Methodology

- Curve construction based on yield of EUR AA corporate bonds bucketed by tenors
- Spread above government curve extrapolated for tenors with no or thin market depth for corporate bonds
- Smoothing allowed under extreme market conditions



### No market observable replicating portfolio available



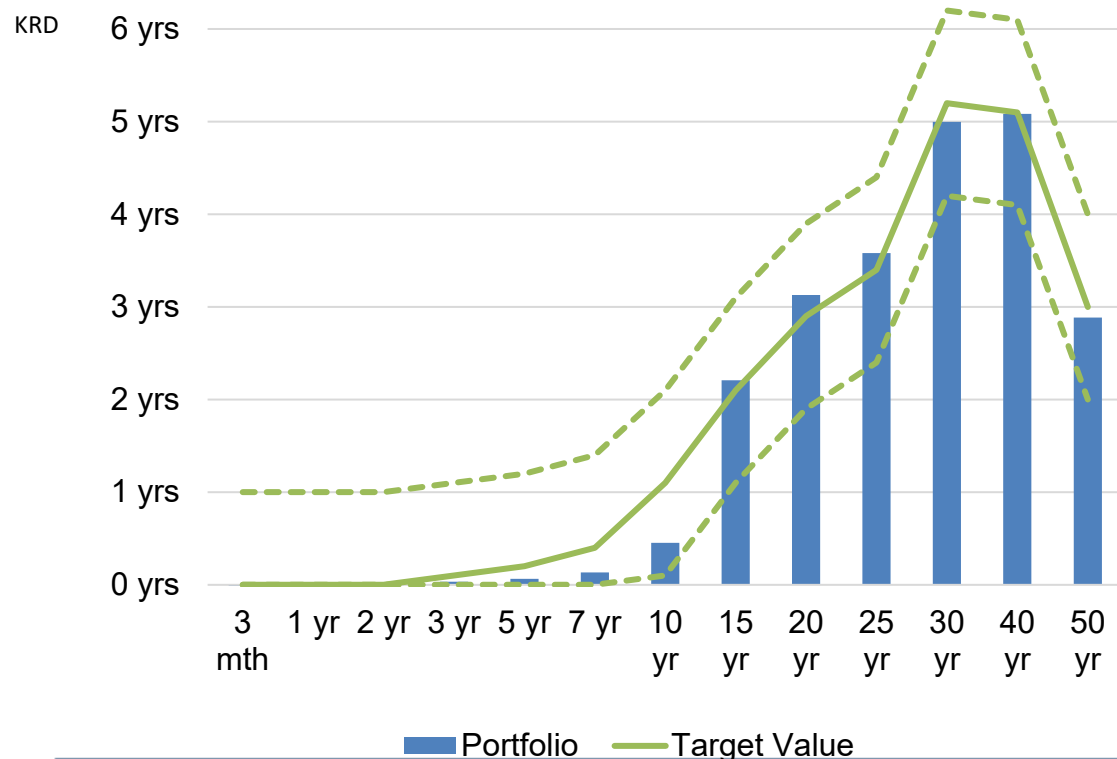
### Economic Risk Profile

- Transform problem to economic risk profile, covering full hedge of Interest rate risk (duration) including curve structure risk (key rate duration) and partial AA credit spread risk
- Providing a full hedge for spread sensitivity is not possible due to a) maturity profile of euro corporate bonds and b) need for a well diversified credit portfolio

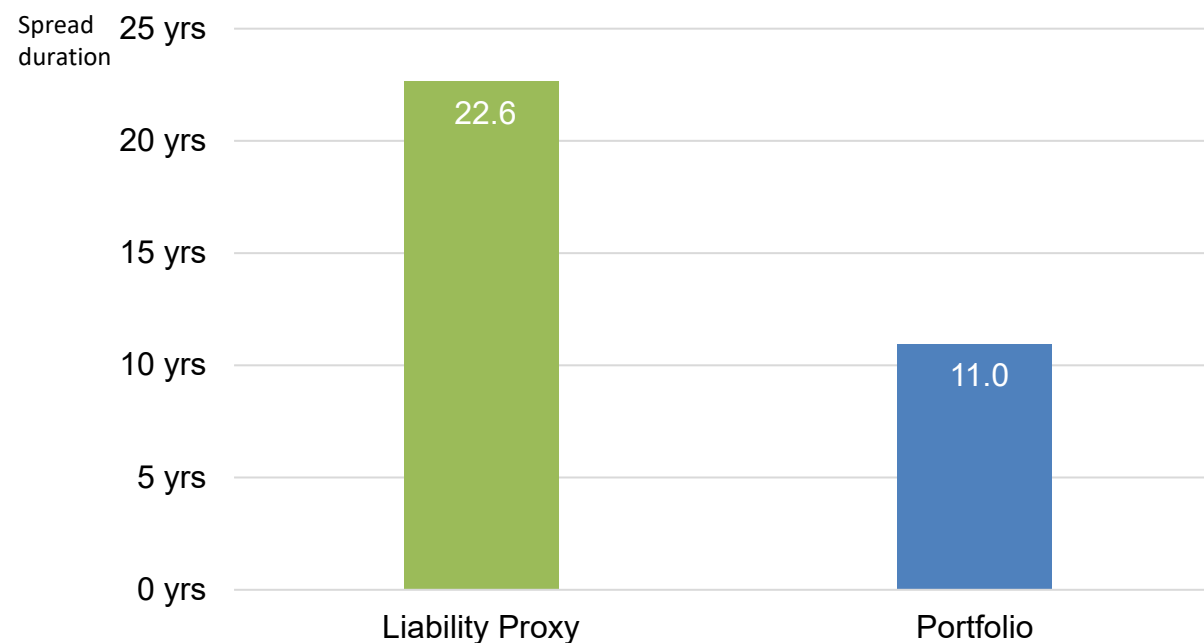
Source: Schroders.

# Case study

## Solution: A multi sector Buy & Maintain portfolio Interest rate matching across the curve



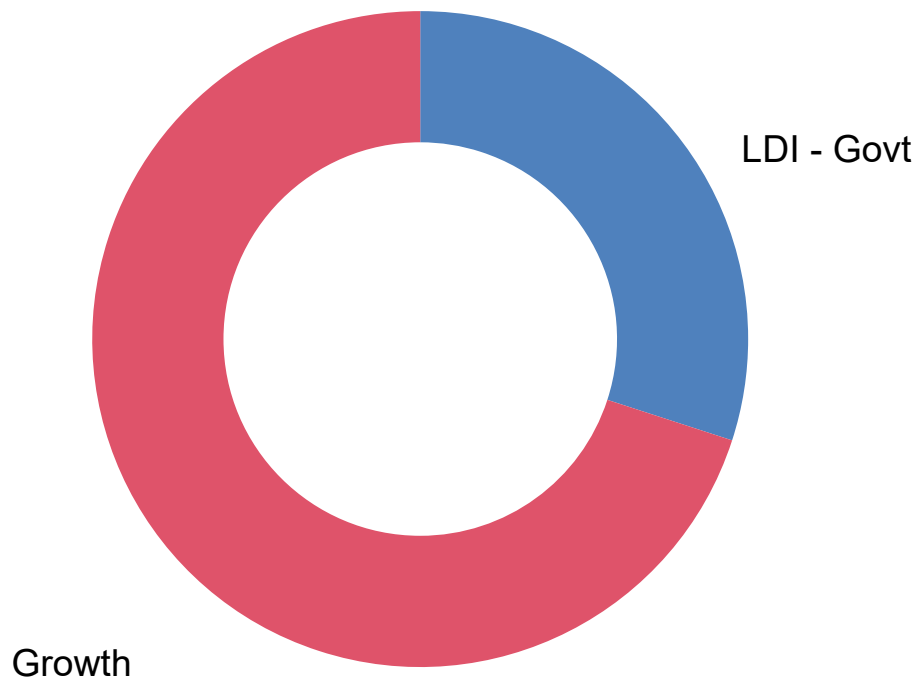
## Portfolio provides a sizeable hedge for spread risk



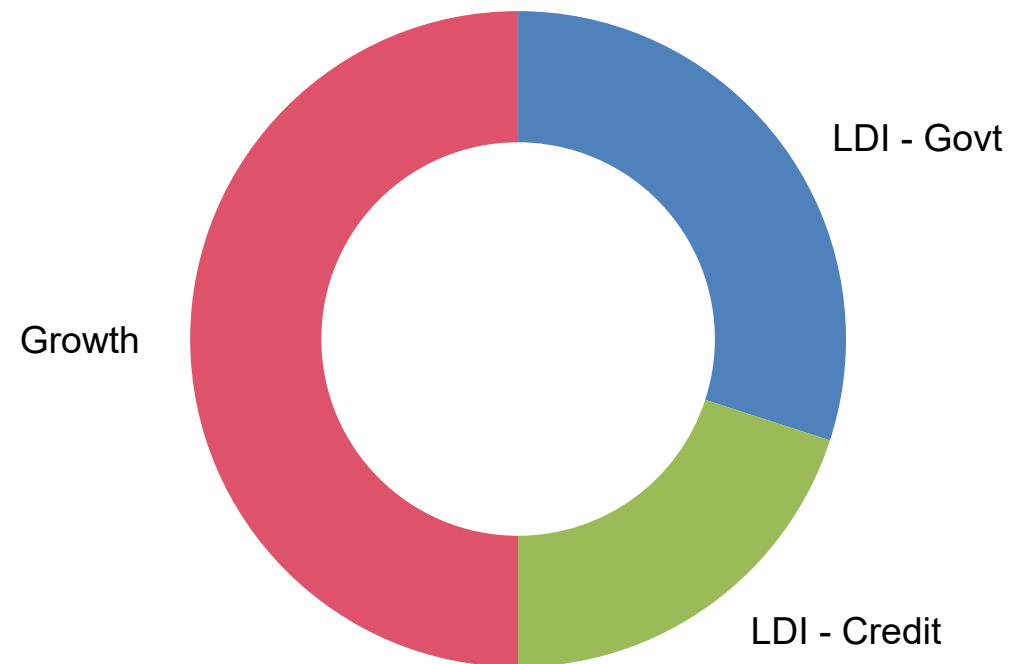
Source: Schroders. For illustrative purposes only. Green dash lines show 0.5 year mismatch allowance. KRD = key rate duration.

# Blending growth and matching

Reducing dependence on the growth portfolio  
Relies on growth portfolio to deliver all returns



Enhanced matching delivers hedging and return



Source: Schroders. For illustrative purposes only.

# Requirements for an end game solution

What are people looking for with end game investing

1

## Returns

Provide the returns needed to **fill the funding gap**

2

## Liquidity

Provide the liquidity required to **meet liability payments** over the remaining life of the scheme

3

## Certainty

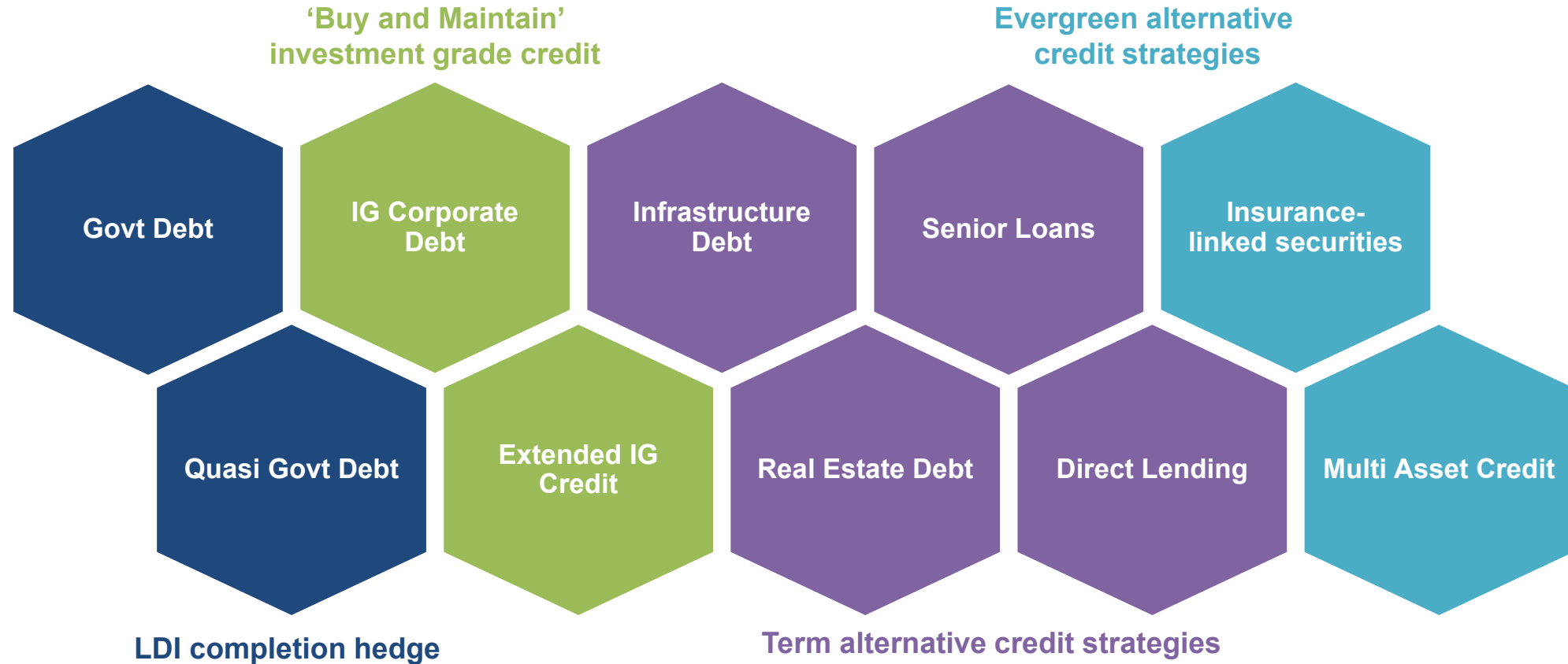
“**end-game**” solution with high certainty

Source: Schroders.



# Building an end game portfolio

Contractual cashflow assets deliver certainty in returns

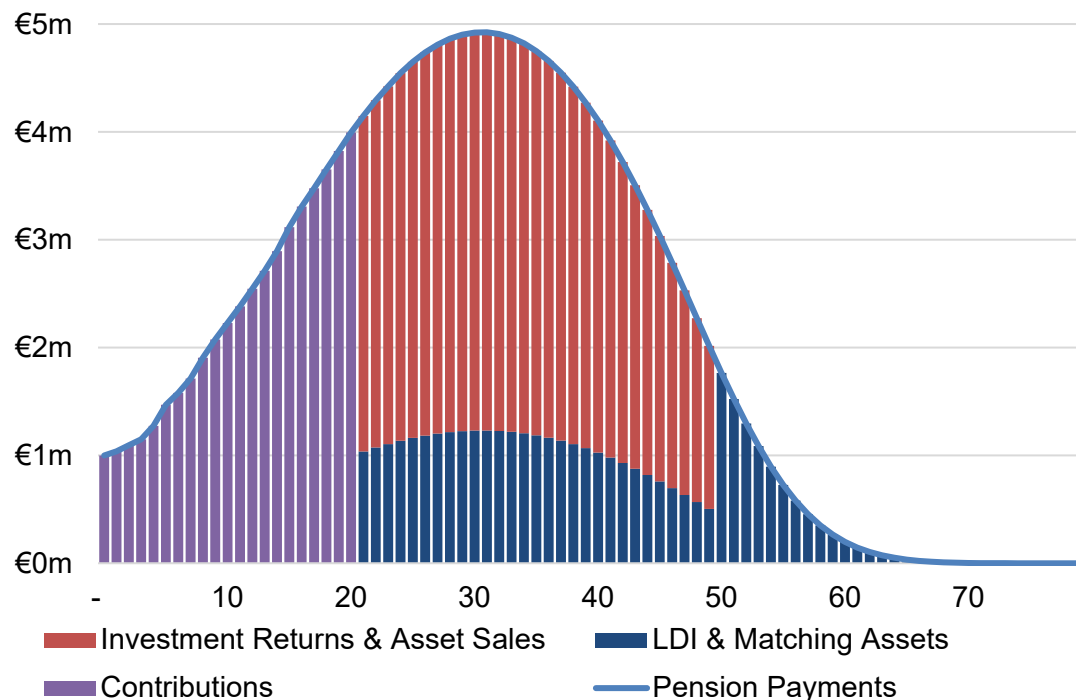


Schroders. For illustrative purposes only and not a recommendation to buy/ sell.

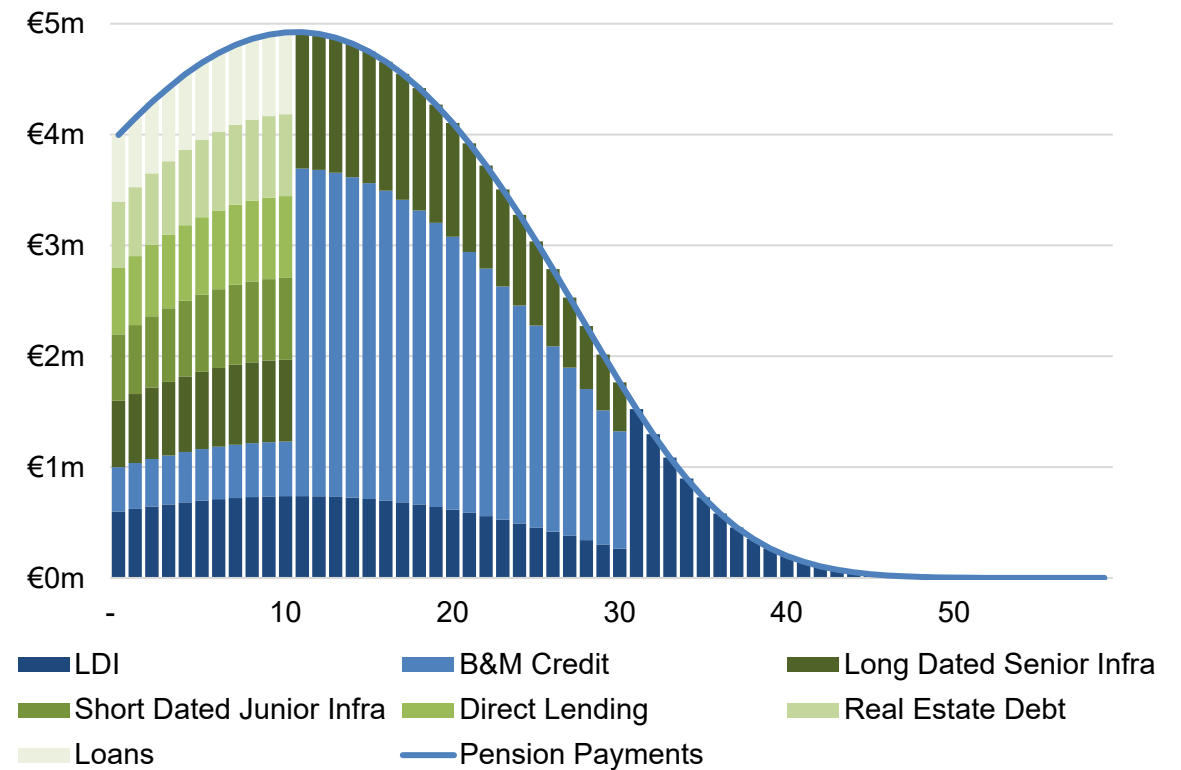
# End game solution delivers return, certainty and liquidity

Return and cashflow certainty become more important during the end game

## Cashflow planning for a growing scheme



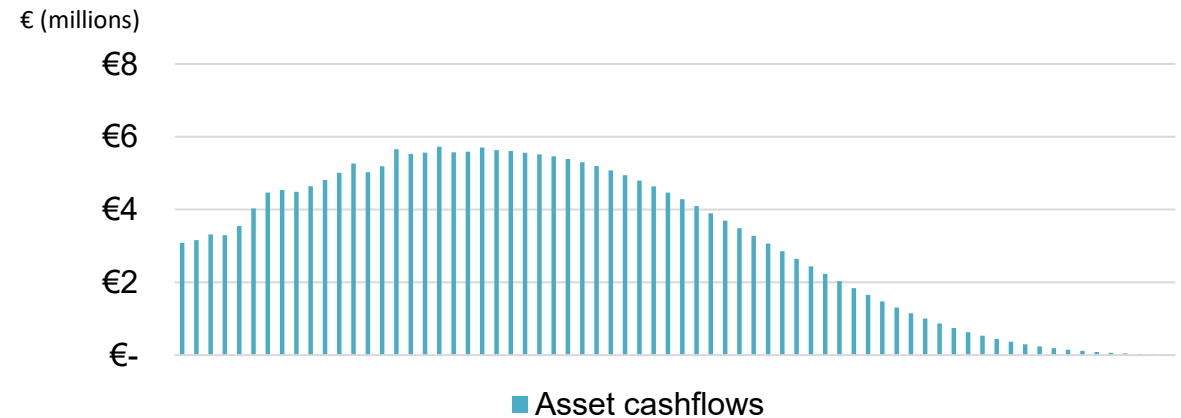
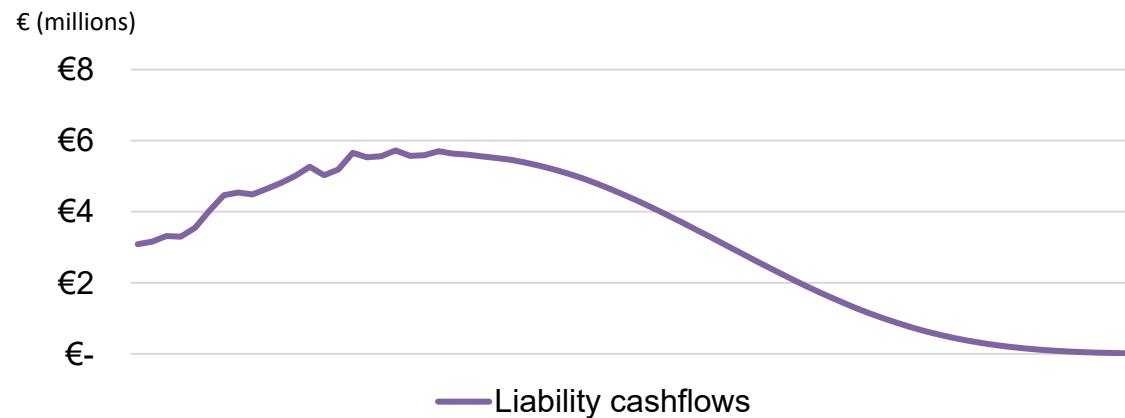
## Cashflow planning over the end game



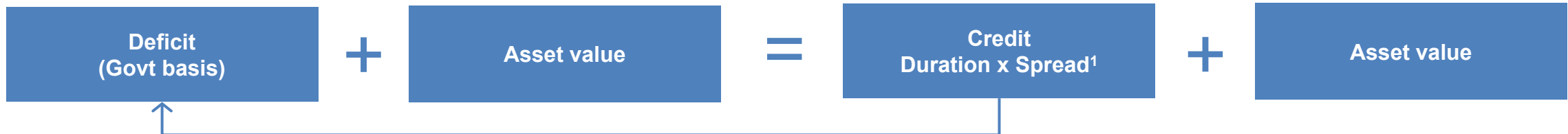
Schroders. For illustrative purposes only.

# Can your deficit be met with more certainty?

## A rule of thumb for assessing feasibility



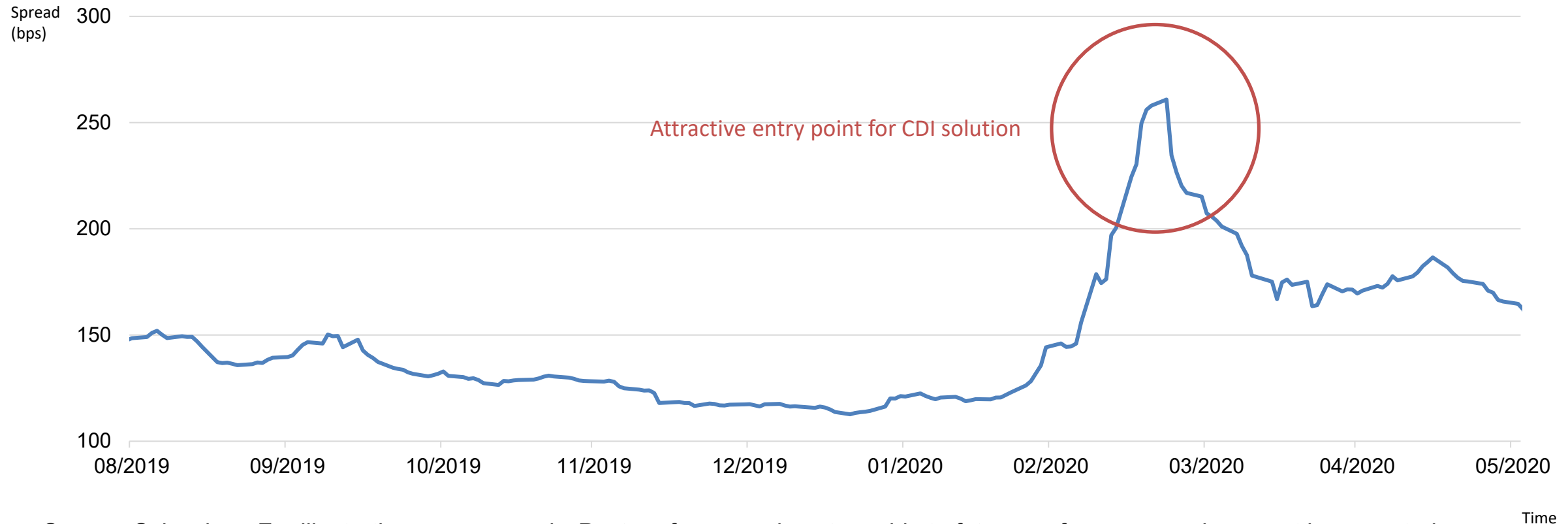
← Value of liability cashflows discounted at Govt →      ← Value of asset cashflows discounted at Govt →



Schroders. For illustrative purposes only. <sup>1</sup>Approximate due to convexity effects.

# Need to be alert for opportunities

## Long dated IG corporate bond spreads



Source: Schroders. For illustrative purposes only. Past performance is not a guide to future performance and may not be repeated.

# Schroders end game philosophy

## Planning starts now

- ① LDI provides **greater confidence of achieving goals** for immature schemes and end game schemes alike
- ② End game investors can use contractual cashflows with credit risk premium to **close the funding gap**
- ③ Blending different credit assets can deliver **higher returns in the earlier years** before rolling off leaving an **insurance friendly, low risk portfolio**
- ④ Preparing for the end games starts today and requires **a long term plan** while being ready to act when opportunities arise

Source: Schroders.

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# Important information

## Main risks associated with end game solutions

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**Liability driven investment:** Entering into derivative contracts introduces counterparty risk, the potential to incur a loss if the counterparty is unable to honour its obligations. This means clients are exposed to potential losses if a counterparty were to default on its obligation. We mitigate much of this risk by receiving collateral with a value at least equal to the exposure to each counterparty. Subject to minimum transaction limits, the level of collateral will be updated on each business day. However, in the event of a default, there would be a cost involved in liquidating and reinvesting.

Liability hedging strategies may also be subject to basis risk between the valuation methodology applied to a pension scheme's liabilities and that applied to the underlying swap contracts. Derivative contracts may involve a commitment to meet LIBOR-based payments on the underlying strategies. There is a risk that the assets of a pension scheme fail to deliver the returns needed to meet these payments which would result in a deterioration in the scheme's funding level.

Whilst hedging strategies are constructed to reflect the expected behaviour of pension fund liabilities, note that pension fund liabilities can only be estimated and as such there may be a divergence between the performance of the hedge and an individual scheme's actual liabilities.